**A new type of epistemic indefinite**

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**Introduction.** Recent interest in epistemic indefinites (EIs) – indefinite pronouns or determiners which encode speaker ignorance (Alonso-Ovalle & Menéndez-Benito 2015) – has revealed interesting differences in when different EIs can be used felicitously. This work has largely concentrated on EIs in Indo-European languages (e.g. Spanish algún (AO & MB 2010), German irgendein (Kratzer & Shimoyama 2002), Italian un qualche (Zamparelli 2007), and Romanian vreun (Fălaş 2014)). While these EIs differ in the conditions that constitute sufficient speaker ignorance about a witness, they have in common that their epistemic effects can generally be analyzed as implicature due to domain restrictions (e.g. a requirement of a non-singleton domain). Tiwa, a Tibeto-Burman language of India, presents a new kind of EI that differs from its Indo-European counterparts in two ways: (1) the ignorance component is a presupposition (not an implicature), and (2) ignorance of any salient property of the witness may satisfy this presupposition. This allows for much broader conditions for felicity than seen with Indo-European EIs. In this paper, I provide an analysis, based on original fieldwork and couched in a Hamblin semantics, that links these two properties and situates Tiwa EIs in the emerging typology.

**Epistemic indefinites in Tiwa.** EIs in Tiwa are formed from indeterminate phrases (which also function as wh-words and have limited use as NPIs) plus the suffix -khi, and necessarily encode speaker ignorance. -khi indefinites always take widest scope, freely violating scope islands, such as finite clauses (1).

   who-KHI come-IPFV COMP correct NEG
   ‘It’s not correct that someone came.’
   ✓: There’s a particular person, who the speaker doesn’t know, that didn’t come.  \(\exists > \lnot\)
   #: Nobody came. * \(\lnot > \exists\)

In contrast to German irgendein and Spanish algún, which have anti-singleton or domain-widening effects (AO&MB 2010; K&S 2002), -khi indefinites can range over singleton sets (2) & (3). In (2), the extension of Indiane PM is \{Modi\}. In (3), there is only one dress that is most expensive in an absolute sense.

   1SG who-KHI India-GEN PM-ACC meet-INF go-IPFV
   ‘I’m going to meet some Indian Prime Minister.’
   Felicitous context: The speaker hasn’t met him before.

   Maria what-KHI all-DAT than costly-NMLZ dress-ACC buy-PFV
   ‘Maria bought some dress that was the most expensive.’
   Felicitous context: The speaker doesn’t know what type of dress it was.

While Indo-European EIs vary in the kinds of ignorance they can convey, they are limited to encoding speaker ignorance about the identity, type, or number of the witness. -khi indefinites can encode speaker ignorance about any salient property of the witness (including identity). The use of -khi in (4) indicates that the speaker doesn’t know their friend John as well as they ought to, while (2) is felicitous in a scenario where the speaker knows the PM is Modi, but hasn’t met him.

   1SG who-KHI friend-ACC meet-INF going his name John but him well know-NEG-1SG
   ‘I’m going to meet some friend (of mine). His name is John, but I don’t know him well.’
By contrast, -khi indefinites are not felicitous in contexts in which the speaker is familiar with the witness in all contextually relevant ways (e.g. a situation where the speaker knows John as well as any friend, but doesn’t know how many hats he owns, which is not of relevance to the discourse).

**Presupposition, not implicature.** The epistemic effects of EIs have been analyzed as arising through implicature due to their anti-singleton requirements (K&S 2002; AO&MB 2010). Since Tiwa EIs can freely range over singleton sets (2) & (3), this analysis is unavailable for the Tiwa data. Further, they do not show classic implicature-style behavior: the epistemic effects cannot be canceled (5) and they always project (1). Obligatory projection suggests instead that -khi makes its epistemic contribution presuppositionally.

(5) Maria shar-khî-gô lak man-ga, # arô shar-gô ang si-w.
   Maria who-KHI-ACC meet-PFV and who-ACC 1SG know-NEUT
   ‘Maria met someone, # and I know who.’

**Compositional analysis.** -khi indefinites consist of an indeterminate phrase and the suffix -khi. I assume -khi is a head that takes a DP complement, headed by an indeterminate (6), which optionally takes an NP complement. -khi undergoes morphological Lowering (Embick & Noyer 2007) to appear on the head of its complement (i.e. the indeterminate).

(6) 

\[-khi \quad DP\]

\(D\) (NP restrictor)

Following K&S 2002’s formulation of Hamblin semantics, indeterminate phrases and the DPs they head denote sets of individuals (7), and verbal predicates denote singleton sets of properties (8). Indeterminates can compose directly with a verbal predicate through pointwise function application to yield a set of propositions, resulting in an in-situ wh-question denotation.

**Denotation of -khi.** -khi composes with the DP, which denotes a set of individuals, through FA: -khi takes in the set of individuals (\(\alpha\)) denoted by the DP and a property (the verb), and carries the presupposition (formalized here using Beaver’s (1992) \(\delta\) operator) that the speaker does not know a salient property Q about the individual selected by the choice function (9).

(9) \([-khi] = \lambda \alpha . \{ \lambda P . P((f(\alpha))) & \delta(IDK((f(\alpha)))) \}\}

This choice functional analysis accounts for the exceptional wide scope of -khi indefinites (Kratzer 1998; Matthewson 1999; Yanovich 2005), and the free variable Q in the presupposition captures the freedom and context dependency of the speaker’s ignorance. It also follows from the analysis that -khi indefinites can range over singleton sets (10), since there are no restrictions on the cardinality of the choice function’s domain. The analysis also allows for the infelicity of (5): the identity of the witness is salient in this context.

(10) \([-khi [shar \{Indiane PM\}]] = \{ \lambda P . P((f(\{Modi\}))) & \delta(IDK((f(\{Modi\})))) \}\}

**Conclusion.** EIs in Tiwa present a new kind of EI in which the ignorance component is a presupposition and not an implicature, and which can signal speaker ignorance about any salient property of the witness, significantly broadening the typology of EIs.