



Semantics & Pragmatics SoSe 2023

Lecture 11: Evidentiality

13/06/2022, Christian Bentz



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Section 1: Recap of Lecture 10



Grammaticalized Modality

“[...] we will focus our attention on the kinds of modality which can be expressed **grammatically**, e.g. by *verbal affixation, particles, or auxiliary verbs*.”

Kroeger (2019), p. 293.

- (1) John *could* smoke.
- (2) John *must* smoke.
- (3) Jumbo *should* like Bambi.

Note: The idea of “grammaticalized markers” of modality (or any other linguistic category) is that there are strongly *conventionalized* markers available to the speaker to encode a particular grammatical function, rather than spontaneously circumscribing it. In English, for example, rather than saying, “In the past I go ...” or “Some time ago I go ...”, we typically say “I went ...”.

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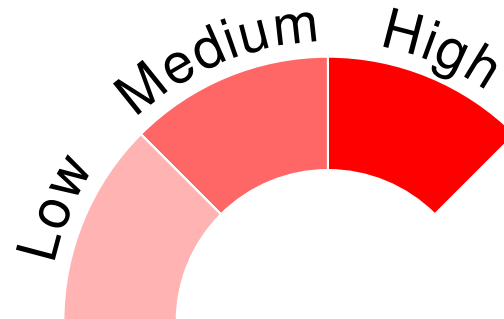


Modal Strength (aka Force)

Statements can express stronger or weaker **commitment to the truth** of the so-called base proposition. The example sentences below are ordered in decreasing strength.

Kroeger (2019), p. 294.

- (4) Arthur **must/has to** be home.
- (5) Arthur **should** be home.
- (6) Arthur **might** be home.



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Modal Type (aka Flavor): Epistemic vs. Root

“**Epistemic modality** is often said to be “speaker-oriented”, because it encodes possibility or necessity in light of the speaker’s knowledge. **Non-epistemic** modal marking reflects some facet of the circumstances surrounding the described situation or event [...]”

Kroeger (2019), p. 307.

- (7) John didn’t show up for work. He *must* be sick.
[spoken by co-worker; Epistemic]
- (8) John didn’t show up for work. He *must* be fired.
[spoken by boss; Deontic (type of Root modality)]

Note: Non-epistemic modal marking is *rooted* in the particular *circumstances* of the *situation*. This is why it is variously called **Root**, **Circumstantial** or **Situational** Modality.

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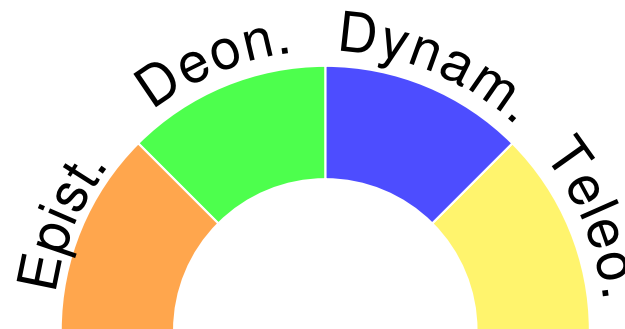
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Further Modal Types (aka Flavors)

The names for modal subtypes are mostly derived from Ancient Greek terms.

- ▶ **Epistemic**
(from Ancient Greek ἐπιστήμη
“knowledge”)
- ▶ **Deontic**
(from Ancient Greek δέον
“obligation, duty”)
- ▶ **Dynamic**
(from Ancient Greek δύναμις
“power”)
- ▶ **Teleological**
(from Ancient Greek τέλος
“goal, purpose”).



Note: There are further types discussed in the literature. For instance, **Bouletic (Boulomaic)** (from Ancient Greek βούλομαι, “to desire/want”). However, the more types we introduce, the harder it gets to clearly distinguish them. For instance, *to have a desire* and *to have a goal* are conceptually very similar.

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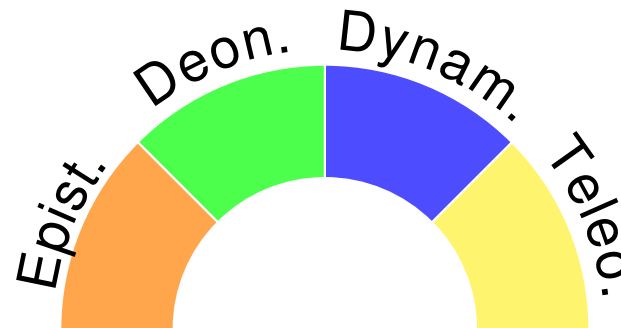
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Polysemy of Modal Auxiliaries

In several languages, **modal auxiliaries** can be used for different types of modality. This might suggest that they are **polysemous**. However, in Kroeger (2019), p. 304 it is argued that they are not in fact polysemous, but rather **indeterminate** to start with (i.e. as a lexical entry), and then get assigned a particular type of modality by context.

- (9) It **has to** be raining. [Seeing people outside with umbrellas]
- (10) Visitors **have to** leave by six pm. [hospital regulations]
- (11) John **has to** sneeze.
- (12) To get home in time, you **have to** take a taxi.



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The Adverbial Phrase Test

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- (13) EPISTEMIC:
(In view of the available evidence,) John must/may be the murderer.
- (14) DEONTIC:
(In view of his parents' orders,) John may watch TV, but he must go to bed at 8pm.
- (15) ABILITY/DYNAMIC:
(In view of his physical abilities,) John can lift 200 kg.

Note: If we come to the conclusion that the adverbial phrases in parentheses are not redundant, then this supports the idea that type of modality is not lexically specified, but inferred from context.



Modal Logical Operators

The **strength of modality** as discussed above is represented by two **modal operators** which represent the extreme ends of the spectrum:

$$\diamond p : \textit{it is possible that } p \quad (1)$$

$$\square p : \textit{it is necessary that } p \quad (2)$$

Modality in this sense can then be construed as **quantification over possible worlds**, e.g.

$$\diamond p \equiv \exists w[w \in p] \quad (3)$$

$$\square p \equiv \forall w[w \in p] \quad (4)$$

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Modal Propositional Logic

We defined the clauses of the syntax of a propositional logic language L in Lecture 4. In order to account for (simple, binary strength) modality, we just need to add one more syntactic clause:

(v) If ϕ is a formula in L , then $\Box\phi$ and $\Diamond\phi$ are too.

Gamut (1991), Volume 2, p. 21.

Examples of valid formulas

$\Box p$

$\Box\Diamond p$

$\Box p \vee \Diamond q$

$\neg\Diamond(p \wedge q)$

$p \rightarrow \Box\Diamond p$

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Feature 75A: Epistemic Possibility

This feature is described in the text of chapter 75 by Johan van der Auwera and Andreas Ammann

You may combine this feature with another one. Start typing the feature name or number in the field below.

Values	
● Verbal constructions	65
● Affixes on verbs	84
● Other	91

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(16) John *may* have arrived. (Epistemic possibility)

(17) John *must* have arrived. (Epistemic necessity)

<https://wals.info/chapter/75>



Modality and Truth-Conditions: Another Controversy

According to the discussion in Kroeger (2019) – and contrary to some claims in the linguistic literature – **epistemic modal markers** might be seen as **contributing to the truth-conditional content of a proposition**, rather than just merely expressing the degree of certainty about a proposition.

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Language	Challenge	Yes-No	Question	Negation
English	yes	yes		(yes)



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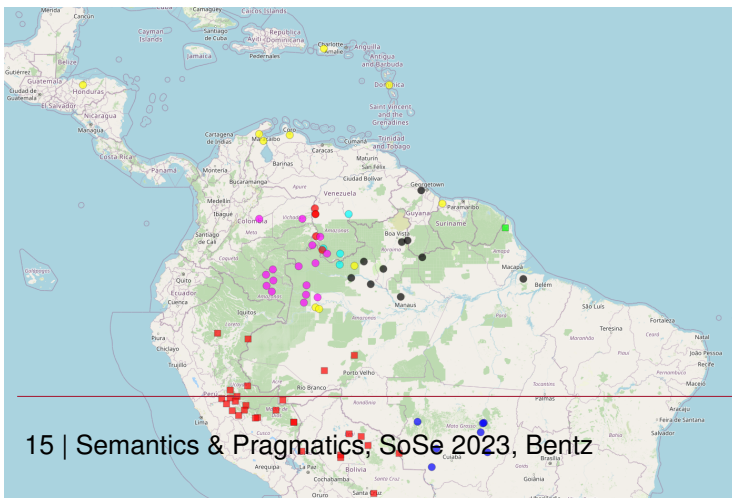
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Definition: Evidentiality

“Evidentiality is a **linguistic category** whose primary meaning is **source of information**... [T]his covers the way in which information was acquired, **without necessarily relating to the degree of speaker’s certainty** concerning the statement or whether it is true or not [...] To be considered as an evidential, a morpheme has to have ‘source of information’ as its **core meaning**; that is, the unmarked, or default interpretation.”

Kroeger (2019), p. 320, citing Aikhenvald (2004), p. 3.

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(18) Tagalog (Austronesian, Phillipines)

Mabuti **raw** ang=ani.

good **HEARSAY** NOM=harvest

‘**They say** that the harvest is good.’

Kroeger (2019), p. 317, citing Schlachter & Otones 1972, p. 423.



Three Claims about Evidentiality

- ▶ **First claim:** It is a “linguistic category”, i.e. a **grammatical category** with grammatical markers (same as for modality).
- ▶ **Second claim:** These evidential markers have **source of information** as their core meaning.
- ▶ **Third claim:** Evidentiality is not “necessarily relating to the degree of speaker’s certainty”, i.e. it is **distinct from epistemic modality**.¹

Kroeger (2019), p. 320–321.

¹In a sense, this third claim is a subclaim of the second claim. While the second claim states more generally that evidentiality can be the core meaning of grammatical markers distinguished from tense, aspect, modality, etc., the third claim reinforces more specifically that evidentiality is not to be equated with epistemic (or any other kind of) modality.

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First Claim: Grammatical Marking

Similar as for to modality, most (if not all) languages likely have *some way of expressing source of information*, e.g. by circumscriptions such as *I have heard that p*, *I was told that p*, *they say that p*, etc.

However, when we talk about a language having a system of **evidential markers**, we refer to **grammaticalized markers**, e.g. affixes, particles, etc. which are used more consistently (sometimes they might even be obligatory), than spontaneous circumscriptions by “lexical means”.

Kroeger (2019), p. 320.

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Second Claim: Core Meaning

In order for an affix, particle, etc. to be considered part of a paradigm of evidential markers, its **core meaning should be source of information**. For instance, according to the strict definition by Aikhenvald, the German *sollen* would not be considered an evidential marker.

Kroeger (2019), p. 320.

(19) German (deu)

Kim **soll** einen neuen Job angeboten bekommen haben.

Kim **should** a new job offered get have

‘Kim has **supposedly** been offered a new job.’

Kroeger (2019), p. 321, citing von Stechow (2006).

Note: However, establishing “core meanings” is notoriously hard, especially since new core meanings might arise through grammaticalization from secondary meanings. For example, morphological material with the primary function of marking modality or tense might more and more gravitate towards having a primarily evidential meaning.

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Second Claim: Core Meaning

Markers can also develop **polysemy** between one grammatical function and another, e.g. *tense* marking and *evidential* marking. Good evidence for this being the case is if the same marker can be used recursively without being redundant.

Kroeger (2019), p. 322.

(20) Iranian Azerbaijani (Turkic)

zefer qazan-miş-**miş**-am
victory win-PRF-**INDIRECT**-1SG

‘**Reportedly** I have won.’

Given this example, we have evidence to assume that the marker *-miş* can indeed mark evidentiality independent of tense, but again it is hard to decide what is generally its “core meaning”.

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Second Claim: Core Meaning

Given these problems, the question arises of how to tease apart **primary** from **secondary functions**, and hence how to determine the core meaning of a marker. In order to have convincing evidence, we need to assess situations where evidentiality can be in conflict with other grammatical functions, e.g. epistemic modality in the example below.

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Huallaga Quechua (Quechuan)

- (21) Qam-pis maqa-ma-shka-nki=**mi**.
you-also hit-1.OBJ-PRF-2.SUBJ=**DIRECT**
'You also hit me (**I saw and/or felt it**).'
- (22) Qam-pis maqa-ma-shka-nki=**shi**.
you-also hit-1.OBJ-PRF-2.SUBJ=**HEARSAY**
'(**Someone told me that**) you also hit me.'

Kroeger (2019), p. 318, citing Weber (1989), p. 421.



Second Claim: Core Meaning

“In many contexts, the direct evidential =*mi* (which is optional) can be used to indicate certainty; and hearers may sometimes interpret the hearsay evidential =*shi* as indicating uncertainty on the part of the speaker.”

“However, when there is a **conflict between source of information and degree of commitment**, it is source of information that determines the choice of clitic.”

Kroeger (2019), p. 318, citing Weber (1989).

Huallaga Quechua (Quechuan)

- (23) [...] =**mi**. **x**
 [...] =**DIRECT**
 ‘My mother’s grandfather’s name was John.’
- (24) [...] =**shi**. **✓**
 [...] =**HEARSAY**
 ‘My mother’s grandfather’s name was John.’

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Third Claim: Distinction from Epistemic Modality

“Evidentials may acquire secondary meanings – of reliability, probability and possibility (known as epistemic extensions), but they do not have to [...] **Evidentiality is a category in its own right**, and not a subcategory of any modality [...] That evidentials may have semantic extensions related to probability and speaker’s evaluation of trustworthiness of information does not make evidentiality a kind of modality.”

Kroeger (2019), p. 321, citing Aikhenvald 2004, p. 7-8.

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Section 3: Evidentiality vs. Epistemic Modality



Modality and Truth-Conditions

According to the discussion in Kroeger (2019) – and contrary to some claims in the linguistic literature – **epistemic modal markers** might be seen as **contributing to the truth-conditional content of a proposition**, rather than just merely expressing the degree of certainty about a proposition.

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Evidentiality and Truth-Conditions

“There is good evidence that evidential markers in a number of languages **do not contribute to propositional content** but function as illocutionary modifiers, and so must be distinct from epistemic modality.”

Kroeger (2019), p. 321.



Evidentiality: The Negation Test

If negation **can scope over the evidential marker**, then the evidential marker is considered to contribute to the truth-conditional content. If **negation cannot scope over the evidential marker**, then the evidential marker is not relevant for truth-conditions.

Cuzco Quechua (Quechuan)

- (25) Ines-qa mana=**s** qaynunchaw ñaña-n-ta-chu watuku-rqa-n.
Ines-TOP not=**REPORT** yesterday sister-3-ACC-NEG visit-PAST1-3
'**(Speaker was told that)** Ines didn't visit her sister yesterday.' ✓
'**(Speaker was not told that)** Ines visited her sister yesterday.' ✗

Kroeger (2019), p. 323, citing Faller (2002).

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Evidentiality: The Challenge Test²

The hearer can challenge the truth of the statement of the speaker given more direct evidence, but the **source of information cannot be challenged**. Hence, source of information is not part of the propositional content.

Cuzco Quechua (Quechuan)

- (26) Ines-qa qaynunchay ñaña-n-ta=**s** watuku-sqa.
 Ines-TOP yesterday sister-ACC=**REPORT** vist-PAST2
 ‘**(Speaker was told that)** Ines visited her sister yesterday.’
- (27) Mana=n chiqaq-chu. Manta-n-ta-lla=**n**✓ watuku-rqa-n.
 not=DIRECT true-NEG mother-3-ACC-LIMIT=**DIRECT** visit-PAST1-3
 ‘That’s not true. She only visited her mother.’
- (28) Mana=n chiqaq-chu. Mana=**n**× chay-ta willa-rqa-sunki-chu.
 not=DIRECT true-NEG not=DIRECT this-ACC tell-PAST1-3S.2O-NEG
 ‘That’s not true. You were not told this.’

Kroeger (2019), p. 323, citing Faller (2002).

²Also called the *Assent/Dissent Diagnostic*.

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Two Types of Evidentials

“A number of languages have evidentials which behave much like those of Cuzco Quechua. However, there are other languages in which evidentials seem to contribute to the propositional content of the utterance [...].”

Kroeger (2019), p. 325, referring to Murray (2010).

Illocutionary³ evidentials: markers of evidentiality that do not contribute to the truth-conditional content, but that “add to or modify the sincerity conditions of the [speech] act”.

Kroeger (2019), p. 323, citing Faller (2002).

Propositional evidentials: markers of evidentiality that also contribute to the truth-conditional content.

³In speech act theory, the *illocutionary act* is the act which the speaker intends to perform by using a certain utterance. This is distinguished from the *locutionary act* (the act of speaking itself), and the *perlocutionary act* (the actual result achieved “by speaking” the utterance).

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Illocutionary Evidentials

Markers of evidentiality that **do not contribute to the truth-conditional content**, but that “add to or modify the sincerity conditions of the [speech] act”.

Kroeger (2019), p. 323, citing Faller (2002).

Cuzco Quechua

- (29) Para-sha-n=**si**.
rain-PROG-3=**REPORT**
'**(It is reported that)** it is raining.'
proposition: It is raining.

Note: This is the type of evidential that Aikhenvald (2004) would accept as a “true” evidential which is clearly distinct from epistemic modality.

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Propositional Evidentials

A marker of evidentiality that also **contributes to the truth-conditional content.**

Kroeger (2019), p. 323.

German

- (30) Es **soll** regnen.
it **should** rain
'It is **supposedly** raining.'
proposition: It is **supposedly** raining.

Note: This type of evidential is much closer (potentially indistinguishable) from epistemic modality.

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Section 4: Evidentiality in Languages of the World



Feature 77A: Semantic Distinctions of Evidentiality



This feature is described in the text of chapter 77 [Semantic Distinctions of Evidentiality](#) by [Ferdinand de Haan](#) [cite](#)

You may combine this feature with another one. Start typing the feature name or number in the field below.

× 77A: Semantic Distinctions of Evidentiality

Submit

Values

<input type="radio"/>	No grammatical evidentials	181
<input checked="" type="radio"/>	Indirect only	166
<input checked="" type="radio"/>	Direct and indirect	71

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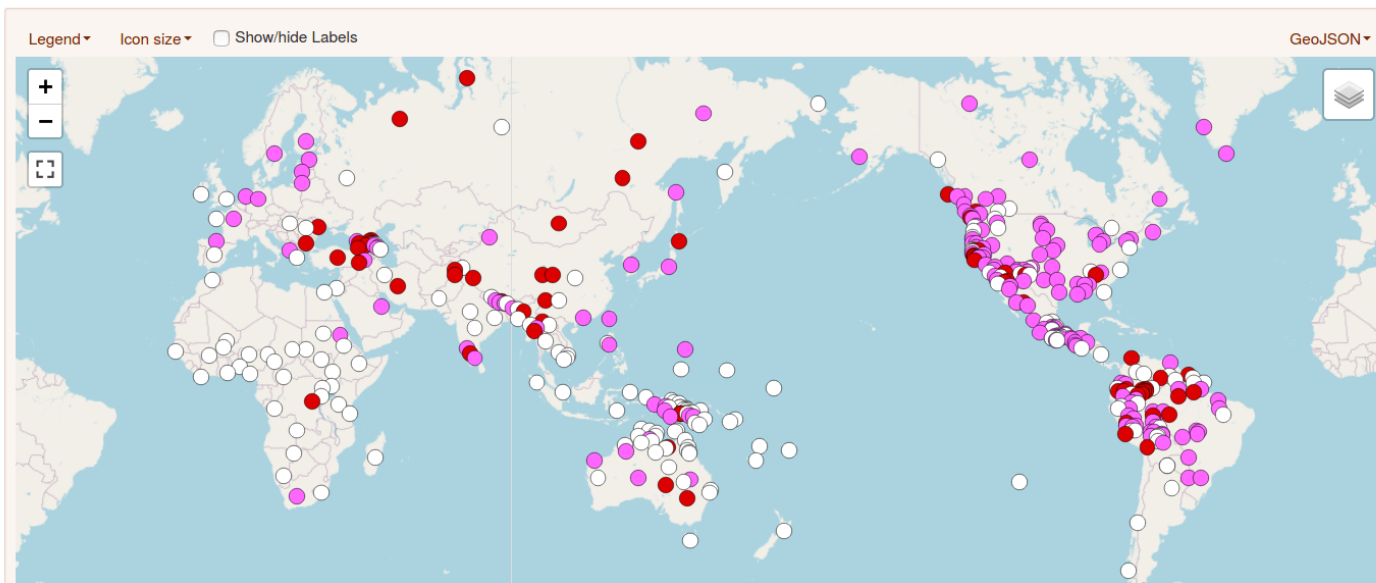
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(31) Der Film *soll* gut sein. (Indirect evidence)
'The movie is said to be good.'

<https://wals.info/chapter/77>



Feature 78A: Coding of Evidentiality



This feature is described in the text of chapter 78 [Coding of Evidentiality](#) by Ferdinand de Haan [cite](#)

You may combine this feature with another one. Start typing the feature name or number in the field below.

Values

<input type="radio"/>	No grammatical evidentials	181
<input type="radio"/>	Verbal affix or clitic	131
<input type="radio"/>	Part of the tense system	24
<input type="radio"/>	Separate particle	65
<input type="radio"/>	Modal morpheme	7
<input type="radio"/>	Mixed	10

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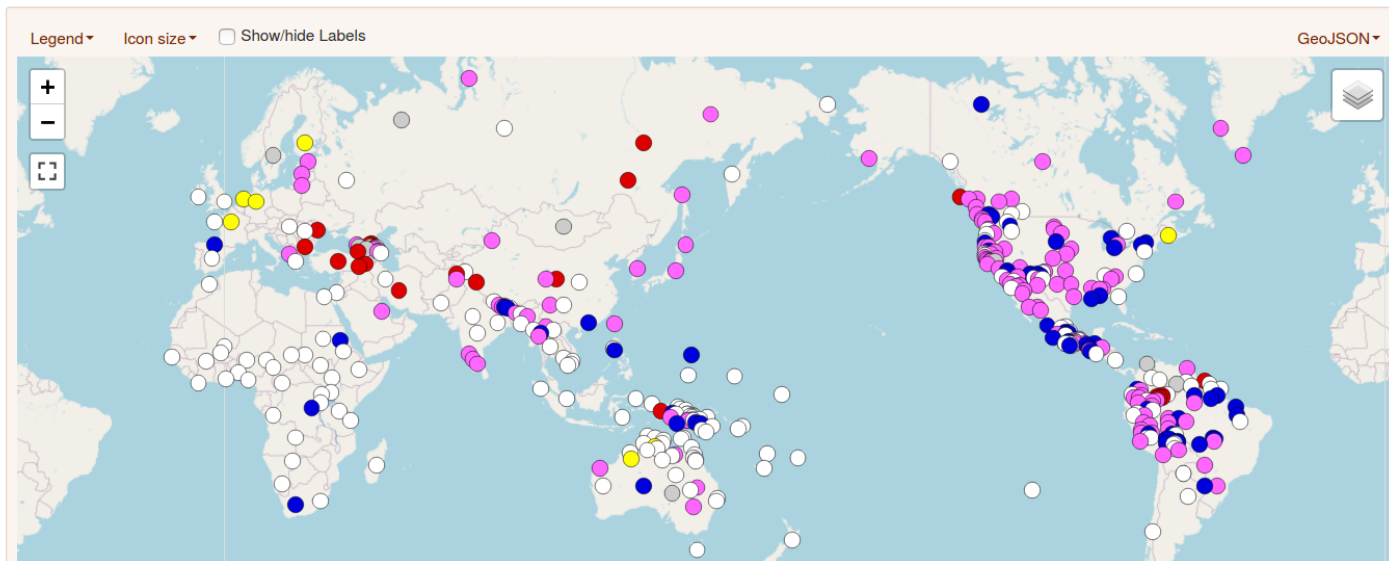
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(32) Der Film *so*// gut sein. (Modal morpheme)
'The movie is said to be good.'

<https://wals.info/chapter/78>



Summary



Summary

- ▶ **Evidentiality** as a grammatical category refers to the expression of **source of information**.
- ▶ It is coded by some grammaticalized means in a considerable part of the world's languages (237/418 or ca. 57% in the respective WALS chapter).
- ▶ In a strict definition, it is **separated from epistemic modality**, i.e. it *can but does not have to* relate to the certainty of the speaker.
- ▶ Further subcategorizations such as **illocutionary vs. propositional evidentials** have been introduced to further account for the diversity of systems found in the world's languages.

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Thank You.

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