

# The linguistics of what speaker and addressee know - and how to study it

Jenneke van der Wal

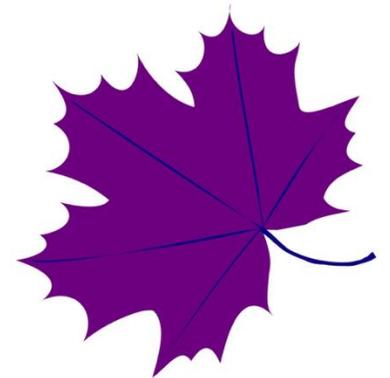
Finding patterns through  
fieldwork in African languages

DGfS workshop 2026

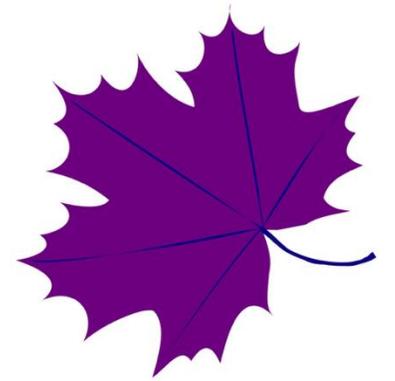


<https://epistemicity.net/>

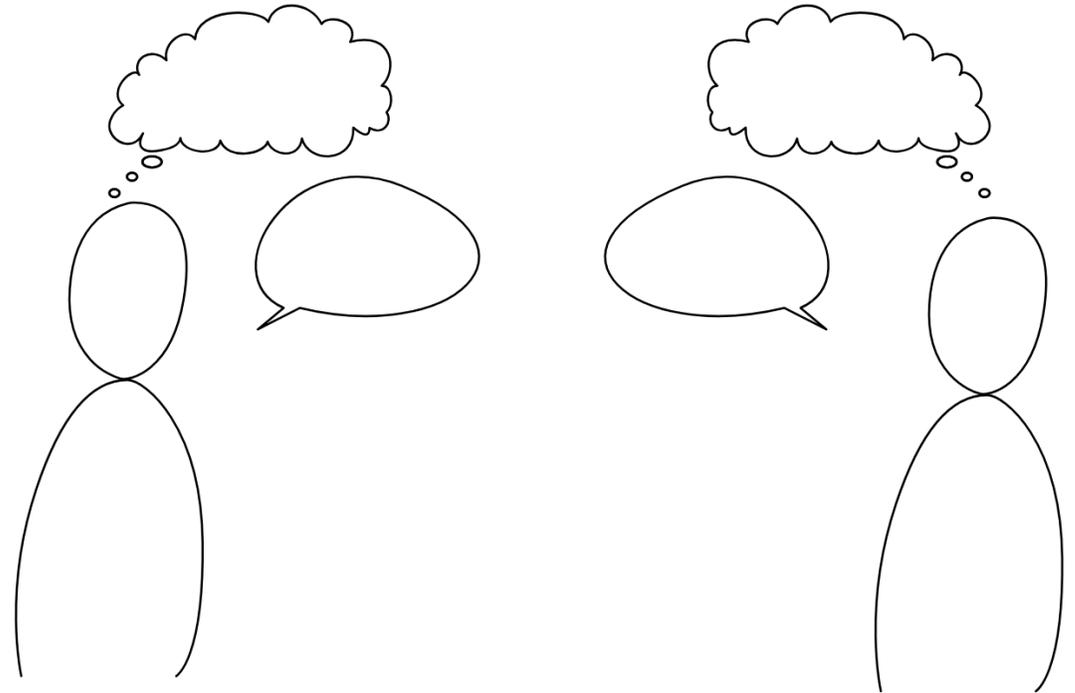
- MapLE project: beyond the categories
- How to gather data on epistemicity?
  - spontaneous interactional data
  - diagnostics in elicitation
  - stimuli and virtual reality



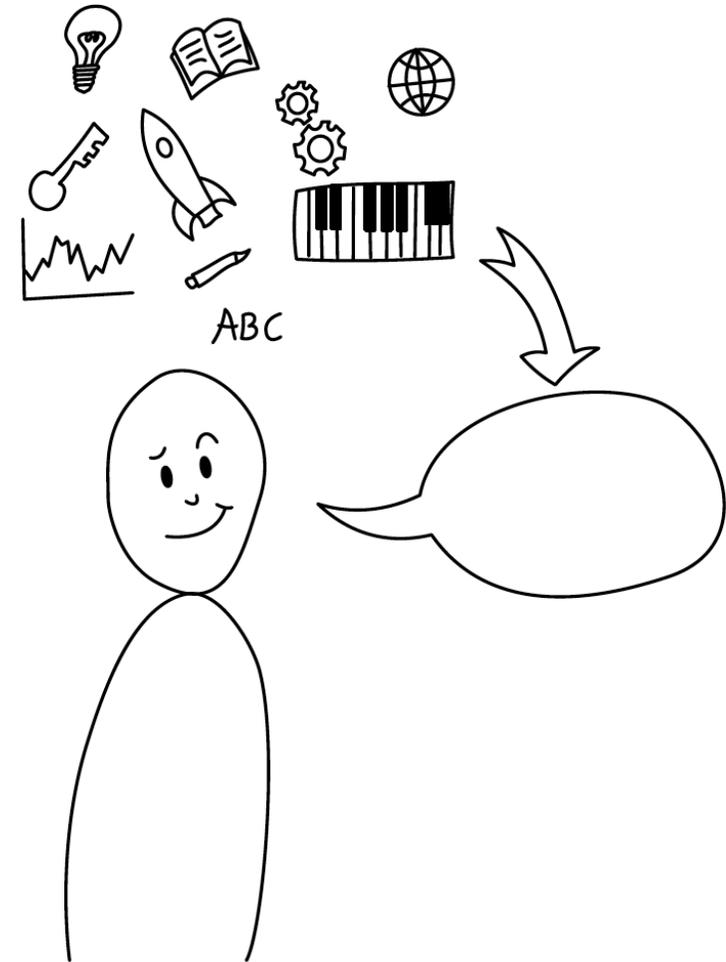
Going beyond the categories



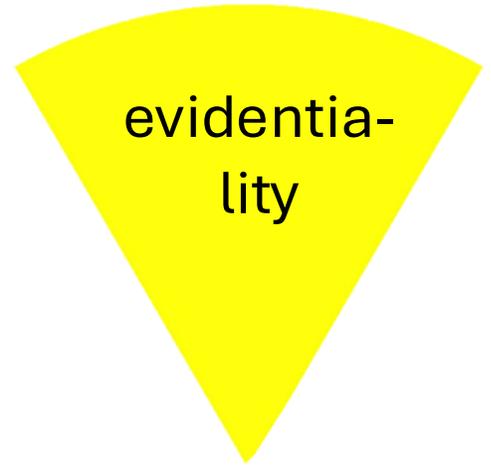
Speakers of any language continuously keep track of what others know and how their own knowledge can be related to the knowledge of others.  
(Bergqvist & Kittilä 2020: 12)



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- What is the source of speaker's knowledge?



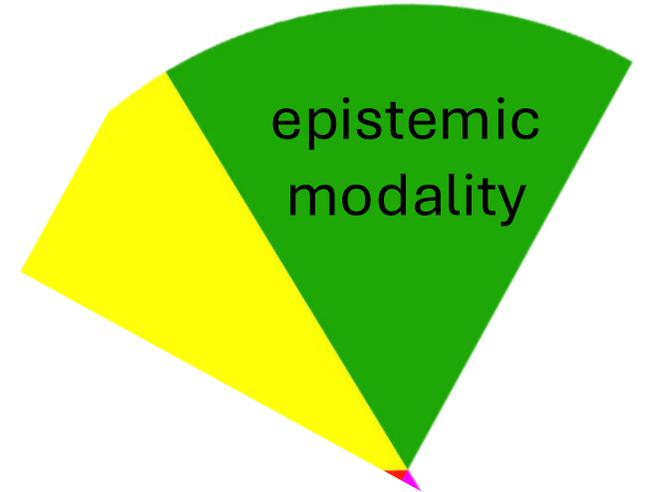
Lega (Bantu, DRC; Botne 1997)

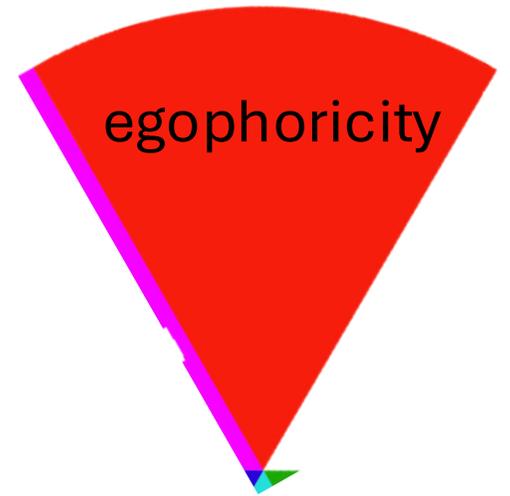
- (1) a. **ampó** ma-belá mé-se ma-kóló  
EV 6-maize 6-be 6-mature  
'The maize is ready.' [speaker saw it]
- b. **ámbo** Másudí é-ko-sámb-a  
EV Masudi 3S-PR-be\_sick-FV  
'[I've heard/I'm told that] Masudi is sick' [report from M. or someone else]
- c. **émbε** m-bula zé-ko-lók-a  
EV 9-rain 9-PR-fall-FV  
'[It appears that] it will rain.' [based on hearing distant thunder]

- How certain is the speaker of this information?

Kipsigis (Nilotic, Kenya, Bossi 2023)

- (2) a. I-**pwaat**-e kaamεε-nyʊʊn kole aa-mnyon-i.  
3-think-IPFV mother-1SG that 1SG-be.sick-IPFV  
'My mother **thinks** that I'm sick.'
- b. ∅-**Par**-e kaamεε-nyʊʊn aa-mnyon-i.  
3-think-IPFV mother-1SG 1SG-be.sick-IPFV  
'My mother **is under the impression** that I'm sick.'





- Does the speaker have privileged access to the information, are they the authority?

Newar (Tibeto-Burman, Hale & Watters 1973: 208, via San Roque et al. 2018)

(3) a. Jj̥ saphuu khan-ā.  
1SG book see-PST.**EGO**  
'I saw the book.'

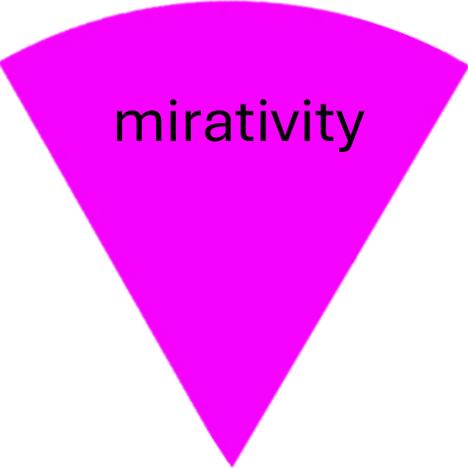
b. Ch̥a saphuu khan-a.  
2SG book see-PST.**NONEGO**  
'You saw the book.'

c. W̥a saphuu khan-a.  
3SG book see-PST.**NONEGO**  
'He saw the book.'

(4) a. Jj̥ saphuu khan-a lā.  
1SG book see-PST.**NONEGO** Q  
'Did I see the book?'

b. Ch̥a saphuu khan-ā lā.  
2SG book see-PST.**EGO** Q  
'Did you see the book?'

b. W̥a saphuu khan-a lā.  
3SG book see-PST.**NONEGO** Q  
'Did he see the book?'



mirativity

- Is the information is surprising for speaker or addressee?

Turkana (Nilotic, Dimmendaal 1996: 257, 258)

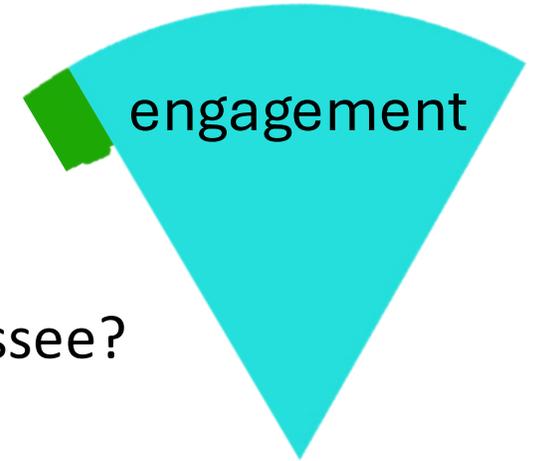
(5) à-bũ` to-ŋer` **ca`** ŋakĩrɔ` na`  
3:PAST-come 3:SUBS-refuse ATT words:ABS these  
'surprisingly, (s)he turned the proposal down!'

(6) è-yèi` **ca`** akim(i) tɔ̀ma` amòn(I)  
3-be ATT fire:NOM inside forest  
'there is actually a fire inside the forest'

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

Makhuwa-Enahara (Bantu, Moçambique, Van der Wal 2025)

- (7) 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).'



- Is the knowledge and attention shared between speaker and addressee?  
 “grammaticalised intersubjectivity” (Evans et al. 2018a: 113)

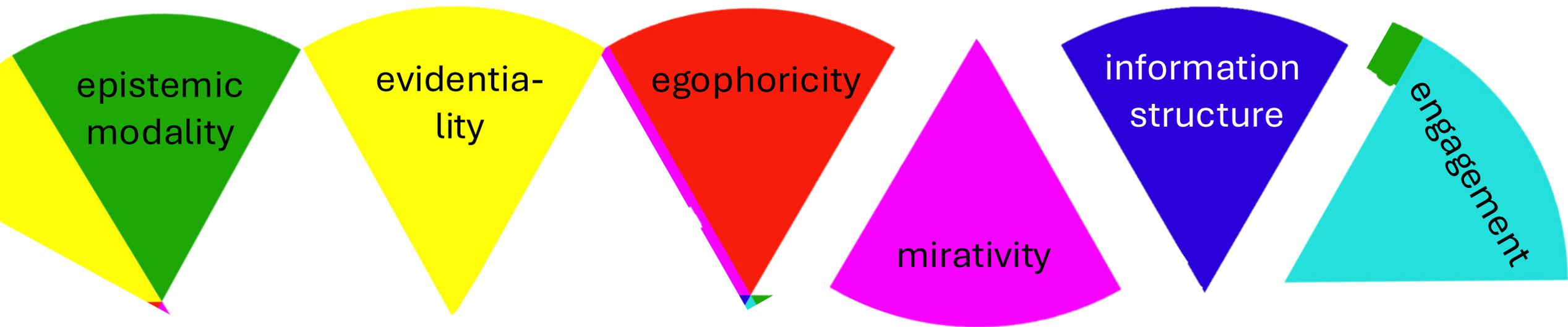
Kogi (Arwako-Chibchan, Colombia) has 4 auxiliaries

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)

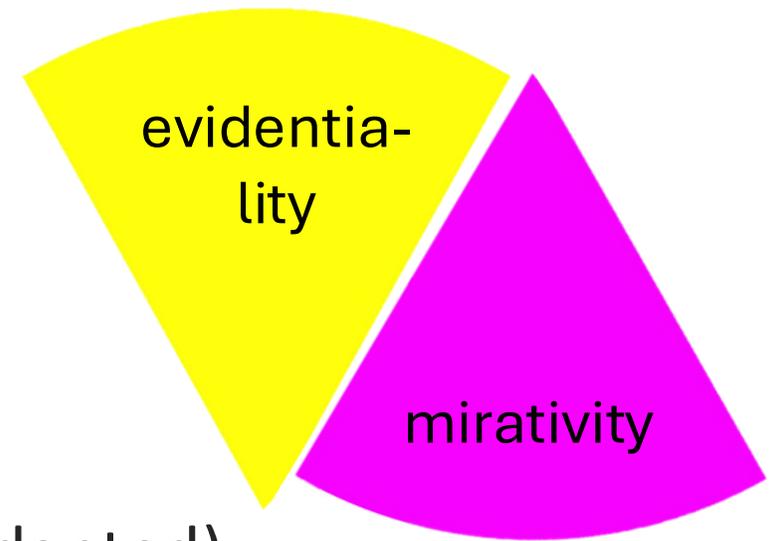
- (8) a. kwisa-té      **na**-nuk-kú  
 dance-IMPF    **SPKR.ASYM**-be.LOC-1S  
 ‘I am/was dancing.’ (informing)
- b. kwisa-té      **ni**-nuk-kú  
 dance-IMPF    **SPKR.SYM**-be.LOC-1S  
 ‘I am/was dancing.’ (confirming)

	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>



Discussion for each:

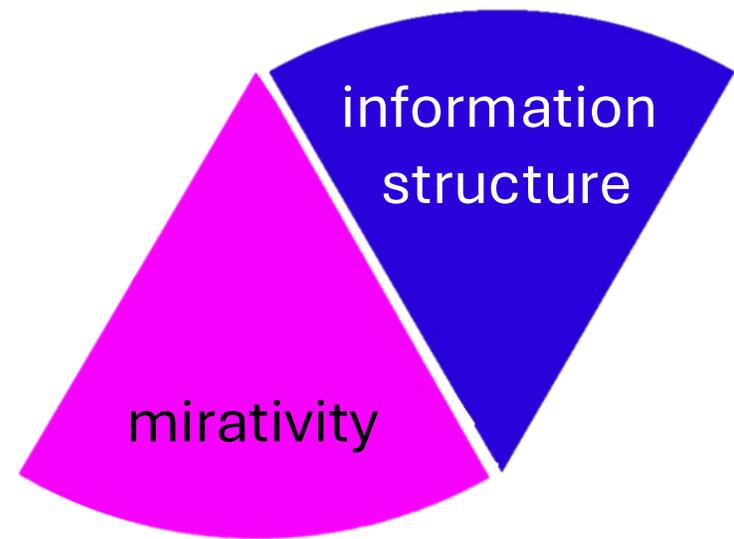
- Is it an independent category?
- What is the definition of the category?
- Is the category universal?



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

- speaker has witnessed event
- unexpectedness for the addressee

(9) D-íí-ŋ        bára    **kamaŋ** ʔéla.  
SG-2SG-GEN brother EV        3SG.come.PFV  
'Your brother has really come.' (I have seen him)



Rukiga (Bantu, Uganda; Asiimwe & Van der Wal 2021)

- contrastive topic
- surprise

(10) O-kw-éézi (kw-ó) n-áá-kú-reeb-a.

AUG-15-moon 15-CM 1SG.SM-N.PST-15OM-see-FV

‘The moon I have seen (the sun and/or the stars maybe I have not seen)’.

(11) Context: Someone has a function or has organised an event and sends out invitations. S/he does not expect many guests to turn up, but...

Abantu bó bíija.

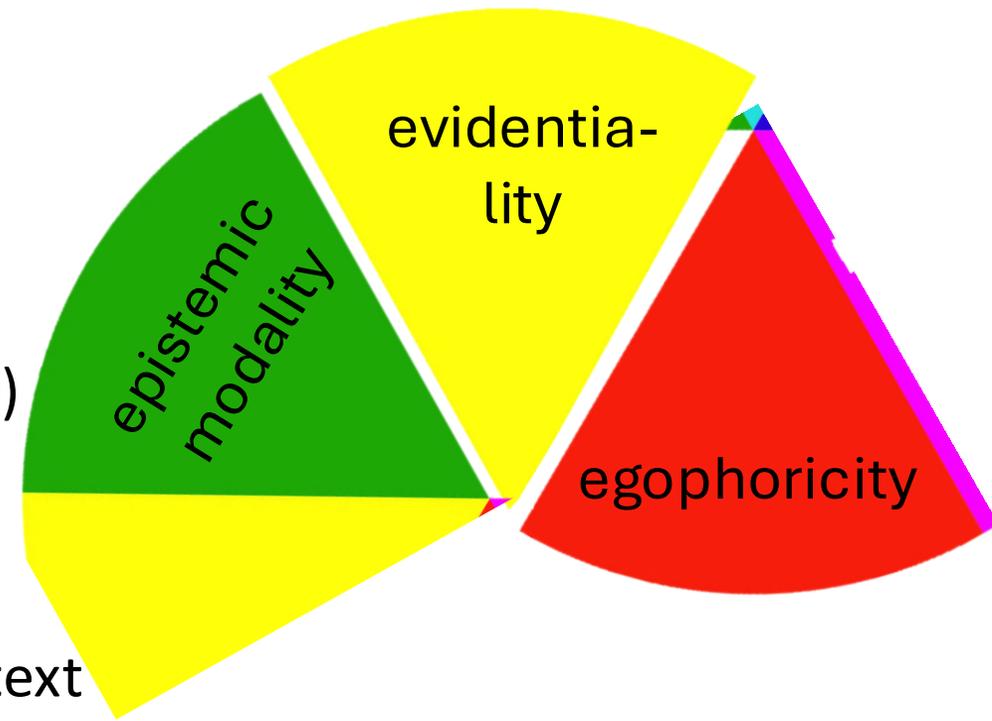
a-ba-ntu ba-o ba-ij-a

AUG-2-person 2-CM 2SM.N.PST-come-FV

‘People really came (many people turned up, more than those expected).’

Maaka (Afro-Asiatic, Nigeria; Storch & Coly 2014:200)

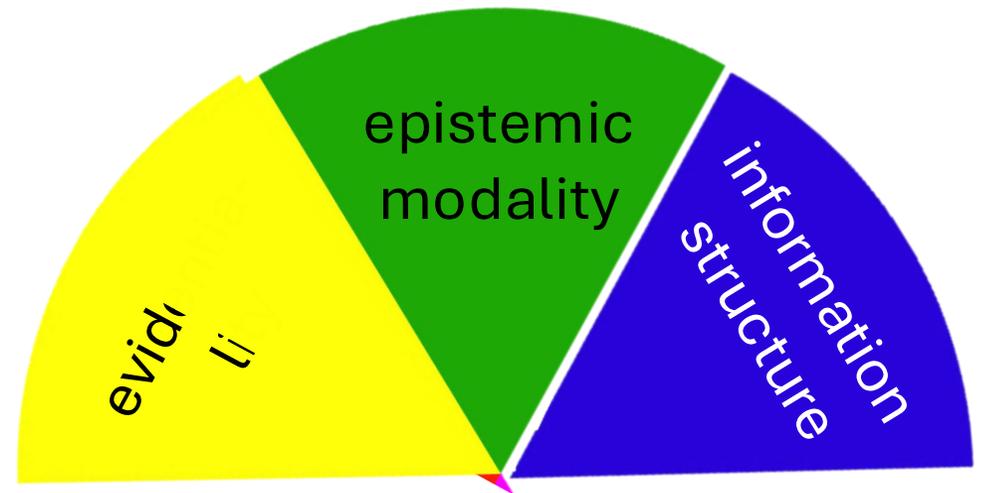
- inferred information
- speaker certainty
- suggests speaker control over the information/context



(12) ʔinndá mmù ʔà mìnè-ndéré báyà m̀ò-yá-dìyà  
stand:IMP 1DU then 1PL-run:NARR otherwise people-DEF-JOINT:VIS

ʔà d̀ukà-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)



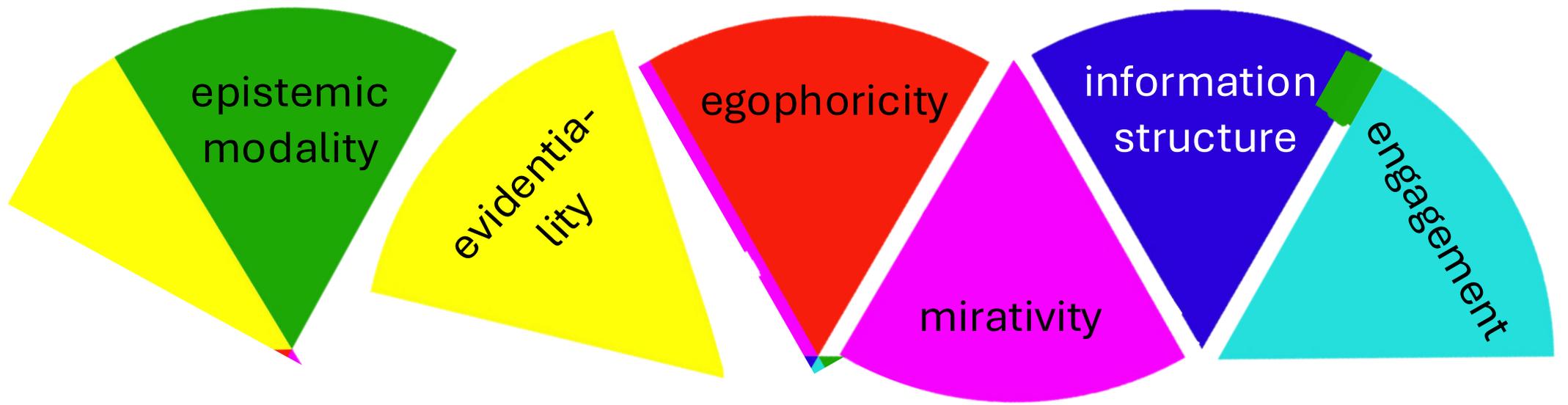
!Xun (Khoisan, Namibia; König 2013: 80, glosses adapted)

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

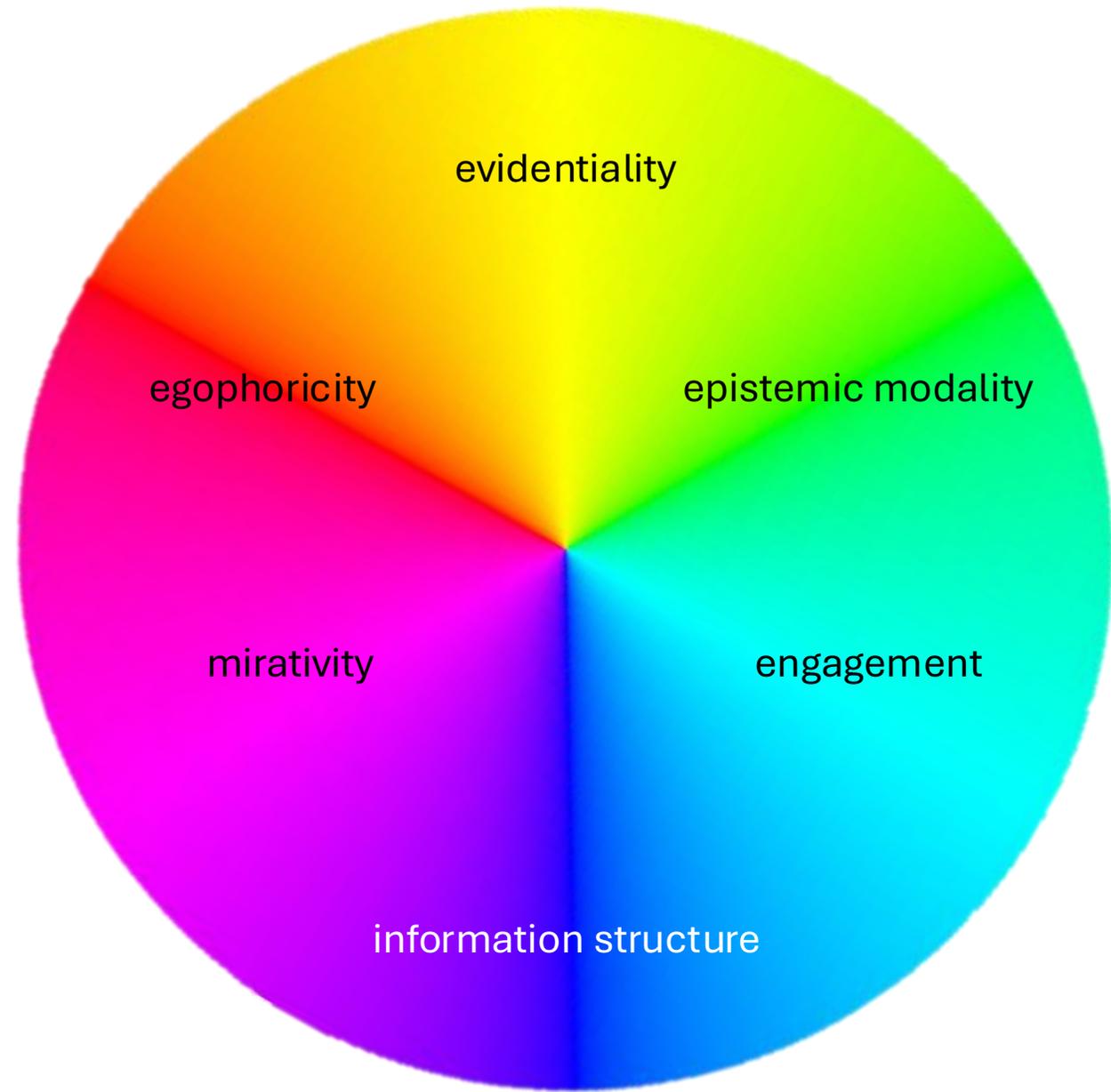
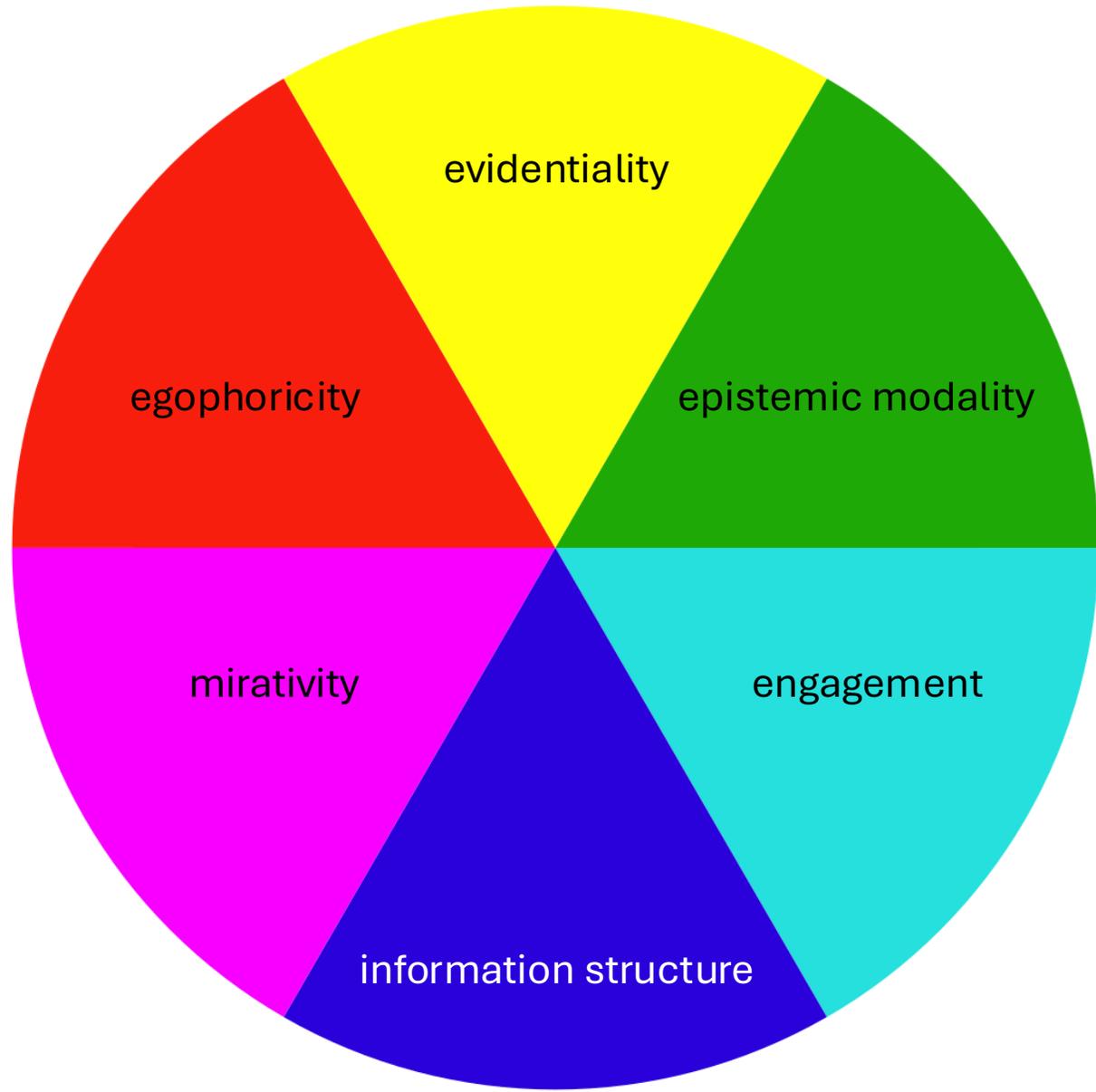
(13) Hà á **cālā** kē ú |'àn hà.

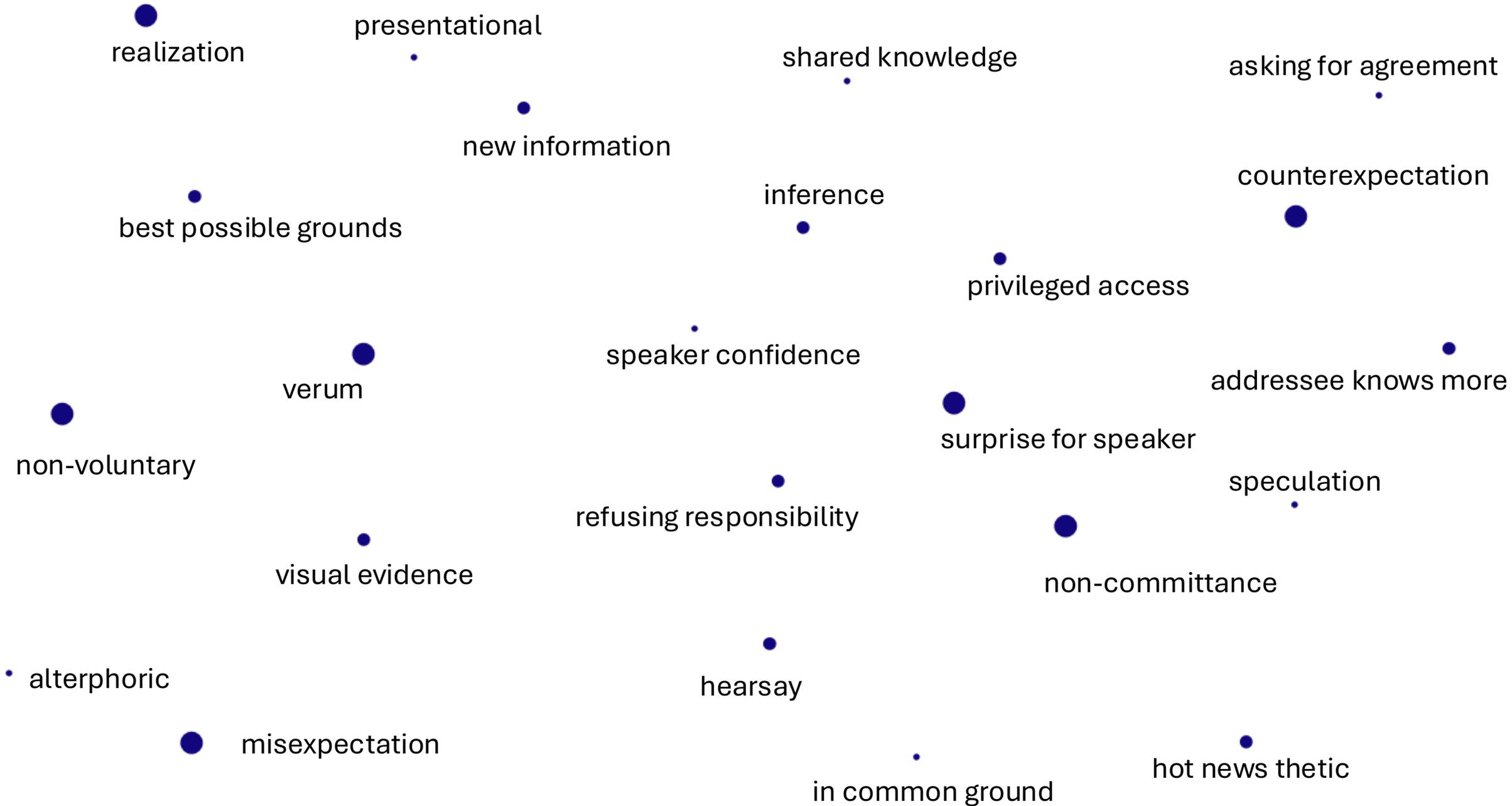
PRO Q **NONFIRSTH.EV** PST go with PRO

'He is said to have left together with her (but I doubt it).'



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





# 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?



(Aikhenvald 2005: 303)



(Aikhenvald 2005: 303)



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morpheme gloss regex ci

Search Count Save

- (1,801) ólé, warumpyááwe khúshélellyá, /ole wa-rup-al-aawe khu-sheleliya 1.dem.dist 16-sleep-pfv.rel-poss.1 narr-dawn-ah aá kinrówá waashínuni vá aaa ki-n-row-a wa-shinuni va/ 1sg.sm-prs.cj-go-fv 16-burd 16.dem.prox 'He, the next say, (he said) Ah, I'm going bird hunting.'
- (1,802) aá okushé nlénsó 'nna /aa o-kush-e n-lenso nna ah 2sg.sm-take-sbjv 5-cloth 5.dem.prox wíthúkele mú w-ii-tthuk-el-e mu/ 2sg.sm-refl-tie-appl-sbjv 18.dem.prox 'Okay, take this cloth and tie it on yourself.'
- (1,803) ólé ohíthúkélá nlénsó 'nne /ole o-h-ii-tthuk-el-a n-lenso nne/ 1.dem.dist 1sm-prfv.dj-refl-tie-appl-fv 5-cloth 5.dem.dist 'He tied that cloth on himself.'
- (1,804) masi úle aanítsúwela étthú /masi ole aa-ni-tsuwel-a etthu

(1,801)

Update this form

transcription ólé, warumpyááwe khúshélellyá, aá kinrówá waashínuni vá

morpheme break ole wa-rup-al-aawe khu-sheleliya aaa ki-n-row-a wa-shinuni va

morpheme gloss 1.dem.dist 16-sleep-pfv.rel-poss.1 narr-dawn ah 1sg.sm-prs.cj-go-fv 16-bird 16.dem.prox

translations 'He, the next day, (he said) Ah, I'm going bird hunting.'

comments

speaker comments

elicitation method H17 khutsupa ni nthiyana n'erukulu

tags LD scene

date elicited 08/13/2022 mm/dd/yyyy

speaker J N

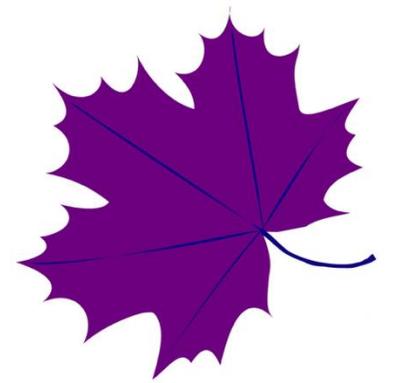
elicitor Jenneke van der Wal

files Search

status tested

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How to study it





## Expectation

Is the strategy used

- when a current fact becomes apparent to the speaker? [realisation]  
For example, Maale indicates such realisation through a suffix -y (Azeb Amha 2001: 150), glossed as mirative:  
*ká hay-í ?amm-é-y*  
INTJ this-NOM give fruit-PF-MIR  
'Oh, this has given fruit! (talking of a three year-old mango tree)'

Note that realisation can be separated from unexpectedness, as for example in Tagalog (Anderbois 2024: 8):

Context: You are asking me what I did yesterday and I am listing things I did, before I momentarily draw a blank and then remember suddenly and say:

*Tapos, nagbeach (nga) pala ako.*  
after go.to.beach.PFV PTCL MIR DIR.1SG  
'Oh yeah, then I went to the beach.'

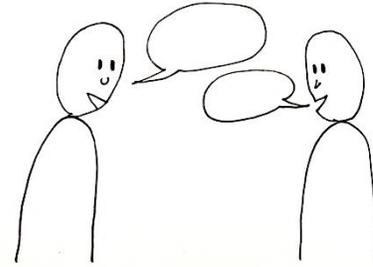
- when the speaker realises a new interpretation of a past event? [deferred realisation]  
In Kolyma Yukaghir, the inferential marker is (also) used for information that was obtained after the situation has taken place (Maslova 2003: 224):  
*ataq-un kun'il-get ningo: i:die-l'el-d'i:l'i*  
two-at ten-ABL lots.of catch-INFR-INTR:1PL  
'It turned out that we had caught more than twenty' [The speaker participated in fishing, yet the fish was counted only afterwards.] (K5: 92)
- when the information is unexpected for the speaker? [unexpected-S]  
For example, the Turkish past indirect evidence marker *-miş* can be used to express surprise when the speaker actually has direct evidence for an event. (Slobin & Aksu 1982: 187).  
[Context: The speaker hears someone approach, opens the door and sees Kemal - a totally unexpected visitor.]  
*Kemal gel-miş.*  
Kemal come-IND  
'Kemal came!'

- when the information is unexpected for the addressee? [unexpected-A]  
Hengeveld & Olbertz (2012) analyse the mirative copula *oleo* in Kham not just as indicating surprise for the speaker but also for the addressee, as in this example, where the information is no longer new to the speaker, but it is expected to be surprising for the listener:  
*Ri-lə te ge-ka:h la:-ye bəi-də o-ya-si-u oleo*  
night-INESS FOC 1PL-dog leopard-ERG take-INF3SG-give-2PL-NML MIR  
'In the night a leopard took our dog away on us!' (Watters 2022: 292, 293)
- when the information/event is unexpected for a character in a story? [unexpected-X]  
Dixon (2003) describes how in Jarawara the *immediate past non-eyewitness* form is used to express surprise, also by 3<sup>rd</sup> persons. The example indicates the surprise of Okomobi, the village chief, who thought he was given a cup of cachaça (cane whiskey) but it turned out to be water:  
*Okomobi faha hi-fa-hani ama-ke*  
Okomobi water OBJ-drink-IPN extent-DECL.F  
'Okomobi (to his surprise) drank water.'
- when the information contrasts with the speaker's expectation? [counterexpectation-S]  
In Isu, a classifier based on 'head' or 'eye' may go together with non-globular objects to indicate a "contra-expected deficiency in number" (Kiessling 2018: 42)  
*tûw fiifâp fə mǝ?*  
19.little.head ASS.19:5.leaf ASS.19 one  
'one single leaf only'

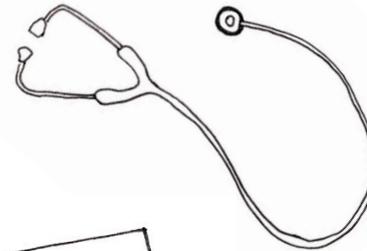
check the epistemicity glossary  
on the MapLE website!

# Methodology

1. spontaneous interactional data



2. specific diagnostics



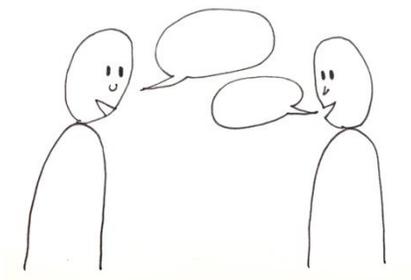
3. prompted speech, stimuli



- (41) líriya aaváhiya nkoror' awé. (JN)  
 iir-iy-a a-o-vah-iy-a nkorora awe  
 say-PASS-FV 2SM-PFV.DJ-give-PASS-FV 1.diff.sex.sibling 1.POSS.1  
 'It was said that they gave (it) to his/her sister.'

- (42) Nkitsuwélálé ni nkiníwwe. (PRS)  
 n-ki-tsuwel-ale ni n-ki-iww-ale  
 NEG-1SG.SM-know-PFV and NEG-1SG.SM-hear-PFV  
 'I didn't know and have never heard.'

- (43) Kaahíkóhatho... (JN)  
 ki-aahi-koh-a=tho  
 1SG.SM-PST.PFV.DJ-ask-FV=REP  
 'I have asked again...'



(44) Mí kiñnihimeeryáká ásooporosóori wiirá mpákhá waákóhá áttú uúlúpale. (PRS) {JN: mñ}

mi ki-nni-himeery-ak-a a-soo-porosoori wiira mpakha o-a-koha  
 1SG.PRO 1SG.SM-HAB-say.APPL-DUR-FV 2-mister-teacher COMP until 15-2OM-ask  
 a-tthu a-ulupale  
 2-people 2-big

'I said to mr. teacher to go ask the old people.'

(48) Vó kómo tsitsám mó tsináápheeliya | kináápácérá waaprófuntári átt' uúlupalé. (PRS) {JN: eé}

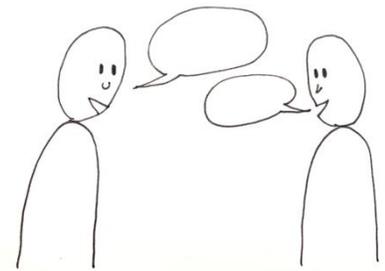
vo komo tsitsammo tsi-na?-pheel-iy-a ki-naa-pacer-a o-aporofuntari  
 PP since like.this 10-?-want-PASS-FV 1SG.SM-PRS.DJ-start-FV 15-investigate  
 a-tthu a-ulupale  
 2-people 2-big

'Well, since it is like this that you need, I will start to investigate the old people.'

(49) Mñ | kináápácéra mééshmu ... vánó vó atth' enli vó. (PRS)

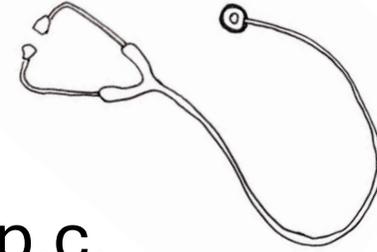
mm ki-naa-pacer-a meeshmu vano vo a-tthu a-inli vo  
 yes 1SG.SM-PRS.DJ-start-FV same now PP 2-people 2-two PP

'Yes, I will indeed start ... now they are two people there already.'









- Cancelling diagnostic
- Cinyungwe (Bantu, Mozambique; Crisófia Langa da Câmara p.c.)

(14) Context: We all know that Siriza was poor in her childhood, and she didn't want to attend school, a well-known way of changing one's life. She disappeared for years from the village. After this long period, she returns with her life changed. Now, she looks rich. Seeing her passing one can say:

*Siriza adala=di!*

*Siriza* 1SG.SM.PERF-rich-FV=DI

'Siriza became rich!' (mirative, counterexpectation)

(15) *Siriza a-dal-a=di, tsono bzi-n'dabw-is-a lini*  
*Siriza* 1SG.SM.PFV-rich-FV=DI but 8SG.SM.PRS-surprise-CAUS-FV NEG

*iyē ni n'-kazi.*

she COP 1-woman

'Siriza is really rich, but it is not surprising, she is a woman.'



Kogi  
(Chibchan, Colombia, Knuchel 2019)

speaker-proximal	<i>hēhié, hē</i>
addressee-proximal	<i>twēhié, twē</i>
distal	<i>kwēhié, kwē</i>

	Proximal	Distal
No shared attention	<i>hēhié, hē</i>	<i>kwēhié, kwē</i>
Shared attention	<i>twēhié, twē</i>	



Figure 1a: Use of *hēhié*.



Figure 1b: Use of *twēhié*.



the matcher



the director



*twēhié* is used

1. at the end of series of instructions to confirm the matcher's choice,
2. during a sequence to refute their choice, and
3. referring to an object that the matcher had already touched.

# MapLE methodology



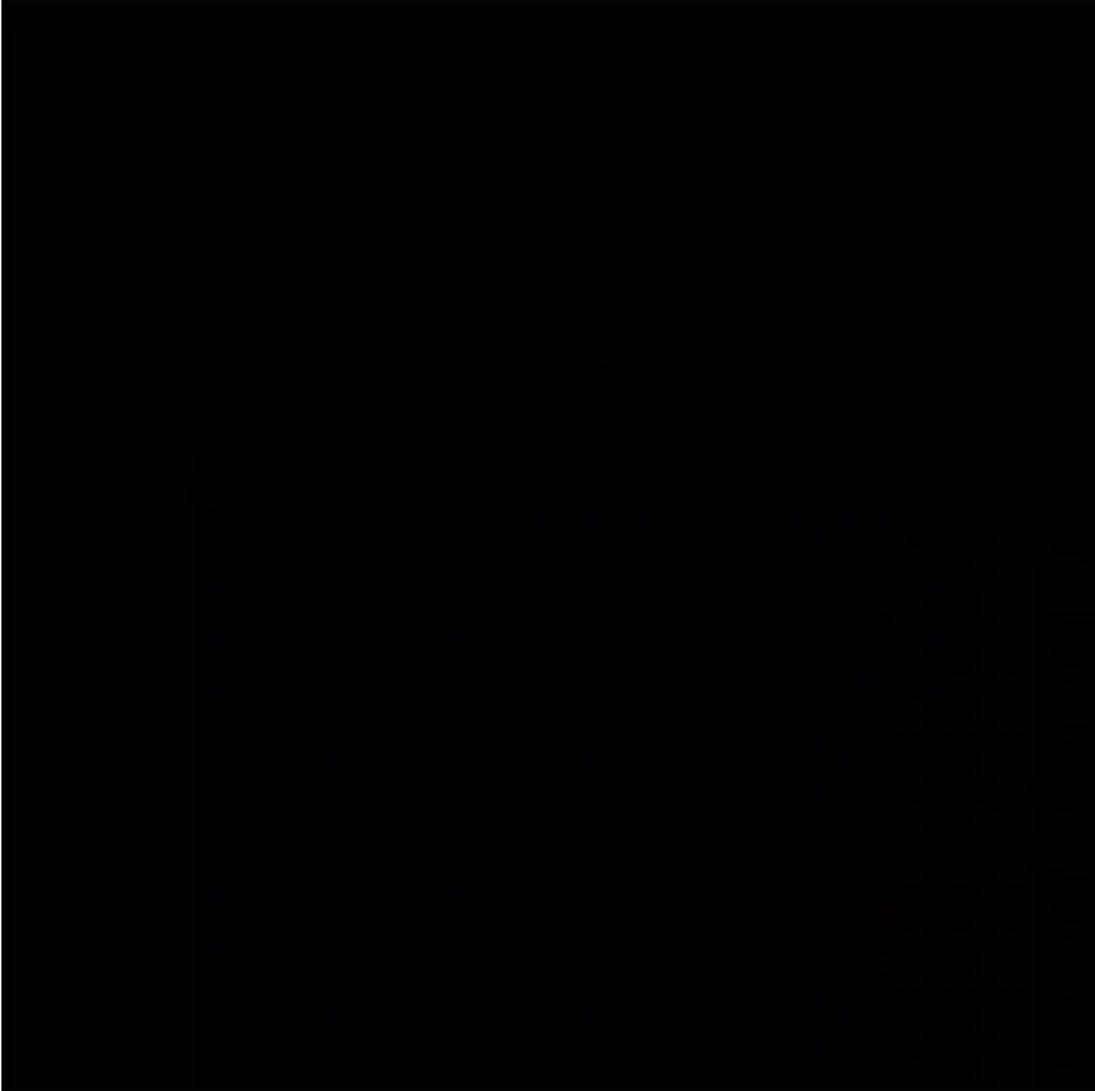
- Description of the goal of gathering the data
- Suggestions for spontaneous interactional prompts with different speakers and topics
- Stimuli (storyboards etc.)
- Diagnostics (with explanation, instruction, examples)
  
- Open access (once finished)



Virtual reality:  
natural environment  
**AND**  
carefully controlled



- Paz González
- Thomas Vorisek
- Jai von Raesfeld Meyer
- Irina Morozova
- Claudia Berruti
- V.T. van Doorn





Glossary

Checklist

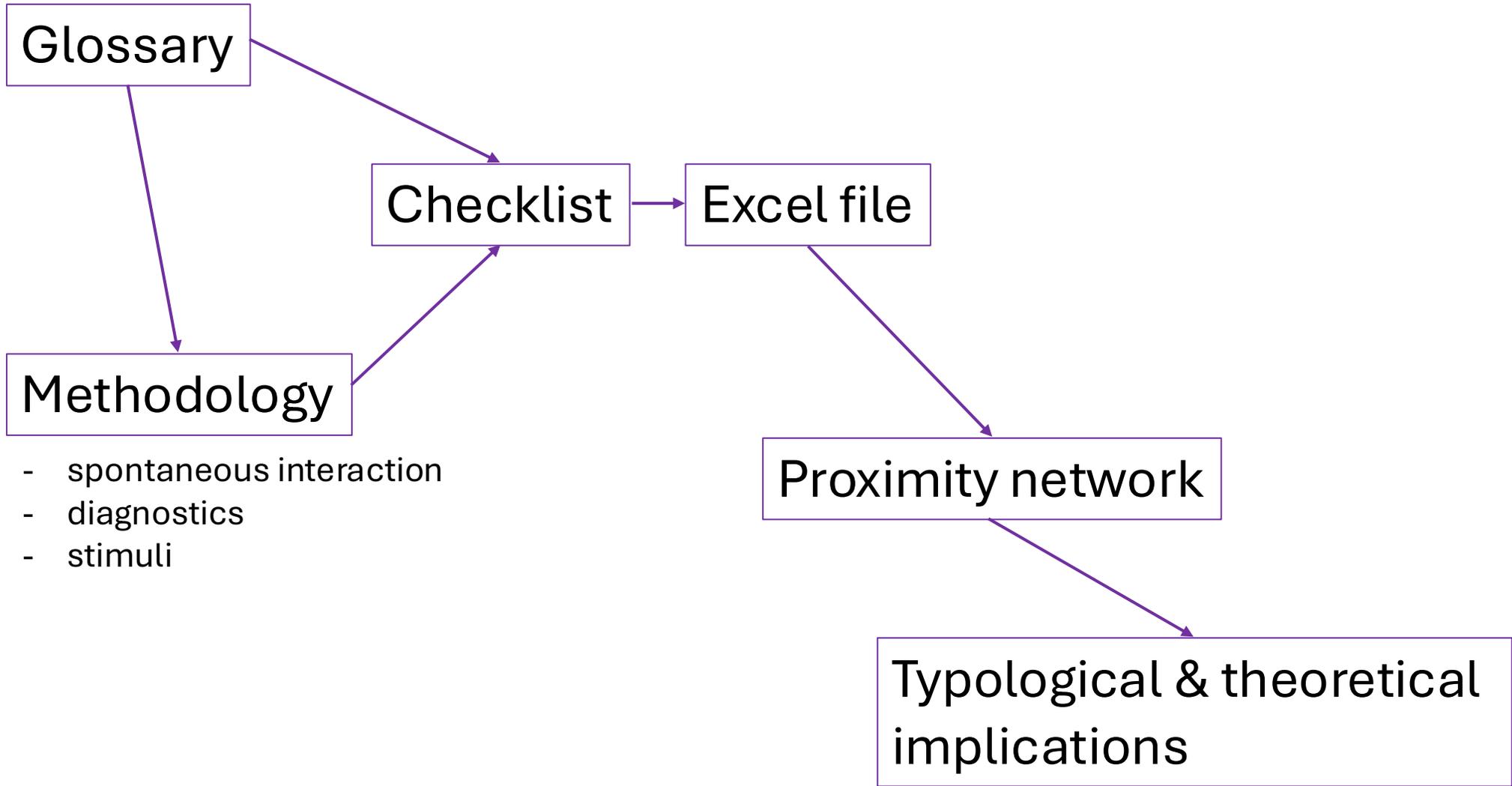
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Methodology

- spontaneous interaction
- diagnostics
- stimuli

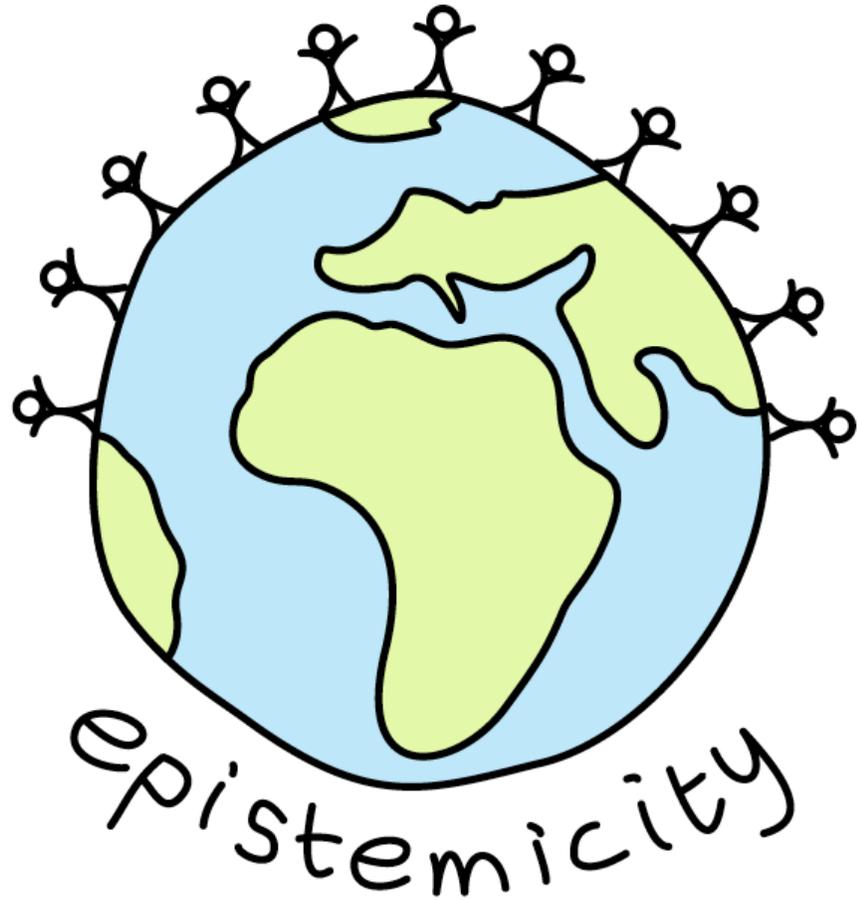
Proximity network

Typological & theoretical implications



# Expectations for African languages

- demonstratives
  - verum / mirative / intensification / downgrading
    - applicatives
    - OM-doubling
    - predicate doubling
    - contrastive topic markers
    - clause-final conjoint form
  - future tense
- ‘ungrammatical’ use leads to intersubjective effects!
-



- Aspects of epistemicity can be found anywhere in any language
- They form one conceptual space
- But taking them as cross-linguistically valid categories may not be most interesting or helpful
- We can use a variety of methods to target the form and meaning

# Thank you!



Universiteit  
Leiden  
Centre for Linguistics



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<https://epistemicity.net/>

send us an e-mail if you want access to the online course!  
maple@hum.leidenuniv.nl

### MapLE Masterclass

#### Module 1

#### What is epistemicity?

- Welcome! Video
- Information about the course Reading
- **Epistemicity is everywhere** Video
- Introduction to epistemicity Video
- Exploring epistemicity Practice Assignment • Results pending
- Your own language Reading
- Questions for the seminar Discussion Prompt
- Epistemicity Graded Assignment
- Piedmontese Graded Assignment

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