

Mapping the conceptual space of intersubjective epistemicity

Jenneke van der Wal

Unreality and Evidentiality in
Language, Cognition, Society
Cyprus, 24 October 2024



<https://epistemicity.net/>

Speakers of any language continuously keep track of what others know and how their own knowledge can be related to the knowledge of others.

(Bergqvist & Kittilä 2020: 12)

The relationship between notions such as epistemic authority, egophoricity, engagement, evidentiality, and epistemic modality remains debated and/or elusive.
(Grzech et al 2020: 286)

what is the source of knowledge?
=
evidentiality

how certain is the speaker?
=
epistemic modality

is the information surprising?
=
mirativity

is the information active in conversation?
=
givenness

who has access to the information?
=

engagement

does the knowledge contrast with alternative information?
=

contrast

was the speaker involved themself?
=

egophoricity

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

- Is the knowledge and attention shared between speaker and hearer or not?
“grammaticalised intersubjectivity” (Evans et al. 2018a: 113)

Kogi (Arwako-Chibchan, Colombia) has 4 auxiliaries

na- means that ‘the speaker knows e and expects the addressee to be unaware of e’ (1a), and

ni- means that ‘the speaker knows e and expects the addressee to know e too’ (1b) (Bergqvist 2016: 2)

(1) a. kwisa-té **na**-nuk-kú
dance-IMPF **SPKR.ASYM**-be.LOC-1S
'I am/was dancing.' (informing)

b. kwisa-té **ni**-nuk-kú
dance-IMPF **SPKR.SYM**-be.LOC-1S
'I am/was dancing.' (confirming)

TABLE 1. *Meaning dimensions of epistemic marking prefixes in Kogi (after Bergqvist, 2016)*

	Speaker-authority	Addressee-authority
Asymmetric	<i>na-</i>	<i>sha-</i>
Symmetric	<i>ni-</i>	<i>shi-</i>
Non-Speech Participant		<i>ska(n)-</i>

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

- How old/new/contrastive is the information for the hearer?

Makhuwa-Enahara (Bantu, Moçambique)

(2) DJ K-**o**-m-phwány-**a** Fernáántu.
1SG.SM-PFV.DJ-1OM-find-FV 1.Fernando
'I met Fernando.'

CJ Ki-m-phwany-**alé** Fernaantú.
1SG.SM-1OM-find-PFV.CJ 1.Fernando
'I met Fernando (and not someone else).'

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

Discussion for each:

- Is it an independent category?
- What is the definition of the category?
- Is the category universal?

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

It is a widely known fact
that the abovementioned
categories overlap in form,
meaning, and function
(Bergqvist & Kittilä 2020:4)

“The four groups of knowledge-related
meanings – evidentiality, egophoricity,
mirativity, epistemic modality – interact. [...]
In such cases, one category is used as a
‘strategy’ to express some meanings which
are core to another one.”
(Aikhenvald 2023: 6)

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

Fur (Nilo-Saharan, Sudan; Waag 2010: 260, glosses adapted)

- speaker has witnessed event
- unexpectedness for the addressee

(6) D-íí-ŋ bára **kamanj** ?éla.
SG-2SG-GEN brother EV 3SG.come.PFV
'Your brother has really come.' (I have seen him)

evidentiality

mirativity

information structure

epistemic modality

egophoricity

engagement

!Xun (Khoisan, Namibia; König 2013: 80, glosses adapted)

- non-firsthand evidential
- uncertainty
- contrast with addressee's expectation

(3) Hă á **cālā** kē ú l'àn hă.
PRO Q **NONFIRSTH.EV** PST go with PRO
'He is said to have left together with her (but I doubt it).'

evidentiality

mirativity

information structure

epistemic modality

egophoricity

engagement

García Macías 2016: 179

“presentatives and hot news are functionally similar because, in order to be felicitous, both require the **unawareness of the addressee** with respect to the event or entity that is introduced as new information”
> mirative
(> engagement)

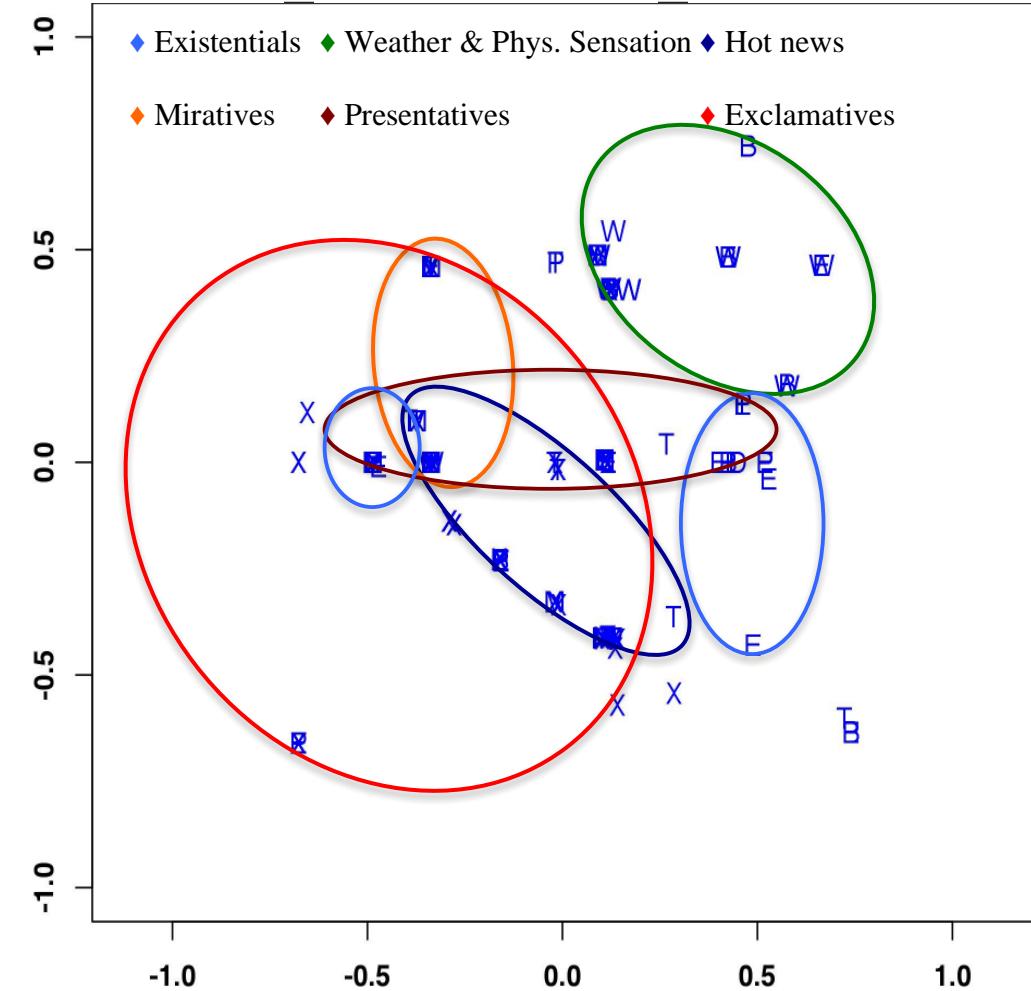


Figure 15: Two-Dimensional map showing the major concentrations of functions.

evidentiality

mirativity

information
structure

epistemic
modality

egophoricity

engagement

Coastal Marind (Papuan; Olsson 2019)

‘absconditive’ (info hidden to hearer) “expresses the addressee’s lack of attention, or lack of epistemic access, to the state of affairs conveyed by the verb.”

- thetics
- verum
- privileged access

(4) Kosi-awe **up**-∅ kw-ayit-a.
small-fish(II) **ABSC:II**-3SG.A- INESS-run-around:3SG.U-EXT
‘There’s a little fish swimming around inside.’

(5) **Ep**-ak-o- lay-e.
ABSC:I-1SG.A-3SG.DAT- talk-IPFV
‘I am talking to him.’

evidentiality

mirativity

information
structure

epistemic
modality

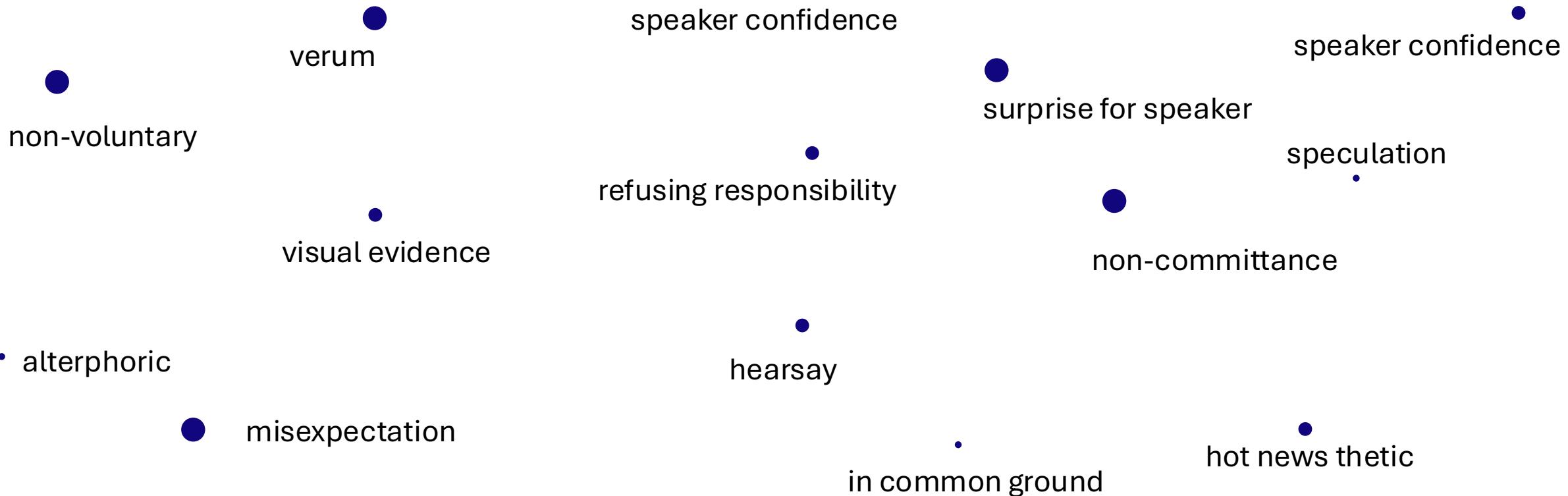
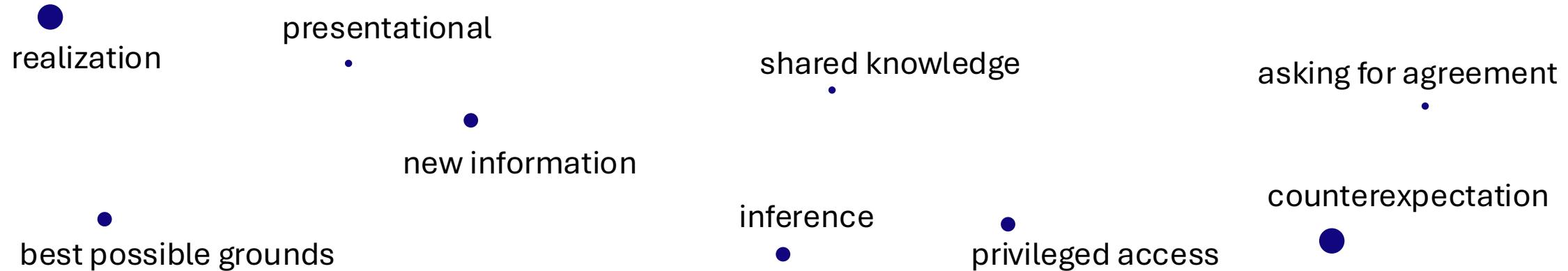
egophoricity

engagement

Maaka (Jukun, Nigeria; Storch & Coly 2014:200)

- speaker's certainty in inferential
- “may also have overtones of control over information, as the inferential verb form highlights the speaker's own knowledge of the context of the event”

(7) ?ìnndá mmù ?à mìnè-ndéré báyà mòo-yá-**dìyà**
stand:IMP 1DU then 1PL-run:NARR otherwise people-DEF-JOINT:VIS
?à dùkà-**ntí**-mìnê
then kill:TR-**ASSERT**-OBJ:1PL
'Stand up! We both then run, otherwise the people we both see/know will
definitely kill us.' (Storch & Coly 2014:199)



Conceptual space

If... (assumptions & hypotheses)

- These are universal interactional needs
- They represent a universal conceptual space
- Linguistic structure is indicative of conceptual structure
- Only adjacent concepts can be expressed together (Croft's connectivity hypothesis)

then...

- we can use co-expression within a language and across languages to see which aspects are closer together
- we can use the consecutive and overlapping co-expression to create a multidimensional map
- with this map we get an insight into the conceptual space of **epistemic and attentional knowledge management**

MapLE research questions



1. What are the nodes in this conceptual space?
2. How are the nodes grouped in linguistic strategies?
3. What does the grouping tell us about the relations between the nodes?
4. What do those relations reveal about our linguistic ability, our conceptual organisation, and their possible interaction?

1. What are the nodes?

	A	B	AC	AE	AF	AG	AH	II	AI	AJ	AK	AL	AM	AN	AO	meta-information-up...	AP	AQ	AR	AS	AT	AU	
1	Language and strategy information		Thetic										Epistemic modality			Egophoricity							
2	Language	Language classification	contrast on V	verum	hold floor	reason thetic	hot news	existential	presentative	interrogative	certainty of truth/pro position	uncertainty, doubt	BPG	Speaker's privileged access to knowledge	speaker is involved in action or state	Locutor undergoer	endopathic	alterphoric	shared knowledge	reduced a...			
60																							
61	Yurakaré	Isolate			1						1			1	0								
62																							
63																							
64																							
65	Tsafiki																						
66																							
67	Ika																						
68																							
69																							
70	Kogi																						
71																							
72																							
73	Cavineña	Tacanan																					

1. What are the nodes?

	A	B	AC	AE	AF	AG	AH	II	AI	AJ	AK	AL	AM	AN	AO	meta-information-up...	AP	AQ	AR	AS	AT	AU	
1	Language and strategy information		Thetic										Epistemic modality				meta-information-up...						
2	Language	Language classification	1	contrast on V	verum	hold floor	reason	thetic	hot news	existential	presentative	interrogative	certainty of truth/pro position	uncertainty, doubt	BPG	Speaker's privileged access to knowledge	speaker is involved in action or state	Locutor undergoer	endopatric	alterphoric	shared knowledge	reduced a	Egophoricity
60																							
61	Yurakaré	Isolate			1							1			1	0	0						
62																							
63																							
64																							
65	Tsafiki	Barbacoan																					
66																							
67	Ika	Arwako (Chibchan)																			0	1	
68																					1	0	
69																					0	0	
70	Kogi	Arwako (Chibchan)											1		1								1
71														1	0	1						1	0
72														1		1						1	1
73	Cavineña	Tacanan																					
74																							

Note 1: To find the detailed aspects, it does not matter whether it is an encoded or implied aspect of a strategy

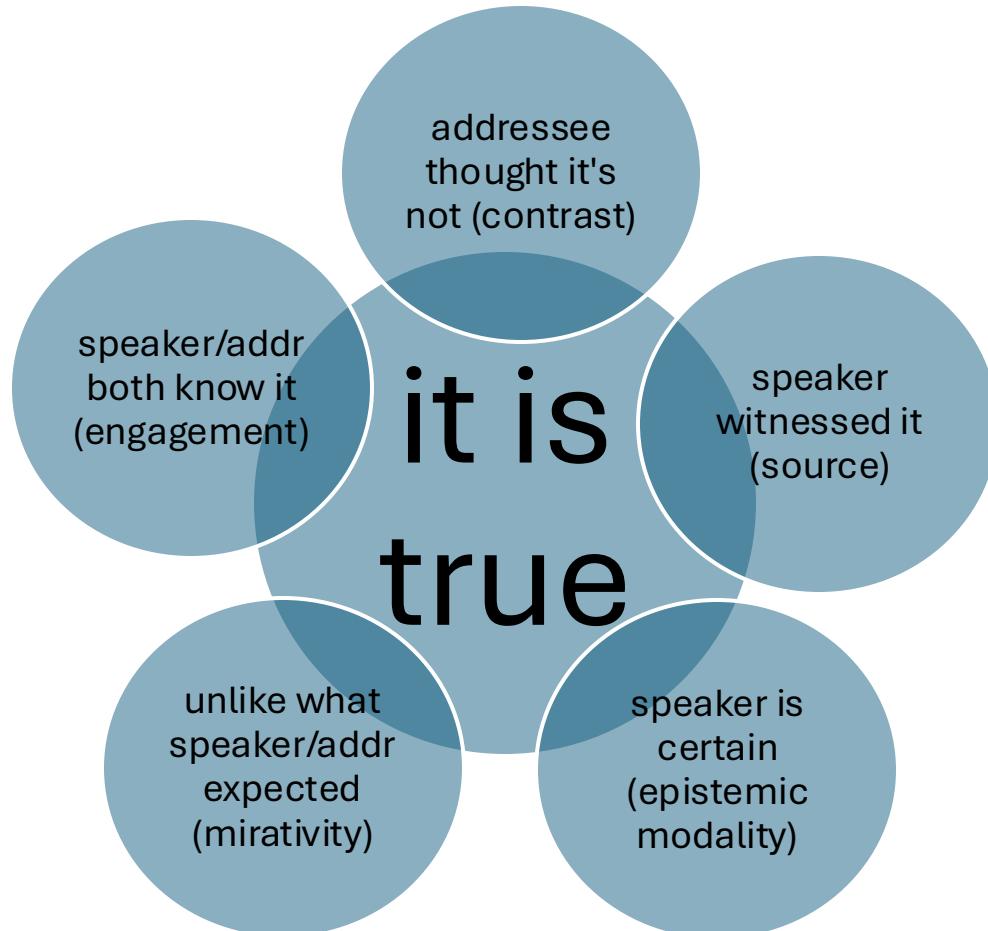
Note 2: We exclude the lexical end of the spectrum of expression and focus on the grammatical end, in order to access the unconscious linguistic knowledge

2. How are the nodes grouped?

- Data collection on six African languages
- Native speaker linguists
- Online masterclass epistemicity

“ongoing semantic research in Bantu languages continues to uncover systems that are primarily evidential in their semantics, as well as other grammatical categories that can be exploited secondarily to express evidential distinctions” (Crane et al. forthcoming)

Verum & everything else (PhD)



Cinyungwe (Mozambique, Crisófia Langa da Câmara)

(8) Ku-**nemb-a** w-a-**nemb-a**(=di).

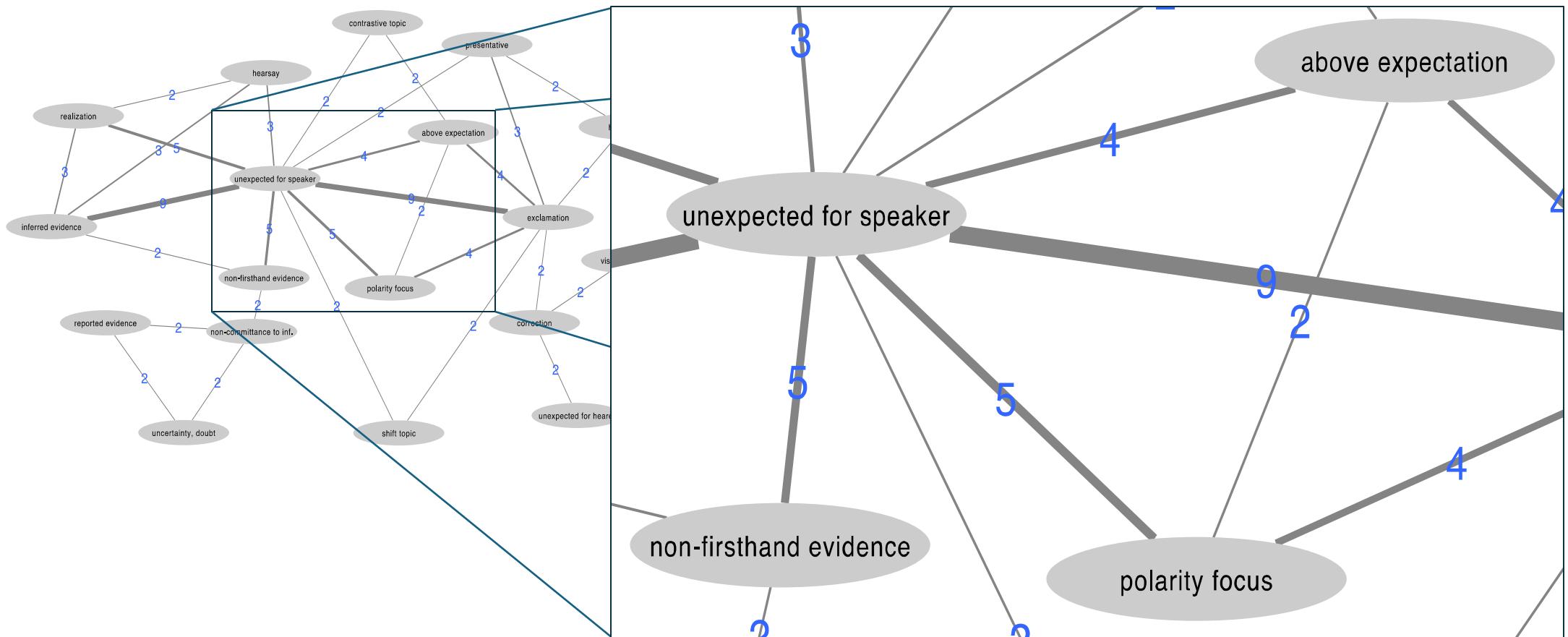
INF-write-FV 2SG.SM-PST-write-FV=VERUM
'You DID write.' (I didn't think you did) /
'You really wrote!' (more than expected)

(9) A: I am not convinced that he can sing. He told me he can. Have you ever heard him sing?
B: A-ni-yimb-a=**di**

1SM-PRS-sing-FV=VERUM
'He DOES sing!'

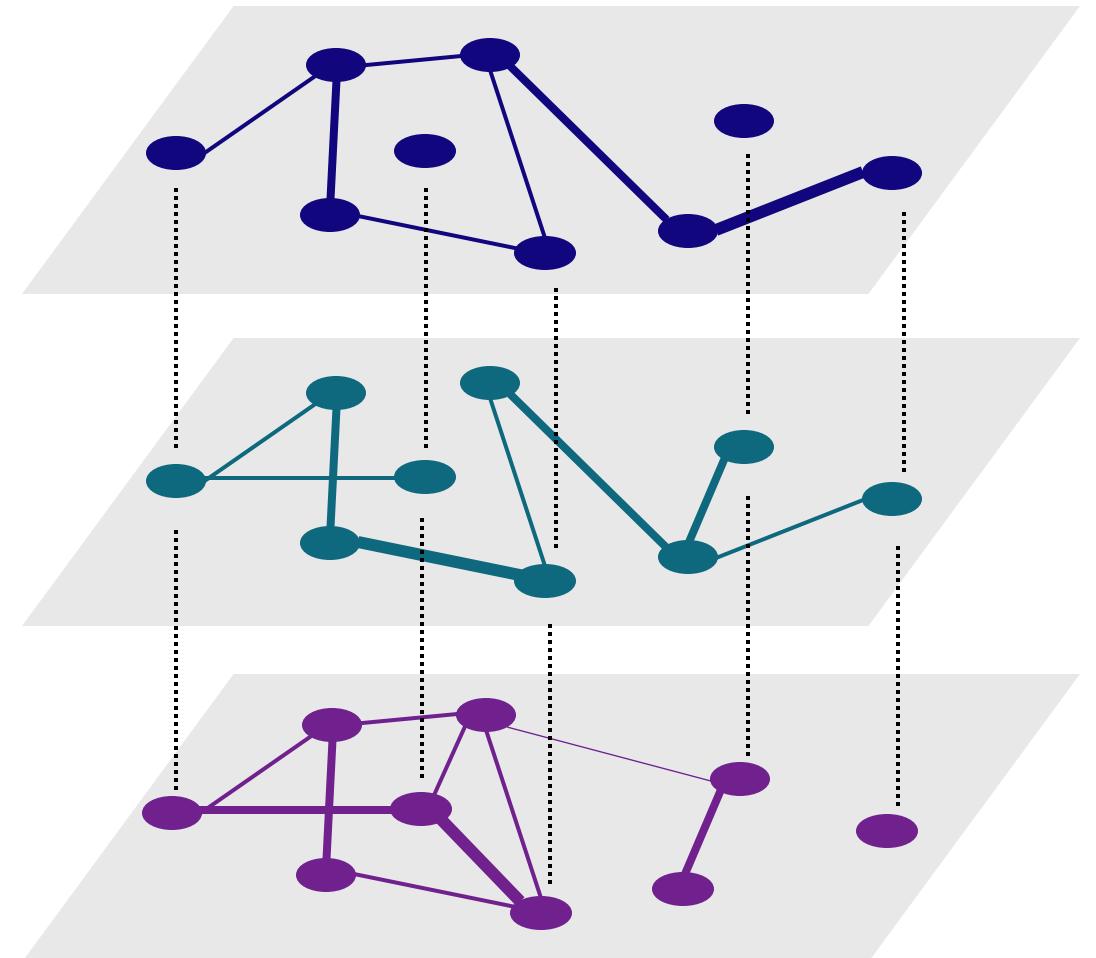
Interpretation: "I am confirming that he can really sing. I heard him singing; I am the witness."

3. What is the relation between the nodes?



4. What do the relations reveal?

- test typological predictions
- implications for theoretical models
- relativity hypothesis: are maps of individual languages compatible with each other?



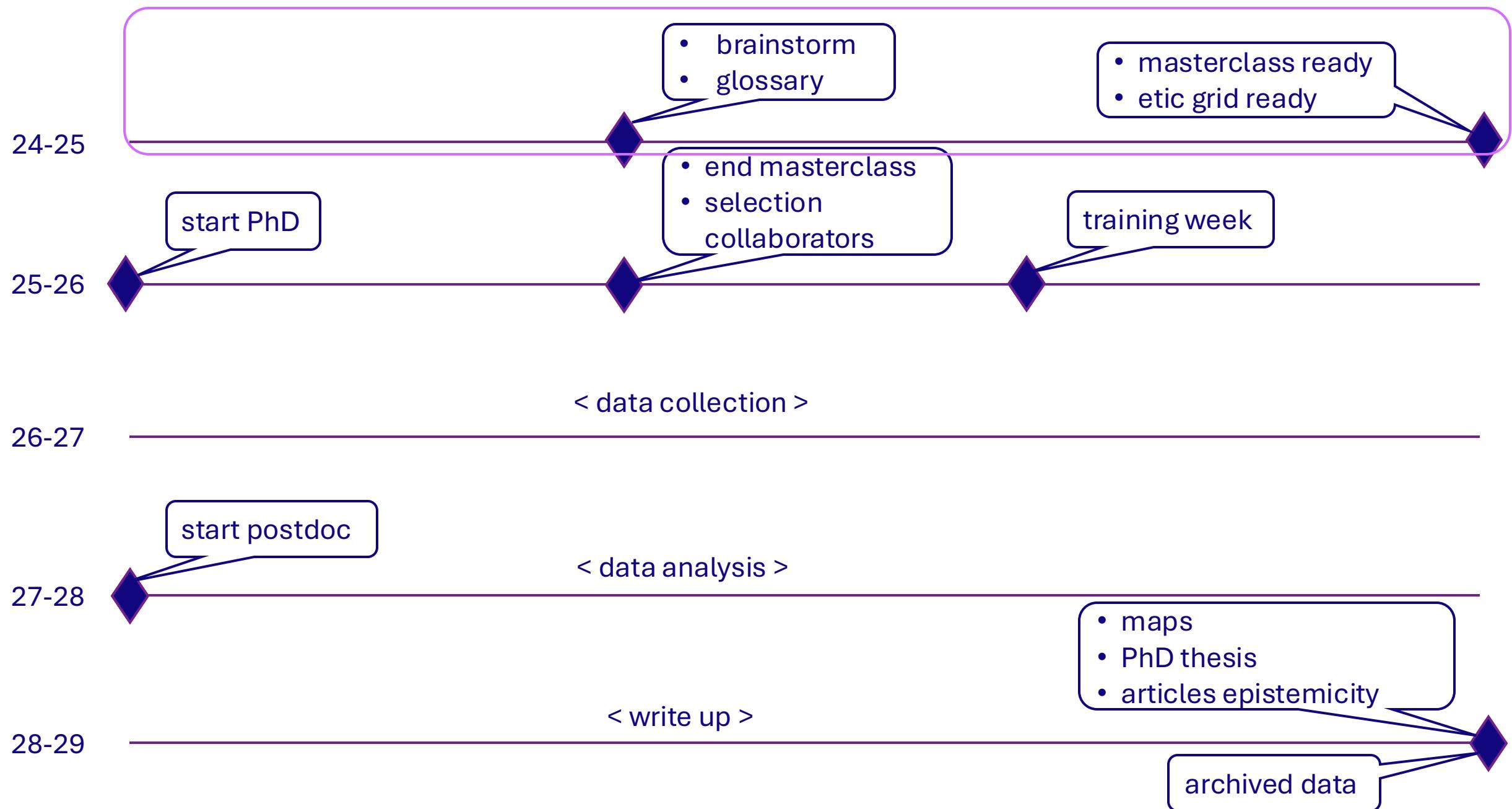
Thank you!



This research is part of the MapLE project, NWO Vici grant VI.C.231-014. I thank Giosuè Balocco for his help.



<https://epistemicity.net/>



References

- Aikhenvald, Alexandra Y. 2021. *The web of knowledge*. Leiden: Brill.
- Asiimwe, Allen & G.J. van der Wal. 2021. The multifunctionality of *-o* in Rukiga: pronoun, contrastive topic, and mirative marker. *Nordic Journal of African Studies* 30 (1).
- Bergqvist, Henrik. 2016. Complex epistemic perspective in Kogi (Arwako). *International Journal of American Linguistics* 82(1). 1–34.
- Bergqvist, Henrik & Seppo Kittilä (eds.). 2020. *Evidentiality, egophoricity and engagement*. Berlin: Language Science Press.
- Crane, Thera, Tim Roth, Hilde Gunnink & Ponsiano Kanijo. Forthcoming. Aspect and evidentiality in four Bantu languages. In Astrid De Wit, Frank Brisard, Carol Madden-Lombardi, Michael Meeuwis & Adeline Patard (eds.), *Beyond aspectual semantics: Explorations in the pragmatic and cognitive realms of aspect*. Oxford: Oxford University Press.
- Croft, William. 2001. *Radical construction grammar: syntactic theory in typological perspective*. Oxford: Oxford University Press.
- Evans, Nicholas, Henrik Bergqvist & Lila San Roque. 2018a. The grammar of engagement I: framework and initial exemplification. *Language and Cognition* 10(1). 110-140.
- Evans, Nicholas, Henrik Bergqvist & Lila San Roque. 2018b. The grammar of engagement II: typology and diachrony. *Language and Cognition* 10(01). 141-170.

References cont'd

- García-Macías, José Hugo. 2016. *From the unexpected to the unbelievable: thetics, miratives and exclamatives in conceptual space*. Albuquerque: The University of New Mexico.
- Grzech, Karolina, Eva Schultze-Berndt & Henrik Bergqvist (eds.). 2020. Knowing in interaction: Empirical approaches to epistemicity and intersubjectivity in language. Special issue of *Folia Linguistica* 54(2).
- Grzech, Karolina, Eva Schultze-Berndt & Henrik Bergqvist. 2020. Knowing in interaction: An introduction. *Folia Linguistica* 54(2). 281-315.
- König, Christa. 2013. Source of information and unexpected information in !Xun — evidential, mirative and counterexpectation marker. In Alexandra Y. Aikhenvald & Anne Storch (eds.), *Linguistic expression of perception and cognition*, 69-94. Leiden: Brill.
- Olsson, Bruno. 2019. The Absconditive revealed: Attention alignment in the grammar of Coastal Marind. *Open Linguistics* 5(1). 136–155. <https://doi.org/10.1515/oli-2019-0009>.
- Ozerov, Pavel. 2021. Multifactorial Information Management (MIM): summing up the emerging alternative to Information Structure. *Linguistics Vanguard* 7(1).
- Storch, Anne 2018. Evidentiality and the expression of knowledge: An African perspective. In Alexandra Y. Aikhenvald (ed.), *The Oxford Handbook of Evidentiality*, 611-628. Oxford: Oxford University Press.
- Storch, Anne & Jules Jacques Coly. 2014. The grammar of knowledge in Maaka (Western Chadic, Nigeria). In Alexandra Y. Aikhenvald & R. M. W. Dixon (eds.), *The Grammar of Knowledge*, 190–208. Oxford University Press.
- Waag, Christine. 2010. *The Fur verb and its context*. Cologne: Rüdiger Köppe Verlag.