



Research Article

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Complexity in Egophoric Marking: From Agents to Attitude Holders

<https://doi.org/10.1515/opli-2017-0018>

Received January 30, 2017; accepted June 27, 2017

Abstract: The present paper considers attested variation found in egophoric marking systems in order to discuss the role of such variation for the defining features of egophoric marking viz. a speech-act participant's epistemic authority subject to his/her involvement in an event. Austin Hale's (1980) pioneering description of egophoric marking in Kathmandu Newar (called "conjunct/disjunct" by Hale) has largely shaped our conception of what such systems look like, but in recent years, research on comparable systems has revealed that egophoric marking systems vary with respect to every purportedly defining feature of such systems. The one remaining variable that appears constant is the epistemic authority of the speech-act participants. When attempting to analyze and compare egophoric marking, one should consider all relevant cross-linguistic variation in order to determine what features are defeasible, and which ones are not. In this paper we explore the range of participant-roles that can be associated with egophoric marking focusing on "secondary" egophoric markers that map onto undergoers, affected participants, and the attitudes of the speech-act participants. It will become clear that these less prototypical instances of egophoric marking bridge such systems to a seemingly unrelated grammatical constructions, known as "ethical datives".

Keywords: egophoric marking, semantic roles, epistemic authority

1 Introduction

Egophoricity, as defined by Dahl (2000), is a discourse phenomenon relating to markers that refer to the speech participants, i.e. the speaker and the addressee. Egophoricity in this sense contrasts with allophoric reference to non-speech participants and is expressed by means of logophoric and pronominal forms (Dahl 2000: 39). Recently, however, egophoricity has been proposed as a label for a kind of epistemic marking that allows the speaker to make reference to his/her own personal knowledge of an event/state based on some form of involvement in a social and/or cognitive sense (see Floyd et al. in press). This more restricted grammatical phenomenon, also known as *conjunct/disjunct* in the literature, is a typologically rare phenomenon that has been attested for a small number of languages in the northern parts of South

Article note: This paper belongs to the special issue: Person and knowledge: from participant-role to epistemic marking, ed. by Henrik Bergqvist and Seppo Kittilä

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America (the Andes), the Caucasus, the Himalayas, and Papua New Guinea¹. In order to avoid overlap with Dahl's use of the term, as well as parallels with categorical terms such as evidentiality and modality, the present paper will use *egophoric marking* instead, thus drawing on the *egophor* word-base, but leaving aside the *-icity* ending. This cautionary choice of terminology is motivated by the goals of this paper, which are to examine variation across attested systems of egophoric marking and focus the discussion on the core properties of such systems.

Based on formal and distributional similarities, egophoric marking has been analyzed as a form of person indexing (e.g. Aikhenvald 2004). However, egophoric marking differs from agreement for instance by encoding the epistemic status of a speech participant (in terms of epistemic authority/primacy) rather than argument identity, a feature that, in turn, has prompted others to analyze egophoric marking as a type of epistemic marking akin to evidentiality or mirativity (e.g. De Lancey 1990). While egophoric marking shares some formal and functional traits with evidentiality, it is not yet clear whether egophoric marking has anything to do with signaling 'information source', which appears to be the core function of evidentials cross-linguistically (e.g. Aikhenvald 2004; cf. San Roque et al. in press).

Egophoric marking involves a binary contrast (egophoric vs. allophoric/alterphoric; Post 2013) that has been described in terms of the presence/absence of privileged access to knowledge (Hargreaves 1991) or the involvement/non-involvement of a speech act participant in an event (Creissels 2008).

Egophoric marking systems show variation with respect to each of its purportedly defining features: whose knowledge is at stake, as reflected by sentence-type alterations vis-à-vis subject person, and what type of involvement justifies the use of the egophoric marker as visible in restrictions regarding predicate-type and their associated semantic roles.

The only remaining variable that appears constant is the epistemic one, i.e. the epistemic authority of the speaker with respect to events that involve the speaker, and the speaker's expectation that the addressee possesses a corresponding epistemic status with regard to events that involve the addressee.

Arguably, Hale's (1980) pioneering description of the Kathmandu Newar verb system has influenced our current conception of egophoric marking to a considerable extent. In Newar, egophoric markers are restricted to contexts with volitional agent-subjects. This restriction is also found in other systems, which makes contexts involving volitional subjects seem key to identifying egophoric markers. Nevertheless, from a cross-linguistic perspective it becomes evident that systems of egophoric marking vary greatly in this regard, as some languages also allow the egophoric marker to occur in contexts with "undergoer" arguments (see Curnow 2002). From the point of view of argument marking (to which egophoric marking has been compared), an undergoer is a semantic role associated with objects rather than subjects. In contrast to cases involving volitional agent-subjects, these less prototypical cases have received little attention in previous descriptions of egophoric marking.

The aim of the present paper is to consider some of the attested variation found in different egophoric marking systems in order to determine the relevance of such variation in shaping our conception of egophoric marking. As this area has not been the subject of much discussion thus far, the focus in this exploration lies in charting which kinds of participants can be associated with egophoric marking and what the range of variation is. The paper will consider so-called "secondary" egophoric markers² which are used to mark undergoers, affected participants, and to express personal opinions. It will become clear that these less prototypical instances of egophoric marking bridge a gap to seemingly unrelated grammatical

¹ Languages with egophoric marking include the Barbacoan languages Awa Pit (Curnow 2002), Tsafiki (Dickinson 2000), Cha'palaa (Floyd, in press), Nam Trik (Norcliffe, in press; Gonzales Castaño & Bruil 2016) and the Chibchan language Ika (Bergqvist 2012, in press). In Asia, the system is found in the Sino-Tibetan languages Kathmandu Newar (Hale 1980; Hargreaves 1991, 2005), Bunan (Widmer, forthcoming), various Tibetan varieties (e.g. DeLancey 1990, 2003; Haller & Haller 2007) as well as in languages of the Amdo-Sprachbund such as the Mongolic languages Mongghul (e.g. Åkermann 2012), Mangguer (Slater 2003; Fried, in press) and Bonan (Fried 2010), and the Sinitic language Wutun (Jahunen et al. 2008; Sandman, in press). Furthermore, it is attested in the Indo-Aryan language Dhivehi (Lum 2016), in the Nakh-Daghestanian language Akhvakh (Creissels 2008) and the Trans-New-Guinea languages Oksapmin (Loughnane 2009) and Duna (San Roque 2008).

² The term "secondary egophoric marker" was first used in the description of the Tibeto-Burman language Bunan (Widmer, forthcoming).

constructions such as “ethical datives”, also known as “non-selected arguments” (Bosse et al. 2012; see Section 5, below).

Section 2 presents the canonical pattern of egophoric marking, drawing on the pioneering description of Kathmandu Newar by Hale (1980) and subsequent accounts by Hargreaves (1991, 2005). It points to some parameters of variation in that language and in other languages with comparable systems. In Section 3, one of those parameters, namely the paradigmatic structure of egophoric marking systems, is examined to reveal differences in complexity: some egophoric marking systems are paradigmatically simple, while others show a greater degree of paradigmatic complexity. In Section 4, the functions of what has been called “secondary” egophoric markers are discussed in order to focus our exploration on how their properties may be compared to non-selected arguments in Section 5. Finally, the findings of this study are summarized in Section 6.

2 Background

2.1 The canonical pattern

In Kathmandu Newar, egophoric markers are restricted to main clauses with first and second person subjects and to complement clauses of co-referential reported speech constructions with third person subjects. Allophoric markers occur in all other configurations of subject person and sentence-type, as well as in non-coreferential reported speech clauses. This distribution of the egophoric marker in main clauses is illustrated in (1) and (2).

- 1) a. *ji wan-ā*
1.ABS go-PST.EGO
‘I went.’
- b. *cha wan-a*
2.ABS go-PFV.ALLO
‘You went.’
- c. *wa wan-a*
3.ABS go-PFV.ALLO
‘S/he went.’ (Hargreaves 2005: 12)
- 2) a. *jī: a:pwa twan-a lā*
1.ERG much drink-PFV.ALLO inter
‘Did I drink a lot/too much?’
- b. *chā: a:pwa twan-ā lā*
2.ERG much drink-PST.EGO inter
‘Did you drink a lot/too much?’
- c. *wā: a:pwa twan-a lā*
3.ERG much drink-PFV.ALLO inter
‘Did s/he drink a lot/too much?’ (Hargreaves 2005: 15)

From these examples, it becomes evident that the speaker in statements (corresponding to a first person subject) and the addressee in questions (corresponding to a second person subject) both trigger egophoric marking on the verb. This distributional characteristic stems from the fact that the two discourse participants share a speech-act role which has been called “epistemic source” (Hargreaves 1991, 2005; cf. Bergqvist & Kittilä, this SI, for a discussion)³. This speech-act role may be defined as “the *epistemic authority* for the proposition in the clause” (Hargreaves 1991:25-26, our italics). The epistemic authority is thus the discourse participant whose knowledge is under consideration: the speaker assumes this role in statements and assigns epistemic authority of the proposition to the addressee when he/she asks a question.

³ This speech-act role is central to descriptive accounts of egophoric marking and carries different labels, e.g. “assertor” (Creisels 2008:12), “locutor” (Curnow 1997) or “informant” (Bickel 2008; Bickel and Nichols 2007).

A second distributional trait of egophoric marking in Kathmandu Newar is shown in (3).

- 3) a. *jī:* *ḡyā* *yān-ā*
 1.ERG work do-PST.EGO
 ‘I did the work.’ (Hargreaves 2005: 12)
- b. *jī* *mhiga* *then-a*
 1.ABS yesterday arrive-PFV.ALLO
 ‘I arrived yesterday.’ (Hargreaves 2005: 13)
- c. *jī:* *thul-a*
 1.ERG understand-PFV.ALLO
 ‘I understood (it).’ (Hargreaves 2005: 13)

The action denoted in (3a) is construed as being volitionally instigated by an agent, whereas this is not the case in (3b-c). Thus, the distribution of the egophoric marker is dependent on the lexico-semantic properties of the predicate that relate to argument structure and semantic roles. In the case of Kathmandu Newar, egophoric marking is restricted to volitional agents. Similar restrictions are attested for other languages with egophoric marking, e.g. the Nakh-Daghestanian language Akhvakh (Creissels 2008). However, a restriction to this type of argument is by no means universal, and there are a number of languages with less restricted egophoric marking systems (see Section 2.2, below).

A final feature of canonical egophoric marking, as seen in Kathmandu Newar, is that the egophoric marker is found in co-referential reported speech constructions:

- 4) *wq̄q* *wa* *ana* *wanā* *dhakāā* *dhāla*
 3S.AGT 3s there go.EGO that say.ALLO
 ‘He said that he went there (himself)’ (Hale 1980: 97)

The co-referential status of the subject of the main clause (‘He said that’) with the subject of the subordinate clause (‘he (himself) went there’) warrants egophoric marking on the verb of the subordinate clause in a way that is directly analogous to languages with logophoric marking (e.g. Ameka 2004). A non-co-referential situation where the reported speaker is distinct from the actor in the report, results in allophoric marking. While not all languages with egophoric marking allow for the egophoric marker to occur in co-referential reported speech constructions, many of them do. Consequently, this feature has to be accounted for in the cross-linguistical description of egophoric marking.

2.2 Variation of the canonical pattern

Variation across egophoric marking systems has been discussed in terms of “flexibility” (San Roque et al. in press) i.e. in some languages an egophoric marker can contradict the canonical distribution, whereas, in other languages, the distribution is more “inflexible” and adheres more strictly to the canonical pattern. The notion of flexibility, in essence, applies to all defining parameters of egophoric marking, as the ensuing discussion will show.

Firstly, we will consider the formal properties of egophoric marking, i.e. how languages mark the egophoric contrast using affixes or auxiliaries, and their positions with respect to the verb and to the clause as a whole. The morpho-syntactic status of egophoric forms ranges from inflectional changes to the verb as seen in Kathmandu Newar (Section 2.1), to auxiliary forms (copula) in Standard Tibetan for instance, to lexical stem variation (e.g. Norcliffe, in press). Sometimes, the egophoric contrast is fused with ones relating to tense and aspect, resulting in portmanteau forms. Such overlaps are also common with other TAME-categories (i.e. Tense-Aspect-Mood-Evidentiality) and are, as such, not specific to egophoric marking. Languages with egophoric marking appear to share some structural characteristics. For instance, they lack person indexing on the verb and many also feature evidential systems overlapping with egophoric marking (see San Roque et al., in press, for an overview). The lack of person marking on the verb is fairly

widespread cross-linguistically (cf. Siewierska 2013), but in languages with egophoric marking, it may be further motivated by the strong implicature of argument identity in such systems. It would seem redundant to encode argument identity along with epistemic authority, since the latter may be implied by the first. Languages with evidential systems are subject to areal patterns of distribution which also appear to overlap with areas where egophoric marking systems are found. It is possible, and indeed likely, that the interactionally motivated functional pressures that give rise to evidential systems, are identical to those that produce egophoric marking systems.

The distribution of the egophoric marker across subject person and sentence-type is what jumps out at anyone coming into contact with the phenomenon. This distributional pattern has been discussed using the term “shiftability” (see San Roque et al., in press), which refers to the property of the egophoric marker to occur together with first person subjects in declarative sentences and with second person subjects in interrogative ones. The logophoric function of the egophoric marker in complement-taking clauses of (co-referential) reported speech may also be subsumed under this distributional property. Bergqvist (in press) argues that the logophoric use of egophoric markers as related to the feature of “shiftability” across subject person and sentence-type, stems from the crucial role of “alignment” in such systems where the egophoric marker signals an alignment between the subject of the clause and the epistemic authority of the utterance.

The notion of alignment as a requirement for egophoric marking is directly analogous to the concept of “shifter” as discussed by Jakobson (1957; cf. Jespersen 1922), in which an element of the speech situation (‘speech event’, in Jakobson’s terms) such as a participant, is related to an element of the sentence (‘narrated event’), such as an actor. Aligned constructions that allow for egophoric marking include: [I say that] *I am running*; [Would YOU say that] *you are running?*; [HE says that] *he is running*. A non-aligned construction is any construction where *the person charged* with saying something (e.g. the speaker) is referentially distinct from the subject of the sentence, e.g. [I say that] *he is running*. “Shiftability” in the sense described here is, however, also attested for modals and evidentials (see Bergqvist & Kittilä, this SI; Bergqvist, in press) and thus, may not be regarded as a property specific to egophoric marking.

Language internal variation in the distribution of the egophoric marker may produce certain pragmatic effects, e.g. an allophoric morpheme can be used in first person statements (where one would expect an egophoric form) to signal a lack of intention on the part of the speaker (e.g. Tsafiki, Dickinson 2000: 387).

- 5) a. *la yaka machitechi poreyoe*
la ya=ka machite=chi pore-yo-e
 1M 3=ACC machete=INSTR cut-EGO-DECL
 ‘I cut him (intentionally) with the machete.’
- b. *la yaka machitechi poreie*
la ya=ka machite=chi pore-i-e
 1M 3=ACC machete= INSTR cut- ALLO-DECL
 ‘I cut him (unintentionally) with the machete.’

Curnow (2002) notes that using the allophoric marker with second person questions may be permissible when talking about events that are already known to the speaker (as well as the addressee), making such utterances rhetorical, thus aligning with how egophoric markers pattern in statements, which in the case of second person is allophoric (Curnow 2002: 614-615).

A distinct distributional feature concerns restrictions for the egophoric marker to occur in some temporal contexts, but not in others. In Tsafiki, not all future events are compatible with egophoric marking, only those that are already initiated or necessary in a modal sense (Dickinson 2000: 414). In Kathmandu Newar and Akhvakh, the egophoric marker is restricted to past contexts. Other languages display less categorical restrictions where egophoric marking is marked differently depending on subject person. In Ika, egophoric marking with first person subjects can be used to refer to present and past events, whereas egophoric marking with second person subjects is restricted to present events (see Bergqvist 2012). Temporal-aspectual restrictions associated with the distribution of forms have also been attested for evidentials and, as such, are not a specific feature of egophoric marking.

The semantics of egophoric marking target the involvement of a speech-act participant as a basis for epistemic primacy/authority, something that can be seen in restrictions of the egophoric marker to certain predicate types. The involvement of a speech-act participant as a defining feature of egophoric marking has been discussed using terms and concepts such as “scope” and the “knower’s” relation to the proposition (Bickel 2008)⁴, which aim to capture the fact that egophoric marking is usually restricted to certain arguments, most commonly volitional agents, as seen above for Kathmandu Newar. As this paper aims to show, however, languages with egophoric marking display differences in this regard. While egophoric marking is restricted to volitional agent subjects in Kathmandu Newar, the egophoric marker in a language like Galo, also applies in contexts in which the grammatical subject of the clause does not act volitionally (e.g. in an utterance like ‘I fell from the balcony’ (Post 2013:123); see Section 4, below). In other languages yet, the egophoric marker can occur with “undergoers”, e.g. patients or recipients typically encoded as grammatical objects, and can target non-selected, peripheral arguments that may not be instantiated in the clause at all. Egophoric markers may thus be found in sentences without explicit expression of an argument corresponding to the epistemic authority (i.e. a first or second person pronoun) to signal a speech-act participant’s privileged access to knowledge about a third person’s situation (e.g. Shigatse Tibetan, Haller & Haller 2007; see below).

Taking this attested variation at face value, and given the prominent role of involvement in egophoric marking, we will detail the paradigmatic structure of egophoric marking systems and account for the role of so-called “secondary” egophoric markers, as well as issues that relate to the number of forms in a given paradigm. It is argued that differences in the formal structure of egophoric marking systems may be connected to the function and semantics of individual forms allowing for a comparison of attested variation across languages with egophoric marking.

3 The paradigmatic structure of egophoric marking systems

Egophoric marking systems differ in the number of egophoric markers found in a given paradigm. On this basis, two types of egophoric marking systems may be identified: we will call them “simple” and “complex” systems. In simple systems, there is a single egophoric marker in a given paradigm, which contrasts with one, or several allophoric markers. This egophoric marker targets a certain argument type, typically agents, and appears to be associated exclusively with arguments expressed in the ‘subject’ grammatical relation. Examples of simple paradigms are given in Table 1.

Table 1. Paradigms of simple egophoric marking systems

LANGUAGE	EGOPHORIC	ALLOPHORIC	
Akhvakh (Nakh-Dagh.), <i>PVF</i>	-ada	-ari	(Creissels 2008)
Galo (Tibeto-Burman)	-tó	-gée (PFV) -ée (IPFV)	(Post 2007: 607)
Lhasa Tibetan (Tibeto-Burman), <i>IPFV</i>	-ki yod	-ki (<i>dug</i>) -ki yod-pa red	(DeLancey 2003)
Tsafiki (Barbacoan)	-yo	-∅; -i	(Dickinson 2000)

⁴ Bickel’s use of the term ‘scope’ targets the restricted distribution of egophoric markers with first and second person subjects. In this respect, egophoric markers differ from evidentials which ‘scope’ over any configuration of arguments. The more traditional use of scope differs somewhat from Bickel’s use of the term. In Cinque (1999) for instance, scope targets how functional categories such as person and negation affect, or are unaffected by, other categories such as epistemic modality and markers of sentence-type. A marker whose meaning remains unaffected by the presence of negation for example, is thus said to have scope over that category (see Bergqvist 2015).

In these languages, the contrast between the egophoric and the allophoric marker(s) is essentially binary: a verb form is either marked as egophoric or allophoric, although there may be more than one morpheme in the allophoric set. In this case, other semantic contrasts (e.g. aspectual or evidential) are encoded in the allophoric forms which stand in complementary distribution with the egophoric form. A simple system of egophoric marking is thus defined as one that features a single egophoric marker in a given paradigm, irrespective of the number of allophoric forms and their meaning.

Languages with complex egophoric marking feature more than one egophoric marker and may motivate a distinction between a primary and a secondary marker which occur in distinct contexts and encode different kinds of involvement.⁵ In such systems, a primary marker maps onto the egophoric markers found in simple systems and occurs in sentences where the epistemic authority aligns with that of a prototypical grammatical subject. Secondary markers, by contrast, map onto undergoer arguments that target the knowledge of the speaker who experienced a state of affairs or underwent an action performed by someone other than him/herself. Secondary markers may also occur in clauses in which the epistemic authority is not instantiated by an argument of the verb. In Table 2, Awa Pit and Lhasa Tibetan exemplify complex systems:

Table 2. Paradigms of complex egophoric marking systems in Awa Pit and Lhasa Tibetan

LANGUAGE	PARADIGM	EGOPHORIC	ALLOPHORIC	
Awa Pit	<i>NPST</i>	<i>-is ~ s</i>	<i>-i ~ Ø ~ y ~ zi</i>	(Curnow 2002)
(Barbacoan)	<i>PST</i>	<i>-w (ego₁); -s (ego₂)</i>	<i>-zi</i>	
Lhasa Tibetan (Tibeto-Burman)	<i>IPFV.</i>	<i>-ki yod</i>	<i>-ki ('dug);</i>	(DeLancey 2003)
	<i>FUT</i>	<i>-ki yin</i>	<i>-ki yod-pa red</i>	
	<i>PFV</i>	<i>-pa yin (ego₁);</i>	<i>-ki red</i>	
		<i>-byung (ego₂)</i>	<i>-pa red; -song;</i>	
			<i>-bzhang</i>	

In the Awa Pit non-past paradigm, we find a binary contrast which parallels simple egophoric marking systems, while the past paradigm exhibits a ternary distinction with an additional egophoric suffix, *-w*. Curnow (2002:619) states that the distribution of the two egophoric suffixes *-w* and *-s* found in the past paradigm, cannot be distinguished as markers of subject and object arguments respectively. Nor is the agency/volition of the subject at issue. Rather, *-s* appears to be used in contexts where the event in question involves one of the speech-act participants in a capacity other than acting subject; they can be experiencer-subjects or simply “affected” by the event, as long as the affectedness targets the speaker or the addressee, with or without explicit subject marking. Similarly, Lhasa Tibetan has a single egophoric marker in the imperfective and future paradigms (which contrasts with a number of allophoric markers that encode evidential distinctions), while the perfective paradigm features two egophoric markers.

Languages known from the literature to display complex egophoric marking are: Awa Pit (Curnow 2002) and Nam Trik (Gonzales Castaño & Bruil 2016; Norcliffe, in press) from the Barbacoan language family, and Bunan (Widmer, forthcoming) and Western and Central varieties of Tibetan (e.g. DeLancey 1990, 2003; Haller & Haller 2007) from the Tibeto-Burman language family.

Awa Pit, Bunan and Tibetan have separate paradigms for primary and secondary markers, where the latter are restricted to the past tense or perfective aspect domain⁶. In Nam Trik, only one set of markers is attested which can be used in either past or non-past clauses.

⁵ The choice to refer to different kinds of egophoric markers using the terms “primary” and “secondary” may be motivated by the fact that first person subjects (as an instantiation of the speaker in the clause) are more frequently found to occupy the role of agent than other non-agentive semantic roles (Dahl 2000). In addition, one may also draw support from the fact that if a language with egophoric marking has one egophoric marker, then it will occur in contexts with first and second person agents, and not with undergoers or peripheral participants (see Section 4, below).

⁶ This preference for past/perfective is also found in evidentiality systems, i.e. languages usually exhibit more evidential distinctions in the past/perfective than in the present/imperfective (Aikhenvald 2004: 265).

In the next section, we will look at secondary egophoric markers in order to enable a comparison with non-selected arguments, which are functionally equivalent to secondary egophoric markers. Those are discussed in Section 5.

4 Secondary egophoric marking and non-agentive participants

In this section, we detail the distribution of secondary egophoric markers in the languages for which they are attested. The focus of this account is on the different types of semantic roles that secondary egophoric markers are associated with. We show that the epistemic authority for an utterance, in addition to mapping onto the acting subject of the clause, can be an undergoer (Section 4.1) or a peripheral participant (Section 4.2) that is not selected by the verb as an argument of the clause. Moreover, it is shown in Section 4.3 that secondary egophoric markers can be employed to express personal opinions or attitudes. Section 4.4 summarizes these findings.

4.1 Undergoer as epistemic authority

Secondary egophoric markers target non-agentive/non-volitional involvement and are thus distributed differently from primary egophoric markers with respect to predicate type and accompanying semantic roles. This distributional difference can be seen in the Lhasa Tibetan perfective constructions presented in (6), where the primary egophoric marker *-pa yin* is used when the epistemic authority is a volitional agent and the secondary egophoric marker *-byung* ([tɕuŋ]) is used when this relates to the semantic role of undergoer (e.g. patient).

- 6) a. *ngas byas-pa yin*
 1SG (ERG) did-PFV.EGO₁
 ‘I did it.’ (DeLancey 1990: 298)
- b. *nga shi-byung*
 1SG die-PFV.EGO₂
 ‘I died.’ (DeLancey 1990: 300)
- c. **nga shi-pa yin*
 1SG die-PFV.EGO₁
 (DeLancey 1990: 300)

The term undergoer is used in the sense of a semantic macrorole which is more akin to patient-like participants in an event. This macrorole primarily contrasts with actors, i.e. participants that are more agent-like, and subsumes a number of more fine-grained semantic roles such as experiencer, theme, patient or recipient (cf. Van Valin & LaPolla 1997). The examples below show how the egophoric marker maps onto the roles of patient and stimulus respectively:

- 7) *nai kek kuakitan*
na-wai kek kuaki-ta-an
 1-GEN husband hit-EGO₂-ALLO
 ‘My husband hit me.’ (Rojas et al. 2009, cited in Gonzales Castaño & Bruil 2016)
- 8) *Juan=na (na-wa) izh-ti-s*
 Juan=TOP (1SG-ACC) see-PST-EGO₂
 ‘Juan saw me.’ (Curnow 2002: 621)

The distribution of secondary egophoric markers varies across languages in terms of which semantic roles they are associated with. This variation echoes with simple systems where the distribution of the primary

egophoric marker also varies in terms of volitionality and control over events. In (9), from Lhasa Tibetan, verbs with experiencer arguments are marked with the secondary egophoric marker *-byung*, while Bunan uses the primary marker *-men* in a corresponding construction in (10).

9) *ngas kho=tsho mthong-byung*
 1SG.ERG 3PL=DAT see-PFV.EGO₂
 ‘I saw them.’ (DeLancey 2003: 300)

10) *gi=dzi karma thaŋ-ø-men*
 1SG=ERG star see-TR-PST.DIR.EGO₁
 ‘I saw the stars (in the sky).’ (Widmer, forthcoming p.523)

While primary and secondary egophoric markers are in complementary distribution, it is possible for a secondary egophoric marker to co-occur with an allophoric marker in some systems. This is the case in Bunan and Nam Trik where verbs appear to have two slots for egophoric marking. In Bunan, the allophoric marker *-tsha* (marking an action of a non-speech-act participant) and the secondary egophoric marker *-ku* (marking the non-agentive involvement of a speech-act participant) co-occur.

11) *tal=tshi ja: gi=tok khet-ø-ku-tsha*
 3=PL yesterday 1SG=DAT beat-TR-EGO₂-PST.DIR.ALLO.PL
 ‘They beat us yesterday.’ (Widmer, forthcoming p. 531)

Future research may reveal more about what semantic roles are associated with secondary markers and what distributional differences exist between languages that have them. At this point, we can only provide an outline of the distribution of secondary egophoric markers vis-à-vis semantic roles, given the scarcity of available data. However, we note that secondary egophoric markers target semantic roles associated with undergoers, and that this appears to be an important function of secondary egophoric markers. We now turn to instances where secondary egophoric markers target so-called peripheral participants that do not map onto an argument of the clause.

4.2 Peripheral participant as epistemic authority

Secondary egophoric markers also occur in contexts where a speech-act participant is involved in an event as a peripheral participant. A peripheral participant is commonly characterized as one who is not essential to the occurrence of an event and who is only loosely involved in it (see e.g. Lehmann 2005). When realized, peripheral participants are typically expressed as adjuncts (e.g. datives) assuming semantic roles such as instrument or beneficiary. This definition of peripheral participants may be applied to some uses of secondary egophoric markers, such as in (12) from Bunan:

12) *taldzi girok len likkudza*
tal=dzi gi=tok len lik-ku-dza
 3=ERG.SG 1SG=DAT work make-EGO₂-PST.DIR.ALLO.SG
 ‘He did the work for me.’ (Widmer, forthcoming p. 532)

In (12), the secondary egophoric marker maps onto the semantic role of beneficiary, which is expressed by the dative form *girok*. In Awa Pit, by contrast, the peripheral participant is not overtly expressed. Curnow (2002) argues that a defining criterion of a peripheral participant as relevant to egophoric marking in Awa Pit lies with the (non-)realization of a form that encodes it. This is illustrated in (13):

- 13) a. *pina alu ki-ma-ti-zi*
 very rain do-COMP-PST-ALLO
 ‘It rained heavily.’
 b. *pina v ki-ma-ti-s*
 very rain do-COMP-PST-EGO₂
 ‘It rained heavily [on me].’

With a non-egophoric verb form as in (13a), the speaker expresses a neutral statement of facts. By applying an egophoric marker in (13b), the speaker indicates that s/he was directly affected by the event denoted by the verb. Example (14) demonstrates the impossibility of explicitly marking the presence of the peripheral participant (i.e. the speaker) in the event described. The ungrammaticality of (14) shows that the secondary egophoric marker in Awa Pit does not target the semantic role of undergoer, but the affectedness of the speaker.

- 14) **na-wa alu ki-ma-ti-s*
 1SG-ACC rain do-COMP-PST-EGO₂
 Intended: ‘It rained heavily [on me].’ (Curnow 2002: 620)

A similar example where the speaker is affected by an event comes from the related language Nam Trik in (15).

- 15) *nakish pesrik kitan kashi*
nakish pesrik ki-ta-an kashi
 smoke angry COP-EGO₂-ALLO a.bit
 ‘The smoke is bothering me a bit (Lit: The smoke is angry, which affects me a bit).’ (Gonzales Castaño & Bruil 2016)

A peripheral participant does not have to be affected, nor be the beneficiary of an action/event. It can also be a recipient as in the Dokpa Tibetan example in (16), or the goal of a motion as exemplified by Shigatse Tibetan in (17). In (16) the dative pronoun that refers to the speaker is optional, as the secondary egophoric marker implies that the speaker assumes the role of recipient. In (17), by contrast, it is clearly the case that the dative targets the location and not the speaker, which sets this construction apart from the Bunan example, in (12), or the Dokpa Tibetan example (16) where the dative maps onto the speaker as a beneficiary or recipient, respectively.

- 16) *khõ (ŋa=la) yiŋe tʃi: tʃuŋ*
 3SG.M.ERG (1SG=DAT) letter write.PFV EGO₂
 ‘He wrote [me] a letter.’ (Caplow 2000: 37)

- 17) *kʰõ tʃʰõm-la lāp-tɕu*
 he market-DAT arrive.PFV-EGO₂
 ‘He came to the market [where I was].’ (Haller & Haller 2007: 185)

Secondary egophoric markers may also map onto the speech-act participant as possessor, or as someone with a close personal relationship to a person corresponding to an argument of the clause. In (18), the speaker’s umbrella has been lost to the (assumed) detriment of the speaker. In such cases, we might also posit a malefactive function for the *-byung* marker. At present, it is unclear to us whether this marker maps onto the possessor (genitive) or the malefactive reading of the sentence.

- 18) *nga’i nyi=gdugs brlags-byung*
 1SG (GEN) umbrella lost-PFV.EGO₂
 ‘My umbrella got lost.’ (DeLancey 1990: 311)

In (19), the egophoric marker signals that the speaker has a close personal relationship to ‘the child’, which constitutes the only argument of the clause:

- 19) *p^hisā=ni nanī tšēpō na:=təu*
 child=DEF last.year very sick.PFV-EGO₂
 ‘The child was often sick last year.’ [The speaker has a close relationship to the child] (Haller & Haller 2007: 185)

4.3 Attitude holder as epistemic authority

Lastly, secondary egophoric markers can be used to signal a speech act participant’s attitudes, feelings and judgments about the content of an utterance. The choice between allophoric and secondary egophoric markers may depend on stating a matter of fact (allophoric) or expressing the speech-act participant’s opinion (egophoric). In the latter case, the utterance signals the speech-act participant’s personal opinion on a matter that is of some concern. This use of secondary egophoric markers is exemplified by data from Awa Pit in (20) and Nam Trik in (21):

- 20) *pina us a-ti-s*
 very heavy be-PST-EGO₂
 ‘I found [the bag] very heavy.’ (Curnow 2002: 620)
- 21) *maik mamik kə-ta?*
 food tasty be-EGO₂
 ‘Is the food tasty [to you]?’ (Norcliffe, p.c.)

In (20) the presence of the egophoric marker signals the speaker’s opinion about the weight of the bag. While no contrasting example is provided by Curnow, we may assume that the same clause with an allophoric verb form would be interpreted as a plain statement of fact. Similarly in (21), the speaker asks for the hearer’s opinion about the food.

4.4 Section summary

In this section, three different functions have been identified for secondary egophoric markers:

- (i) The speech-act participant is involved in the event as an undergoer, e.g. as a patient, or as a recipient, and thereby maps onto an argument of the verb
- (ii) The speech-act participant is loosely involved in the event as a peripheral participant, e.g. as a beneficiary or affected party, and does not map onto an argument of the verb
- (iii) The speech-act participant expresses a personal opinion and/or attitude, and does not map onto an argument of the verb

While clearly limited by available data, some findings are summarized in Table 3. A tick signals that a given function is attested for the language indicated in the leftmost column. A cross indicates that counter evidence to the function in question is available. A blank cell indicates instances for which no example or counterexample has been found.

Table 3. Types of involvement in secondary egophoric marking.

	UNDERGOER ARGUMENT	PERIPHERAL PARTICIPANT				ATTITUDE HOLDER
		GOAL	POSSESSOR	BENEFICIARY	AFFECT. EXP.	
Awa Pit	✓		×		✓	✓
Nam Trik	✓		×		✓	✓
Bunan	✓	×	×	✓	×	×
Tibetan	✓	✓	✓	✓		

For the languages included in the study, the most widely attested function of secondary egophoric markers is to signal the role of undergoer. However, we observe some variation with regard to the semantic roles that are covered by secondary egophoric markers. ‘Experiencers’ are signaled using the secondary marker in Barbacoan languages and Tibetan, while primary egophoric markers apply in comparable contexts in Bunan (see (10)).

As for peripheral participants, only the Barbacoan languages show egophoric marking that targets affected participants, whereas contexts involving goals and possessors are attested in Tibetan. In Bunan, it is not possible for a speaker to use an egophoric marker to signal his/her peripheral participation in an event.

Finally, the expression of a speech-act participant’s attitude/opinion using secondary egophoric marking is only attested for the Barbacoan languages.

Having surveyed the various functions of secondary egophoric marking, we now turn to a functionally comparable phenomenon, namely the expression of affectedness and attitude using ethical/sympathetic datives, as seen in languages like German and Spanish. These former dative forms have in common with (some) secondary egophoric markers that they fail to select an argument of the verb while adding pragmatic meaning relating to the perspective of the speaker. This has prompted researchers to call such forms “non-selected argument” datives (see Bosse et al. 2012; Camillieri & Sadler 2012). In the following section, we discuss these non-selected datives to allow for an eventual comparison with secondary egophoric markers.

5 Non-selected arguments as markers of epistemic authority

This section details how in languages without egophoric marking, datives may develop uses that parallel some uses reviewed for secondary egophoric markers in Section 4, more specifically peripheral participants and markers of opinion/attitude. Some of those uses are well known from the literature and are commonly called “ethical datives” (Section 5.1). Related non-subject markers similar to ethical datives are discussed by Bosse et al. (2012) using the term “non-selected arguments”, i.e. person forms that signal the status of an argument as *possessor*, *beneficiary*, *affected experiencer*, or *attitude holder* (Section 5.2). Attitude holders, as a special case of non-selected arguments (Section 5.3), may be connected to epistemic marking in Kogi and Chechen, as well as to the secondary egophoric markers which we have just reviewed (Section 5.3). From their distributional and functional properties, it is clear that the markers described below may be compared to some egophoric markers in terms of signaling involvement and epistemic authority.

5.1 Ethical datives

Ethical datives are identical in form to proper datives, but they display syntactic properties that separate them from datives that target an argument of the clause (e.g. Abraham 1973, for German). In German, the ethical dative is restricted to directive/exclamative utterances with first and second person dative forms, while not selecting either (dative) argument.⁷ Instead, it serves the pragmatic function of signaling the

⁷ In contrast to first person ethical datives, instances with second person are less frequent and are restricted to exclamative utterances. In such cases, the speaker evaluates the proposition as astonishing or unusual, and at the same time expresses his belief that the addressee shares this opinion (Wegener 1989).

speaker's attitude/affectedness with respect to the proposition it occurs in. This pragmatic function evokes parallels with modal particles, to which German ethical datives have been compared (Schmid 2006). Below is an example of the German ethical dative:

- 22) *Du sollst mir nicht wieder fernsehen!*
 you shall me.DAT not again watch.television
 'You shall not watch TV again (and I want this to come true).' (Bosse et al. 2012: 1197)

Comparable, heterogeneously labeled forms are attested for several European languages, e.g. Spanish ("sympathetic datives", Haddad 2013), Czech ("datives of empathy", Fried 2011), Hungarian ("emo-datives", Rákosi 2008), Albanian ("affected experiencer", Bosse et al. 2012) and Maltese ("non-selected dative", Camilleri & Sadler 2012). They are also attested for non-European languages such as Hebrew ("subject coreferential dative", Halevy 2008), Syrian Arabic ("ethical dative"/ "interested hearer dative", Al-Zahre & Boneh 2010), Lebanese Arabic ("unselected participant"/ "hearer and speaker-oriented pronouns", Haddad 2013) and Japanese (nominative, "affected experiencer", Bosse et al. 2012). The pragmatic function of ethical datives is to signal the speaker's attitude/affectedness with respect to the event under discussion. Consequently, researchers are calling such forms "non-selected arguments" (Bosse et al. 2012; Camilleri & Sadler 2012), a designation that connects them with selected arguments, which is the conventional function of any pronoun, including datives.

5.2 Non-selected arguments

Bosse et al. (2012) identify four types of non-selected arguments: *possessor*, *beneficiary*, *affected experiencer*, and *attitude holder*. Each are found in German, although not all languages with non-selected arguments display all four functions. The four types of non-selected arguments identified in German are exemplified below:

Possessor

Als sie ankommen, bluten ihnen die Füße.
 'As they arrive, [their] feet are bleeding.' (Schmidt 2006: 955 [our translation])

Beneficiary

Er kochte seinem Vater eine Suppe
 'He cooked his father some soup.' (Fischer 1997: 78 [our translation])

Affected experiencer

Alex zerbrach Chris Bens Vase.
 'Alex broke Ben's vase on Chris.' (Alex broke Ben's vase. [this matters to Chris.]; Bosse et al. 2012: 2)

Attitude holder

Du sollst mir dem Papa die Schuhe putzen!
 'You shall clean the shoes for dad [I want this to happen.]' (Bosse et al. 2012: 11)

Except for the attitude holder, non-selected argument types display a clear correlation to a semantic role encoded by proper datives, i.e. (external) *possessor*, *beneficiary/maleficiary*, and *experiencer* (e.g. Zúñiga & Kittilä 2010). The *beneficiary* and *experiencer* roles may be conceptually related to aspects of epistemicity, which goes some way towards explaining the connection between datives that select an argument and those that do not. The *attitude holder* construction seems to lack a clear correlation with respect to any semantic role associated with proper datives. Of the four non-selected argument types, it also shows the clearest epistemic function. Bosse et al. remark on this, commenting that the *attitude holder* is the one type most clearly associated with the notion of ethical dative in the literature (Bosse et al. 2012: 3).

The identified non-selected argument types differ from each other semantically and syntactically, with a gradual decrease in concrete semantic content from *possessor* to *attitude holder*. Features that distinguish between types of non-selected arguments include pragmatic (not at-issue) meaning content and distributional restrictions across sentence types and person. A comparison along these lines results in a division between *possessor* and *beneficiary* types, on the one hand, and *affected experiencer* and *attitude holder* on the other. The former two (*possessor/beneficiary*) have at-issue semantic meaning content, whereas the latter (*affected experiencer/attitude holder*) primarily target aspects of the speech situation and consequently lack at-issue meaning. For instance, in German the attitude holder type is only instantiated by (weak) first and second person dative forms that reflect the attitude of the speaker and/or the addressee.

5.3 Attitude holders and secondary egophoric marking

Attitude holder forms are discussed by Haddad (2013) for Lebanese Arabic. He calls them “unselected participant” forms and his investigation focuses on how they are used in gossip constructions.⁸ The unselected participant forms are instantiated by first and second person datives, which like the previously discussed non-selected arguments, are not referentially linked to the participants corresponding to these forms (i.e. the speaker/addressee), but to their attitudes regarding some event. According to Haddad, they are used for social influence, thus motivating his choice to investigate them through gossip constructions.

The speaker has a choice between “speaker-oriented” (-*l-i/ik*,) and “hearer-oriented” (-*l-ak*,) datives, which both signal (i) the speaker’s attitude towards the gossip event, (ii) a familiarity with the hearer’s attitude towards the same event, and (iii) an invitation for the hearer to agree with the speaker’s evaluation. The hearer-oriented datives represent a more aggressive way of requesting the addressee/hearer to share the speaker’s attitude. Both forms are shown in (23)-(24) below where according to Haddad, either form may be used:

- 23) A: *ki:f-o žami:l ha-l-'iye:m?*
How-he Jamil these-the-days?
'How's Jamil these days?'
- B: *žami:l! kil fahar bise:fer-l-i/ak*
Jamil! every month he.travels-DAT-me/you.S.M
'*a-balad fikil w-ma*
to-country different and-NEG
byilbis-l-i/ak ye:r aħla tye:b
he.wear-DAT-me/you.S.M except best clothes
'Jamil! He travels all the time now and he only wears expensive clothes.' (Haddad 2013: 63)
- 24) A: *Jami:l byidhar-l-i/ak kil yo:m ma binit*
Jamil he.goes.out-DAT-me/you.S.M every.day with girl
fikil w-bi il-l-i/ak baddo yitjawwaz
different and-he.tells-DAT-me/you.S.M he.wants he.marry
w-yistaqirr!
and-he.settle!
'Jamil goes out with a different woman every day, and he claims that he wants to get married and to settle down.'
- B: *fu ha-l-saxa:fe!*
what this-the-silliness!
'This is ridiculous.' (Haddad 2013: 65)

⁸ Comparable “interested hearer” datives are also attested for Syrian Arabic (Al-Zahre & Boneh 2010).

With respect to the semantic roles associated with non-selected arguments, we may note that all semantic roles used to label those as reflecting a specific kind of involvement are also attested for secondary egophoric markers (see Section 4.4 above). Non-selected arguments, by definition, do not refer to the identity of arguments selected by the verb. This is a feature which they share with primary and secondary egophoric markers. The shiftability of egophoric markers to attribute epistemic authority to one of the speech-act participants is also found with non-selected arguments, but it is not instantiated by sentence-type alternations. Non-selected arguments target the speaker’s and the addressee’s epistemic perspectives using different forms that are instantiated by first and second person datives in German and Lebanese. Considering the function of some non-selected argument types to target the affectedness and attitude of the speaker, these may justifiably be regarded as a form of epistemic marking that targets aspects of the speaker’s epistemic perspective. This mode of analysis is supported by a comparison with the secondary egophoric markers we have reviewed. Those are paradigmatically contrasted with primary egophoric markers and with allophoric markers which are widely accepted as epistemic markers. Even a cursory look at non-selected arguments reveals that they share the function of signaling the speaker’s epistemic authority and involvement with secondary egophoric markers, albeit not in the role of an acting subject. The main difference between the two lies in their diachronic origins, where the connection to proper person markers is evident with non-selected argument forms, but less so with secondary egophoric markers.

5.4 “Epistemic datives” in Kogi and Chechen

Another argument in support of the view of non-selected arguments as epistemic markers comes from languages outside the literature on ethical datives. In Kogi (Arwako-Chibchan, Colombia) there is a dative form *nakla*, which diachronically can be analyzed as a first person dative. But synchronically, it is part of a paradigm that features forms used to situate the sometimes differing epistemic perspectives of the speech participants (detailed in Bergqvist 2016). This allows for an analysis in terms of epistemic marking. *Nakla* signals the point-of-view of the speaker as distinct from that of the addressee, sometimes with an overtone of frustration:

- 25) *nas* *kwisa-nuk-ku-gé* ***nakla***
 1S.IND dance-PROG-1S-HAB SPKR.ASYM.be
 ‘(Can’t you see) I am dancing!’ (ARR_120520)

Nakla marks the speaker’s act of dancing as something that the addressee (apparently) is unaware of. The attitudinal element of frustration/irritation is however defeasible, since only the speaker’s assumption that the addressee is unaware/ignorant of some event is encoded in the form, making it clearly epistemic in nature.

In Chechen (Nakh-Dagestanian, Chechnya) there is an “addressee-dative” (Molochieva 2012) that targets the expectation/interest of the addressee:

- 26) *Muusa* *hwave’ana* ***shun***
 Musa.ABS into.come 2PL.ADD
 ‘Musa has come.’ {I knew that you expected him/I know you are interested in this information.}

In stating (26) the speaker makes an assertion about an event (‘Musa has come’) while at the same time signaling that the speaker expects this to be of interest to the addressee. In utterance final position, *shun/hwun* contrasts with other sentence final particles that target various aspects of discourse, as well as the context of an utterance (see Molochieva 2011, for details). Example (27) shows the distinct syntactic slots belonging to the proper dative (*hwuuna*) and to the addressee-dative (*hwuun*):

- 27) *as hwuuna Koch ec-na hwuun*
 1SG.ERG 2SG.DAT dress.ABS buy-PFV 2SG.ADD
 'I bought a dress for you.' {You already knew that I was going to buy something for you.}

The grammatical and functional properties of the forms in Kogi and Chechen (as instances of non-selected arguments) share key features with egophoric markers: (i) they target the epistemic authority of the speech-act participants (as can be seen in the restriction to first and second person dative forms), (ii) They primarily serve to index the speaker's point-of-view (along with assumptions about the addressee's point-of-view) instead of selecting an argument of the clause. Although non-selected arguments and secondary egophoric markers have arisen under different circumstances, they arguably share a function in indexing speech-act participant involvement and the epistemic authority of the speaker with respect to an event.

6 Conclusion

We started with a discussion of attested variation in egophoric marking systems. Key features of egophoric marking were pointed out to support the claim that all purportedly defining features are subject to substantial variation, except for the epistemic component of epistemic authority. Some features, such as "shiftability" where the speaker and the addressee are attributed the role of epistemic authority depending on sentence-type, are also known from analyses of evidentiality and modality, and cannot be attributed a defining role in an analysis of egophoric marking.

Given that the speech-act role of epistemic authority is subject to different kinds of involvement in languages with a version of egophoric marking, we focused on this notion in an attempt to explore the distribution of egophoric markers against predicate types and against the semantic roles associated with these. Formally, we noted that there are differences in the complexity of egophoric marking systems, where some systems are simple, only containing one egophoric marker, whereas other languages have more than one egophoric form. We called the latter complex egophoric marking systems. The secondary egophoric markers of complex systems were shown to target different kinds of involvement (i.e. different distributional patterns) compared to primary egophoric markers that are defined against the distribution of egophoric markers in simple systems, such as Kathmandu Newar.

The occurrence of secondary egophoric markers in contexts that parallel the distribution of so-called ethical datives (or non-selected arguments) warranted a closer look at such forms. Like egophoric markers, they target the speech-act participant's epistemic perspectives rather than argument identity in terms of (subject) person. Non-selected arguments map perfectly onto secondary egophoric markers in terms of the semantic roles that they may be associated with. Both non-selected arguments and secondary egophoric markers target the affectedness and attitude of the speech-act participants in clauses that do not explicitly mark arguments.

Based on the preceding discussion, we observe that egophoric marking, as a grammatical phenomenon, is wider than Hale (1980)'s canonical description would suggest. The flexibility noted for attested versions of egophoric marking may be viewed against the above comparison with non-selected arguments, to reveal a pragmatically motivated need to signal speech-act participant authority in any situation that somehow involves the speaker and/or the addressee. Some languages, like Kathmandu Newar, only have grammatical resources to signal the epistemic authority of a speech-act participant based on involvement in contexts with a volitional agent. Other languages, like German, signal the speaker's authority in terms of his/her attitude with respect to an event that does not involve the speaker as a participant. Yet other languages, like Awa Pit, signal epistemic authority in both agentive and non-agentive contexts that sometimes include attitude holders.

The range of involvement that may be connected with expressing epistemic authority by means of egophoric marking is analogous to the range available for proper pronouns, i.e. all semantic roles associated with different person forms are also targeted by egophoric markers and non-selected arguments to signal the epistemic authority of the speech-act participant in the role indicated by a given marker.

Acknowledgements: For institutional support, we are grateful to Åke Wiberg stiftelse, a Faculty Program for collaboration between Stockholm University and the University of Helsinki (SU FV-5.1.2-0757-15), to the Swiss National Science Foundation for its support of the research project "A grammatical description of Kogi (Arwako-Chibchan)" (POBEP1_165335) as well as to our respective host institutions: Stockholm University and the University of Bern. The ideas in this paper have emerged from discussions with the participants of the workshop, "Person and knowledge: from participant-roles to epistemic marking", which was held at the SLE 2015 in Leiden, September 2nd. We'd like to say thank you to Katarzyna Grzegorek at Open Linguistics for her kind guidance and patience throughout the whole process. We also thank two anonymous reviewers and Seppo Kittilä for valuable suggestions and criticisms. Any remaining errors remain our own.

Abbreviations

ABS	absolute
ACC	accusative
ADD	addressee
AGT	agentive
ALLO	allophoric
ASYM	asymmetric
COMP	completive
COP	copula
DAT	dative
DECL	declarative
DEF	definite
DIR	direct evidence
EGO	egophoric
ERG	ergative
GEN	genitive
HAB	habitual
IND	independent
INSTR	instrumental
INTER	interrogative
IPFV	imperfective
M	masculine
NPST	non-past
PFV	perfective
PL	plural
PROG	progressive
PST	past
S	subject
SG	singular
SPKR	speaker-perspective
TOP	topic
TR	transitive
FUT	future
1	first person
2	second person
3	third person

References

- Abraham, Werner. 1973. The ethic dative in German. In Kiefer, Ferenc and Nicolas Ruwet (eds.), *Generative grammar in Europe*, 1-19. Dordrecht: D. Reidel.
- Ameke, Felix K. 2004. Grammar and cultural practices: The grammaticalization of triadic communication in West African languages. *Journal of West African Languages* 30:2. 5-28.
- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Al-Zahre, Nisrine, Nora Boneh. 2010. Coreferential dative constructions in Syrian Arabic and Modern Hebrew. *Brill's Annual of Afroasiatic Languages and Linguistics* 2. 248-282.
- Bergqvist, Henrik. 2012. Epistemic marking in Ika (Arwako). *Studies in Language (News from the field)* 36 (1). 151-178.
- Bergqvist, Henrik. 2016. Complex epistemic perspective in Kogi (Arwako). *International Journal of American Linguistics* 82:1. 1-34.
- Bergqvist, Henrik. 2017. The role of 'perspective' in epistemic marking. *Lingua* 186-187. 5-20.
- Bergqvist, Henrik. in press. The role of sentence type in Ika (Arwako) egophoric marking. In Floyd, Simeon, Elisabeth Norcliffe and Lila San Roque (eds.), *Egophoricity*. Amsterdam: John Benjamins.
- Bickel, Balthasar. 2008. Verb Agreement and Epistemic Marking: a Typological Journey from the Himalayas to the Caucasus. In: Huber, Brigitte, Marianne Volkart, Paul Widmer (eds.), *Chomolangma, Demawend und Kasbek: Festschrift für Roland Bielmeier zu seinem 65. Geburtstag*, 1-14. Halle: IITBS.
- Bickel, Balthasar, Johanna Nichols. 2007. Inflectional Morphology. In Shopen, Timothy (ed.) *Language Typology and Syntactic Description, vol. 3: Grammatical Categories and the Lexicon*, 169-240. Cambridge: Cambridge University Press.
- Bosse, Solveig, Benjamin Bruening and Masahiro Yamada. 2012. Affected Experiencers. *Natural Language & Linguistic Theory* 30 (4). 1185-1230
- Camilleri, Maris and Louisa Sadler. 2012. On the Analysis of Non-Selected Datives in Maltese. In Butt, Miriam, Tracy Holloway King (eds.), *Proceedings of the LFG12 Conference*, 118-138. CSLI Publications. <http://csli-publications.stanford.edu>.
- Caplow, Nancy J. 2000. *The epistemic marking system of émigré Dokpa Tibetan*. Unpublished ms. Santa Barbara: University of California.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: A cross-linguistic perspective*. New York: Oxford University Press.
- Creissels, Denis. 2008. Person variations in Akhvakh verb morphology: Functional motivation and origin of an uncommon pattern. *STUF* 61. 309-25.
- Curnow, Timothy J. 1997. *A grammar of Awa Pit (Cuaiquer): An indigenous language of south-western Colombia*. Canberra: Australian National University dissertation.
- . 2002. Conjunct/disjunct marking in Awa Pit. *Linguistics* 40. 611-27.
- Dahl, Östen. 2000. Egophoricity in Discourse and Syntax. *Functions of Language* 7. 33-77.
- DeLancey, Scott. 1990. Ergativity and the cognitive model of event structure in Lhasa Tibetan. *Cognitive Linguistics* 1. 289-321.
- . 2003. Lhasa Tibetan. In: LaPolla, Randy J., Graham Thurgood (eds.), *The Sino-Tibetan languages*, 270-88. London: Routledge.
- Dickinson, Connie. 2000. Mirativity in Tsafiki. *Studies in Language* 24. 379-421.
- Fischer, Klaus. 1997. *German-English Verb Valency: A Contrastive Analysis*. Tübingen: Gunter Narr Verlag.
- Floyd, Simeon. in press. Egophoricity and argument structure in Cha'palaa. In Floyd, Simeon, Elisabeth Norcliffe, Lila San Roque (eds.), *Egophoricity*. Amsterdam: John Benjamins.
- Floyd, Simeon, Elisabeth Norcliffe, Lila San Roque (eds.). in press. *Egophoricity*. Amsterdam: John Benjamins.
- Fried, Mirjam. 2011. The notion of affectedness in expressing interpersonal functions. In Grygiel, Marcin, Laura A. Janda (eds.), *Slavic linguistics in a cognitive framework*, 121-143. Frankfurt am Main: Peter Lang.
- Fried, Robert Wayne. 2010. *A Grammar of Bao'an Tu: A Mongolic Language of Northwest China*. PhD thesis. The University of Buffalo, State University of New York.
- Fried, Robert Wayne. in press. Egophoricity in Magghuer: Insights from pragmatic uses of the subjective/objective distinction. In Floyd, Simeon, Elisabeth Norcliffe, Lila San Roque (eds.), *Egophoricity*. Amsterdam: John Benjamins.
- Gonzales Castaño, Geny, Martine Bruil. 2016. On the existence of egophoricity in Nam Trik. Paper presented at the Symposium on Evidentiality, Egophoricity and Engagement, 17.-18. March 2016, Stockholm University.
- Hale, Austin. 1980. Person Markers: Finite Conjunct and Disjunct Verb Forms in Newari. *Papers in South-East Asian Linguistics* 7. 95-106.
- Haddad, Youssef A. 2013. Pronouns and intersubjectivity in Lebanese Arabic gossip. *Journal of Pragmatics* 49. 57-77.
- Halevy, Rivka. 2008. The grammaticalization 'chains' of the subject coreferential dative in Semitic and elsewhere. In Breban, Tine, Lieselotte Brems, Kristin Davidse, Tanja Mortelmans (eds.), *Proceedings of "NRG 4 New reflections on Grammaticalization 4"*. University of Leuven 16-19 July 2008. <http://www.ling.arts.kuleuven.be/nrg4/>
- Haller, Felix, Chungda Haller. 2007. *Einführung in das Zentraltibetische: Auf Basis des Dialektes von Shigatse/westliches Zentraltibet (Tsang)*. (Introduction to Central Tibetan: On the basis of the dialect of Shigatse/western central Tibet (Tsang)). Unpublished manuscript.

- Hargreaves, David. 1991. *The concept of intentional action in the grammar of Kathmandu Newari*. Eugene: University of Oregon dissertation.
- . 2005. Agency and intentional action in Kathmandu Newar. *Himalayan Linguistics* 5. 1-48.
- Janhunen, Juha, Marja Peltomaa, Erika Sandman, Xiawu Dongzhou. 2008. *Wutun*. (Languages of the World/Materials 466). München: Lincom Europa.
- Jakobson, Roman. 1990 [1957]. Shifters and verbal categories. In Waugh, Linda R., Monique Monville-Burston (eds.), *On language*, 386-392. Cambridge, MA: Harvard University Press.
- Jespersen, Otto. 1922. *Language; its nature, development, and origin*. London: George Allen & Unwin Ltd.
- Lehmann, Christian. 2005. Participant roles, thematic roles and syntactic functions. In: Tsunoda, Tasaku, Taro Kageyama (eds.), *Voice and Grammatical Relations: Festschrift for Masayoshi Shibatani*, 153-174. Amsterdam, Philadelphia: John Benjamins.
- Loughnane, Robyn. 2009. *A Grammar of Oksapmin*. PhD thesis. Melbourne: University of Melbourne.
- Lum, Jonathon. 2016. A conjunct-disjunct analysis of Dhivehi verbal morphology. Paper presented at the Symposium on Evidentiality, Egophoricity and Engagement, 17.-18. March 2016, Stockholm University.
- Molochieva, Zarina. 2011. Tense, aspect, and mood in Chechen. PhD thesis. Leipzig: Universität Leipzig.
- Molochieva, Zarina. 2012. Source and status of information in Chechen. Presentation at the SLE 2012 in Stockholm: Workshop on “Complex perspective in epistemic marking: the origins, motivations and definitions of intersubjective perspectives in grammar.”
- Norcliffe, Elisabeth. in press. Egophoricity and evidentiality in Guambiano (Namtrik). In Floyd, Simeon, Elisabeth Norcliffe, Lila San Roque (eds.), *Egophoricity*. Amsterdam: Benjamins.
- Post, Mark W. 2007. *A Grammar of Galo*. PhD thesis. Melbourne: La Trobe University.
- . 2013. Person-sensitive TAME marking in Galo: Historical origins and functional motivation. In Tim Thornes, Erik Andvik, Gwendolyn Hyslop, Joana Janson (eds.), *Functional-Historical Approaches to Explanation: In honor of Scott DeLancey*, 107-130. Amsterdam, Philadelphia: John Benjamins.
- Rákosi, György. 2008. Some remarks on Hungarian ethical datives. In Andor, József, Béla Hollósy, Tibor Laczkó, Péter Palyvás (eds.), *When grammar minds language and literature: Festschrift for Prof. Béla Korponay on the occasion of his 80th birthday*, 413-422. University of Debrecen.
- Rojas Curieux, Tulia, Beatriz Vasquez de Ruiz, Geny Gonzales Castaño, Esteban Díaz Montenegro. 2009. *Léxico de la lengua Nam Trik de Totoró*. Popoayán: SignaArtes Gráficas.
- Sandman, Erika. in press. Egophoricity in Wutun. In Floyd, Simeon, Elisabeth Norcliffe, Lila San Roque (eds.), *Egophoricity*. Amsterdam: John Benjamins.
- San Roque, Lila. 2008. *An introduction to Duna grammar*. Canberra: Australian National University dissertation.
- San Roque, Lila, Simeon Floyd, Elisabeth Norcliffe. in press. Egophoricity: An introduction. In Floyd, Simeon, Elisabeth Norcliffe, Lila San Roque (eds.), *Egophoricity*. Amsterdam: John Benjamins.
- Schmid, Josef. 2006. Die “freien” Dative. (The “free” datives). In Ágel, Vilmos, Ludwig M. Eichinger, Hans Werner Eroms, Peter Hellwig, Hans Jürgen Heringer, Henning Lobin (eds.), *Dependency and Valency: An International Handbook of Contemporary Research*, Vol. 2, 951-962. Berlin, New York: de Gruyter.
- Siewierska, Anna. 2013. Verbal Person Marking. In Dryer, Matthew S., Martin Haspelmath (eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/102> (28.09.2016).
- Slater, Keith. 2003. Mangghuer. In Janhunen, Juha (ed.), *The Mongolic languages*, 307-324. London, New York: Routledge.
- Van Valin, Robert D., Randy J. LaPolla. 1997. *Syntax: Structure, Meaning, and Function*. Cambridge: Cambridge University Press.
- Wegener, Heide. 1989. Eine Modalpartikel besonderer Art: Der Dativus Ethicus. (A modal particle of a special kind: The ethical dative). In Weydt, Harald (ed.), *Sprechen mit Partikeln*, 56-73. Berlin: de Gruyter.
- Widmer Manuel. forthcoming. *A grammar of Bunan*. (Mouton Grammar Library).
- Zúñiga, Fernando, Seppo Kittilä (eds.). 2010. *Benefactives and Malefactives: Typological perspectives and case studies*. (Typological Studies in Language 92). Amsterdam, Philadelphia: John Benjamins.
- Åkerman, Vesa. 2012. *Inflection of finite verbs in Mongghul*. SIL Electronic Working Papers 2012-003. <https://www.sil.org/resources/publications/entry/49117> (16.01.2017)