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## Evidentiality and scope

### Abstract

This paper deals with the scope properties of evidential meanings. It rejects the idea that different types of evidential meanings have different scope properties. More basically, it rejects the idea that evidential meanings apply to ‘speech acts’ or to ‘states of affairs’. The paper argues that evidential meanings share scope properties in the sense that they are all conceptually dependent on a ‘proposition’ – i.e. a meaning unit which can be said to have a truth value. Subsequently, it outlines how the scope properties can be employed in criteria of membership of the category of evidentiality.

### 1. Introduction<sup>1</sup>

There is broad agreement about the notional definition of evidentiality. Definitions are typically cast in terms of either of the related notions ‘evidence’, ‘source’ or ‘justification’. Most definitions also mention scope properties, however, and here there is less consensus. Evidentiality is often defined as having to do with ‘information’ – according to AIKHENVALD (2004: 3), for instance, it is “a linguistic category whose primary meaning is source of information” – but there is disagreement about what this means more precisely. Some scholars take evidentiality to apply to ‘propositions’.

Evidentials may be generally defined as markers that indicate something about the source of the information in the proposition (BYBEE 1985: 184).

Evidential constructions express a speaker’s strength of commitment to a proposition in terms of the available evidence (rather than in terms of possibility or necessity) (CRYSTAL 1991: 127).

Others prefer ‘claims’, ‘assertions’, ‘statements’ or even ‘speech acts’.

Evidentials show the kind of justification for a factual claim which is available to the person making that claim [...] (ANDERSON 1986: 274).

[...] the semantic domain of evidentiality [...] centers around the sources of information or sources of information behind assertions (DENDALE & TASMOWSKI 2001: 340).

[An evidential is a particle or inflection] which is one of a set that make clear the source or reliability of the evidence on which a statement is based (MATTHEWS 2007: 129).

Evidentiality is defined as the functional category that refers to the perceptual and/or epistemological basis for making a speech act (CORNILLIE 2009: 45).

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Still others refer to ‘states of affairs’.

*evidentiality* [...] can be characterized as an indication of the nature of the sources of information which the speaker (or somebody else) has to assume or accept the existence of in the state of affairs expressed in the clause [...]. That is, it involves a characterization of the origins of the knowledge about the state of affairs, or of the compatibility of the (postulated) state of affairs with the general epistemological background of the issuer (NUYTS 2006: 10).

In fact, most of the literature on evidentiality pays little, if any, attention to scope properties. This is unfortunate as the notional definition may leave one in doubt when it comes to deciding whether or not a given linguistic phenomenon belongs within the realm of evidentiality. For instance, can English *so-called* be said to express ‘source of information’?

All research on evidentiality presupposes that at least an approximate line can be drawn between what is evidential and what is not. The present paper is intended to demonstrate that evidential scope properties can help us drawing such a line. The aim of this paper is twofold. Firstly, the paper aims to demonstrate that uncontroversial examples of evidential meanings share scope properties in the sense that they are all conceptually dependent on a *proposition*, as opposed to a *state of affairs* and a *speech act*. Secondly, the paper aims to show how the scope properties common to evidential meanings can be employed in a set of membership criteria for the category of evidentiality.

Section 2 defines the notions of ‘proposition’, ‘state of affairs’ and ‘speech act’, and precisely defines what ‘evidentiality’ is taken to cover and what ‘scope’ is taken to mean in the present paper. Section 3 presents evidence that the scope of evidential meaning is a proposition rather than a speech act or a state of affairs, and Section 4 argues that this is so even in cases where there is an asymmetric relation between evidential expressions and propositional clauses. In conclusion, Section 5 proposes a set of scope criteria for membership of the category of evidentiality.

The paper draws on two crosslinguistic surveys (BOYE 2006 and 2010).

## **2. Preliminaries**

Any claim about any property of any category is hollow as long as it is not clear what the category covers and how the property is defined. Below, I firstly specify what I take ‘evidentiality’ to cover (Section 2.1) and what I mean by scope (Section 2.2). Subsequently, I introduce and define the notions of ‘proposition’, ‘state of affairs’ and ‘speech act’ as they are understood here.

### **2.1. Evidentiality**

In the present paper, evidentiality is defined in terms of the notion of ‘evidence’. That is, it is defined as covering meanings – and expressions with meanings – that can be described in terms of familiar distinctions between ‘direct’ and ‘indirect evidence’, subsequent distinctions between ‘visual’ and ‘non-visual direct evidence’ and between ‘reportive’ and ‘inferential indirect evidence’, and so on – for instance, the meanings of the English adverbs emphasized in (1).

- (1) *He is **obviously/evidently/allegedly/apparently** out of office.*

With this definition, the conception of evidentiality adhered to here is similar to that found in such prominent works as ANDERSEN 1986, WILLETT 1988, BYBEE, PERKINS & PAGLIUCA 1994, and AIKHENVALD 2004. There is only one important difference; in the present paper, evidentiality is not reserved for grammatical expressions and their meanings. Rather, it is taken to cover both lexically and grammatically expressed meanings (see BOYE & HARDER 2009 for a theoretical distinction between lexically and grammatically expressed evidential meanings). Evidentiality is thus basically a notional meaning generalization. But, in so far as it is significant for the description of structural phenomena in and across languages, it can be conceived of as a crosslinguistic descriptive category in the specific sense of a notional generalization made by linguists in order to capture convergent structural patterns (BOYE fc.a, fc.b).

## 2.2. Scope

In the present paper, the scope of a given meaning is defined as the meaning it applies to. This definition is comparable to standard definitions like the one in MATTHEWS 2007 where scope is identified as “[t]he part of a sentence with which a quantifier [...], negative, etc. combines in meaning”. But there is one important difference: The meaning which constitutes the scope of a given meaning need not be explicit. It may be implicit. Compare (2) and (3).

- (2) *There were three other guys on the train – **they were thieves, unfortunately.***
- (3) *There were three other guys on the train – **thieves, unfortunately.***

In (2), the meaning of the adverb *unfortunately* takes the meaning of the whole clause *they were thieves* as its explicit scope. In (3), it takes only the meaning of *thieves* as its explicit scope. Also in (3), however, the meaning of *unfortunately* arguably applies to something like the meaning of the clause *they were thieves*. Thus, while (2) and (3) differ with respect to their *explicit scopes*, their *implicit scopes* are similar. As a sentence adverb, *unfortunately* presupposes clause meaning in order to make sense. Following LANGACKER (1987, 1991), the meaning of *unfortunately* may be said to be *conceptually dependent* upon clause meaning. When I argue, later on, that evidential meaning has propositional scope, I use the term ‘scope’ in the specific sense of a meaning upon which evidential meaning is conceptually dependent.

For convenience, I will sometimes talk about the semantic scope of expressions (morphemes, words or constructions) rather than about the scope of meanings. For instance, I might say *the adverb takes the clause as its semantic scope* rather than *the meaning of the adverb takes the meaning of the clause as its scope*.

### 2.3. Speech acts, propositions and states of affairs

‘Speech act’, ‘proposition’ and ‘state of affairs’ are understood here as distinct types of linguistic meaning units. They are types of meanings that can be conveyed by means of linguistic expressions – typically clauses (possibly nominalized).

The notion of ‘speech act’ belongs to the basic linguistic curriculum and needs no thorough introduction. Since the notion is traditionally associated with pragmatics, and since pragmatic meaning is conceived of here as identical to non-conventional meaning, it only needs to be stressed that speech acts are not an entirely pragmatic phenomenon. Speech acts are potentially semantic, conventional meanings. In Crow, for instance, different types of speech acts are conventionally marked by different “basic sentence-final clitics” (GRACZYK 2007: 391-392). These clitics are what SEARLE (1969) calls “illocutionary-force indicating devices”.

The notions of ‘state of affairs’ and ‘proposition’, and the distinction between them, are less well known. The notions go under different names. Rather than ‘state of affairs’ and ‘proposition’, for instance, LEES (1960) talks about “action” and “fact”, VENDLER (1967) about “event” and “fact”, PALMER (1979) and PERKINS (1983) about “event” and “proposition”, and LYONS (1977) about “second-order entity” and “third-order entity”. There is no doubt, though, that the different terminological distinctions cover the same contrast in meaning. In the traditional denotational conception of the contrast, states of affairs (or actions, events or second-order entities) are entities that “have essentially the property of obtaining or failing to obtain” (LOUX 1998: 132); they are “primarily temporal entities” (VENDLER 1967: 144) that can be “located in time and [...] said to occur or take place, rather than to exist” (LYONS 1977: 443). On the other hand, propositions (or facts or third-order entities) are “abstract entities [...] the primary bearers of truth values” (LOUX 1998: 132) that “are not in space and time at all” (VENDLER 1967: 144); they are “unobservable and cannot be said to occur or to be located either in space or in time”, and “‘true’, rather than ‘real’, is more naturally predicated of them” (LYONS 1977: 445). In a cognitive conception of the contrast, states of affairs are pure conceptual representations whereas propositions constitute information about the world in the sense that they are conceptual representations construed as referring – i.e. as having an external referent (BOYE 2010).

The contrast is illustrated in (4). (4a) involves a complement which designates a state of affairs, and (4b) involves a propositional complement (BOYE 2010; cf. e.g. DIK & HENGEVELD 1991 and SCHÜLE 2000 on perception-verb complements).

(4) a. *I heard [him yell].*

b. *I heard [that he was yelling].*

Thus in (4a), the complement arguably designates an object of direct perception: a conceptual representation of something which can be said to take place and which is accordingly accessible to perception. In (4b), by contrast, the complement designates a piece of information acquired through perception: something which can be said to have a truth value – a conceptual representation which is stipulated

to have an external referent. A criterion for distinguishing propositions from states of affairs is epistemic evaluation. Since propositions, but not states of affairs, constitute information about the external world in the sense that they have a truth value or refer, only propositions can be evaluated epistemically. In accordance with this criterion, the propositional complement in (4b) can readily be construed with an epistemic adverb such as *probably*, but the state-of-affairs-designating complement in (4a) cannot.<sup>2</sup>

- (5) a. \**I heard [him probably yell].*  
b. *I heard [that he was probably yelling].*

It is important to note that, as they are conceived of here, and as they are conceived of in Functional Grammar and Functional Discourse Grammar, the three types of meaning do not mutually exclude each other. Rather, all propositions inevitably involve states of affairs ('conceptual representations that are construed as referring' inevitably involve 'conceptual representations'), and speech acts inevitably involve either propositions (and thus also states of affairs) or states of affairs (without propositions). Thus, according to the view held here, the sentence in (6) designates an *assertion* (marked by declarative clause structure) of a *proposition* (marked by the indicative verb form *is*) which involves the *state of affairs* 'Johnny hold the ball'.

- (6) *Johnny is holding the ball.*

By contrast, (7), as an imperative, arguably does not involve a proposition (cf. e.g. LEECH 1981: 75-76, and HENGEVELD 1990: 7 on the view that genuine imperatives do not involve a truth value and are thus not propositional).

- (7) *Johnny, hold the ball!*

The sentence in (7) designates a *command* (marked by clause structure and verb form) which involves the *state of affairs* 'Johnny hold the ball'.

### 3. Evidential meaning and the proposition

In light of Section 2, the claim about the scope of evidential meaning advocated in this paper can be specified. What I claim is that meanings that can be described in terms of the notion of 'evidence' are conceptually dependent upon a proposition understood either as a meaning unit with a truth value or as a conceptual representation construed as referring. Below I present arguments in support of that claim. As, to my knowledge, three types of meaning have been associated with

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<sup>2</sup> Like evidential expressions, *probably* can occur with less than a clause in its semantic scope (cf. Section 4.1). (5a) is perhaps not entirely unacceptable if *probably* is read as taking only *yell* or *him* in its semantic scope rather than the whole state-of-affairs-designating complement *him yell*.

evidentiality and evidential meaning, the argumentation falls in three parts. I first present arguments against the views that the scope of evidential meaning is a state of affairs (Section 3.1) or a speech act (Section 3.2) and then arguments in support of the view that the scope is a proposition (Section 3.3).

### 3.1. The scope of evidential meaning is not (merely) a state of affairs

Only a few scholars seem to associate evidential meaning with states of affairs. NUYTS, who was quoted in Section 1, is not even unequivocal, but HENGEVELD & MACKENZIE (2008: 56, 176-178) are. They explicitly associate one type of evidential meaning with states of affairs as opposed to propositions (what they call “propositional contents”): direct evidence (or “perceptual evidentiality”).

There are at least two arguments indicating that this is a mistake. The first argument is conceptual. With the notional definition of evidentiality in terms of ‘evidence’, which is adopted here, evidential meaning could not possibly apply to states of affairs. States of affairs are not something for which there can be evidence. They are not *about* the world in the sense of having a truth value or in the sense of referring. Rather, in the traditional denotational conception of them, they are *in* the world – and in the cognitive conception of them, they are simple conceptual representations that are not stipulated to have an external referent (cf. Section 2.3). To be sure, expressing ‘direct evidence’ implies that some real world phenomenon has been observed and has evoked a mental representation. For instance, in (8), adduced by HENGEVELD & MACKENZIE as an illustration, the use of the Turkish suffix *-di* to mark ‘direct evidence’ implies that the speaker actually witnessed that snow has fallen.

Turkish, Altaic (HENGEVELD & MACKENZIE 2008: 178)

- (8) *Kar yağ-di-Ø.*  
snow rain-EVID-3.  
‘Snow has fallen’.

However, this does not entail that *-di* only takes a state of affairs as its semantic scope and classifies it as “observed”. (8), as a declarative clause, unquestionably involves a proposition (cf. Section 2.3). As an evidential suffix, *-di* takes this proposition as its semantic scope and indicates that the evidence for this proposition is directly accessible through the senses.

The second argument is that uncontroversial examples of evidential expressions are incompatible with clauses that designate states of affairs but not propositions. Examples of such clauses are the accusative-with-infinitive *him yell* in (4a) and (5a), and imperatives like *Johnny, hold the ball* in (7) (see Section 2.3 for discussion and references). Neither of these clauses can be construed with an evidential adverb such as *obviously* (‘direct evidence’), *allegedly* (‘reportive indirect evidence’) or *apparently* (‘inferential indirect evidence’).<sup>3</sup>

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<sup>3</sup> Evidential expressions can occur with less than a clause in their semantic scope (cf. Section 4.1). If in (9) the evidential adverb is read as taking only *yell* or *him* in its explicit semantic scope, rather than

(9) \**I heard [him obviously/allegedly/apparently yell].*

(10) \**Johnny, hold the ball, obviously/allegedly/apparently!*

This pattern holds not only for English and related languages. There is evidence from many languages that evidential expressions are incompatible with genuine imperatives, and as discussed in Section 2.3, genuine imperatives arguably involve a state of affairs but no proposition. In her study of grammatical evidential expressions in more than 500 languages, AIKHENVALD found that “[a]n overwhelming majority of languages with evidentials do not use them at all in imperative clauses” (AIKHENVALD 2004: 250). There is reason to believe that the few cases of imperatives that do allow evidential expressions are not genuine but can be analyzed as conveying the meaning of ‘command’ as an indirect speech act – at least historically (BOYE 2006: 150).

HENGEVELD & MACKENZIE (2008: 177) see a parallel between grammatical markers of direct evidence like *-di* in (10) and the use of lexical perception verbs with state-of-affairs-designating complements in (4a) and (11).

(11) *Sheila saw Peter leave.* (HENGEVELD & MACKENZIE 2008: 177)

There is no such parallel, however. The sentence in (11) designates an act of visual perception of the situation described by *Peter leave*. With this meaning it *implies* that the perceiver has direct evidence for the proposition that ‘Peter left’, but it does not *express* this. For one thing, as acknowledged by HENGEVELD & MACKENZIE (cf. DIK & HENGEVELD 1991), *Peter leave* does not designate a proposition but only a state of affairs. Accordingly, I am not aware of one single case where perception verbs in construction with state-of-affairs-designating complements give rise to grammatical evidential expressions through grammaticalization. By contrast, perception verbs – and other verbs – in construction with propositional complements, such as English finite complement clauses, are well known to grammaticalize into evidential markers (although, not necessarily markers of direct evidence). In English, for instance, *hear* in construction with a first person subject is arguably undergoing grammaticalization into a particle in a development analogous with the development of the Afrikaans particle *glo* from a verb meaning ‘think’ (cf. BOYE & HARDER 2007, 2009).

(12) a. *I hear (that) he is rich.* (Lexical source)

b. *He is, I hear, rich.* (Result of grammaticalization)

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the whole state-of-affairs-designating complement *him yell*, the sentence is perhaps not entirely unacceptable (cf. Footnote 2).

Afrikaans (BOYE & HARDER 2007: 591-592)

(13) a. *ek glo dat hy ryk is.* (Lexical source)

**I think** that he rich is.  
'I think that he is rich'.

b. *hy is glo ryk.* (Result of grammaticalization)

he is **EVID** rich.  
'He is said (supposed, believed) to be rich'.

### 3.2 The scope of evidential meaning is not a speech act

Several scholars associate evidential meaning with speech acts in general or with assertions in particular. There are several arguments indicating that this is wrong.

The hypothesis that evidential meaning applies to speech acts in general can be refuted already by the observation, discussed in the previous section, that evidential expressions are incompatible with genuine imperatives. Likewise, the hypothesis that evidential meaning specifically applies to assertions can be refuted by the observation that evidential expressions are found not only in assertions, but also in questions – even in polar questions (AIKHENVALD 2004: 241-249).

Evidential meanings never have a speech act as their scope but are rather within the scope of a speech act (cf. AIKHENVALD 2004: 242 on evidential expressions in questions). Again the first argument is conceptual. With the notional definition of evidentiality in terms of 'evidence', which is adopted here, evidential meaning could not possibly apply to speech acts. Speech acts, like states of affairs, are not something for which there can be evidence. We can say that we *base* our assertion of something on some evidence, but this does not mean that the evidence at hand applies to the assertion we make. Clearly, the evidence applies to *what* we assert, not our assertion of it. Consider (14).

(14) *Johnny allegedly ran away yesterday.*

In a precise analysis, the evidential adverb *allegedly* cannot be taken to convey that the speaker has reportive evidence for the assertion she makes. This would imply that somebody told her that she made an assertion. Rather, *allegedly* indicates that the speaker has reportive evidence for what she asserts: somebody told her what she is now asserting.

The second argument turns on the assumption that dependent clauses lack illocutionary force (e.g. SEARLE 1969, CRISTOFARO 2003). That is, with the possible exception of clauses that express a direct quotation, they do not involve a speech act. The argument is that, in many languages, uncontroversial examples of evidential expressions are, in fact, found in dependent clauses (AIKHENVALD 2004: 253-256). Danish is a case in point. Here, evidential adverbs like *tilsynladende* ('apparently'), *angivelig(t)* ('allegedly') and *øjensynlig* ('evidently') readily occur in complement clauses (15), adverbial clauses (16) and parenthetical relative clauses (17) (all examples are attested in a corpus, KorpusDK).

Danish (KorpusDK)

- (15) *Sveriges statsminister Carl Bildt siger*  
Sweden's prime.minister Carl Bildt says  
[*at det tilsyneladende er russiske ubåde ...*].  
that it **apparently** is Russian submarines  
'Sweden's prime minister Carl Bildt says that apparently it is Russian submarines'.
- (16) *Khazraji blev skudt*  
Khazraji become.PST shot  
[*fordi han angiveligt planlagde et kup mod Saddam ...*].  
because he **allegedly** plan.PST a coup against Saddam  
'Khazraji was shot because allegedly he planned a coup against Saddam'.
- (17) *Ritt Bjerregaard og Svend Auken har indgået en alliance*  
Ritt Bjerregaard and Svend Auken have entered an alliance  
[*der øjensynlig er ubrydelig*].  
which **evidently** is unbreakable  
'Ritt Bjerregaard and Svend Auken have entered an alliance which evidently is unbreakable'.

To be sure, some languages do not allow *grammatical* evidential expressions in dependent clauses. This is the case, for instance, with Choctaw (BROADWELL 2006: 196), Imbabura Quechua (COLE 1982: 165) and Tariana (AIKHENVALD 2003: 547). However, this is surely a matter of general “deranking” (CRISTOFARO 2003) rather than of functional incompatibility. If evidential meaning were applying to speech acts, it would be impossible to give an account of the occurrence of evidential expressions in dependent clauses without violating the assumption that dependent clauses lack illocutionary force.

The third argument that evidential meanings do not take speech acts as their scope turns on diagrammatic iconicity. In cases where evidential markers and markers of illocutionary force take distinct positions in the clause, there is a strong crosslinguistic tendency for the former to occur inside the latter with respect to the predicational core of the clause (e.g. VAN VALIN & LAPOLLA 1997, CINQUE 1999, BOYE 2006). In Korean, for instance, evidential suffixes precede illocutionary suffixes like the interrogative marker *-kka* (18) and the politeness marker *-yo* (19).

Korean, Isolate (SOHN 1994: 300, 354, cf. CINQUE 1999: 53-54)

- (18) *Ku pwun-i cap-hi-si-ess-ess-keyss-sup-ti-kka?*  
the person-NOM catch-PASS-HON-PST-PST-EMOD-HON-EVID-Q  
'Did you feel that he had been caught?'
- (19) *Minca-nun ttena-ss-te-kwun-yo!*  
Minca-TOP leave-PST-EVID-APP-PLT  
'I noticed that Minca had left'.

This ordering of evidential markers with respect to illocutionary markers iconically reflects the fact that evidential meaning is within the scope of the speech act.

FALLER (2002) presents an analysis of “evidential meaning in Quechua as illocutionary” (FALLER 2002: 118). This analysis is at variance with the view advocated here, and it may be seen at least partly as a theoretical artefact. FALLER first argues that the meaning of Quechua evidential clitics “do not contribute to the truth conditions of the proposition expressed” (FALLER 2002: 110). This is in agreement with the view advocated here in so far as it means that evidential meaning is distinct from what it takes as its scope. However, she then argues that this means that evidential meaning must be a conversational implicature, a conventional implicature, a presupposition, or an illocutionary meaning, and after excluding the conversational implicature analysis and the presupposition analysis (FALLER 2002: 116-119), and after disregarding the possibility that evidential meaning is a conventional implicature on the grounds that this meaning type “is not very well understood in linguistic theory” (FALLER 2002: 118), she is left with illocutionary meaning. This line of reasoning is problematic. One problem is that FALLER works within a formal approach to meaning which does not pay much attention to non-truth-conditional conventional meaning. Outside formal semantics, there is nothing odd about such meaning. The fact that evidential meaning may be conventional but non-truth-conditional does not force us to analyze it as illocutionary. In fact, the arguments adduced above force us to analyze evidential meaning as non-illocutionary.

This does not exclude the existence of expressions that have both evidential and illocutionary meaning. In Choctaw, for instance, the evidential suffixes are “in complementary distribution” with a set of “illocutionary force” suffixes taking the same position in the clause (BROADWELL 2006: 184). The evidential suffixes arguably signal the illocutionary value of ‘assertion’ in addition to their evidential meaning. Likewise, one and the same expression may be used either to indicate that there is reportive evidence for a proposition or to mark a verbatim (or semi-verbatim) speech act as a quotation. This seems to be the case in Cavineña (GUILLAUME 2008: 643-647), for instance, and in Tariana where the “Present reported is used as a quotative – when something someone just said is repeated” (AIKHENVALD 2003: 292). However, the point is that evidential expressions need not have – and most often do not have – illocutionary meanings. In many languages, reportive evidence and quotation are indicated by distinct expressions. In Kannada, for instance, the evidential “hearsay” clitic *-ante* is clearly distinct from the speech-act oriented “quotative” particle *anta/endu*. Accordingly, only the latter is found with “direct imperatives” (SRIDHAR 1990: 1-5, 30-32; cf. Section 3.1 on the incompatibility of evidential expressions and genuine imperatives).

### **3.3. The scope of evidential meaning is a proposition**

Among the scholars that associate evidentiality and evidential meaning with propositions, the majority probably do not distinguish propositions from states of affairs. Rather, they conceive of propositions quite vaguely as ‘meanings prototypically expressed by clauses’. There are at least five arguments that even in the more restricted sense of the notion employed here, propositions are what

evidential meaning applies to. The first argument is conceptual: propositions are something for which there can be evidence. They are information about the world in the specific sense that they possess some feature (a truth value or referring status; cf. Section 2.3) that hooks them onto the world. With a definition of evidentiality in terms of ‘evidence’, it is thus natural to conceive of evidential meaning as applying to propositions.

The second argument is that uncontroversial examples of evidential expressions are compatible with propositional clauses. Examples of propositional clauses include declaratives and English finite complement clauses (cf. Section 2.3). Both types of constructions readily occur with evidential expressions.

(20) *Johnny is **evidently** holding the ball.*

(21) *I saw that he was **evidently** very ill.*

The third argument is that evidential expressions disambiguate ambiguous clauses as propositional (cf. SCHÜLE 2000: 38, 237-238, 244). The emphasized part of the Danish construction in (22) is an ambiguous clause. In the written language, at least, it can be read either as an imperative expressing a command, in which case it arguably involves a state of affairs but no proposition, or as a declarative expressing an assertion, in which case it involves a proposition (cf. Section 2.3).

Danish

(22) *Hvis jeg hørte rigtigt, så løb du bare.*  
 if I hear.PST correctly **then run.PST/IMP** you **just**  
 a. ‘If I heard correctly, then just go ahead and run!’  
 b. ‘If I heard correctly, you were just running’.

The presence of an evidential adverb such as *tilsyneladende* (‘apparently’) disambiguates the clause as propositional with the effect of excluding the non-propositional reading (a).

(23) *Hvis jeg hørte rigtigt, så løb du **tilsyneladende** bare.*  
 if I hear.PST correctly then run.PST/IMP you **apparently** just  
 a. \*‘If I heard correctly, then apparently just go ahead and run!’  
 b. ‘If I heard correctly, you were apparently just running’.

The fourth argument is that propositional clauses disambiguate ambiguous expressions as evidential. For instance, the English expression *I hear* considered in isolation from its context can be understood either as describing an act of auditory perception or as an evidential expression indicating reportive or perhaps auditory evidence. In construction together with a state-of-affairs-designating accusative-with-infinitive without an infinitival marker, it has the former meaning (cf. Section 3.1).

(24) *I heard him yell.*

However, in a construction with a proposition-designating finite complement clause, it has the latter, evidential meaning.

(25) *I heard that he was yelling.*

In (25), but not in (24), *I heard* can be used to indicate that the speaker has reportive evidence for the proposition ‘he was yelling’.

The fifth argument that the scope of evidential meaning is a proposition turns on diagrammatic iconicity and on the link between deictic tense and propositions. In cases where evidential markers and tense markers take distinct positions in the clause, there is a strong crosslinguistic tendency for the former to occur outside the latter with respect to the predicational core of the clause (e.g. VAN VALIN & LAPOLLA 1997, CINQUE 1999, BOYE 2006, NORDSTRÖM 2008). In Kewa, for instance, evidential suffixes follow tense suffixes.

Kewa, Trans-New Guinea (FRANKLIN 1971, FOLEY & VAN VALIN 1984: 218).

(26) *Ira-a-na.*  
cook-3S.PST-EVID  
‘He cooked it (I saw it)’.

(27) *Ira-a-ya.*  
cook-3S.PST-EVID  
‘He cooked it (hearsay, I didn’t see it)’.

This iconically reflects the fact that in Kewa temporal location is within the scope of evidential meaning rather than vice versa.<sup>4</sup> As deictically tensed clauses are often propositional (BOYE 2006, 2010; cf. e.g. HARDER 1996: 217-218, 236, 327-328), the canonical ordering of evidential markers with respect to tense markers may in turn be taken to reflect the fact that the scope of evidential meaning is a proposition.

#### **4. Asymmetric relations between evidential expressions and propositional clauses**

The claim that evidential meaning has propositional scope does not entail that there is one explicit proposition for every evidential expression. As mentioned in Section 2.2, I take ‘scope’ to be identical to the meaning upon which some other meaning is conceptually dependent. This meaning need not be conveyed explicitly. That is, what I refer to as the explicit scope (cf. Section 2.1) of a given evidential meaning need not be a proposition (see BOYE 2006: Sections 5.4 and 5.5 for discussion).

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<sup>4</sup> Evidential expressions may be tensed themselves. However, the temporal location of some piece of evidence is in principle independent of the temporal location of the proposition to which the evidence applies. Accordingly, in *he is odd, they said*, where *they said* is arguably an evidential expression, the propositional clause *he is odd* is marked for present tense while the evidential expression is marked for past tense.

#### 4.1. Evidential expressions without explicit propositions

Evidential expressions may be found in the absence of an explicit proposition. For one thing, an evidential expression may take a clause in its semantic scope, which is not unambiguously propositional but rather ambiguous with respect to the contrast between state of affairs and proposition. This is the case in (23), where an evidential adverb disambiguates an ambiguous clause as propositional. Moreover, there may not even be a whole clause in the semantic scope of an evidential expression (cf. Section 2.2). In (28), the meaning of the evidential adverb *apparently* takes in its semantic scope only the noun phrase *natives of Spain*.

- (28) *When passing in front of the police barracks the coach was hailed by two well-dressed men, **apparently** natives of Spain, who asked the driver if he would take them to the Bovedas.* (The New York Times, April 4, 1885)

In (29), where the same adverb constitutes an utterance on its own, there is arguably no explicit scope at all (unless one accepts the idea of scope relations across utterances).

- (29) A: – *Is John in Rome?*  
B: – *Apparently!*

In the Kamaiurá example in (30), finally, there are two evidential expressions. The second one, *heme*, takes the whole clause in its semantic scope, but the first one, *rak*, seems to take only the constituent *moĩ-a* (‘snake-NUCLEAR.CASE’).

Kamaiurá, Tupi (Seki 2000; adapted from Aikhenvald 2004: 94)

- (30) *Moĩ-a rak ij-u'u-me heme-pa.*  
snake-NCAS EVID 3-bite-GER EVID-MSP  
‘It was a snake that bit him (the speaker saw it but the snake is gone now)’.

While *apparently* in (28) and (29) and *rak* in (30) have less than a clause in their semantic scope, their meanings still have implicit propositional scope in the sense that they are conceptually dependent upon a proposition. In each case, understanding the meaning of the evidential expression requires understanding propositional meaning: In (28), the inferential evidence indicated by *apparently* must be understood as applying to an identificational propositional structure like ‘the two well-dressed men were natives of Spain’; in (29), it must be understood as applying to the proposition ‘John is in Rome’ questioned in the previous utterance; and in (30), the firsthand evidence expressed by *rak* must be understood as applying to an identificational propositional structure like ‘it was a snake’, as highlighted by the translation of the example. Evidential expressions that have less than a clause in their semantic scope can thus be analyzed as “coercing” what is found in their explicit scope to be interpreted as part of a propositional meaning structure. That is, the explicit scope is “coerced” to be interpreted as an implicit

propositional scope.<sup>5</sup> It must be stressed, though, that there are limits to the coercing powers of evidential expressions. In particular, a clause which specifically designates a state of affairs – as opposed to a proposition – must be analyzed as resisting coercion. For instance, it is impossible to force an imperative to be interpreted as propositional by adding an evidential expression to it. As discussed in Section 3.1, evidential expressions are incompatible with genuine imperatives.

#### 4.2. Explicit propositions with more than one evidential expression

It has already been illustrated that two evidential expressions may be found with one and the same explicit proposition. In (30) above, however, only one of the two evidential expressions, *heme*, actually takes the proposition in its explicit semantic scope – the other one, *rak*, takes the meaning of a clausal constituent in its explicit semantic scope. In what follows, I shall discuss a number of cases where two or more evidential expressions occur with the same proposition in their explicit semantic scope, and I shall argue that all cases are perfectly compatible with the analysis of evidential meaning as being conceptually dependent upon a proposition (see BOYE 2006: Section 5.5.1 for detailed discussion).

First, two or more evidential expressions may occur in harmonic combination. That is, 1) they have one and the same proposition as their semantic scope, 2) one expression is not found in the semantic scope of another expression, and 3) they have overlapping meanings and may thus be thought of as cooperating in the specification of evidential meaning. Carib provides a case in point. Here, according to HOFF (1986), absence of the verbal suffix *-n* marks evidential (“extraspective”), as opposed to epistemic modal (“introspective”), meaning and in the absence of *-n*, one of six evidential particles may be added to specify type of evidence. Cases like this, obviously, are not problematic for the proposal made in this paper.

Second, two or more semantically non-overlapping evidential expressions may occur with the same proposition as their explicit semantic scope and signal each its own distinct type of evidence for the proposition. For instance, a speaker may replace one evidential expression with another one in an online revision which takes place during the production of one and the same clause. This seems to be what is happening in the following example from Qiang, where a marker of visual evidence is added to a marker of inferential evidence.

Qiang, Sino-Tibetan (LAPOLLA 2003: 70)

- (31) *Oh, the: z̥bə z̥ete-k-u!*  
       oh 3.SG drum beat-EVID-EVID  
       ‘Oh, he WAS playing a drum!’

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<sup>5</sup> One argument for this analysis is that it makes it possible to account for the fact that evidential expressions that occur with only a nominal clausal constituent in their semantic scope seem to endow the constituent at hand with constituent focus (cf. DERBYSHIRE 1979: 144 on Hixkaryana, AIKHENVALD 2003b: 133 on Tariana, and COLE 1982: 165 on Imbabura Quechua). Constituent focus emphasizes the identity of a constituent and may be thought of as evoking an identifying propositional structure like ‘it was a snake’ in (30). Accordingly, the focalizing effect of evidential expressions may be seen as the result of the fact that they “coerce” the constituent found in their semantic scope to be interpreted as part of an identifying propositional structure.

According to LAPOLLA, (31) has the sense of “as I had guessed and now pretty-well confirm” (LAPOLLA 2003: 69) and would be possible “given a situation such as having guessed someone was playing drums next door the speaker went next door and saw the person standing there holding a drum or drumsticks” (LAPOLLA 2003: 69). Cases like (31) do not constitute a problem for the proposal advocated here either. In fact, they may be considered quite natural. While it is certainly not economical to adduce more than one’s best evidence for some proposition, there may be good reasons to do so – for instance, in a court room.

Finally, one evidential expression may be found in the semantic scope of another one. In (32), from Eastern Pomo, for instance, both inferential *-ne* and reportive *--le* take the proposition ‘he has left his daughter-in-law there’ in their semantic scope, but *--le* simultaneously takes *-ne* in its scope.

Eastern Pomo, Hokan (MCLENDON 2003: 112)

- (32) Ka·lél=xa=k<sup>h</sup>í      ma·ʔór-al      q’á·*-ne--le*.  
 simply=EVID=3.A daughter.in.law-P leave-EVID-EVID  
 ‘He must have simply left his daughter-in-law there, they say’.

On the face of it, this might seem to be a problem for the proposal advanced here. In particular, the fact that *--le* semantically scopes over *-ne* and occurs outside it with respect to the predicational core of the clause might be taken to suggest that in (32) *--le* takes a whole assertive speech act in its semantic scope, rather than merely a proposition (cf. Section 3.2 on diagrammatic iconicity). That is, it might be suggested that in (32) *--le* takes an assertive speech act in its semantic scope – which comprises the proposition ‘he has left his daughter-in-law there’ – as well as the specification of inferential evidence by means of *-ne* for this proposition. This is in fact what is suggested by HENGEVELD & MACKENZIE (2008: 103-104, 152-153). They claim that, in general, reportive evidential meanings differ from other types of evidential meaning in that they have a whole “communicated content” rather than merely a proposition(al content) in their scope. In support of this, they point to the fact that, while reportive evidential meanings may readily scope over other types of evidential meaning, as in (32), they are hardly ever – if at all – found in the scope of those meanings.

Under closer scrutiny, however, there is really no need for HENGEVELD & MACKENZIE’S account. Cases like (32) are perfectly compatible with the proposal made here that uncontroversial examples of evidential meaning – including reportive evidential meanings – apply to propositions.

As for the tendency for reportive evidential meanings not to occur in the scope of other types of evidential meaning, there is an obvious pragmatic explanation: Situations in which you have direct or inferential evidence for some reportive evidence are pragmatically implausible. The idea of witnessing some piece of reportive evidence, or arriving at it through inference, is decidedly odd. By contrast, a situation in which someone wrote to or told you about some piece of direct or inferential evidence is perfectly conceivable.

This means that the only reason HENGEVELD & MACKENZIE have for distinguishing between different general scope properties for the meanings of the

two evidential expressions in (32) is that one occurs in the semantic scope of the other one. This is not a good reason, however. Consider (33) from Tsafiki.

Tsafiki, Barbacoan (DICKINSON 2000: 408)

- (33) *Man-to=ka            ji-ti-e            ti-ti-e            ti-e.*  
 other-earth=LOC    go-EVID-DECL    say-EVID-DECL    say-DECL  
 ‘They say that they say that they say that he went to Santo Domingo.

(33) comprises two tokens of *-ti*, referred to by DICKINSON (2000: 408) as a “hearsay evidential”. The first token is found in the semantic scope of the other one. Surely, HENGEVELD & MACKENZIE would not claim different general scope properties for the different tokens of *-ti*. Surely, for instance, they would not claim that the first token of *-ti* semantically scopes over a proposition(al content) while the second one scopes over a “communicated content”. According to DICKINSON (2000: 408), *-ti* “may be repeated to indicate up to three sources between the speaker and the original event [i.e. proposition]”, but as indicated by (34), three sources may not be the maximum in other languages, and at some point HENGEVELD & MACKENZIE would run short of general scope properties – i.e. “layers” of layered clause (or content) structure.

- (34) *A says that B says that C says (...) that Z says that John is in Rome.*

What (32)-(34) show is that evidential meaning can be applied recursively. The output of indicating evidence for a proposition may itself be construed as a proposition which can function as the input to a new round of evidence indication, and so on and so forth. This is obvious in lexical cases like (34) where all propositional levels are fleshed out linguistically (by means of the indicative clauses *A says that...*, *B says that...*, *C says that*, etc.). In cases like (32), by contrast, “coercion” (again) plays a crucial role. Here, only the proposition ‘he must have simply left his daughter-in-law there’, for which *-ne* indicates inferential evidence, is explicitly expressed. However, because evidential meaning is conceptually dependent upon a proposition, the presence of a second evidential expression, reportive *-le*, “coerces” the totality of the explicit proposition and the indication of inferential evidence for it to be understood as a proposition itself.

## 5. Conclusion: criteria of evidentiality

In the preceding sections, I have argued that uncontroversial examples of evidential meanings share scope properties in the sense that they are all conceptually dependent on a proposition. In conclusion, I suggest a precise definition of evidentiality as well as two scope criteria of membership of the descriptive category of evidentiality. The definition combines a notional definition of evidentiality in terms of ‘evidence’ with a specification that evidentiality applies to propositions (in the definition, the notion of ‘evidence (for)’ can unproblematically be replaced by either of the related notions ‘source (of)’ or ‘justification (for)’).

*Notional definition of the descriptive category of evidentiality*

Evidentiality covers meanings that represent the evidence for a proposition.

The revised definition can be fleshed out in the following two criteria.

*Scope criteria of membership of the category of evidentiality*

1. Evidential meanings can have the meaning of a proposition-designating clause as their explicit scope.
2. Evidential meanings cannot have the meaning of a state-of-affairs-designating clause as their explicit scope.

The criteria are designed for the specific purpose of deciding what should be included in a database of evidential expressions. However, I believe they may be useful to anybody who wishes to base the dividing line between what is evidential and what is not on more than subjective judgements based on a notional definition.

The first of the two criteria means that, in order for a given linguistic expression to be considered as having evidential meaning, it must be attested with a proposition-designating clause in its semantic scope. In principle, the proposition-designating clause may be either dependent or independent. In practice, however, non-occurrence with dependent proposition-designating clauses is not sufficient in all languages for the dismissal of an expression as non-evidential. As discussed in Section 3.2, non-occurrence of evidential expressions in dependent clauses may be due to general “deranking” of dependent clauses. On the other hand, non-occurrence with independent proposition-designating clauses such as notably declaratives (i.e. clauses that conventionally express the assertion of a proposition) is sufficient for dismissing an expression as non-evidential. Consider, for instance, English *so-called*, mentioned in Section 1. Any speculation that this expression might be a reportive evidential is refuted by the fact that it is not found with a declarative construction in its semantic scope. To be sure, it can occur in a declarative construction, as in (35).

- (35) The so-called Executioner's Axe was really a woodman's axe on a long handle. (British National Corpus, H85 3496)

But in (35), *so-called* clearly only has (part of) the constituent (*the*) *Executioner's Axe* in its semantic scope. As illustrated in (36) and (37), *so-called* cannot be construed with a propositional clause in its semantic scope. It can be construed neither as a propositional clausal adverb, nor as a predicative adjective with a propositional complement.

- (36) Evidently/\*so-called, the Executioner's axe was really a woodman's axe on a long handle.

- (37) It is evident/\*so-called that the Executioner's axe was really a woodman's axe on a long handle.

The second criterion means that, in order for a given linguistic expression to be considered as having evidential meaning *only*, it must be non-attested with a (independent) state-of-affairs-designating clause as its scope. For instance, any speculation that the Kannada “quotative” particle *anta/endu*, discussed in Section 3.2, might be a pure reportive evidential is refuted by the fact that it occurs in imperative constructions. As mentioned in Section 2.3, genuine imperatives arguably designate states of affairs but not propositions. It must be stressed, however, that the criterion basically applies to meanings rather than to expressions. Expressions that have other meanings in addition to an evidential meaning might be dismissed as non-evidential by the criterion unless the different meanings are studied in isolation. This is the case, for instance, with the polyfunctional expressions found in Cavineña and Tariana (cf. Section 3.2). They can be used either to indicate reportive evidence or to mark verbatim (or semi-verbatim) quotations. Only when they are used with evidential meaning may they be expected to be incompatible with state-of-affairs-designating clauses.

While the two criteria can be used to dismiss meanings and expressions as non-evidential, meeting them is not sufficient for being considered evidential. The criteria delimit a set of meanings that have propositional scope, and evidential meanings are by far not the only members of this set. For instance, epistemic modal meanings like the meaning of English *probably* and emotive meanings like the meaning of *hopefully* arguably also have propositional scope. However, the criteria should not be applied in isolation. They should be applied in combination with the requirement that evidential meanings must conform to the notional definition of evidentiality and be describable in terms of the notion of ‘evidence’.

#### Abbreviations

The paper uses the standard gloss abbreviations found in the appendix to the Leipzig Glossing Rules ([www.eva.mpg.de/lingua/resources/glossing-rules.php](http://www.eva.mpg.de/lingua/resources/glossing-rules.php)). The following abbreviations are not among those standard abbreviations.

APP	apperceptive	HON	honorific
EMOD	epistemic modal	MSP	male speaker
EVID	evidential	NCAS	nuclear case
GER	gerund	PLT	polite

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