



Cross-linguistic categories – and how to identify them

Kasper Boye

Department of Scandinavian Studies and Linguistics

University of Copenhagen

kabo@hum.ku.dk



Overview

1. Cross-linguistic categories
2. The relation between Evidentiality and Epistemic Modality
3. Epistemicity as a cross-linguistic category
4. Criterion 1: Epistemicity is notionally coherent
5. Criterion 2: Epistemic systems across languages
6. Criterion 3: A semantic map of epistemic expressions
7. Criterion 4: The semantic scope of epistemic expressions
8. Summary



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- **Cross-linguistic categories**
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Cross-linguistic categories

The term 'category' in linguistics is used

1a) of language-specific phenomena ("language-specific categories"), but also
1b) of cross-linguistic generalizations ("cross-linguistic categories");

2a) of linguistic particulars like Past, Present and Future
(Whorf's (1956: 113) "specific" categories), but also

2b) of groups of related particulars like Tense (Whorf's (1956: 113)
"generic" categories;

3a) of linguistic phenomena ("linguistic categories"), but also

3b) of the cognitive and communicative phenomena that are assumed to
motivate them ("conceptual categories");

4a) of theoretical constructs, but also

4b) of entities that are assumed to have an ontological reality.



Cross-linguistic categories

How the term 'category' is used here

- 1) It is used of cross-linguistic generalizations ("cross-linguistic categories").
- 2) It is used of groups of related linguistic particulars like Tense (Whorf's (1956: 113) "generic categories").
- 1+2) It is used of cross-linguistic generalizations over groups of related expressions (morphemes, words, constructions).
- 3) It is used of linguistic phenomena ("linguistic categories").
 - Cross-linguistic generalizations are often assumed to give an idea of universal cognitive and communicative phenomena.
 - However, they are descriptions of linguistic facts, not of cognitive and communicative phenomena.
- 4) It is used of a theoretical construct.
 - Cross-linguistic generalizations are descriptions.
 - As descriptions, they cannot have any independent ontological status: they are not 'out there'.



Cross-linguistic categories

How expressions can be related within languages

1. In terms of **structure** (morphosyntactic, (semantic, phonological))
2. In terms of **substance** (semantic, (phonological)).

Example: Tense markers in Danish weak verbs (simplified)

Stem	Tense marker
<i>arbejde</i> (<i>'work'</i>)	<i>-r</i> (<i>'NON-PAST'</i>) <i>-de</i> (<i>'PAST'</i>)

The relations between the two Tense markers

1. **Substance relation** (semantic): Both express location in time.
2. **Structural relation** (morphosyntactic): Both are verbal inflections.



Cross-linguistic categories

How expressions can be related across languages

In terms of **substance** (semantic, (phonological)).

Central assumption within "functional typology" (and "structuralism"):
Substance can be universal – structure is language-specific

Example: Tense markers in Danish and Lithuanian (Timberlake 2007: 305)

DANISH		LITHUANIAN	
Stem	Tense marker	Stem	Tense marker
<i>arbejde</i>	<i>-r</i> ('NON-PAST')	<i>dirb</i>	<i>-siu</i> ('FUTURE.1.SG')
('work')	<i>-de</i> ('PAST')	('work')	<i>-u</i> ('PRESENT.1.SG')
			<i>-au</i> ('PAST.1.SG')

The relation between the Tense markers:

1. **Substance relation:** All express location in time.
2. Structural relation: All are verbal inflections.

But cross-linguistic structural relations are considered accidental or as the result of empirical bias.



Cross-linguistic categories

The format of cross-linguistic categories like Tense:

Since (systematic) cross-linguistic relations are substance relations, cross-linguistic categories like Tense must take the form of generalizations in terms of semantic substance.

However, while cross-linguistic categories take the form of semantic generalizations, there is a difference between cross-linguistic categories and semantic generalizations.



Cross-linguistic categories

Cross-linguistic categories vs. semantic generalizations:

Cross-linguistic categories are cross-linguistic semantic generalizations **which are significant for the description of language-specific structure in a number of unrelated languages.**

Example of semantic generalization (1):

Colour: black, white, red, green, yellow, blue, brown, etc.

Example of semantic generalization (2):

Time: past, present, future, yesterday, two days ago, three days ago, etc.

Example of cross-linguistic category:

Tense: past, present, future (+ a few more).

Significant for the description of structure in a large number of languages

- e.g., the morphosyntactic systems of Tense markers in Danish and Lithuanian.



Cross-linguistic categories

Criteria for being identified as a cross-linguistic category:

1. A cross-linguistic category must be notionally coherent.

Tense is notionally coherent in so far as all members of the category can be described with reference to the notion of time.

5. A cross-linguistic category must be significant for the description of language-specific morphosyntactic systems.

Tense is significant for the description of morphosyntactic systems in a large number of languages.

8. A cross-linguistic category must cover a continuous region of a semantic map.

4. The members of a cross-linguistic category should preferably share semantic scope properties, as reflected iconically in the morphosyntactic position of relevant language-specific expressions.



Cross-linguistic categories

Example:

Identification of a cross-linguistic category of 'Epistemicity' which covers

3. 'Epistemic Modality': expressions that indicate 'degree of certainty':

(1) *The former president of France may have been bald.*

(2) *It is probable that the former president of France was bald.*

(3) *The former president of France was certainly bald.*

11. 'Evidentiality': expressions that indicate 'information source':

(4) *The former president of France seems to have been bald.*

(5) *I hear that the former president of France was bald.*

(6) *The former president of France was evidently bald.*



Overview

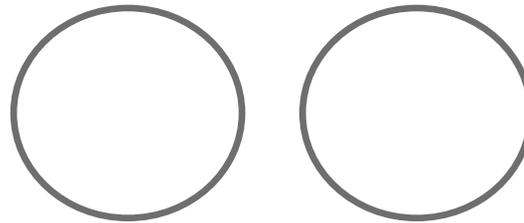
- Cross-linguistic categories
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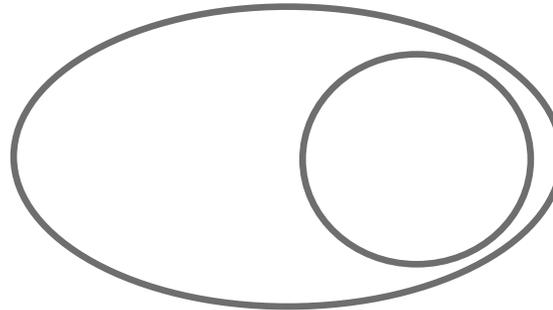
The relation between Evidentiality and Epistemic Modality

Current positions on the relation between Evidentiality and (Epistemic) Modality (Dendale & Tasmowski 2001: 241-242)

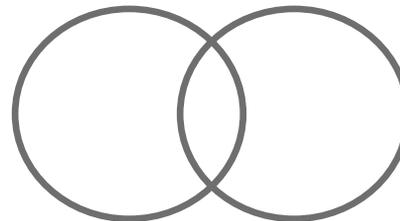
Disjunction



Inclusion

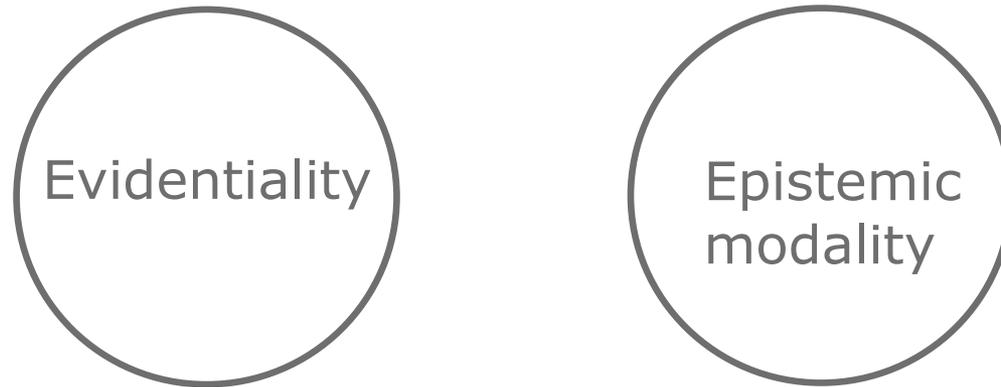


Overlap



The relation between Evidentiality and Epistemic Modality

The disjunction view

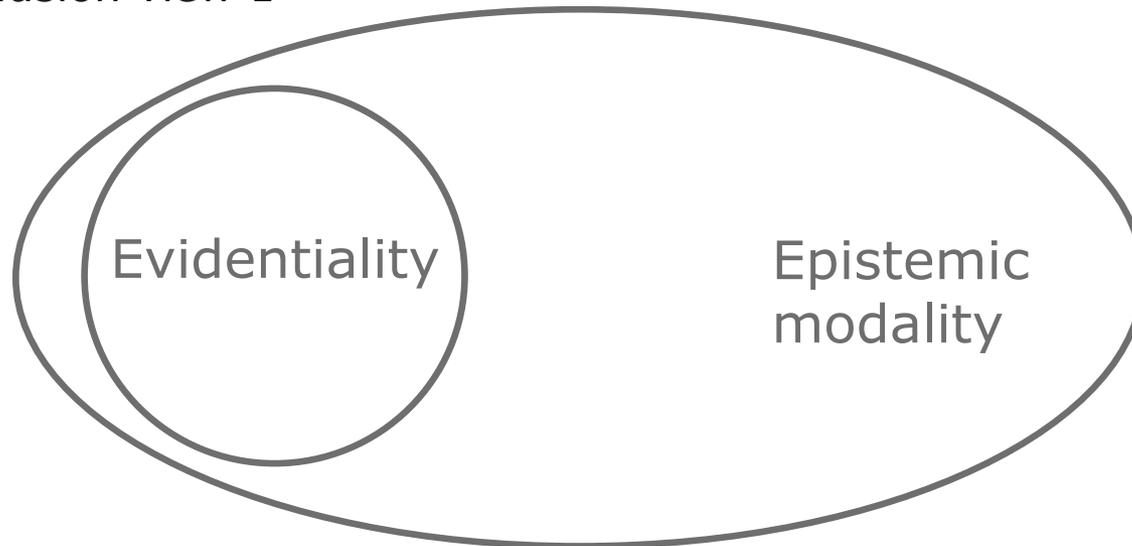


E.g. Bybee & al. 1994: 320-324; de Haan 1999; Nuyts 2001: 27, 35; Aikhenvald 2003a: 1, 13; Aikhenvald 2004: 6-8.

Compatible with a narrow conception of both Evidentiality and Epistemic Modality.

The relation between Evidentiality and Epistemic Modality

The inclusion view 1

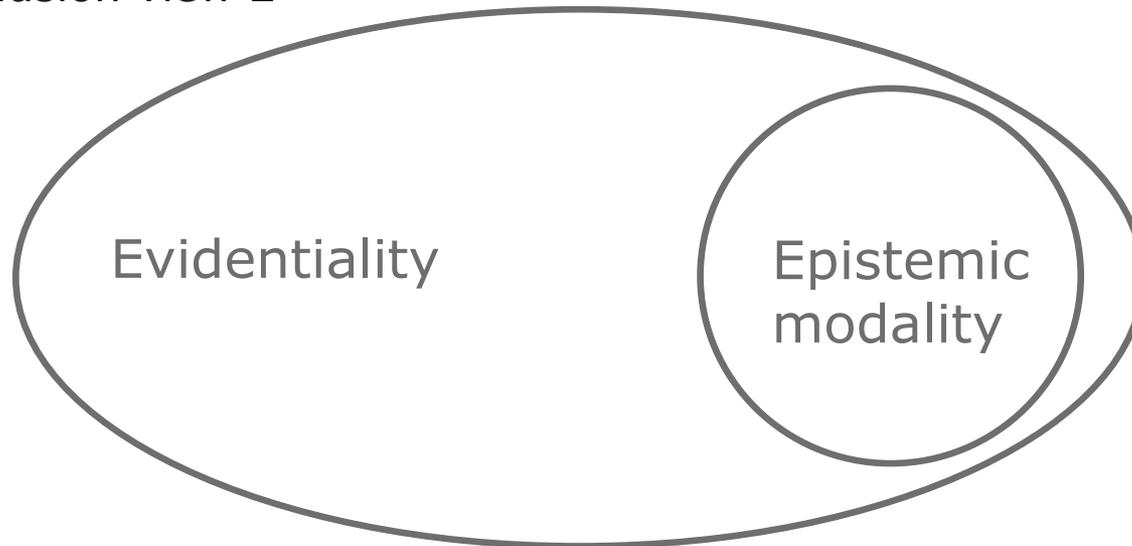


E.g. Palmer 1986: 51, Willett 1988: 52, Crystal 1991: 127.

Often involves a broad and vague conception of Epistemic Modality.

The relation between Evidentiality and Epistemic Modality

The inclusion view 2

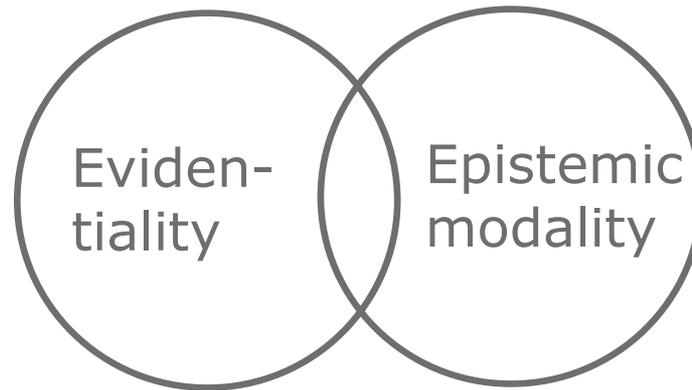


E.g. Papafragou 2000: 121, Ifantidou 2001: 5-8, Plungian 2001: 354.

Often involves a broad and vague conception of Evidentiality a la Chafe 1986: 262, but not in the case of Plungian 2001.

The relation between Evidentiality and Epistemic Modality

The overlap view



E.g. van der Auwera & Plungian 1998: 85-86, Palmer 2001: 8-9, Faller 2002: 93-94 (cf. also Pelyvás 1996: 149).

Compatible with a narrow conception of both Evidentiality and Epistemic Modality.

The relation between Evidentiality and Epistemic Modality

The problem

There is no consensus about how to describe the relation between Evidentiality and Epistemic Modality.

The problem is partly terminological

Disagreement as regards what to include under the terms *Evidentiality* and *Epistemic Modality* (e.g. Nuyts 2005: 10-12, Guentchéva & Landaburu 2007: 3-5).

But the problem is not entirely terminological

Agreement that

1. *Evidentiality* includes expressions that can be defined semantically in terms of the notion of *information source*.
2. *Epistemic Modality* includes expressions that can be defined semantically in terms of the notion of *degree of certainty*.



The relation between Evidentiality and Epistemic Modality

The core of the problem

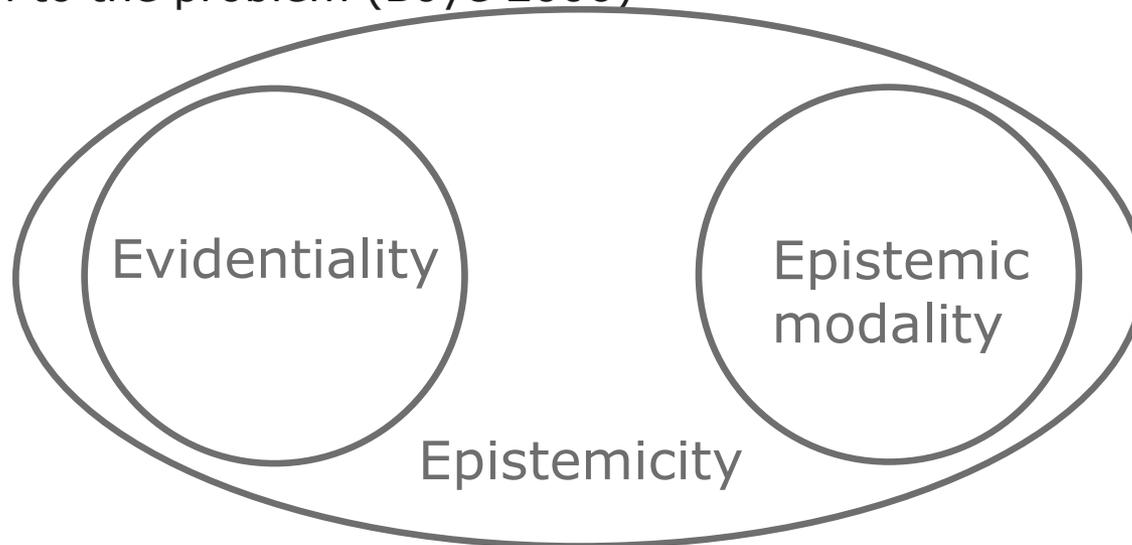
(cf. Guentchéva & Landaburu 2007: 3 on “valeur” (\sim degree of certainty) and “circonstances” (\sim information source)).

1. One set of facts suggests that expressions of information source and expressions of degree of certainty are clearly distinct.
(This set of facts is emphasized by proponents of the *disjunction view*).
2. Another set of facts suggests that expressions of information source and expressions of degree of certainty are closely related.
(This set of facts is emphasized by proponents of the *inclusion view*).



The relation between Evidentiality and Epistemic Modality

Solution to the problem (Boye 2006)



Evidentiality and Epistemic Modality as well as the relation between them must be understood in relation to a third category: Epistemicity.

Presupposition

- Evidentiality is defined narrowly and precisely in terms of the notion of information source.
- Epistemic Modality is defined narrowly and precisely in terms of the notion of degree of certainty.

The relation between Evidentiality and Epistemic Modality

How epistemicity solves the problem

At the same time captures:

1. the facts that suggest that expressions of information and expressions of degree of certainty are clearly distinct.
2. the facts that suggest that expressions of information source and expressions of degree of certainty are closely related.

The Epistemicity view vs. the overlap view of the relation between Evidentiality and Epistemic Modality

- The overlap view stays content with Evidentiality and Epistemic Modality.
- The Epistemicity view introduces a third category: Epistemicity.



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Epistemicity as a cross-linguistic category

The idea of epistemicity as a cross-linguistic category

Precursors

- Whorf 1956 on the category of "assertion"
- Aronson 1977 and others on the category of "status"
- Akatsuka 1985 and others on "epistemic scales"
- Hengeveld 1989 on "epistemological modality".
- Mushin 2001 and others on "epistemic" or "epistemological stance"
- Palmer 2001 on "propositional modality"

The present study offers

- A more or less different conception of the category.
- Precise and narrow definitions of Epistemicity, Evidentiality and Epistemic Modality.
- Explicit, cross-linguistic argumentation.



Epistemicity as a cross-linguistic category

Arguments for identifying Epistemicity as cross-linguistic category

Criteria for being identified as a cross-linguistic category:

1. A cross-linguistic category must be notionally coherent.

Epistemicity is notionally coherent.

7. A cross-linguistic category must be significant for the description of language-specific morphosyntactic systems.

Epistemicity is significant for the description of morphosyntactic systems in a number of languages.

10. A cross-linguistic category must cover a continuous region of a semantic map.

Epistemicity covers a continuous region of a semantic map

4. The members of a cross-linguistic category should preferably share semantic scope properties.

Epistemic expressions share scope semantic properties



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Criterion 1: Epistemicity is notionally coherent

The expressions in (1)-(3) indicate 'degree of certainty'

- (1) *The former president of France may have been bald.*
- (2) *It is probable that former president of France was bald.*
- (3) *The former president of France was certainly bald.*

The expressions in (4)-(6) indicate 'information source':

- (4) *The former president of France seems to have been bald.*
- (5) *I hear that the former president of France was bald.*
- (6) *The former president of France was evidently bald.*

All expressions indicate 'reliability' or 'justificatory support'.



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Criterion 2: Epistemic systems across languages

Definition of system

A system is a morphosyntactically delimited cluster of linguistic expressions.

Two kinds of semantically coherent epistemic systems are found:

1. *Epistemic subsystems* with only either evidential or epistemic modal members:
 - i. *Evidential systems* with evidential members only.
 - ii. *Epistemic modal systems* with epistemic modal members only.
2. *General epistemic systems* with both evidential and epistemic modal members.



Criterion 2: Epistemic systems across languages

Evidential system of clitics in Ngiyambaa (Australian) (Donaldson 1980)

Morphosyntactic delimitation of the clitics:

1. They mutually exclude each other,
2. They always follow "knowledge clitics".

Semantic description of the clitics

CLITIC	MEANING
<i>-gara</i>	EV ("sensory evidence")
<i>-Dhan</i>	EV ("spoken, or by extension written, evidence")

Criterion 2: Epistemic systems across languages

Epistemic modal system of complementizers in Jacaltec (Mayan) (Craig 1977)

Morphosyntactic delimitation of the complementizers:

1. They introduce finite complement clauses.

Semantic description of the (main) complementizers

COMPL	MEANING
<i>chubil</i>	EM ("high degree of [...] certainty")
<i>tato</i>	EM ("disbelief")

Criterion 2: Epistemic systems across languages

General epistemic system of particles in Slave (Na-Dene) (Rice 1989, p. c.)

Morphosyntactic delimitation of the particles:

1. can be only postverbal,
2. "occur sentence finally, following the tense markers" (Rice 1989: 159),
3. can occur outside clauses marked as "optative", and
4. can occur as the only epistemic particle in a clause.

Semantic description of the particles

PARTICLE	MEANING
<i>ʔesjá / sја / sја</i>	EV ("not first hand")
<i>ʔésji / ʔésjh / sj / hįsj</i>	EM ("uncertainty")
<i>gohthę / gohwę</i>	EM ("possibility")
<i>sónį / sóonį / sóndih / sáondih</i>	EM ("uncertainty")
<i>lq̄q / lq̄ / nq̄</i>	EV ("evidential") EM ("dubitative")
<i>lq̄q / lq̄ / nq̄</i>	EV ("apparently", "reported") EM ("uncertainty")

Criterion 2: Epistemic systems across languages

General epistemic systems across languages

What they have in common is that they include both expressions of degree of certainty and expressions of information source, and that they are morphosyntactically delimited. However, the exact structural properties vary.

Suffix systems: Copper inuktitut, North Slope Inupiatun, Tarramiut, West Greenlandic (Eskimo-Aleut)

Clitic systems: Imbabura Quechua (Quechuan)

Particle systems: Akha (Sino-Tibetan), Basque (Basque), Dene Suliné, Slave (Na-Dene), Hanis (Penutian), Hidatsa (Siouan), Hixkaryana, Carib (Carib), Lega (Niger-Congo)

Copula systems: Ladakhi, Tibetan (Sino-Tibetan)

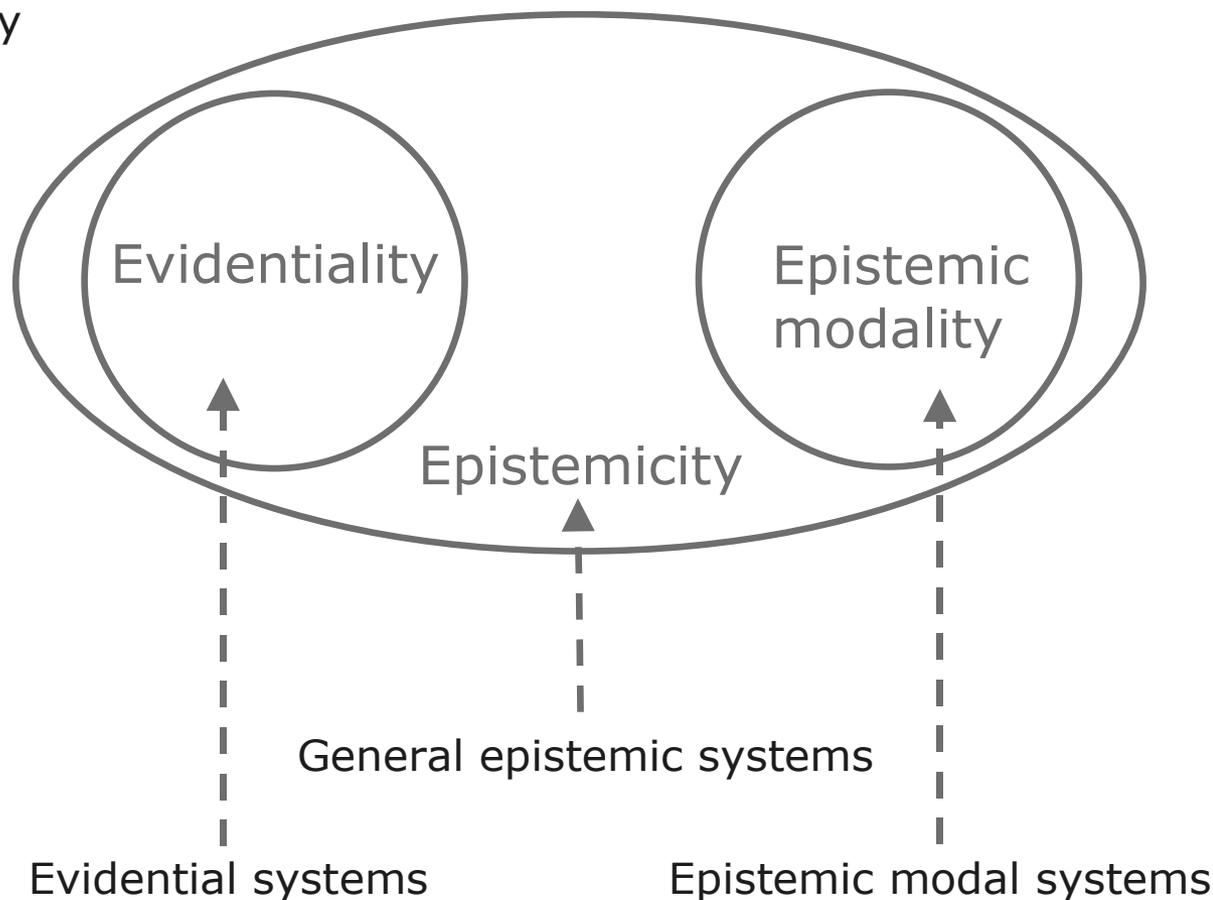
Adverb systems: Danish, German (Indo-European)

"Construction systems": Mangarayi (Australian)



Criterion 2: Epistemic systems across languages

Summary of the argument for identifying Epistemicity as a cross-linguistic category



The existence of epistemic systems is a non-trivial empirical fact.

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Criterion 3: A semantic map of epistemic expressions

Epistemicity covers a continuous region of a semantic map.

A semantic map of epistemic expressions (expressions of degree of certainty and/or information source) reflects

1. the coherence of Epistemicity,
2. the complexity of Epistemicity as comprising two distinct subcategories: Evidentiality and Epistemic Modality.

Semantic maps are

descriptions of relations between linguistic meanings as reflected in diachronic semantic change and synchronic multifunctionality of a given set of expressions.



Criterion 3: A semantic map of epistemic expressions

A semantic map consists of

2. A number of meaning regions: generalizations over distinct meanings attested in specific languages.

Criterion for the distinction between two meaning regions:

- A distinction can be made between two meaning regions if in at least one language, meanings covered by the two regions are conveyed by distinct expressions.

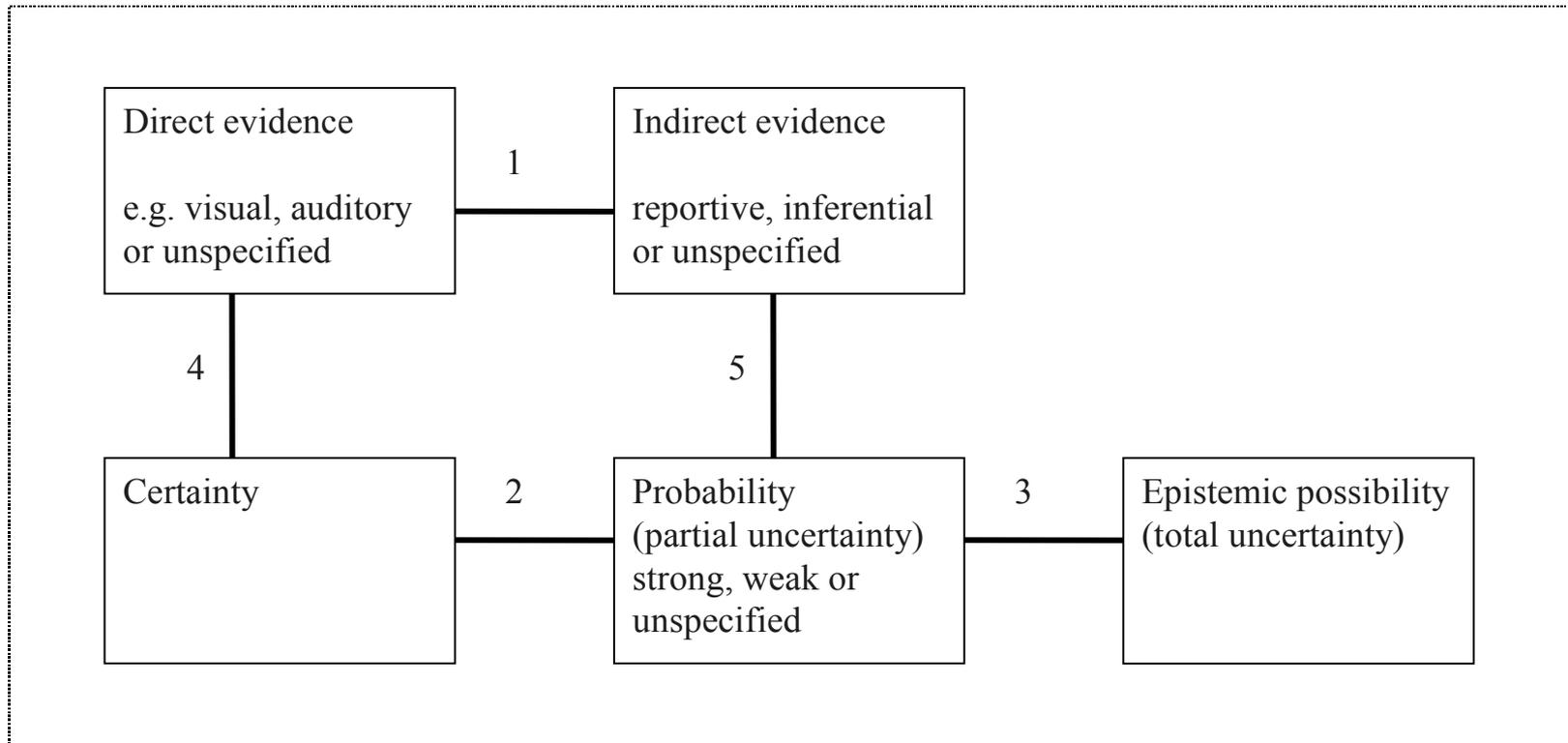
7. A number of relations between meaning regions: relations attested in specific languages.

Criteria for the identification of relations between meaning regions:

1. Synchronic multifunctionality: A relation is identified between two meaning regions if in at least one language, meanings covered by them are conveyed by the same expression.
2. Diachronic change: A relation is identified between two meaning regions if in at least one language, a meaning covered by one of them has changed into a meaning covered by the other.



Criterion 3: A semantic map of epistemic expressions



(Boye 2006, submitted)

Criterion 3: A semantic map of epistemic expressions

The semantic map is based on data from 52 languages representing 35 phyla (Gordon's 2005 classification):

Afro-Asiatic (2), Algic (1), Altaic (1), Arauan (1), Araucanian (1), Australian (4), Austro-Asiatic (1), Austronesian (2), Basque (1), Carib (2), Chapacura-Wanham (1), Creoles (1), Dravidian (2), Eskimo-Aleut (1), Hokan (1), Indo-European (4), Isolates (1), Japanese (1), Keres (1), Mayan (1), Na-Dene (2), Nambiquaran (1), Niger-Congo (2), Nilo-Saharan (2), Panoan (1), Penutian (1), Quechuan (1), Salishan (2), Sino-Tibetan (4), Siouan (1), Trans-New Guinea (1), Uralic (1), Uto-Aztecan (1), West Papuan (1), Yukaghir (1).

In addition, the semantic map is compatible with data from a great number of languages discussed in Givón 1982, Akatsuka 1985, Bybee & al. 1994, and Aikhenvald 2004.

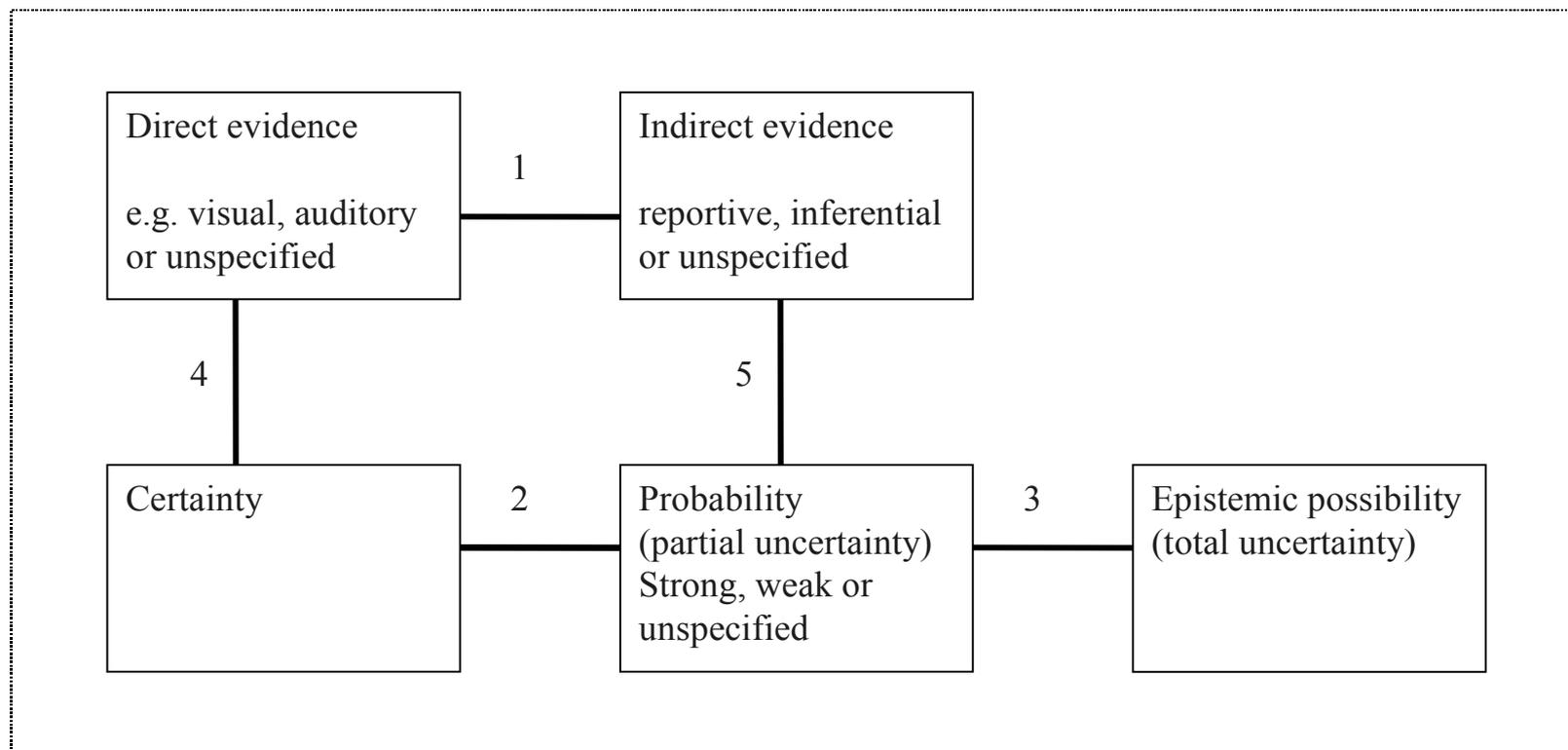


Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

Criterion for the distinction between two meaning regions:

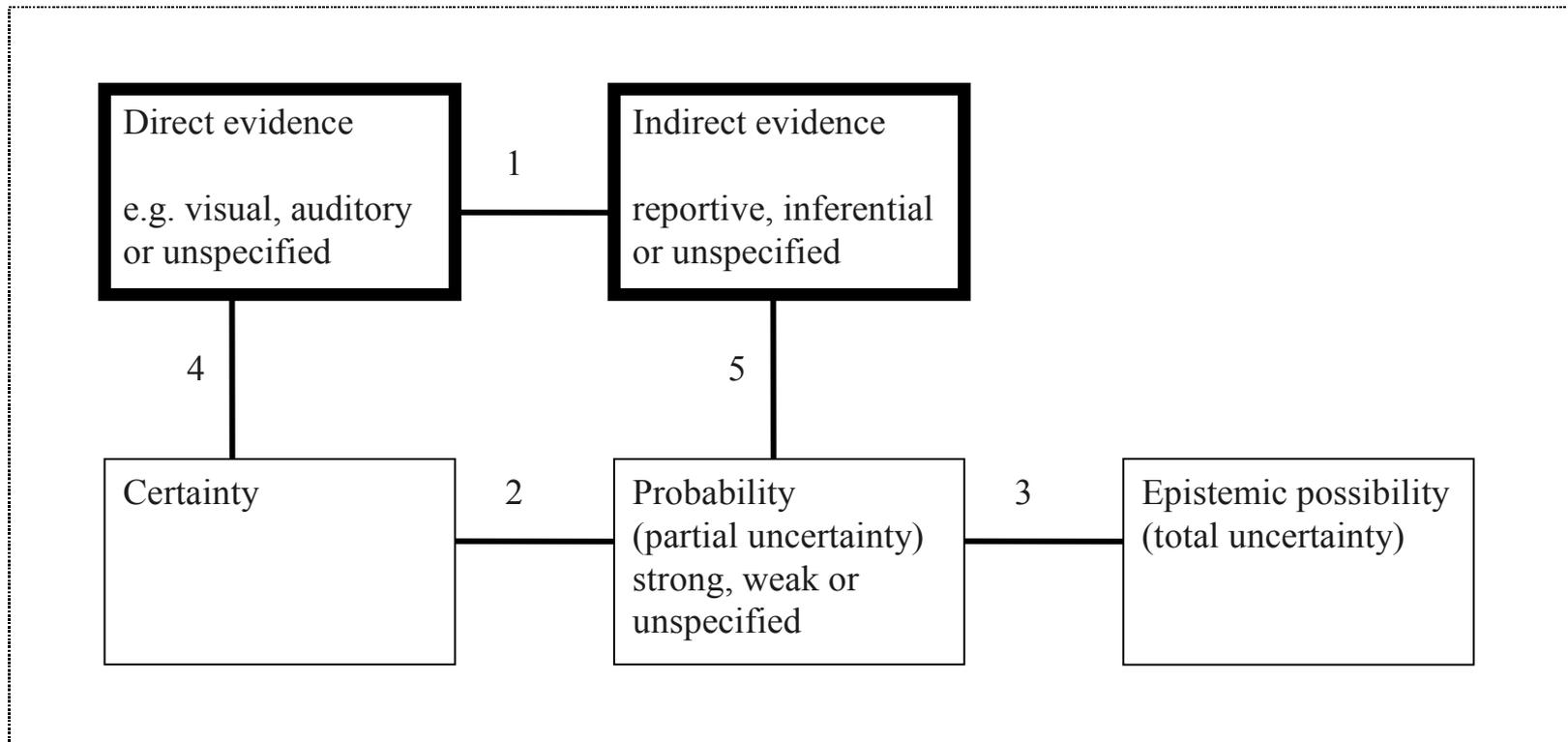
- In at least one language, meanings covered by the two regions are conveyed by distinct expressions.



Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

The distinction between direct and indirect evidence (cf. e.g. Willett 1988)



Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

The distinction between direct and indirect evidence

Ngiyambaa clitics (Donaldson 1980: 275-276)

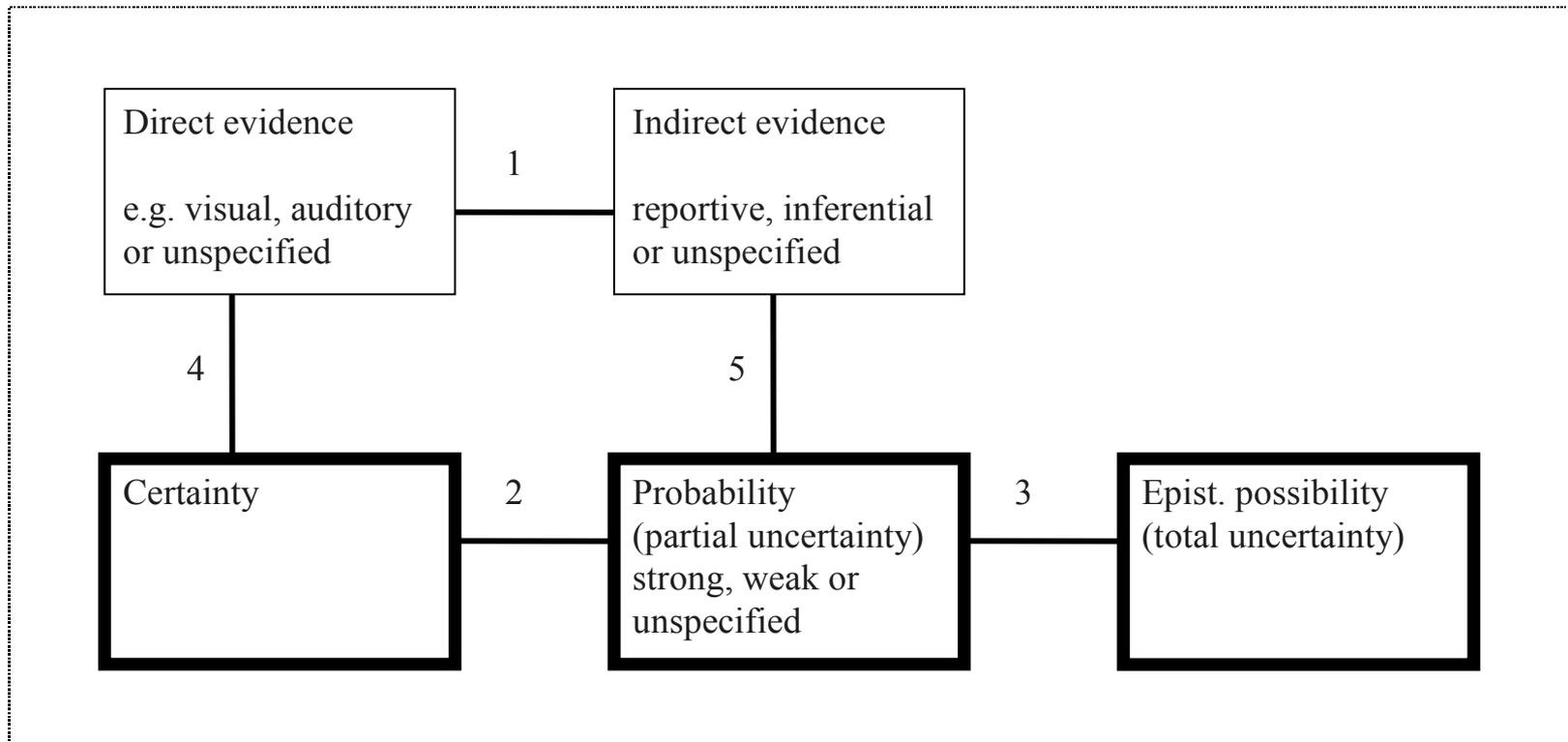
- (1) *ŋindu -gara girambiyi.*
 you+NOM -SENS.EVID sick+PAST.
 'One can see you were sick'.
- (2) *ŋindu -dhan girambiyi.*
 you+NOM -LING.EVID sick+PAST.
 'You are said to have been sick'.



Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

The distinction between certainty, probability and epistemic possibility
(cf. e.g. Caton 1966)



Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

The distinction between certainty, probability and epistemic possibility

West Greenlandic suffixes (Fortescue 1984: 293-294, 2003)

- (1) *kaman* -*navianngill* -*at*.
be.angry-EPIST -3.PL.INDIC.
'They certainly won't be angry'.

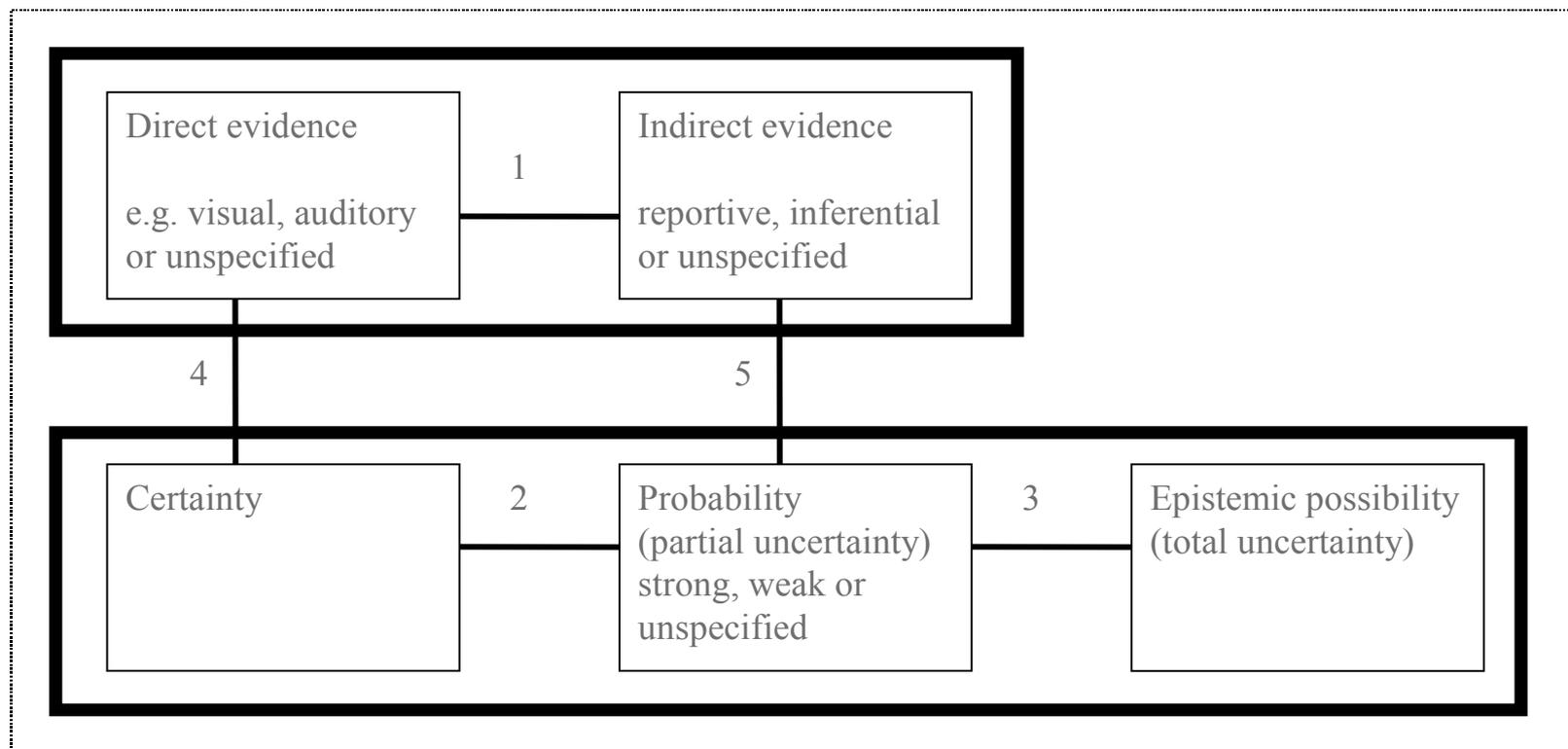
- (2) *qama* -*junnarsi* -*vuq*.
be.out.hunting.seals -EPIST -3.SG.INDIC.
'He's probably out hunting seals'.

- (3) *timmi* -*sima* -*sinnaa* -*vuq*.
fly -PERFECT -EPIST -3.SG.INDIC.
'It may have flown (earlier)'.

Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

The distinction between type of evidence and degree of certainty
(cf. e.g. Bybee & al.'s 1994)



Criterion 3: A semantic map of epistemic expressions

Data in support of the distinctions found in the map

The distinction between type of evidence and degree of certainty

1. Expressions that code type of evidence may but need not also indicate degree of certainty (cf. e.g. Aikhenvald 2003a: 13). For instance, Kashaya evidential suffixes are neutral with respect to degree of certainty (Oswalt 1986: 43).

6. Expressions that code degree of certainty may but need not also indicate type of evidence.

Jacaltec complementizers (Craig 1977: 268, cf. Craig 1977: 267)

(1) *xal naj tato chuluj naj presidente.*
 said CLASS/he that will.come CLASS/the president.
 'He said that the president is going to come'.

(2) *xal naj alcal chubil chuluj naj presidente.*
 said CLASS/the alcalde that will.come CLASS/the president.
 'The alcalde said that the president is going to come'.

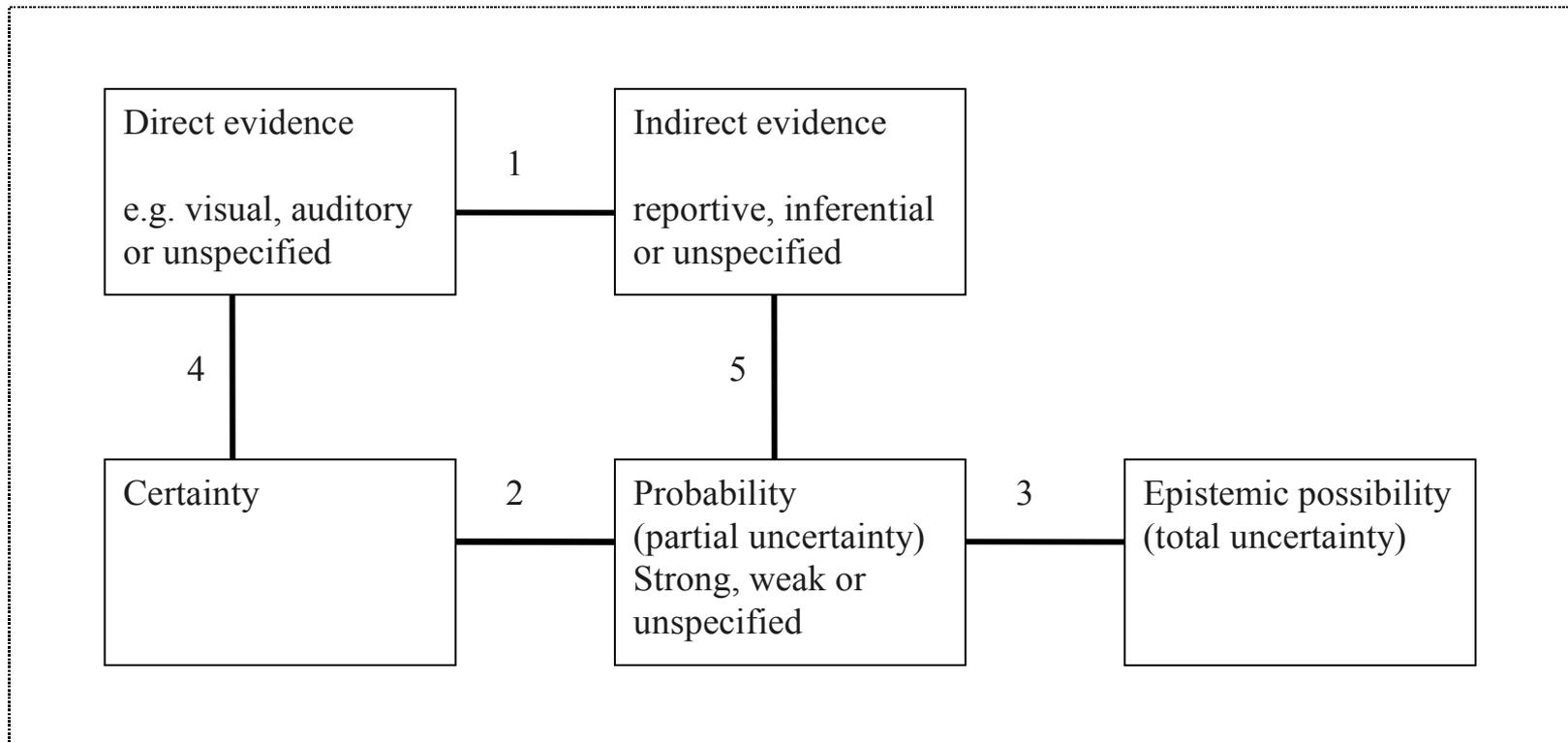


Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

Criteria for the identification of relations between meaning regions:

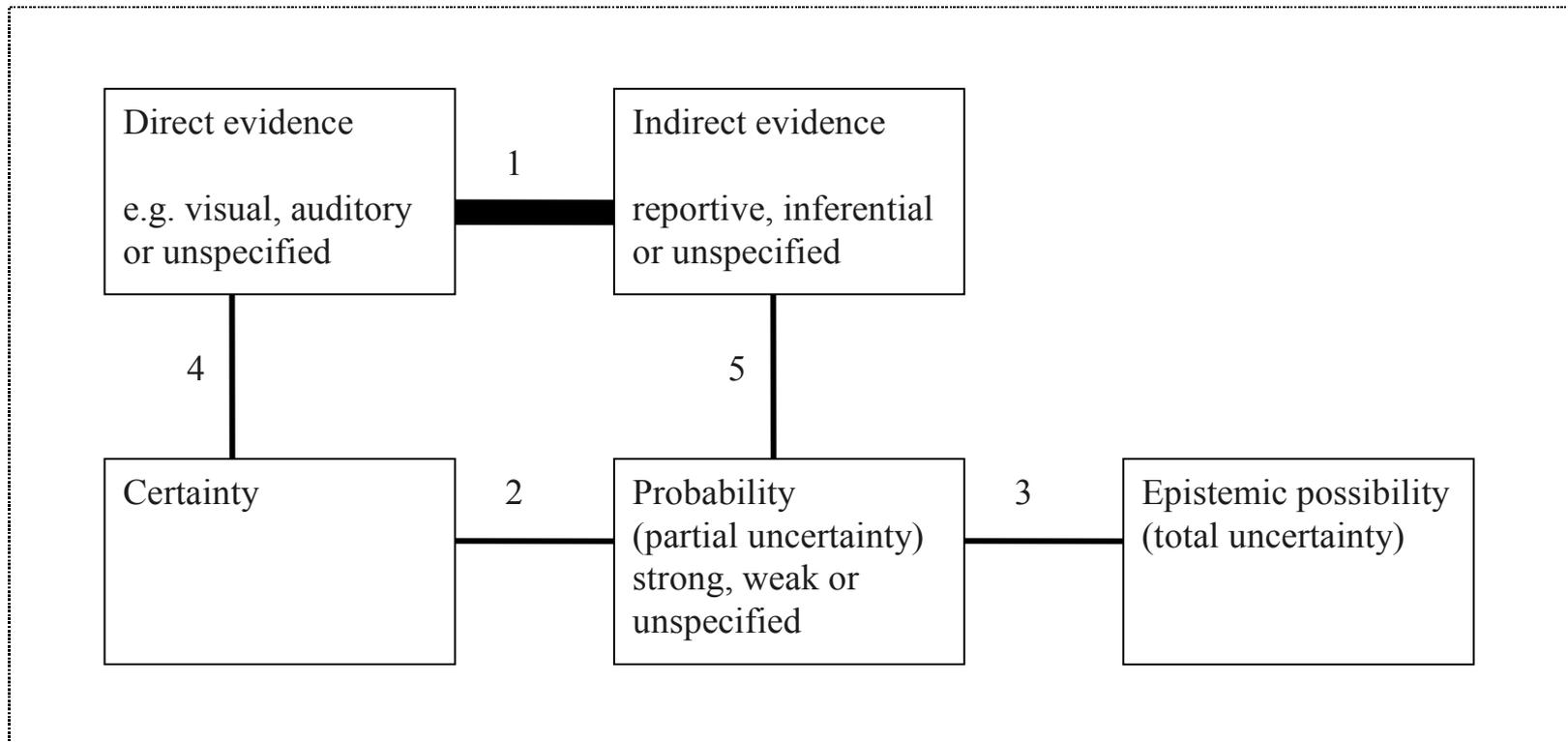
1. Synchronic multifunctionality
2. Diachronic change



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (1) between direct and indirect evidence



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (1) between direct and indirect evidence

Synchronic evidence: multifunctional expressions covering both direct and indirect evidence.

Turkish suffix *-mİş* (Kornfilt 1997: 377, and Johanson 2003: 274)

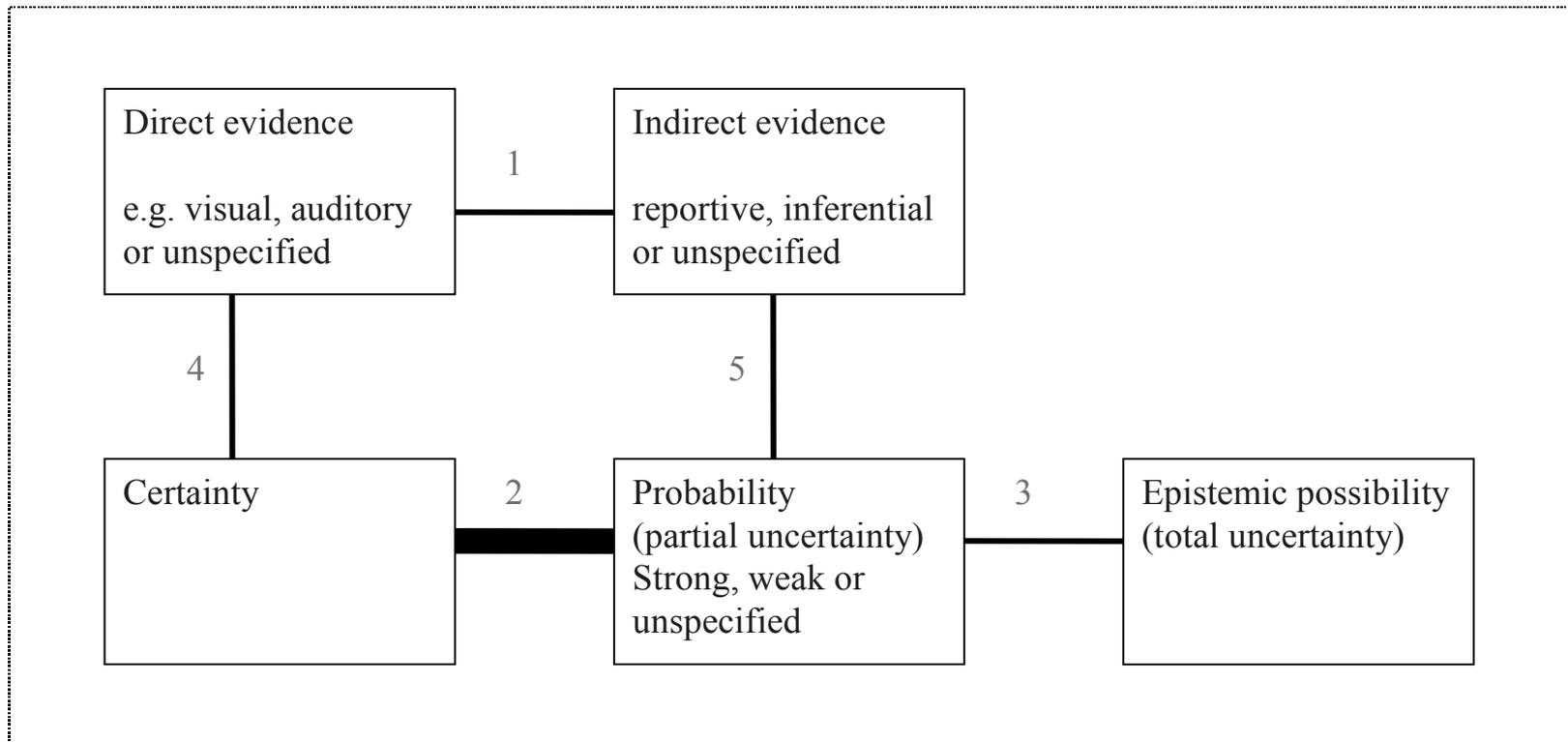
- (1) *Hasan dün akşam sinema -ya git -miş.*
 Hasan yesterday evening cinema -DAT go -EVID.
 'They say that Hasan went to the movies yesterday evening'.
- (2) *iyi çal -ıyor -muş.*
 good play -INTRA -EVID.
 '(S)he is, as I hear, playing well'.
 (Context: "said by somebody just listening").



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (2) between certainty and probability



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (2) between certainty and probability

Synchronic evidence: multifunctional expressions covering both certainty and probability.

Turkish suffix *-Dir* (Kornfilt 1997: 376)

- (1) *Hasan orada -dir.*
Hasan there -EPIST.
'Hasan is probably/definitely there'.

- (2) *Hasan herhalde orada -dir.*
Hasan probably there -EPIST.
'Hasan is probably there'.

- (3) *Hasan muhakkak orada -dir.*
Hasan definitely there -EPIST.
'Hasan is definitely there'.



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (2) between certainty and probability

Diachronic evidence: semantic changes from certainty to probability, and vice versa.

Danish (cf. Boye 2006: 98-99)

(1) *det er sikkert han har været dopet.*
 it is EPIST he has be.PERF.PART dope.PERF.PART.
 'It is certain that he was doped'.

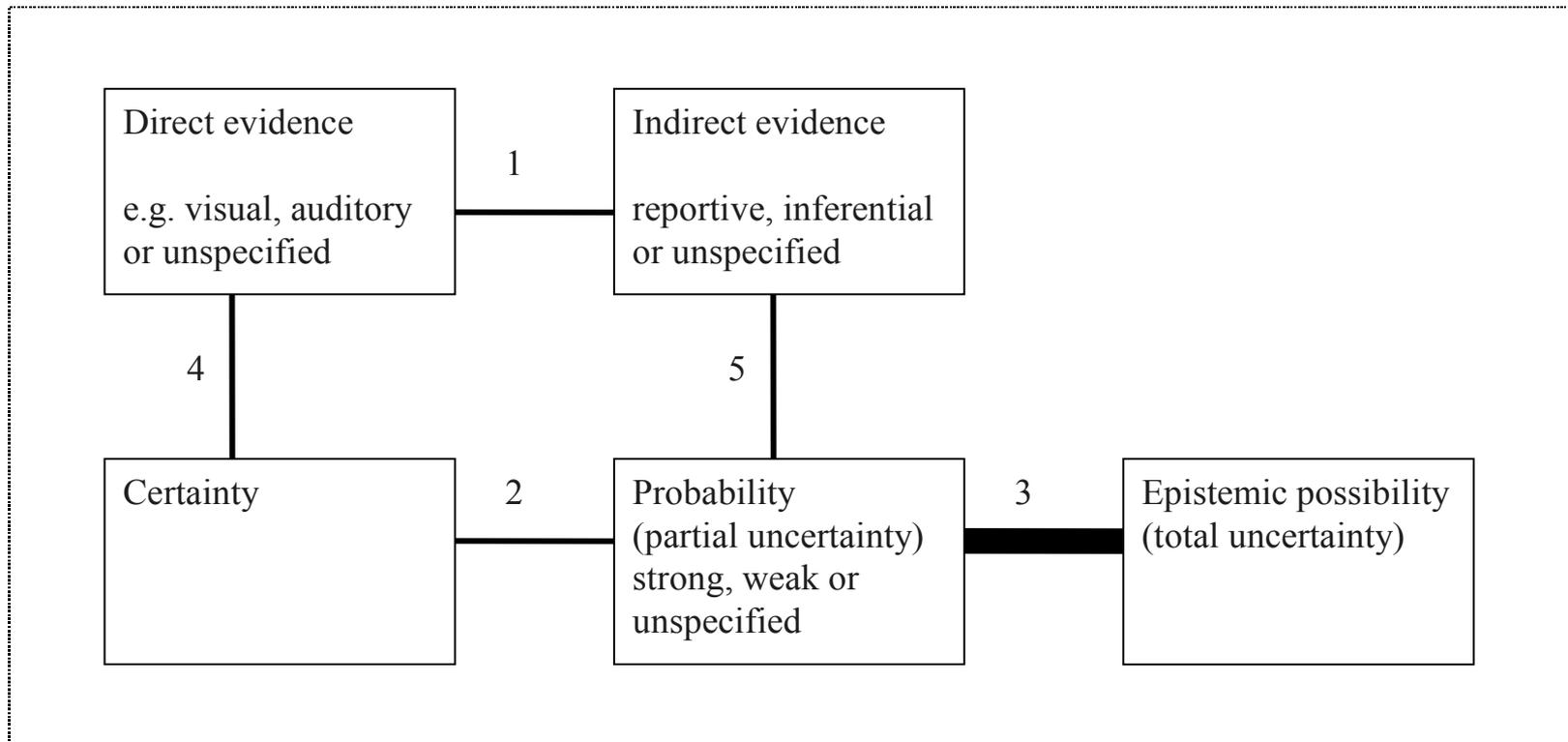
(2) *han var sikkert dopet.*
 he was EPIST dope.PERF.PART.
 'He was probably doped'.



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (3) between probability and epistemic possibility



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (3) between probability and epistemic possibility

Synchronic evidence: multifunctional expressions covering both probability and epistemic possibility.

Cairene Colloquial Arabic particle *jimkin* (Gary & Gamal-Eldin 1982: 99)

(1) *jimkin* *jikuun hinaak.*

probable/possible he.be there.

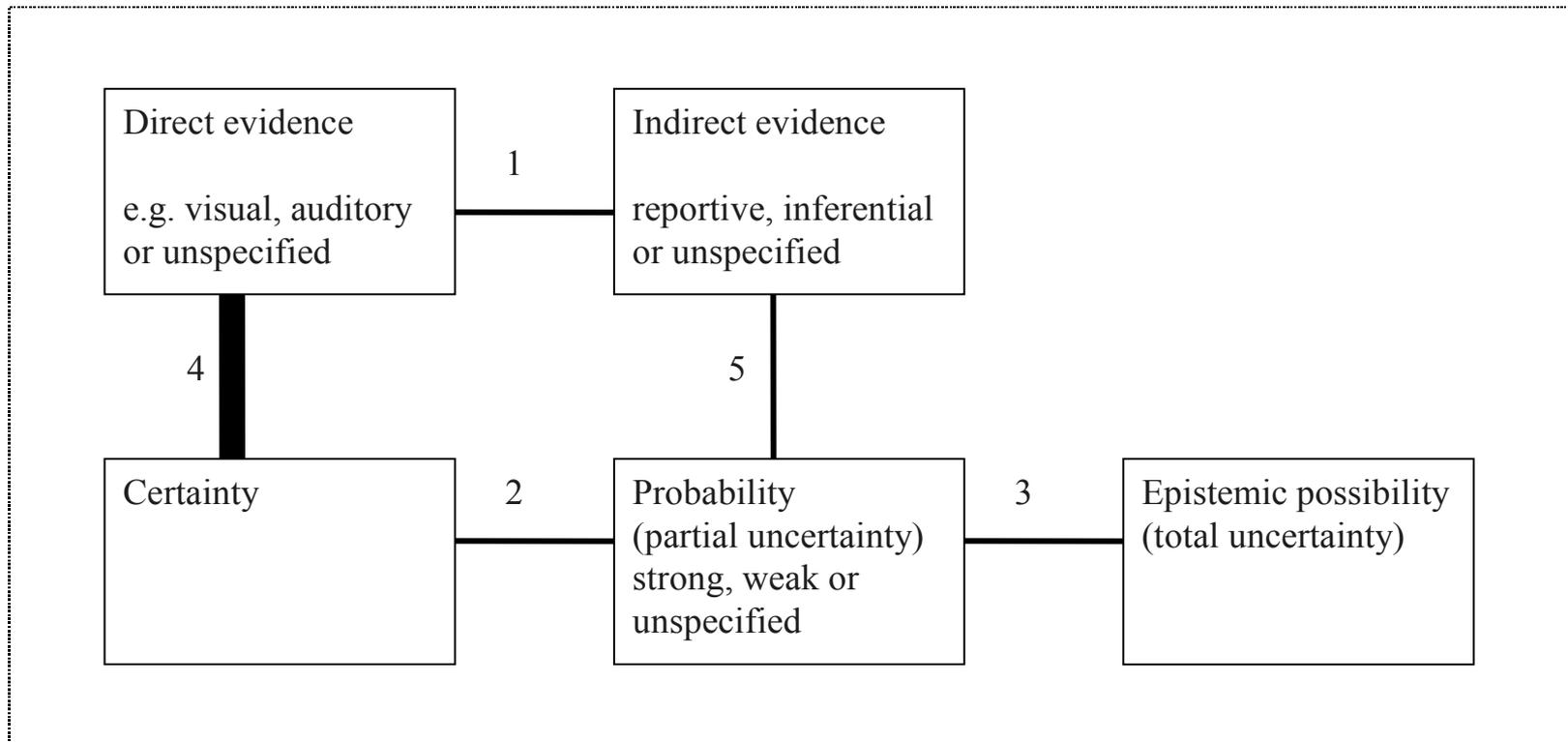
'It is probable/possible that he is here'.



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (4) between direct evidence and certainty



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (4) between direct evidence and certainty

Synchronic evidence: multifunctional expressions covering both direct evidence and certainty.

Kashaya suffix *-wă* (Oswalt 1986: 37)

(1) *śihta=yac^hma cahno -w.*

bird=PL.SUBJ sound -EPIST.

'Birds sing', or '(I see/saw) birds are/were singing'.

Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (4) between direct evidence and certainty

Diachronic evidence: semantic changes from direct evidence to certainty, and vice versa.

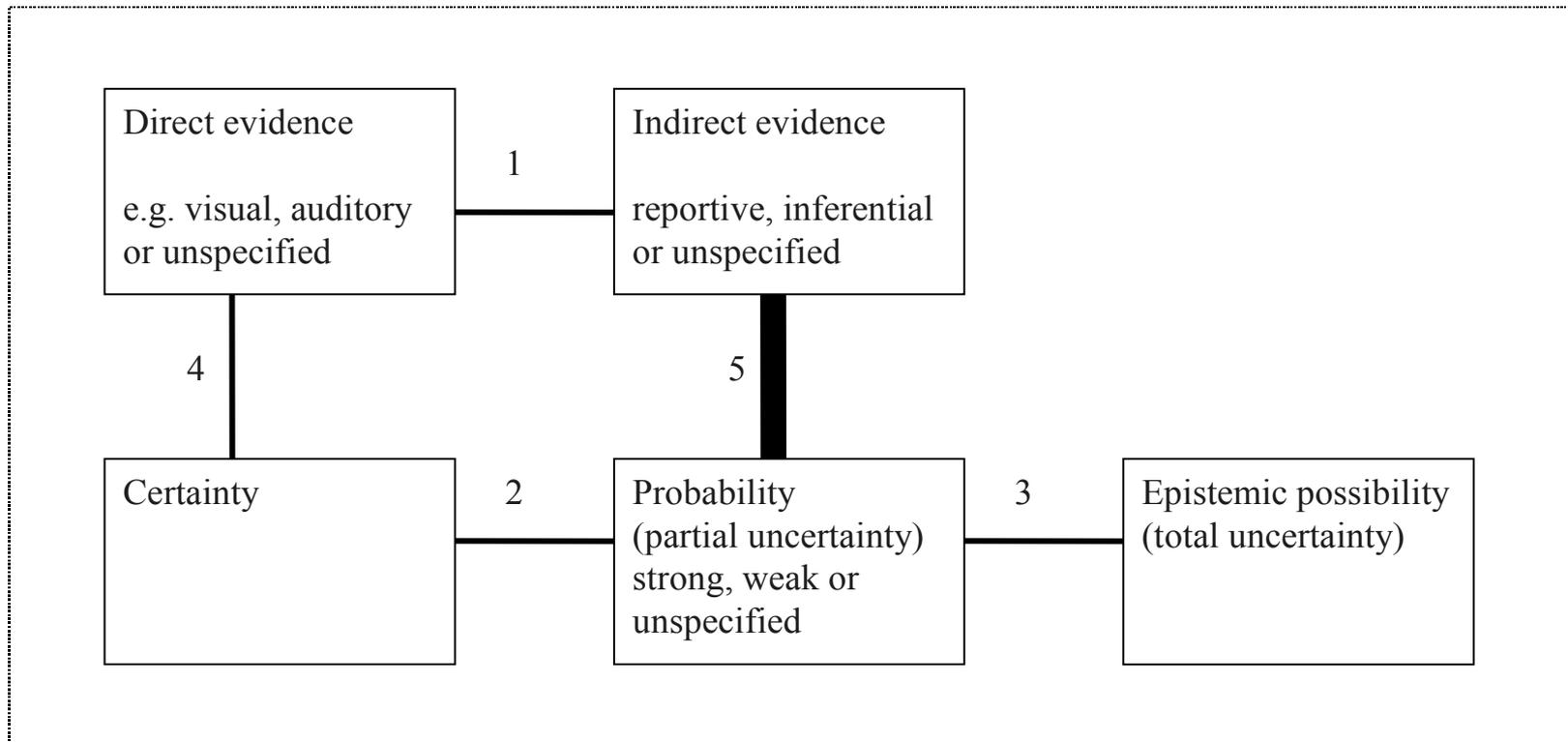
PIE **weid* ('see') > German *wissen* ('know'), Danish *vide* ('know').

Old Norse *kenna* ('know', 'recognize') > Swedish *känna* ('sense', 'feel').

Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (5) between indirect evidence and probability



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (5) between indirect evidence and probability

Synchronic evidence: multifunctional expressions covering both indirect evidence and probability.

Lega particle *ámbo* (Botne 1997: 511-515)

(1) *ámbo Amísi ézi nzelá.*

EPIST Amisi 3.SG.know path

'(They say/I hear tell (that)) Amisi knows the way'.

(2) *ámbo Amísi éndilɛ ko Misisi?* (question with *ámbo*)

EPIST Amisi 3.SG.go.REC.PAST to Misisi.

'(Is it really the case that) Amisi went to Misisi?'

(3) *Amísi éndilɛ ko Misisi?* (question without *ámbo*)

Amisi 3.SG.go.REC.PAST to Misisi.

'Did Amisi go to Misisi?'



Criterion 3: A semantic map of epistemic expressions

Data in support of the relations found in the map

The relation (5) between indirect evidence and probability

Diachronic evidence: semantic changes from indirect evidence to probability, and vice versa.

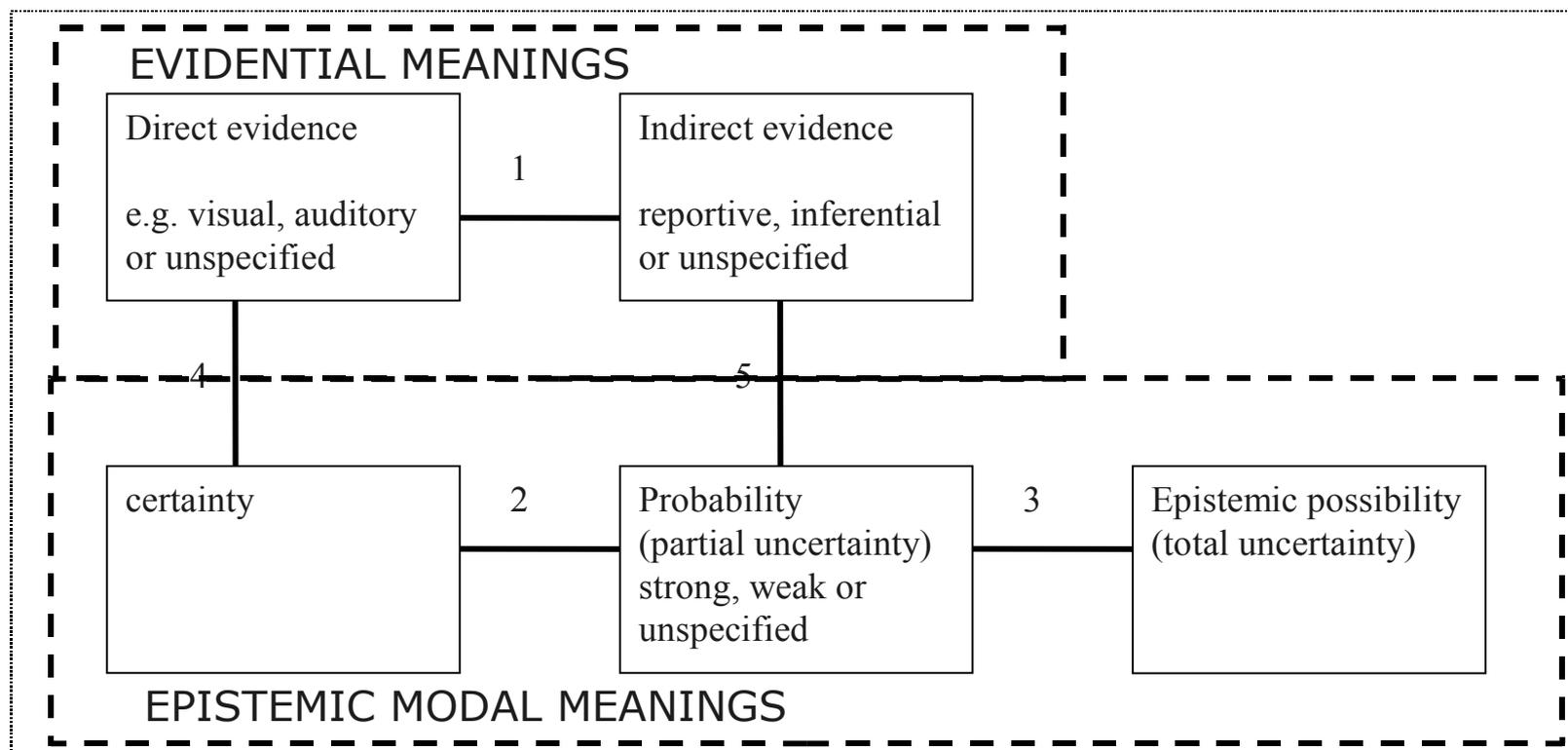
In Cree-Montagnais-Naskapi, "dubitative suffixes lose their uncertainty meaning [i.e. "that the speaker thinks, but is not certain" that something is the case] and take on a purely [indirect-inferential] evidential meaning" (James & al. 2001: 254).



Criterion 3: A semantic map of epistemic expressions

Main features of the map

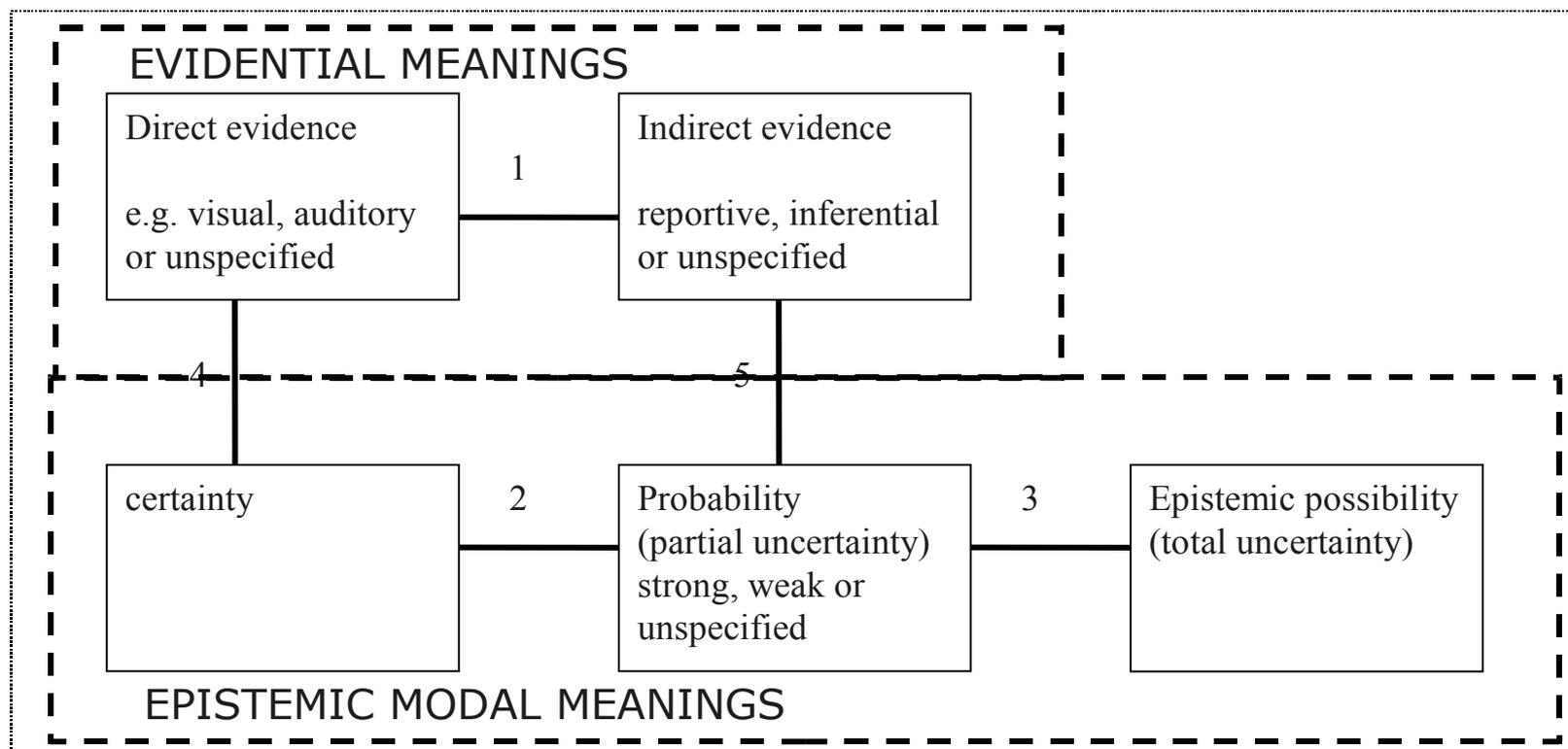
- Epistemic meanings together make up an overall continuous region.
- Two continuous subregions can be distinguished:
a region of evidential meanings and a region of epistemic modal meanings.



Criterion 3: A semantic map of epistemic expressions

Summary of the argument for recognizing epistemicity as a cross-linguistic category:

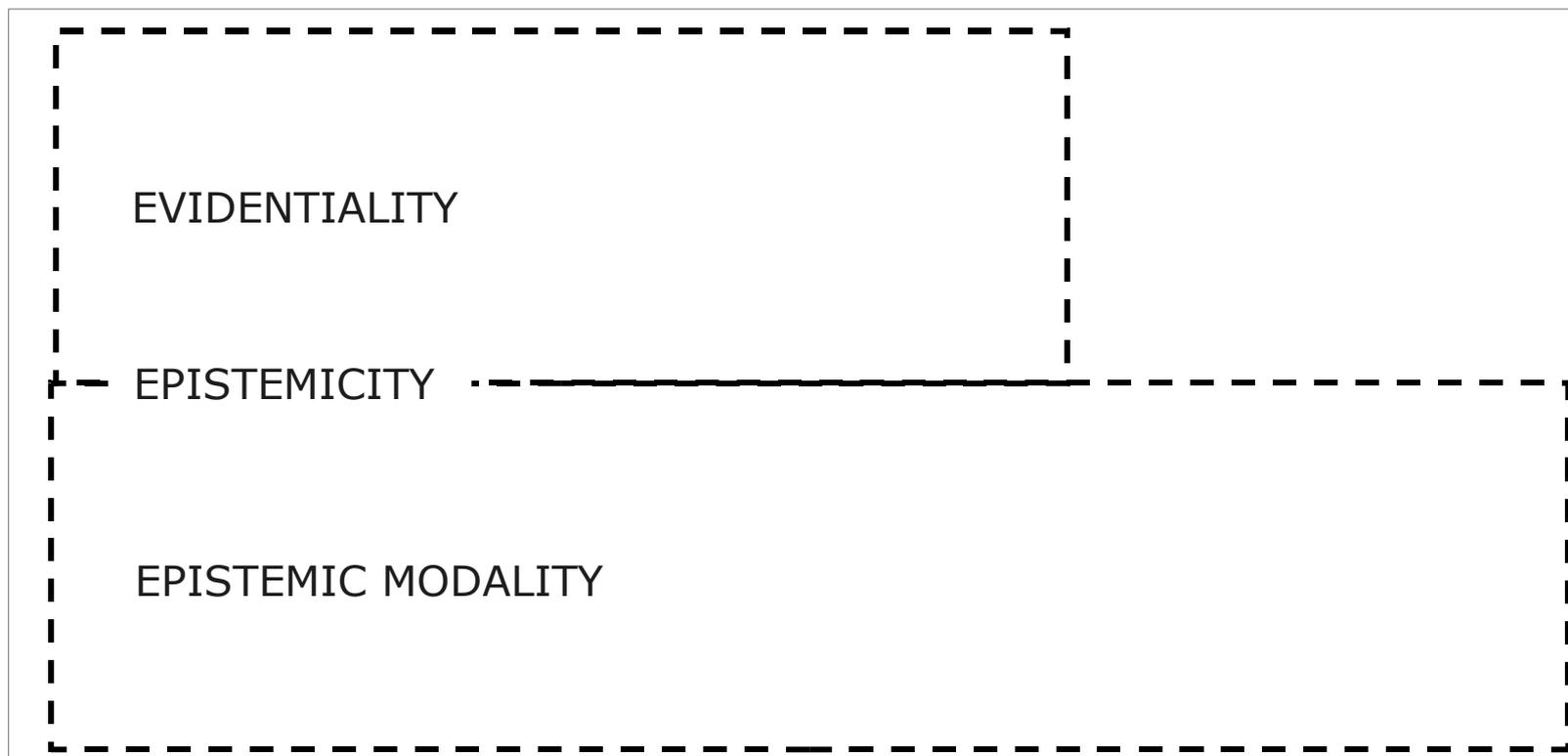
A cross-linguistic category must cover a continuous region of a semantic map. Epistemicity does so, and also evidentiality and epistemic modality



Criterion 3: A semantic map of epistemic expressions

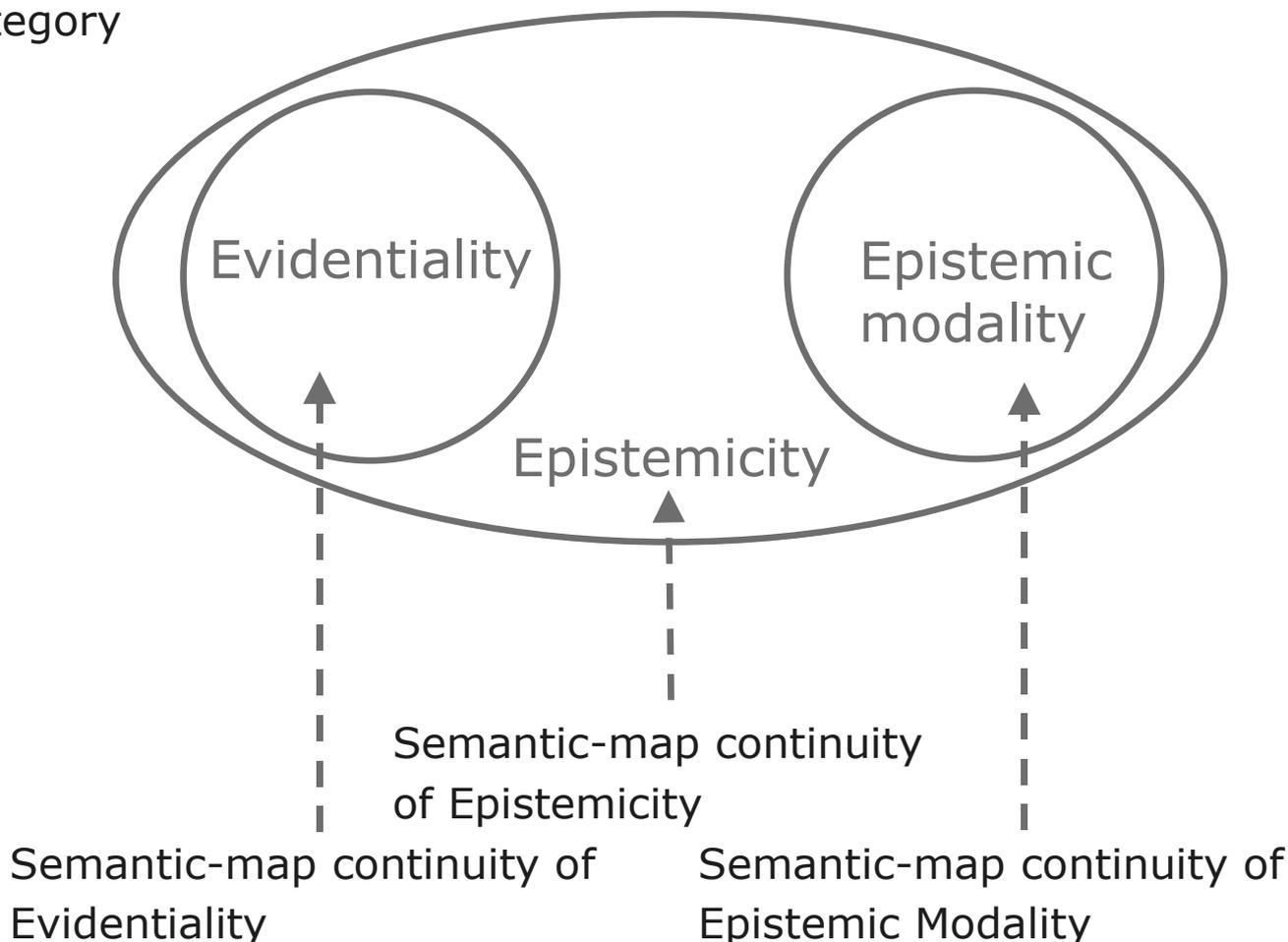
Summary of the argument for recognizing epistemicity as a cross-linguistic category:

A cross-linguistic category must cover a continuous region of a semantic map. Epistemicity does so, and also evidentiality and epistemic modality



Criterion 3: A semantic map of epistemic expressions

Summary of the argument for identifying Epistemicity as a cross-linguistic category



Semantic-map continuity of categories is a non-trivial empirical fact.

Overview

- Cross-linguistic categories
- The relation between Evidentiality and Epistemic Modality
- Epistemicity as a cross-linguistic category
- Criterion 1: Epistemicity is notionally coherent
- Criterion 2: Epistemic systems across languages
- Criterion 3: A semantic map of epistemic expressions
- **Criterion 4: The semantic scope of epistemic expressions**
- Summary



Criterion 4: The semantic scope of epistemic expressions

Epistemic expressions share semantic scope properties

The semantic scope of a linguistic expression is the maximal semantic entity with which the expression combines in meaning.

The semantic scope properties of epistemic expressions reflect the coherence of Epistemicity as a semantic category:

All epistemic expressions share scope properties.

This is reflected in

1. the tendency for epistemic markers to occur in the same position relative to non-epistemic markers.
2. the absence of a privileged relative ordering of evidential and epistemic modal expressions in general.



Criterion 4: The semantic scope of epistemic expressions

1. Epistemic markers tend to occur in the same position relative to non-epistemic markers:

CORE < NON-EPIST. MODAL/ASPECT < TENSE < *EPISTEMIC* < SA-ORIENTED
(cf. Cinque 1999: 76 and 106 – vs. e.g. Van Valin & LaPolla 1997: 40-52)

West Greenlandic (Eskimo-Aleut) (Fortescue 1984: 313-314)

- (1) Base < non-epist. modal < aspect < tense < *epistemic* < colorator < conj

- (2) *ungasig-niru-laar-tsiar -ssa -qquur -qi -vuq.*
be.far-more-a.little-somewhat -FUT -UNDOUBTEDLY -INTENSITY -3.S.INDIC.
'It will undoubtedly be somewhat further off'.

Imbabura Quechua (Quechuan) (Cole 1982: 164, 95)

- (3) *Juzi-ka Kitu-man chaya -shka -chá.*
José-TOPIC Quito-to arrive -PERFECT -DOUBT.
'Perhaps José has arrived in Quito'.

- (4) *pay-ka shamu -nga -má(ri).*
he-TOPIC come -FUTURE -3.EMPHATIC.VALIDATOR.
'He will come!'



Criterion 4: The semantic scope of epistemic expressions

1. There is no privileged relative ordering of evidential and epistemic modal expressions in general (vs. Cinque 1999: 76 and 106):

EPISTEMIC MODAL < EVIDENTIAL

Korean (Isolate) (Cinque 1999)

- (1) *ku pwun-i cap -hi -si -ess -ess -keyss -sup -ti -kka?*
 The person-NOM catch -PASS -AGR -ANT -PAST -EPIST -AGR -EVID -Q.
 'Did you feel that he had been caught?'

EVIDENTIAL < EPISTEMIC MODAL

Slave (Na-Dene) (Keren Rice, p. c.)

- (2) *nákale ʔagújá nq sónj.*
 morning area.arrived EVID UNCERT.
 'Morning came' (context: the speaker did not actually observe the morning come, but it is evident that it is coming).

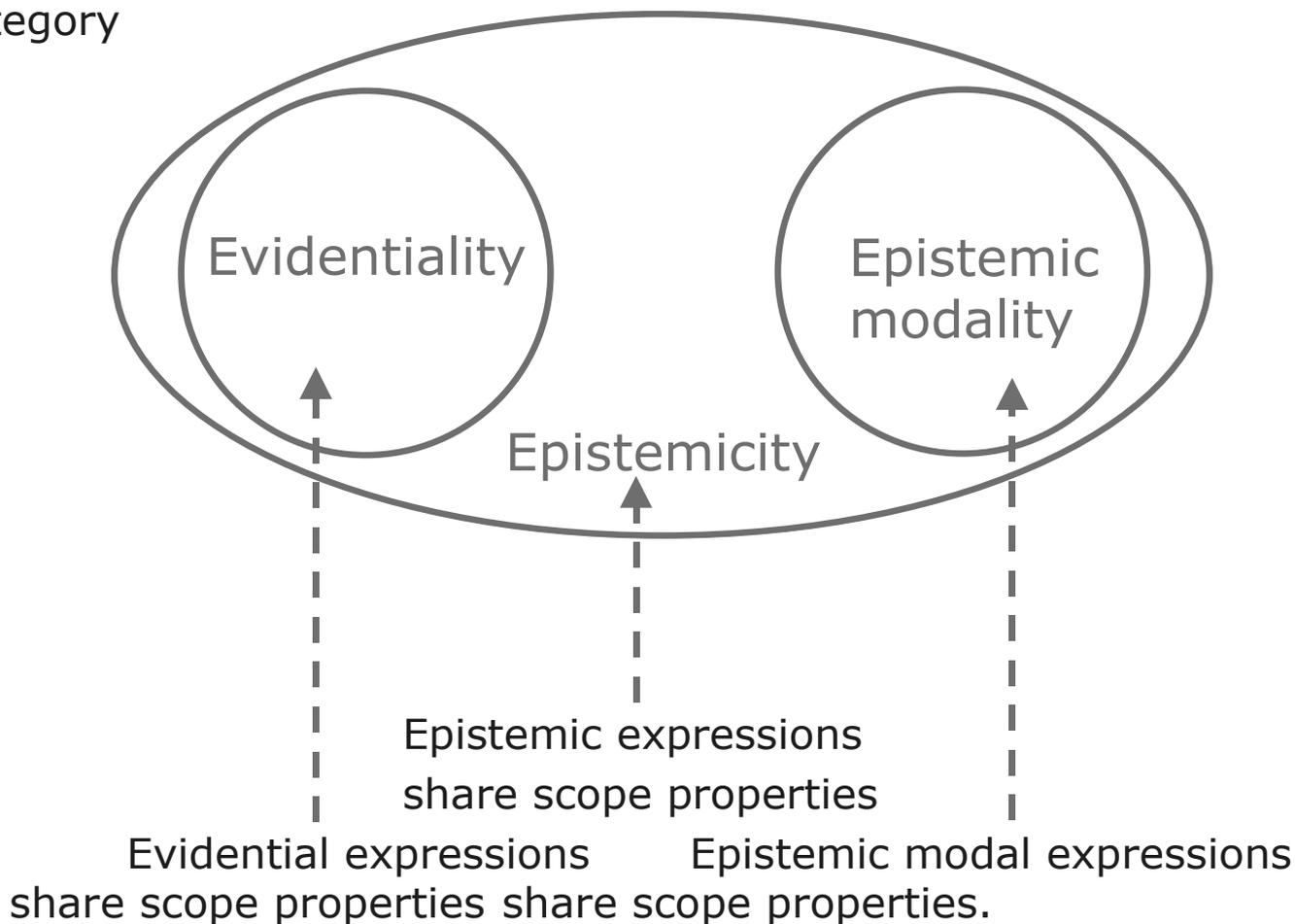
Tariana (Arawakan) (Aikhenvald 2003b: 152)

- (3) *weperi-pua-se di -a -thama -da.*
 poison-CL:RIVER-LOC 3.SG.NONFEM -say -FRUSTR+PRES.NONVIS -DOUBT.
 'He must have said 'weperi-pua-se' (but I am not sure I heard it right)'



Criterion 4: The semantic scope of epistemic expressions

Summary of the argument for recognizing Epistemicity as a cross-linguistic category



Shared scope properties is a non-trivial empirical fact.

Overview

- Cross-linguistic categories
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- **Summary**



Summary

1. The mainstream functionalist (and structuralist) conception of a cross-linguistic category:
 - A cross-linguistic generalization
 - A generalization over groups of related expressions
 - A generalization in terms of substance (as opposed to structure)
 - A theoretical construct which is significant for the description of language-specific structure
6. Four criteria for the identification of cross-linguistic categories:
 - Notional coherence
 - Significance for the description of language-specific morphosyntactic systems
 - Continuity on a semantic map
 - Sharing of semantic scope properties
11. Illustration:
 - The identification of a new cross-linguistic category, Epistemicity

