

Introduction to information structure

Jenneke van der Wal

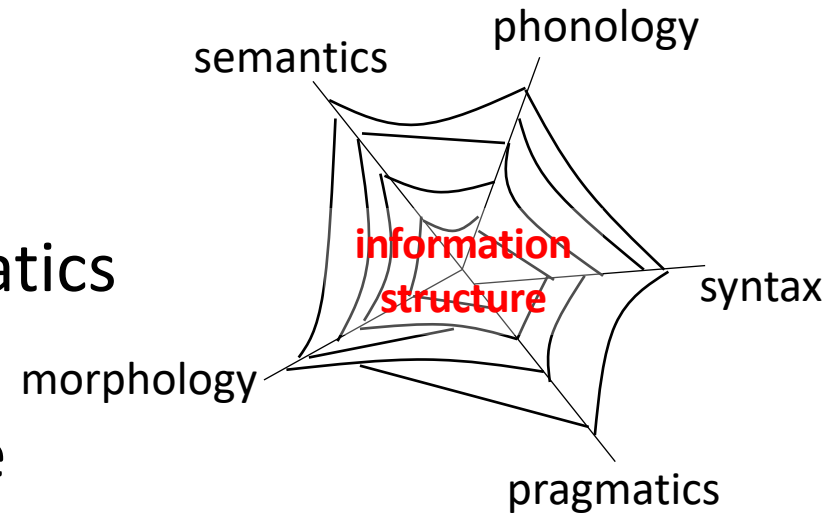
LIME

What is information structure, do you think?

Why is information structure important?

Information structure

- All speakers and hearers need structured information
- All languages have means to express IS
- All types of linguistic means can be used:
phonological, morphological, syntactic
- On the boundary between semantics and pragmatics
- We can only understand the grammar
(phon/morph/synt/sem/prag) of a language if we
understand its information structure!

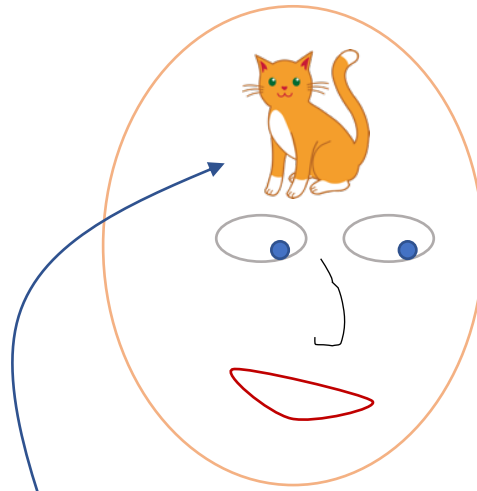


Factors in information structure

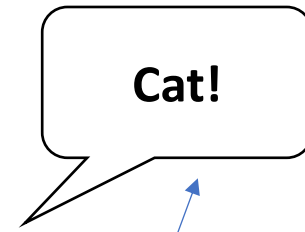
- The mental accessibility of the referent
- The discourse function of the referent
 - Topic
 - Focus
 - (or none)
- (Plus further context and pragmatics)
- See the [Glossary of Information Structure](#) for a list of all the terms



REFERENT



MENTAL
REPRESENTATION





EXPRESSION

Exercise 1

(We are missing a spoon and then we discovered that)
'The spoon was stolen by a mouse'.

In this sentence the topic referent is...

- a) 
- b) 
- c) 'a mouse'
- d) 'the spoon'

Accessibility

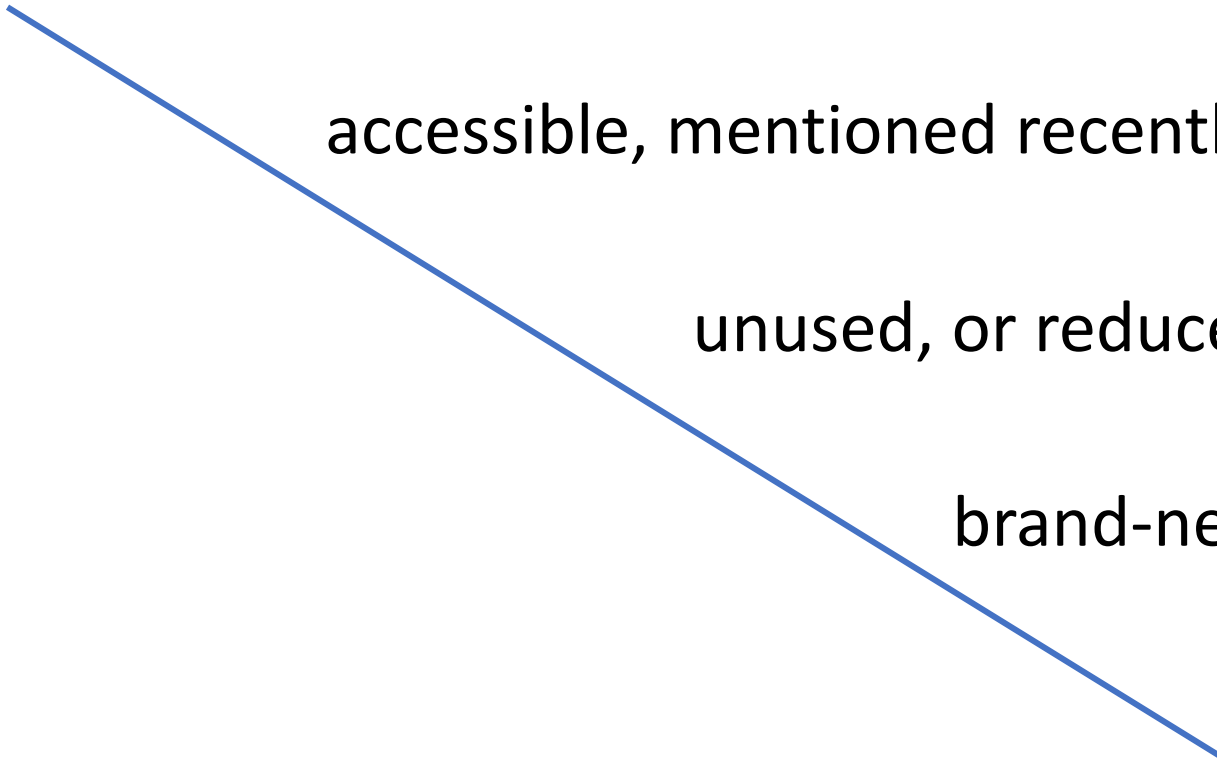
highly active, in current attention

accessible, mentioned recently

unused, or reduced in activation

brand-new anchored

brand new



Accessibility hierarchy

- Ariel (2001, 1998)

least accessible referent,
most linguistic encoding

Full name+modifier > full name > long definite description >
short definite description⁵ > last name > first name >
distal demonstrative+modifier > proximate demonstrative+modifier >
distal demonstrative + NP > proximate demonstrative + NP >
distal demonstrative (-NP) > proximate demonstrative (-NP) > stressed
pronoun+gesture > stressed pronoun > unstressed pronoun > cliticized
pronoun⁶ > verbal person inflections > zero

most accessible referent,
least linguistic encoding

Topic

- Anchor for new information
- What the sentence is about
- Directs the attention of the hearer

Luganda

- (1) a. **Omuwála** aa-béra mu-nyúmba enó.
1.girl 1sm-lives 18-house dem
'a/the girl lives in this house'
- b. **Mu-nyúmb' eeyó** mú-bééra-mú omuwála.
18-house dem 18sm-lives-18 1.girl
'in that house lives a girl'

Topic



-beera munyumba eno

topic | comment
| focus | background

Types of topics

- Familiarity: A topic that is highly active and has already been the topic in a previous sentence.
- Contrastive topic: Topic that is contrasted with another topic in the direct context, for example, 'The books he read, but the magazines he threw away'
- Shift topic: A topic whose referent is different from the topic referent of the previous sentence (and therefore less active/accessible).

Focus

- “Of all the possibilities, this is the one I am asserting”
- Triggers a set of alternatives

(2) Q: Yayera ki?
‘What did she sweep?’

A: Yayera oluggya.
‘She swept the yard.’

Exercise 2

In the following question-answer pairs, identify what is in focus.

1. Who wanted to feed the giraffes? Jesse wanted to do so.
2. What will you buy? At the market, I will buy watermelon.
3. Where can they find good eggs? They will find good eggs halfway the main road.
4. Who did the king offer an award? The king gave Abdul an award.
5. Which cups did he use to serve the guests? He used the blue cups.
6. What did Masha do with the cupcakes? She ate the cup cakes.

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Exhaustive focus

- The predicate is true for the focused referent, and false for any alternatives
- Exhaustive focus-sensitive particle 'only'
- But also in syntactic constructions like the English cleft
'It is bananas that I ate for breakfast' (and nothing else)



Exercise 3

How is focus expressed in your first language?

Which constructions / intonations / particles / ... are used?

What is the precise interpretation? Exhaustive, new information, presenting as one piece of information, etc.

Different roles

- Referents can play roles at three levels:
 - semantic (agent, patient, experiencer, goal, benefactive, etc.)
 - syntactic (subject, object, non-argument)
 - discourse (topic, focus, background)
- These need to be distinguished, even if there are very clear preferences – the subject tends to the topic

Exercise 4

For each argument in the following sentences, identify its role at the three levels, filling in the table.

1. (Who will the shark bite?) The shark will bite the turtle.
2. (What about the octopus?) The octopus was bitten last week.
3. It's the jellyfish that were watching.

	shark	turtle	octopus	jellyfish
semantic				
syntactic				
information structure				

Exercise 4

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	shark	turtle	octopus	jellyfish
semantic	agent	theme/patient		
syntactic	subject	object		
information structure	topic	focus		

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	shark	turtle	octopus	jellyfish
semantic	agent	theme/patient	theme/patient	agent/experiencer
syntactic	subject	object	subject	subject
information structure	topic	focus	topic	focus

Do all sentences need topic and focus?

- Thetic sentences likely not.
- Theticity, thetic sentence: Presenting all the information as one piece, in a sentence that does not have a topic *expression*. The topic *referent* can be the 'here and now' (stage topic); the sentence can be seen as 'all comment'.
- Typically used in a situation 'out of the blue'.
- Stage topic: The 'here and now' that the comment is about in a thetic sentence, for example in 'It's raining' or 'The QUEEN had an accident!'.

How do we find information structure?

- Context (always!)
- Q-A pairs
- Texts – referent tracking
- Identify & then test specific strategies

(further diagnostics are available! E.g. QUIS Skopeteas et al. 2006, [vdWal 2016](#), BaSIS methodology – available online: www.bantusyntaxinformationstructure.com/methodology/)

Questionnaire on Information Structure

Who is hitting the ball?

S1-110



ConditionF Item6

Who is eating the apple and who is eating the banana?





S1-33



ConditionB Item2

Does William have four melons?

S1-28

		
		
Samuel	Thomas	William

Item3



QUIS

Kikuyu (E51) (Morimoto field notes)

(3) I> [FOC] [BG]

A: {Audu loves his car. Yesterday he took care of it.}

B: ne gu-thabía a-ra-mé-thabi-rié kanane gu-thodéka a-ra-mé-thodék-ire?
FOC INF-wash 1SM-PST-9OM-wash-PFV or FOC INF-fix 1SM-PST-9OM-fix-PFV

‘Did he wash or fix it?’

State of Affairs focus

A: ne gu-thodéka a-ra-mé-thodék-ire
FOC INF-fix 1SM-PST-9OM-fix-PFV

He FIXED it.

State of Affairs focus

Examples how IS influences Bantu grammar

- Predicate doubling
- Subject inversion
- Conjoint/disjoint alternation

Predicate doubling

Kĩĩtharaka (E54, database Kanampiu & Van der Wal)

- (4) **Kû-rúgă** **n-káá-rúg-a.** [Topic]
15-cook 1SG.SM-FUT-cook-FV
'I will indeed cook.'
- (5) I **kû-rííngá** **tû-rííng-iré** ng'-óombé, tû-tí-ra-cí-thaik-a. [Cleft]
FOC 15-hit 1PL.SM-hit-PFV 10-cows 1PL.SM-NEG-YPST-10OM-tie-FV
'We HIT the cows, we didn't tie them.'
- (6) **Ba-kí-bá-thírí-á** **kû-ba-thíría** [In situ]
2SM-DEP-2OM-finish-FV 15-2OM-finish
'They completely finished them.'

Predicate doubling

Rukiga (JE14, database Asiimwe & Van der Wal + p.c.)

(7) O-ku-hínga tu-hing-íre.
AUG-15-dig 1PL.SM-dig-PFV

- | | |
|--|---------------------|
| a. 'As for ploughing, we ploughed...' | Contrastive |
| [We were expected to dig and feed the animals] | |
| b. '(Yes,)We did actually plough.' | Verum |
| [There is doubt as to whether we did the ploughing] | |
| c. 'We ploughed a lot!' | Intensive |
| [The boss expected us to cover only one part but we did the whole field] | |
| d. 'We ploughed anyway.' | Depreciative |
| [It's planting season but there is no rain] | |

Subject inversion

Kinyarwanda (JD61, Ngoboka 2016: 356)

- (8) a. Abáana nti-ba-nywá inzogá.
2.children NEG-2SM-drink 9.alcohol
'Children don't drink alcohol.'
- b. Inzogá nti-**zi**-nywá abáana.
9.alcohol NEG-9SM-drink 2.children
lit. 'Alcohol does not drink children.'
'It is the children who do not drink alcohol.'

Subject inversion

Kinyarwanda (JD61, Kimenyi 1980:141)

(9) Instrument Inversion

Ikarámu i-ra-andik-iish-a úmwáalímu
9.pen 9SM-PRS-write-INSTR-FV 1.teacher
'The pen is used to write by the teacher'
lit. 'The pen writes the teacher.'

Xhosa (S41, Carstens & Mletshe 2015)

(10) Default agreement Inversion

Ku-lil-é u-Sindiswa.
17SM-cry-PFV.CJ AUG-1.Sindiswa

- i. 'Sindiswa cried' (answers 'what happened?')
- ii. 'It's Sindiswa who cried' (answers 'who cried?')

Subject inversion

- The preverbal position is reserved for topical referents
- “Subject” marking can be argued to be topic agreement (Morimoto 2006, Givón 1976)
- (Then what is the grammatical role of the postverbal logical subject?)

Conjoint/disjoint alternation

Makhuwa (P31, Van der Wal 2011: 1735)

(8) a. DJ Nthíyáná o-hoó-cá (nráma).
1.woman 1SM-PFV.DJ-eat 3.rice
'the woman ate rice'

b. CJ Nthíyáná o-c-aalé *(nramá).
1.woman 1SM-eat-PFV.CJ 3.rice
'the woman ate *rice*'

Conjoint/disjoint alternation

Makhuwa (P31, Van der Wal 2014: 49)

- (9) a. CJ Eshímá e-ruw-iy-é tsiítsáale.
9.shima 9SM-stir-PASS-PFV.CJ like.that
'Shima is cooked like that.'
- b. CJ Ni-n-rúpá wakhaámá-ni.
1PL.SM-PRS.CJ-sleep 16.bed-LOC
'We sleep in a bed.'
- c. CJ Ki-naan-alé n' iipulá.
1SG.SM-wet-PFV.CJ with 9.rain
'I got wet by the rain.' lit. 'I was wetted with rain.'

Conjoint/disjoint alternation

- Verb forms can require an information-structural complement (conjoint needs a focus to follow)
- T/A morphology depends on the information-structural status of the following element

Other phenomena

- Passive
- CV exhaustive marker (Lusekelo & Van der Wal [video presentation](#))
- Augment ([Van der Wal & Namyalo 2016](#))
- Particles (e.g. [Asiimwe & Van der Wal 2021](#))



“Do not steal from widows!”



Summary

- Information structure concerns the way the information in a sentence is presented, taking into account the addressee's current attention
- Information structure can have a BIG impact on grammar – you cannot do without it!
- Question-answer pairs can be used to determine what is in focus
- Languages use different formal means to express information structure

Further reading (introductory)

- Féry, Caroline, & Sinichiro Ishihara. 2015. Introduction. In *The Oxford handbook of information structure*, ed. by C. Féry & S. Ishihara, 1-15. Oxford: Oxford University Press.
- Foley, William A. 1994. Information structure. In *The Encyclopedia of Language and Linguistics*, ed. by R.E. Asher, 1678-85: Pergamon Press.
- Krifka, Manfred & Renate Musan. 2012. Information structure: overview and linguistic issues. In *The expression of information structure*, ed. by M. Krifka & R. Musan, 1-44. Berlin: Mouton de Gruyter.
- Lambrecht, Knud. 1994. *Information structure and sentence form*. Cambridge: Cambridge University Press.