**The BaSIS basics of information structure**
Wal, G.J. van der

# The BaSIS basics of information structure

Jenneke van der Wal
August 2021



Bantu Syntax & Information Structure

# Table of Contents

## Abbreviations and symbols

High tones are indicated by an acute accent, low tones are unmarked or have a grave accent. Numbers refer to noun classes, or to persons when followed by SG or PL. All-caps indicates prosodic stress.

| | |
|---|---|
| # | infelicitous example |
| * | ungrammatical example |
| *(…) | omitting the part between brackets is ungrammatical (it must be there) |
| (*…) | inserting the part between brackets is ungrammatical (it cannot be there) |
| ACC | accusative |
| APPL | applicative |
| ART | article |
| CJ | conjoint verb form |
| CL | clitic |
| DAT | dative |
| DEC | declarative |
| DEM | demonstrative |
| DJ | disjoint verb form |
| E.C. | complement focus (*emphatique du complément*) |
| E.S. | subject focus (*emphatique du sujet*) |
| F | feminine |
| FOC | focus (marker) |
| FV | final vowel |
| GEN | genitive |
| INF | infinitive |
| int. | intended reading |
| lit. | literal meaning |
| LOC | locative |
| M | masculine |
| NEG | negation |
| NOM | nominative |
| OM | object marker |
| P1 | past 1 |
| P2 | past 2 |
| PASS | passive |
| PCF | predicate-centred focus |
| PFV | perfective |
| PL | plural |
| PL | predicative lowering |
| PST | past tense |
| RED | reduplication |
| REL | relative |
| SM | subject marker |
| TOP | topic (marker) |

## 1. About this document

In the project 'Bantu Syntax and Information Structure' (BaSIS)[1] we want to learn about the expression of information structure in Bantu languages. Which linguistic strategies do Bantu languages use to mark the focus of a sentence, for example, or for shifting to another topic? This is important because information structure has a fundamental impact on the grammar of Bantu languages. It is therefore crucial to investigate information structure so that we can fully describe and understand these languages.

For each individual language, we want to systematically discover which strategies are used for which functions in information structure. In order to do that, two things are required: on the one hand we need to gather the relevant data, and on the other hand we need to understand how we can draw the right conclusions from these data. This document aims to help in both the data gathering and the understanding. If you read and work your way through it, by the end you can explain the key concepts in information structure, you know which tests can be used to diagnose the meaning of a linguistic strategy, and you can draw conclusions about form/meaning mapping on the basis of the data that you gather from understudied languages.

The document consists of three parts. Part I presents and explains various notions in information structure. This part is built up step by step, with exercises in between. These exercises are included to help you to reflect on the notions and diagnostics for yourself, and thereby better understand the material. It is recommended to do the exercises before reading on, because they stimulate you to think and therefore retain the knowledge better. The key to the exercises can be found at the end of Part I. Part II contains a series of diagnostics to be conducted in collaboration with a native speaker informant. This is the key methodology for the BaSIS project, and with its results we can draw well-motivated conclusions on the expression of information structure in each language. Part III provides diagnostics for abstract Case and nominal licensing. This is also of essence to the BaSIS project, because the hypothesis underlying the BaSIS project is that nominal licensing is fundamentally influenced by information structure in the Bantu languages.

Especially part 2 draws on the Questionnaire on Information Structure (QUIS, Skopeteas et al. 2006), the Questionnaire on Focus Semantics (Renans et al 2011), and Van der Wal (2016). Unlike the QUIS, this methodology does not use computer-generated visual stimuli, but includes photographs, which turned out to be more recognisable and effective for native speaker informants. The photos are taken by me (Jenneke van der Wal), and may be used for purposes of linguistic fieldwork.

Throughout the three parts, references to other literature will be made only occasionally (with a selected bibliography at the end of the document), so as to not clutter the text and to avoid confusion by bringing in different points of view. What you read in this document, therefore, is just one way of looking at information structure. You are much encouraged to challenge it, to read other models and opinions, and to adjust the conceptual and empirical knowledge with good arguments.

The terms used in the field of information structure are gathered and defined in a glossary by Stavros Skopeteas and Jenneke van der Wal at the end of the document.

---

# PART I - Introduction to information structure

## 2. Information structure

When speakers form a message to communicate, they not only take into account the propositional content (who does what) but also the addressee's current attention (what is active in the addressee's mind). Speakers then package the content in bits of information in order to help a smooth communication. The same meaning can thus be packaged in different ways. This is known as 'information structure' or 'information packaging' . Differences in information structure are illustrated in (1). The propositional content of both (1a) and (1b) is that we participated in a pancake-eating event. However, only (1a) would be felicitous out of the blue, or answering a question about what we did, whereas (1b) presupposes that we ate something and identifies this as pancakes, possibly to correct the addressee's incorrect belief that we ate pizza.

(1)     a.      We ate pancakes.
        b.      What we ate was pancakes.

The context in which a sentence is used can thus influence the form it takes. In information structure, we are primarily concerned with the expressions and constructions at the sentence level, even if they are influenced by the larger discourse. We do need to know the larger discourse, though, because this gives valuable information about the context in which a sentence is used. In fact, a sentence may be perfectly grammatical and interpretable, but not felicitous in a particular context. In the context of the question in (2), only the utterance in (2a) is a proper answer, putting stress on 'we' (indicated by capital letters). The sentences in (2b) and (2c) are grammatical, but they do not make sense as answers to the question. Such infelicitous use is indicated by a hash <sup>#</sup> preceding the sentence. In contrast, the sentence in (2d) does not follow the rules of English grammar and is therefore marked as ungrammatical by an asterisk *.

(2)     Question: Who has eaten the pancakes?
        Answers:
        a.   WE did! / WE have eaten the pancakes.
        b.   <sup>#</sup>It's pancakes that we ate.
        c.   <sup>#</sup>We ate the PANCAKES.
        d.   *We pancakes ate.

There are two different aspects that play a role in information structure. The first is the ACTIVATION STATUS of referents, and the second is the functions that these may take. The activation status concerns how 'active' a referent is in the mind of the addressee and speaker: if we have just talked about pancakes, the referent 'pancakes' is still active in our minds. Activation status is further explained in section 3. The main functions in information structure are FOCUS and TOPIC, and these are discussed in detail in sections 4 and 8, respectively. Informally speaking, the focus of the sentence highlights what is new or unexpected, and the topic is the anchor for the new information (the referent that the sentence is about). In the answer in (3) below, we are anchoring information to the Hare, who functions as the topic. The new or unexpected information is that this happened at night, which is the focus of the sentence.

(3)    Question: When did the Hare trick the other animals?
       Answer: He tricked them at NIGHT!

We know that these are the information-structural roles in the answer, because of the preceding question. The question sets up the Hare as a known referent which could therefore function as an anchor, and the question asks for new information: out of all the possibilities for a time to trick the animals, which one is true? Furthermore, in English, the focus is often marked by sentence stress, indicated here by capital letters.

These information-structural functions of topic and focus should be distinguished from semantic/thematic roles on the one hand, and syntactic/grammatical roles on the other hand. Semantic/thematic roles are those such as 'agent', 'patient', 'goal', 'benefactive', etc. Syntactic/grammatical roles are subject, object, indirect object, and oblique. For example, in the answer in (3) above, 'he' not only functions as the topic, but is also the agent (semantic role) and the subject (syntactic role).

---

**Exercise 1**

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

I.    (Who will the shark bite?) The shark will bite the turtle.
II.   (What about the octopus?) The octopus was bitten last week.
III.  It's the jellyfish that swam away.

|  | shark | turtle | octopus | jellyfish |
|---|---|---|---|---|
| semantic |  |  |  |  |
| syntactic |  |  |  |  |
| information structure |  |  |  |  |

---

The semantic and syntactic roles are assumed to be universal, that is, all languages are assumed to work with semantic and syntactic roles. How languages express these roles has been studied extensively for the languages of the world: some languages use case marking to express syntactic roles, for example 'she' vs. 'her' for subject vs. object; some languages show agreement with subject and object on the verb, and word order properties are usually indicated by syntactic role as well, for example the majority of languages are said to have SOV or SVO word order. What about information structure, is that universal too? We can certainly state that all speakers of all languages package their messages; that is, the *concept* of information structure is universal. However, there is a wide variation in the linguistic means used to express information structure. Some languages use word order, some have special particles, sometimes just a tonal difference helps to package information. While much work has been done in the past decades to document and analyse information structure in the languages of the world (e.g. Zimmermann & Féry 2010, Krifka & Musan 2012, Breul & Göbbel 2010, Féry & Ishihara 2016), much work in this area remains to be done. It is important to pay attention to information structure in the description of languages, as it can have a profound influence on the phonology, morphology and syntax – no language can be fully understood without appreciating the context of an utterance and its effect on the form of a sentence.

We therefore need to study the expression of information structure across languages. Essentially, this means that we want to discover form-interpretation mappings: which aspect of information structure is expressed by which linguistic means, and vice versa, which interpretation is associated with which linguistic means? By 'linguistic means' I refer to any form of expression in the language, which could be a particle, a construction, a certain word order, etc. The interpretation combines semantic and pragmatic aspects, which need to be independent concepts that ideally can be studied across languages, such as topic, focus, or exhaustivity.

In order to find those form-interpretation mappings, the best practice is to work in two directions: from interpretation to form, and from form to interpretation. If we work from interpretation to form, we essentially ask 'How is this meaning or function expressed in language X?' and the answer will be one or more linguistic means. The other way around, working from form to interpretation, the question is 'What is the interpretation of this linguistic means in language X?'. Both can be illustrated by the example of the form-interpretation mapping found for Luganda (Van der Wal & Namyalo 2016). In Luganda, nouns can appear in two forms: with the initial vowel called the augment (*o-mwana* 'child') and without it (__*mwana* 'child'). If we work from form to interpretation, that is, if we do not know the precise interpretation of the absence of the augment, we may ask 'What is the interpretation associated with the absence of the augment in Luganda?' and find that referents of nouns without an augment can be interpreted as excluding other referents, as in 'the child and not the adults'. Therefore, we find that the absence of the augment expresses exclusive focus. The other way around, if we work from interpretation to form, we ask 'How is exclusive focus expressed in Luganda?' and find that omitting the augment on the noun is the linguistic means by which speakers can express exclusivity.

Note that often there is no one-to-one relation. There may be one-to-many relations, if one interpretation can be expressed by a number of different linguistic means, or if one linguistic strategy can be used to express different aspects of interpretation. We will see examples of such multiple relations in the following sections.

What will usually happen in the investigation of information structure of any given language, is a natural alternation between form-to-interpretation and interpretation-to-form. For example, you might first use a question-answer pair to elicit how the language expresses simple focus (interpretation) and discover that the language can use a cleft to express this (form). Since you now have the cleft, you may investigate in which other contexts clefts can be used, and thus continue working from form to interpretation. In the rest of this Part I we also go back and forth between the two, but you can keep the distinction in mind, as it influences the way we phrase the research questions.

As mentioned, the discourse/context determines the information structure of any given sentence, and it is therefore impossible to discover how a language expresses information structure from single, isolated sentences. As much as possible, we want to rely on spontaneous sentences from a recorded conversation, a narrative, or a recipe, for example, because such sentences occur in a natural context. Furthermore, longer stretches of text are necessary to track referent activation. Nevertheless, we also need to find the boundaries to form-interpretation mappings, that is, to discover which interpretation is NOT possible for a certain linguistic means. This is why we also want elicited examples. For these elicited phrases and sentences it is all the more important to first sketch a context, even if this is somewhat artificial. The diagnostics in Part II are intended to help with this.

## 3. Activation

So far, the terms 'referents' and 'expressions' have been mentioned. It is important to distinguish the two. REFERENTS are the actual concepts, things, people, and events in the real world, whereas EXPRESSIONS are linguistic forms that can refer to these referents. To illustrate, when I say 'I saw a cat', I use the linguistic expression 'a cat' to refer to the actual referent, that is, the furry feline creature that was sleeping in the garden when I saw it.



referent

expression

*Figure 1*

When discussing the information status and function of referents, therefore, it is the *referent* which is the topic, for example, and a phrase in a sentence is the topic *expression*.

To be even more precise, as speakers we actually work with the mental representation of a referent: things, people, and concepts, all exist as clusters of information in our minds. This cluster of information, about its shape, behaviour, associated words and much more, in short: this mental representation, is what we refer to by using a referential expression.



referent

mental
representation
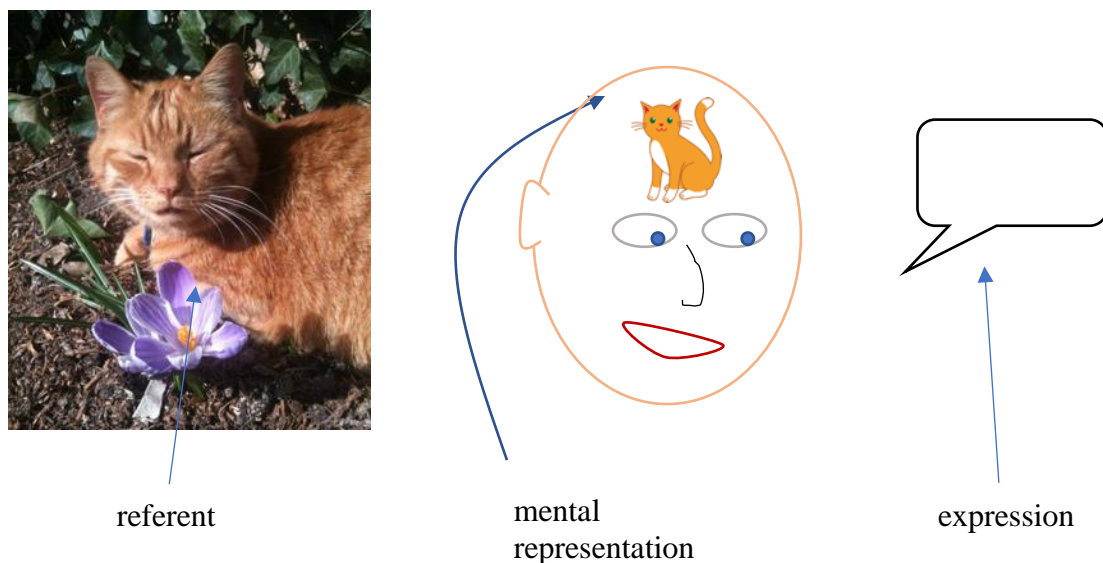
expression

*Figure 2*

You can imagine that these mental representations are activated when we think about them, as if they 'light up' in our mind. This happens also when you hear a referential expression: if you understand the language that is spoken or signed to you, the mental representations will be activated in your mind for each of the referents that the speaker refers to. This is what is referred to as 'referent activation'. Note that I may use the term 'referent' in the rest of the document as a shorthand for 'mental representation of a referent'.

**Exercise 2**
A referent becomes active in the addressee's mind when a speaker mentions that referent. But can referents be activated in other ways too? How else can a referent be or become active in the addressee's mind?

It is important to note that referent activation is a purely cognitive notion: it's just about mental representations being activated, and there is no necessary linguistic component. Furthermore, referent activation is a gradual notion: the (mental representation of) a referent can be more active or less active. In fact, after a referent has become active, the activity will decrease over time, unless it is kept active. We can imagine tracking a referent in a conversation over time as in Figure 3.
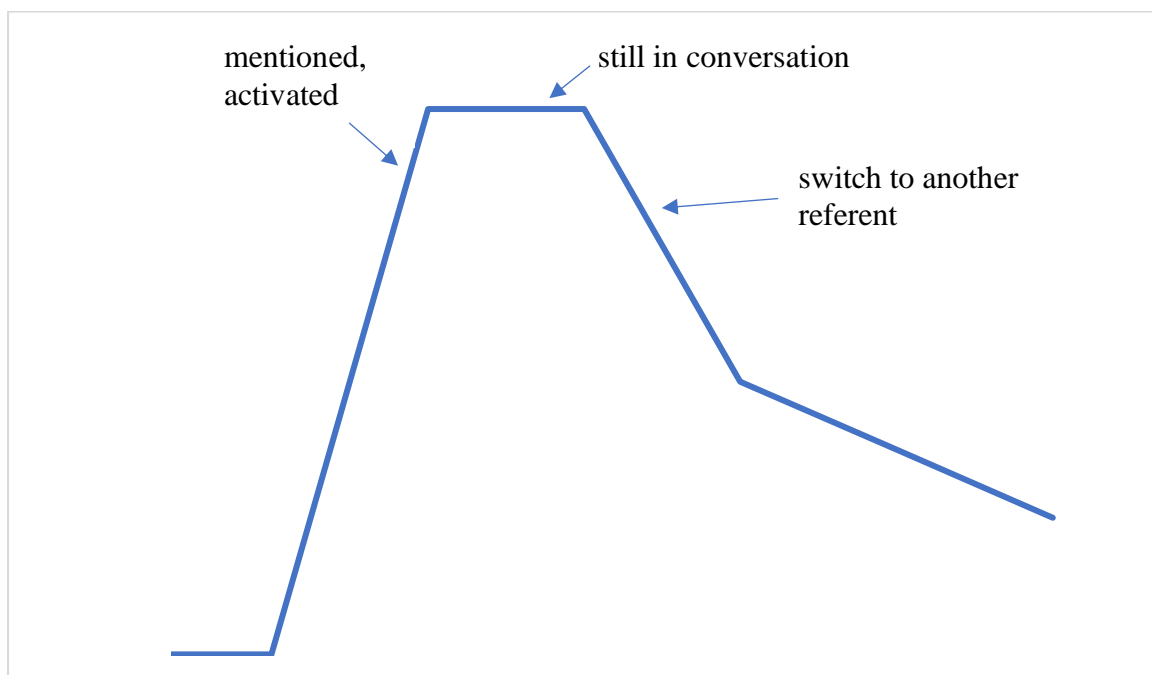


*Figure 3 – Referent activation in addressee's mind over time*

Various linguists have noted this and proposed scales or hierarchies for the various activation states. In these hierarchies, like in (4) and (5), the activation states are split into several categories. It should be kept in mind, however, that the mental activation of a referent is gradual: we assume that a referent cannot suddenly drop from being completely active to being semi-active, but rather does so gradually.

(4)     Chafe's (1976, 1987) activation states
        inactive > semi-active > active

(5)     Gundel, Hedberg and Zacharski's (1993) Givenness Hierarchy
        type identifiable > referential > uniquely identifiable > familiar > activated > in conscience

A referents' activation state influences the linguistic form that is chosen to refer to the referent. Ariel (1990, 2001) maps mental accessibility of referents to referential expressions such as an NP or pronoun. Referents that are higher in activation (more accessible in the mind of the addressee) are more likely mapped onto the latter end of the hierarchy in (6), and inactive referents to the expressions at the beginning of the hierarchy. The generalisation here is that "the more disruptive, surprising, discontinuous or hard to process a topic is [i.e. the less active and predictable, JW], the more coding material must be assigned to it" (Givón 1983: 17).

(6)     Accessibility Hierarchy (Ariel 1990, 2001)
        full name > long definite description > short definite description > last name > first name > distal demonstrative + modifier > proximate demonstrative + modifier > distal demonstrative + NP > proximate demonstrative + NP > distal demonstrative > proximate demonstrative > stressed pronoun > unstressed pronoun > cliticized pronoun > verbal person inflections > zero

It is relevant, therefore, to establish the activation state of referents in a sentence and conversation, but this is easier said than done. After all, we cannot look into the addressee's head – we can only indirectly determine how active (a mental representation of) a referent must be, by tracking its occurrence in a longer discourse or text. That is, we want to assess its anaphoric accessibility and its cataphoric persistence (Givón 1994). Ariel (2001) mentions a number of factors that influence the accessibility of a (mental) referent, which we can check in a text. These include the following (see also Givón 1983):
  - whether the referent has recently been mentioned,
  - the number of times a referent has been mentioned before,
  - the inherent importance of the referent (whether the referent is a participant in the discourse, for example),
  - the number of referents mentioned between two expressions for the same referent,
  - the cohesion of a paragraph,
  - paragraph boundaries,
  - the grammatical role (subject, object).
All these influences (and most probably others) affect the accessibility of the referent and hence the choice of the referential expression.

The activation status of a referent determines not only the expression that is chosen (as in the accessibility hierarchy), but also the information-structural function that a referent can take in the clause. More active referents are more suitable for the function of topic than less active ones, and simple focus tends to fit newly presented referents. Lambrecht (1994) proposes the 'Topic acceptability scale', as in (7). The further to the left the activation status of a referent is, the more suitable it is to form the topic of a sentence.

(7)     Lambrecht's (1994:165) Topic Acceptability Scale
        active > accessible > unused > brand-new anchored > brand-new unanchored

The difference between 'brand-new anchored' and 'brand-new unanchored' on this scale is illustrated with Lambrecht's (1994: 167) examples in (8). The unanchored 'a boy' in (8a) cannot refer to a specific, identifiable referent, whereas the combination of the indefinite 'a boy' with the definite 'in my class' makes it possible to "anchor" the referent to an identifiable referent, namely 'me'. This anchoring makes it more suitable as a topic.

(8)     a.      *A boy is tall.
        b.      A boy in my class is real tall.

We will discuss the functions of topic and focus in the next sections, and return to their interaction with referent activation.

## 4. Focus: from interpretation to form

The information in a sentence can be divided into the new or unexpected information, and the backgrounded information. The speaker can indicate this division in the sentence to focus the attention of the addressee on what is new or unexpected – this is an informal definition of 'focus' (see section 5 for a more precise definition). When a piece of information is presented by the speaker as new, contrasted, and/or unexpected, we say that this information has the focus function in the sentence. So all referents have a certain activation status (as discussed in section 3), and some may also function as the focus (or topic, see section 8). The complement of focus, the background, is discussed in section 10.

An easy and widely used test to detect the focus, is a question-answer pair. Content questions like who, what, when etc.[2] always ask for new information and have therefore been said to be inherently focused. The answer to such a question provides the new information, and so the part of the answer that replaces the question word can be said to be the focus in the answer. In (9), the question asks about the object of writing, and because of the context of this question, we can deduce that in the answer it is 'a spell' which is in focus. The focused constituent is indicated here by square brackets and a subscript $_F$.

(9)     Q: What did the elves write on the door?
        A: They wrote [a SPELL]$_F$ on the door.

This becomes even clearer when we keep the answer sentence almost the same, but change the context question and the intonation: in (10A) the sentence stress is on 'door', no longer on 'spell' as in (9A).

(10)    Q: Where did the elves write a spell?
        A: They wrote a spell [on the DOOR]$_F$.

> **Exercise 4**
> In the following question-answer pairs, underline what is in focus.
> I.      Who wanted to feed the giraffes? Jesse wanted to do so.
> II.     What will you buy at the market? At the market, I will buy watermelon.
> III.    Where can they find good eggs?  They will find good eggs halfway the main road.
> IV.     Who did the king offer an award? The king offered Abdul an award.
> V.      Which cups did he use to serve the guests? He used the blue cups.
> VI.     What did Masha do with the cupcakes? She ate the cup cakes.

The question-answer pairs are a helpful research tool in two ways.

---

[2] Note that 'why' works differently, since it does not interrogate a subpart of the sentence.

First, they can reveal which linguistic strategy a language uses to express focus. In the English examples in (9) and (10) the focus is marked by sentence stress, i.e. the element that is in focus receives a higher pitch, potential longer duration, and more intensity. In other languages, other linguistic strategies may be used. In Matengo, for example, word order plays an important role (Yoneda 2011). When providing information about what someone has been up to, the word order is SVO, as in (11). However, focus on the subject, as in (12), is expressed by a different word order, in which the focused subject appears after the verb.[3]

Matengo
(11)  Isáaya    ju-hem-í        li-koólo.
       1.Isaya   1SM-buy-PFV    5-vegetable
       'Isaya bought vegetables.'

(12)  Q:   Juí            nya?
            1SM.die.PFV   who
            'Who died?'

       A:   Jui            Áana.
            1SM.die.PFV   1.Anna
            'Anna died.'

A second way in which question-answer pairs are useful, is by indicating the size (or scope, or domain) of the focus. Different constituents of a sentence may be in focus, and question-answer pairs can help to identify, for identical sentences, whether the focus concerns the whole verb phrase, as in (13A1), or just the object, as in (13A2).

Swahili
(13)  Q1:  A-li-fanya     nini?
            1SM-PST-do    what
            'What did s/he do?'

       A1:  A-li-[nunua   mkate]F.
            1SM-PST-buy  3.bread
            'S/he bought bread.'

       Q2:  A-li-nunua    nini?
            1SM-PST-buy  what
            'What did s/he buy?'

       A2:  A-li-nunua    [mkate]F.
            1SM-PST-buy  3.bread
            'S/he bought bread.'

---

[3] This is not the only linguistic strategy that Matengo uses for subject focus, clefts being an alternative.

The focus can also target a subpart of a noun phrase, if the noun phrase contains modifiers. Focus can then be on the modifier (e.g., possessive, numeral, adjective), as in Q1 of (14), or on the noun itself excluding the modifier, as in Q2.

(14)    Q1:    Which oak did they fell?
        A1:    (They felled) the BIG oak.
        A1':    (They felled) THAT oak.
        A1'':    (They felled) YOUR oak.

        Q2:    Did they fell the big oak?[4]
        A2:    They felled the big ACACIA.

The variation in the scope (or size) of the focus can be divided into the categories shown in Figure 4. Each of these is discussed in turn below.
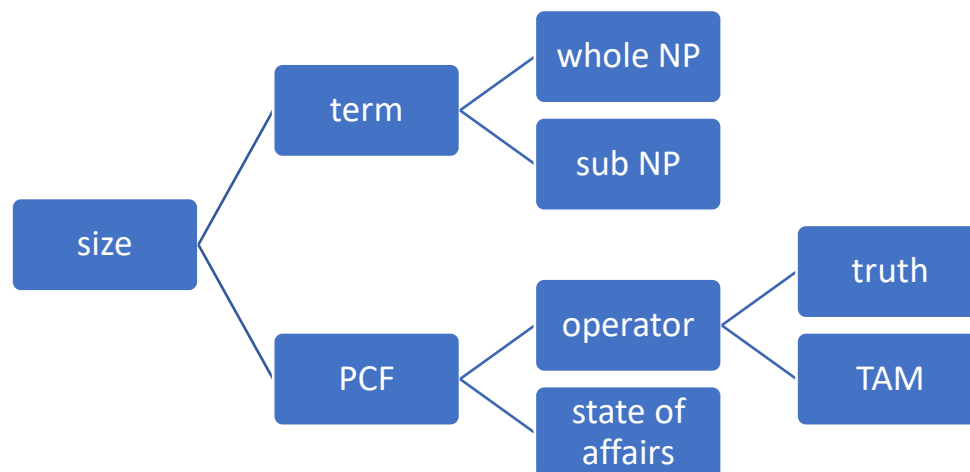


*Figure 4 – Variation in the scope of the focus (building on Dik 1997:331 and Güldemann 2009)*

TERM FOCUS concerns phrasal constituents, including arguments such as the object in (9) above, as well as adjuncts like the prepositional phrase in (10) above. Another example of term focus is given from Wolof in (15), for which Robert (2000) shows that the shape of the auxiliary indicates what the scope of the focus is.

Wolof (Robert 2000: 234)
(15)    a.    Peer   lekk  na
               Pierre  eat   PERF.3SG
               'Pierre has eaten'                             *neutral*

        b.    Peer   **moo**   ko  lekk
               Pierre  E.S.3SG  OM  eat
               'It's Pierre who has eaten it'              *subject focus*

---

[4] Note that this is not a wh question, but a corrective yes/no question. This is a more natural context for a sub-NP focus on the noun itself. Further discussion on correction can be found in section 7.

| | | | |
|---|---|---|---|
| c. | Mburu **laa** | lekk | |
| | bread E.C.1SG | eat | |
| | 'It's bread that I've eaten' | | *complement focus* |

For non-term focus, Güldemann (2003, 2009) suggest the term PREDICATE-CENTRED FOCUS (PCF). Within PCF, a distinction can be drawn between OPERATOR FOCUS and STATE-OF-AFFAIRS FOCUS. Under operator focus we find a further division: TRUTH VALUE (or polarity) focus, which contrasts between the action taking place or not as in (16), and then focus on the T(ense), A(spect) or M(ood) of the clause (TAM FOCUS), for example contrasting the present progressive versus perfective, as in (17). Under state-of-affairs focus, focus is narrowly on the lexical verb itself, as in (18). This focuses on the nature of the action or state expressed by the predicate. We could also add the broader VP focus here, as in (19), although VP focus is typically treated as a separate category.

Güldemann (2009, adapted)

(16) (I cannot imagine that the princess kissed the slippery frog.)
Yes, she DID kiss the frog. *truth focus*

(17) (Is the princess kissing the frog now?)
She HAS kissed him. *TAM focus*

(18) (What did the princess do with the frog?)
She KISSED him. *SoA focus*

(19) (What did the princess do?)
She [kissed the FROG]. *VP focus*

Focus on verbs and verb-related operators tends to be expressed in a different way than term focus. For African languages, Güldemann et al. (2015) illustrate a range of verb doubling constructions, where the focused verb can be an infinitive, nominalisation, or a bare verb, and is 'doubled' by a finite verb form in the rest of the clause, as illustrated for Yoruba in (20). In Gungbe, state-of-affairs focus can be expressed by a gerund (a reduplicated verb form) in sentence-initial position and marked by the focus marker *wὲ*, as in (21).

Yoruba (Aboh & Dyakonova 2009: 11, referring to Manfredi 1993)

| (20) | Rírà | ni | Ajè | ra | ìwé. |
|---|---|---|---|---|---|
| | buying | FOC | Aje | buy | book |
| | 'Aje BOUGHT a book.' | | | | |

Gungbe (Aboh & Dyakonova 2009: 11)

| (21) | Tí-tón | wὲ | má | jró | mì | dìn. |
|---|---|---|---|---|---|---|
| | go.out-RED | FOC | NEG | please | 1SG | now |
| | 'I don't want GOING OUT now.' | | | | | |

> **Exercise 5**
> Taking the example sentence 'Ali showed Evie a purple book yesterday', how can you check whether it can express all the different sizes of focus? Can it express subject focus? Truth focus? Etc. Give (all) the questions to which the sentence can form a felicitous answer.

> **Exercise 6**
> Form 3 felicitous question-answer pairs in a language you speak natively. Make explicit which linguistic strategy is used.

Question-answer pairs thus work straightforwardly from interpretation to form: we take a test for focus (simple or 'new information' focus in question-answer pairs) and apply it to languages to discover which strategy or form they use to express it, as you have done in Exercise 6**.**

---

Important points in this section:
- Focus typically forms the new or contrasted information in the sentence.
- Question-answer pairs can be used to detect what is in focus.
- Different parts of the sentence can be in focus, an important division being term-focus versus predicate-centred focus.

---

## 5. Focus: from form to interpretation

We now switch to investigating in the opposite direction, from form to interpretation: we take a particular linguistic strategy and want to discover what precise function or interpretation it has. For example, if we find an infinitive doubling strategy as in (20) above, we want to know whether it expresses state-of-affairs focus, or truth focus, or perhaps can be used to express both. In order to discover this, and in order to be able to show evidence for the answer, three things are required: we need a more specific definition of what focus is, we need to see in which natural contexts a strategy is used, and we need systematic diagnostic tests, as presented in Part II. I elaborate on each of these three needs.

A more specific definition of focus was proposed by Rooth (1985, 1992, 1996). In his Alternative Semantics, he explains that focus can be seen as triggering a set of alternatives for the focused referent. The set of alternatives can be very big, as in the case of a content question – the meaning of a content question can be seen as denoting the whole set of possible answers (Hamblin 1973). The set of alternatives can also be smaller, depending on the context. For example, in the earlier answer 'she bought bread', the focus on the object triggers a set of alternatives that is restricted to things she could have bought: rice, chicken, cauliflower, …. The alternatives indicate how things may have been different, which is something that the speaker and addressee silently take into account when they use focus. Out of those alternative possibilities, focus asserts that the one mentioned in the sentence is true, for example that the action of buying is true for the referent 'bread'. Nothing needs to be said about the alternatives; they can simply be there. However, it is possible to operate on the set of alternatives, as we shall see in section 6. For now, we adopt the definition of focus as *triggering a set of alternatives*.

In our study of specific linguistic strategies, we want to observe when each strategy is used. That is, in which context and with which implied or inherent interpretation do we find the strategy in natural language use? With this approach, we view language as a natural

object, just as a biologist would. If a biologist wants to research a giraffe, they will observe closely in which habitats the giraffe lives, what it eats, and how it behaves. Similarly, a linguist wanting to research a linguistic strategy should observe closely in which contexts this linguistic strategy is found, which words are used in the strategy, and what interpretational 'behaviour' it exhibits in each context. As an example, take a look at the Makhuwa strategy of postverbal subjects. Makhuwa can be said to have a canonical SVO word order, and VS order seems to have an effect on the information structure. Therefore, we search for where VS order occurs in natural language. Browsing through a collection of narratives, we find that VS order is typically used in two contexts: at the beginning of a narrative, as in (22); and when a referent is (re)introduced, as in (23).

(22)   Nihúkú ni-motsa ohíyú    waa-nú-mwááryá    mweéri.
       5.day  5-one   14.night 3SM.PST-PERS-shine   3.moon
       'One night the moon was shining.'

(23)   Vánó   hwíyá-w-aaká        khutsúpa.
       now    NARR.IPFV-come-HAB   hyena
       'And then came Hyena.'

From these observations we can deduce that VS order is naturally used with referents that are not very active, that still need to be brought into the addressee's attention. More information is needed to draw conclusions on the precise function of the VS strategy, but studying the 'natural environment' of a strategy is crucial in discovering its interpretation.

Approaching language as a natural object also means that it can be studied following the scientific method. As you probably know, the first step in this method is the observation of a phenomenon, in our case a particular linguistic strategy. The second step is to form a hypothesis, for example that this linguistic strategy expresses focus. In step three, we test this hypothesis, by seeing whether the predictions that the hypothesis makes are actually true. If the test results are positive, the hypothesis still stands, and in our case we have evidence that the strategy expresses focus. If the test results are negative, then we have to revise the hypothesis and start again at step 2.
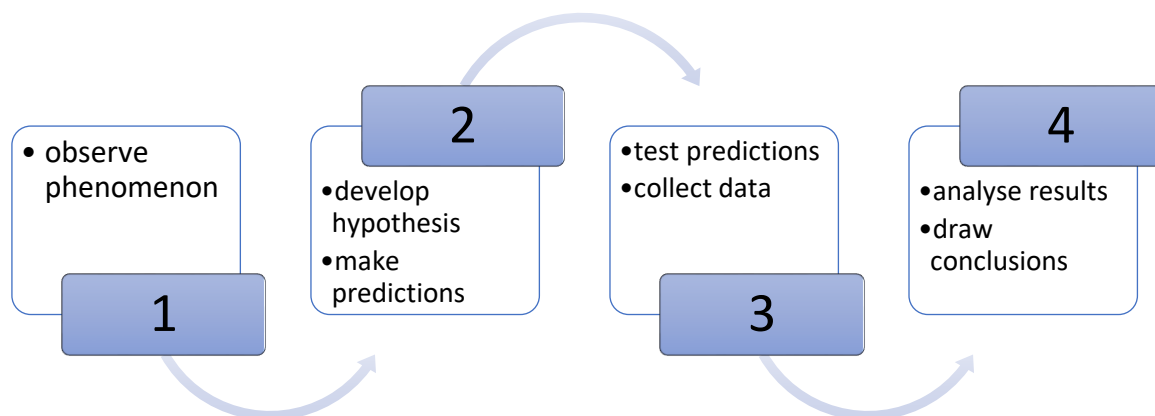


*Figure 5 – The scientific method*

Let's see how this works for focus in Rukiga. <u>Step 1</u>: In Rukiga, we encounter a construction with a preposed noun phrase, a marker with *ni-* and some pronominal form, followed by the rest of the clause, as in (24). We call this the 'ni'-construction. For the moment, we are not interested in its morphosyntactic structure, but just in its semantic-pragmatic interpretation.

Rukiga (Asiimwe & Van der Wal database)
(24) Muhógo ni-yó Paméla a-ryá-téeka.
9.cassava COP-9.RM 1.Pamela 1SM-FUT-cook
'It's cassava that Pamela will cook.'

<u>Step 2</u>: Considering the translation given, we hypothesise that the ni-construction expresses focus. One of the predictions this hypothesis makes, is that idioms cannot be used in the ni-construction. This is because idioms have a fixed meaning that cannot be derived compositionally from its parts. In Rukiga, for example, the idiom 'to scratch oneself with a shard' means 'to be in a bad situation, to not do well'.

Rukiga (Asiimwe & Van der Wal database)
(25) Ni-ny-eeyagúzá o-ru-gúsyo.
PROG-1SG.SM-scratch.CAUS AUG-11-shard
lit: 'I am scratching myself with a shard.'
fig: 'Things are not well with me, I am in a bad situation.'

This idiom can be used to test focus in the following way: if the function of focus is to trigger a set of alternatives and assert that the proposition is true for the referent given, then that referent must itself have a meaning that distinguishes it from the alternatives. For example, cassava can be distinguished from maize. In an idiom this is not the case: the idiomatic meaning comes as one piece and there are no relevant alternatives – 'shard' does not really mean 'shard' in the idiom, and there are no alternatives that could take its place. Thus, we can deduce that the function of focus (selecting from alternatives) and the idiomatic reading (non-compositional meaning) are not compatible with each other. This makes a strong prediction: the idiomatic reading should not be possible in the ni-construction. To test this prediction, we use the idiom in the ni-construction, and see whether the idiomatic reading is still available. If the idiomatic reading is lost, then our prediction is true, and we have (one piece of) evidence that the ni-construction expresses focus. If the idiomatic reading persists, then the test shows that this construction cannot (inherently) be a focus construction.

     <u>Step 3</u>: We presented the sentence in (26) to native speakers, who indicated that it only has the literal meaning, of scratching oneself with a shard.

Rukiga (Asiimwe & Van der Wal database)
(26) O-ru-gusyo ni-rw-ó n-a-eeyagúza.
AUG-11-shard COP-11-REL.PRO 1SG.SM-N.PST-scratch
'It's a shard that I scratched with.'
*'I'm really in a bad situation.'

<u>Step 4</u>: The idiom is thus incompatible with the ni-construction, as predicted by our hypothesis. We can conclude that the ni-construction can express focus, on the basis of our data and reasoning following the scientific method.

Just to illustrate the idiom test further, note that the opposite result was found for German. The hypothesis for German was that fronting a constituent is a focus strategy. The prediction is thus that fronting should be incompatible with an idiomatic interpretation. As shown in (27), the part of the idiom *schöne Augen* 'beautiful eyes' was fronted, and the idiomatic interpretation is still possible. The conclusion that Fanselow and Lenertová (2011) reach is therefore that fronting in German is not a dedicated focus construction.

German (Fanselow and Lenertová 2011:176)
(27)  [Schöne  AUgen]$_i$ hat  er  ihr  t$_i$ gemacht.
       beautiful  eyes      has  he  her.DAT made
       'He made eyes at her.'

Of course, this is only one test. Further tests are useful because of three reasons. First, the more tests are done, the stronger the evidence is for the analysis. Second, we need to establish whether the focus reading is an inherent function of the construction, or just comes about in the pragmatics. Third, we want to discover what the precise interpretation is: is it merely unexpectedness, or does the construction express exhaustivity, for example? These points we will return to below.

---

**Exercise 7**

Can you think of an idiom in a language you speak natively?[5] Once you have one, try to use is in the strategy/ies that you identified in Exercise 6. When used with this focus strategy, does the idiom still have its idiomatic interpretation, or only a literal one? What does this tell you about the interpretation/meaning of the strategy?

---

Important points in this section:
- Focus triggers a set of alternatives.
- To find the interpretation of a linguistic strategy, we
    - o  observe in which natural contexts it occurs, and
    - o  test the hypothesised interpretation.

---

## 6.  Beyond simple focus: presupposition, exclusivity, and scalarity

Apart from the 'simple focus' that has been discussed so far, we can distinguish identificational focus and exclusive focus. These have a more specific focus interpretation, the former coming with a presupposition of existence and the latter excluding (part of) the triggered alternatives.

Clauses may come with a 'presupposition of existence', that is, it is a given fact that some action took place, and/or that there was some referent (involved in the action). For example, the sentence 'My nieces are very smart' presupposes the existence of the nieces. If a focus strategy contains such a presupposition, the focus identifies the referent for which the statement is true. Crucially, it is known that there exists such a referent. For example,

---

[5] Idioms are often found in taboo areas such as death, sex, going to the toilet, secrets, illnesses like cancer or HIV, etc. Another area are emotions, which may be expressed with bodyparts.

take the clause 'What they saw was a mouse'. The construction 'what they saw = X' presupposes that there exists something that they saw. Or in other words: the set of referents for which 'being seen' is true must contain at least one referent – the set is not empty. This (focused) referent, the X, is then identified as a mouse.

---

**Exercise 8**

Below are two examples from Luganda. In (28), the question is formulated using SVO order, and it is possible to answer this question by 'nobody'. In (29), the question uses a focus strategy (sentence-initial position followed by a focus marker *gwe*). The answer to this question cannot be the empty set 'nobody' – it is infelicitous to deny that anyone was hit. What does the (un)acceptability of an answer giving the empty set ('nobody') tell us about the strategy used in the question? Does it contain a presupposition of existence? If the strategy does not contain a presupposition, would if be felicitous to answer 'nobody'? Why (not)?

Luganda (Van der Wal & Namyalo 2016: 360)

(28) Q:   W-á-kúbyé          ání?
          2SG.SM-PAST-hit.PFV   who
          'Who did you hit?'

     A:   Te-wá-lî.
          NEG-16SM-be
          'Nobody.', lit. 'There is not.'

(29) Q:   Aní    gw-e    w-á-kúbyê?
          who    1-FOC   2SG.SM-PAST-hit.PFV
          'Who is it that you hit?'

     A:   #Te-wá-lî.
          NEG-16SM-be
          'Nobody.', lit. 'There is not.'

---

As mentioned before, the set of alternatives triggered by the focus can just be there without anything else happening to it. The sentence then simply asserts that a proposition is true for the mentioned referent, and that there are alternatives, but nothing is stated about the truth of the proposition for these alternatives. However, it is also possible to do something with/to the set of alternatives. Two operations that can be applied to the alternatives are EXCLUSION and SCALAR ORDERING. We look at these in turn.

When alternatives are excluded, this means that the proposition is asserted to be true for the mentioned referent, and in addition that it is false for (at least some of) the alternatives. For the example sentence 'It was pancakes that we ate', what is asserted is that 'being eaten by us' is true for 'pancakes' and it also carries the meaning that this is not true for alternatives, i.e. we did not eat bananas, maandazi or samosas (illustrated in Figure 6).

*Figure 6 – Alternative referents*

An easy way to exclude alternatives is by adding a subsequent clause that explicitly rejects some or all alternatives, such as 'We ate pancakes… and not bananas' (at least one alternative rejected) or '… and nothing else' (all alternatives rejected). When all the alternatives are excluded, this is called EXHAUSTIVE FOCUS. The focus-sensitive particle 'only' is by definition exhaustive: 'only pancakes' means that there are alternatives but none of these are also true. Exclusive and exhaustive focus are difficult to tease apart – often what matters is that at least some (exclusive), and possibly all (exhaustive), alternatives are excluded. In the remainder I will refer to exclusive focus, bearing in mind that this may be exhaustive.

Exclusive focus differs from simple focus in that it changes the truth conditions of the sentence. Sketching two situations of how the world can be, as in Figure 7, we can test whether a sentence is true under both conditions or not. In the first condition (A), we see that a fisherman caught only one type of fish called *ntare*, whereas in the second (B) he caught three types of fish, say, *ntare*, parrot fish, and merlin. The sentence with simple focus 'He caught ntare' is true in both conditions, as it is irrelevant whether the alternatives are excluded or not, that is, it doesn't matter whether he caught other fish. However, a sentence with the exhaustive particle 'He caught only ntare' is only true under condition A in Figure 7, and not condition B.

A: one type of fish[6]                                    B: multiple types of fish

*Figure 7 – Conditions for exclusive focus*

This can also be illustrated by examples from Makhuwa. In Makhuwa, verbs can inflect as 'conjoint' or 'disjoint', as seen in (30). This is a strategy to express focus; more specifically exclusive focus (Van der Wal 2011). If the disjoint form as in (30a) is used, there is no special interpretation, and the disjoint form is therefore true in either condition above. If the conjoint form as in (30b) is used, the element following the verb is in exclusive focus, and hence this sentence is only true in condition Figure 7A, not Figure 7B.

Makhuwa (Van der Wal 2011: 1740, and own data)

| (30) | DJ | K-oo-lówá | enttáare. | felicitous in both A and B |
| | | 1SG.SM-PFV.DJ-fish | 9.ntare | |
| | | 'I caught ntare.' (kind of fish) | | |

| | CJ | Ki-low-alé | enttaaré. | felicitous in A, not B |
| | | 1SG.SM-fish-PFV.CJ | 9.ntare | |
| | | 'I caught *ntare.*' (kind of fish) | | |

Exclusive focus thus affects the truth conditions of the sentence, which means that this is a semantic phenomenon, not just a pragmatic one. Further discussion on the pragmatic or semantic nature of focus follows in section 7.

As said before, we need tests to show evidence that a strategy expresses exclusive focus. Using the same metaphor in biology: in order to discover more about giraffes, a biologist can feed the giraffe different types of food and see which they eat and which not. Linguists can do the same tests, by 'feeding' a strategy different types of phrases and checking which are acceptable and which are not. We have already seen this for idioms: if you feed part of an idiom to a focus construction, this is unacceptable. To test exclusivity, we can take a phrase modified by 'only', for example, or an indefinite non-specific phrase, and check the acceptability in a focus strategy. If the strategy expresses exclusive focus, it should be possible to use it with a phrase modified by 'only', since this too excludes

---

[6] This is not actually a picture of *ntare*.

alternatives. This is true for the conjoint and disjoint verb forms in Makhuwa: the conjoint form accepts the phrase, but the disjoint form rejects it.[7]

Makhuwa (Van der Wal 2011: 1739)

(31) a. CJ Ki-n-thúm'      étomati    paáhi.
            1SG.SM-PRS.CJ-buy   10.tomatoes only
            'I buy only tomatoes'

     b. DJ * Ki-náá-thúma      etomátí    paáhi.
            1SG.SM-PRS.DJ-buy    10.tomatoes only

Indefinite non-specific phrases are interesting for exclusivity too, and form a strong test. By definition, indefinite non-specifics such as 'someone', 'anything', or 'nobody' cannot exclude alternatives: any (or no) referent will satisfy. To illustrate, when I say 'I need to eat something', the natural non-specific interpretation is that I am hungry and do not care what I eat, out of the set of edible alternatives. All alternatives are therefore included. If a strategy expresses exclusive focus, it is predicted to be incompatible with the inclusive nature of the non-specific indefinite: the interpretation cannot be inclusive and exclusive at the same time. Again, this prediction is borne out for the conjoint and disjoint verb forms in Makhuwa: the non-specific interpretation is possible after the disjoint verb form as in (32a), but unacceptable after the (exclusive) conjoint verb form as in (32b). Instead, the interpretation is twisted in such a way that it becomes possible to exclude alternatives, as in (32c): if *ntthu* 'person' is interpreted as a type (a human being), then other types can be excluded, and the conjoint form is acceptable.

Makhuwa (Van der Wal 2011: 1740)

(32) a. DJ Ko-ḿ-wéha              ńtthu.
            1SG.SM.PFV.DJ-1OM-look    1.person
            'I saw someone.'

     b. CJ *Ki-m-weh-alé             ntthú.
            1SG.SM-1OM-look-PFV.CJ      1.person
            int: 'I saw someone.'

     c. CJ Ki-m-weh-alé         ntthú,   nki-weh-álé      enáma.
            1SG.SM-1OM-look-PFV.CJ   1.person NEG.1SG-look-PFV   9.animal
            'I saw a person/human being, not an animal.'

> **Exercise 9**
> In a language you speak natively, identify a linguistic strategy that can felicitously be used with a phrase containing 'only', and that does not allow a non-specific indefinite interpretation of 'someone/person'.

---

[7] The difficulty here is whether the exclusive reading of the DP could be brought about by the use of a certain strategy by itself (e.g. the conjoint verb form), or whether the exhaustive interpretation is solely due to the presence of the particle ('only'). In other words, do we interpret 'tomatoes' as exhaustive because of 'only' or (also) because of the conjoint verb form?

So far, we have seen that the set of alternatives that is triggered by focus can just remain as it is in simple focus, or some of the alternatives can be excluded in exclusive focus. Another operation on the set of alternatives is to order the members of the set according to a SCALE. If we order the alternatives according to likelihood, we can express the meaning of the focus-sensitive particle 'even'. A sentence 'even Anna laughed' indicates that there were others who laughed as well, and that of that whole set of relevant people, Anna is the least likely to laugh. In other words, there is a set of alternatives, and if those are ordered on a scale of likelihood of laughing, Anna is at the far end of this scale. Or if someone weaves and sells their products on the market, we can order the products according to popularity, as in Figure 8: the bags are always the first to be sold, the baskets usually as well, but the mats hardly get any attention. When all items are sold, including the lowest on the scale, we can say 'they sold *even* the mats'.



more likely

less likely

*Figure 8 – Scalar ordering and inclusion of alternatives (pictures via Pixabay)*

Note that in many languages, including the Bantu languages, the word for 'and/with' (frequently *na* or *ni*) is used to express 'also' and 'even' as well. It is important in that case, as always, to show a clear context in which the sentence with intended meaning 'even' is used.

Important points in this section:
- Focus varies according to the scope of focus, but there is also variation in the precise interpretation. We have seen three distinguishable types:
- Simple focus only triggers a set of alternatives without operating on them, and does not have a presupposition of existence.
- When we order the alternatives or exclude (some of) them, this has consequences for the truth conditions of the clause. This was shown for exclusive focus.
- When a presupposition of existence is present, the focus is identificational.

## 7. Semantics or pragmatics

Up to now we have tried to establish mappings between forms and interpretations. It would be easy to say that a certain form 'means' the linked interpretation, for example that the Makhuwa conjoint form 'means' exclusive focus on the following element. But not every strategy that can have a certain interpretation is also a dedicated strategy to express that interpretation. Not every aspect of the interpretation needs to be an inherent part of that strategy, and not all aspects of meaning are encoded in the semantics. Thus, after establishing A) which strategies a language uses, and B) which precise interpretations are linked to those strategies, step C) is to establish whether the interpretation is encoded in the semantics of the form, or associated with it through pragmatics. In this section I discuss three aspects of meaning that have been suggested as different types of focus (see Dik 1997), and show tests and exercises to diagnose whether the interpretation is due to the semantics or pragmatics.

A first proposed type is REPLACING or CORRECTIVE focus. When the speaker suspects or knows that the addressee has a different referent in mind than the one intended by the speaker, s/he may try to correct this and replace the wrong referent with the intended one. What happens in the pragmatics is that the wrong referent is present in the context, which is how we can deduce that there is a replacive or corrective aspect to the interpretation. What happens in the semantics is that the truth for the intended referent is asserted and the wrong referent is excluded – a case of exclusive focus. Note that the corrected (and therefore excluded) part may not only concern term focus, as in (33a,b), but also scope over different parts, e.g. truth focus (33c) or focus on the verb phrase (33d).

(33)    Assumption about addressee's wrong beliefs: Amos fed the cows grass.
        Possible corrections:
        a.  No, <u>Jimmy</u> fed the cows grass.          agent/subject
        b.  No, he fed the <u>goats</u> grass.            recipient/object
        c.  No, he did <u>not</u> do so.                  truth value
        d.  No, he <u>watered the plants</u>.             verb phrase

---

**Exercise 13**

Imagine that you're showing the picture in Figure 9 to a speaker of the language you are studying. You want the speaker to give you corrections for different parts of the sentence (subject, object, verb (state of affairs), TAM, etc.). List the questions you can ask to which the speaker will give a corrective answer. Indicate for each question what the target of the correction is (and hence the scope of the focus). To target subject correction, for example, you could ask 'Is a child pushing the bike?'.



*Figure 9*

---

A second 'flavour' of focus is CONTRASTIVE. This is possibly the most confusing term, since it has been used in two ways: to express a contrast with a referent that is present in the context, and to express contrast with referents in the set of alternatives. To some extent these overlap, of course, since referents in the context are also alternatives to the focused referent. Notice, however, that there is an easy way to keep these separate: the contrast with the set of alternatives is usually said to be exclusive or exhaustive (e.g. É.Kiss 1998), and we already have a term for this: exclusive focus. We can therefore reserve the term 'contrastive focus' for the pragmatic contrast that is perceived when alternatives are mentioned explicitly and contrasted side by side. Hence, exclusive focus indicates a semantic operation, whereas contrastive focus is only pragmatic. Examples are sentences like 'The children ate *ugali* and the parents ate *rice*', where ugali is explicitly contrasted to rice, or 'Paulo *cycled* but Hadija *walked*', where two modes of movement are contrasted. Note also that a contrast is perceived between the subjects of these sentences – we will come back to this in section 9 under the notion of 'contrastive topic'.

A third pragmatic type of focus is SELECTIVE. This is found in a context where a set of alternatives is mentioned and one (or more) referents are selected from that set.

Alternative questions such as 'Do you want coffee or tea?' establish a set of two referents (namely, 'coffee' and 'tea') from which the addressee is to choose one. Or, in other words, the addressee is invited to indicate for which referent out of the restricted set of beverages his or her 'wanting' is true. if the addressee indicates 'I would like some tea', it is natural to interpret the answer as exclusive: 'I want tea, and not coffee'. However, this is not necessarily an inherent part of the meaning: wanting tea does not automatically mean not wanting coffee. The perceived exclusion of the non-selected alternative is thus in the pragmatics.

Whether an aspect of interpretation such as correction, exclusion, or selection is pragmatic or semantic can be tested by cancellation. Explicitly cancelling an aspect of meaning can reveal whether this is semantic or pragmatic: if the cancellation results in a contradiction, the aspect of meaning is an inherent part of the semantics, whereas if the resulting cancellation is acceptable, it was only a pragmatic implicature. This is a well-known test for other implicatures, as illustrated in (34).

(34)    Cookie Monster ate some of the biscuits.
   ➔ Aspect of meaning 1: He did not eat all the biscuits
   ➔ Cancellation: Cookie Monster ate some of the biscuits; in fact, he ate all of them.
   ➔ Conclusion: The sentence is fine, so this aspect is a pragmatic implicature.

   ➔ Aspect of meaning 2: He ate biscuits
   ➔ Cancellation: Cookie Monster ate some of the biscuits and he didn't eat biscuits.
   ➔ Conclusion: The sentence is a contradiction, so this is a semantic aspect of meaning.

The same cancellation test can be used for information-structural aspects of meaning. We may cancel an exhaustive aspect of meaning by adding '… and also [alternative]', as in (35).

(35)    It's Mister Bean who went to the sea side.
   ➔ Aspect of meaning: He was the only one; none of the other relevant people went to the sea side
   ➔ Cancellation: It's Mister Bean who went to the sea side, and his neighbours did so too.
   ➔ Conclusion: The sentence is strange, and only acceptable if taken as a self-correction ('wait, I'm wrong – his neighbours went too'), so the exhaustive aspect is inherent in the meaning according to this test.

Another test to diagnose exhaustivity is to correct an incomplete statement or question, as in **Exercise 14**, which is explained further below, after you have done the exercise.
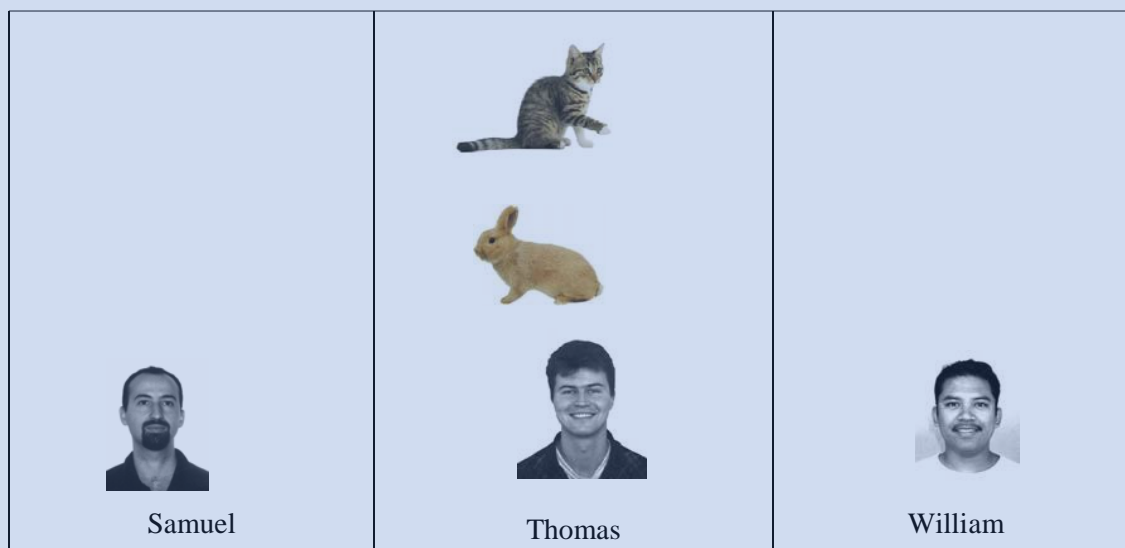
*Figure 10 – QUIS picture incompleteness*

Presenting an incomplete statement or yes/no question can trigger a corrective reply, but crucially it is not the focused constituent itself that is corrected, but only its exhaustive aspect. To illustrate, if the question were posed 'Does Thomas only have a cat?', a felicitous answer is 'No, he has a cat and a rabbit'. This corrective reply starting with 'no' does not negate the truth of the proposition that Thomas has a cat (because he does, after all), but negates that Thomas has *only* a cat, that is, the predicate is not exhaustively true for the cat – it is incomplete. The reply with 'no' indicates that there is a contradiction between the exhaustive semantics of the question and the situation in the real world (or in this case the world as depicted in Figure 10). If the reply to an incomplete question or statement naturally starts with 'no', we can deduce that the strategy used in the question or statement is exhaustive.

Alternatively, if the strategy used to ask the question does not encode exhaustivity, then there is no real contradiction between the incomplete question and the situation as presented. The incompleteness of the question 'Does Thomas have a cat?' can still be corrected, but the correction more naturally begins with 'yes', because it is true that Thomas has a cat. Speakers can then choose to continue with '… and also a rabbit' or '… but also a rabbit'. Both indicate that the strategy used to ask the question is not exhaustive, although the 'yes, but…' answer indicates that there are still implicational effects of exhaustivity, or a perceived contrast.

Having seen these different flavours of pragmatic and semantic focus, we can see how focus varies not only in its scope, as in Figure 4, but also in its interpretation. This is schematically represented in Figure 11. To all four main semantic types of focus, pragmatic effects can be added.
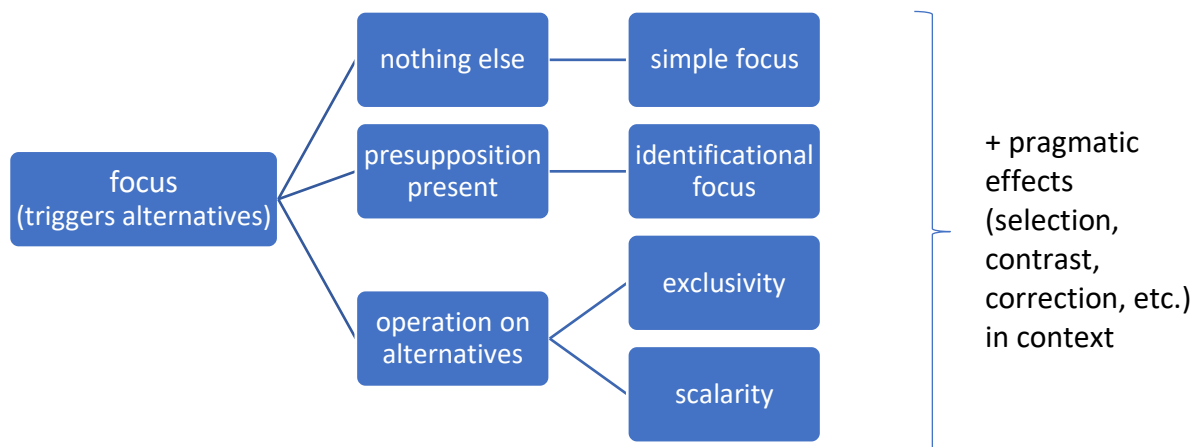
*Figure 11 – Variation in interpretation of focus*

From this overview we can extract (at least) two things: the first is that focus is only one unified function, namely triggering a set of alternatives, and the second is that the precise interpretation of a focused constituent is much more finegrained than just 'focus' or a particular type of focus, as it is sometimes presented in the literature.

> Important points in this section:
> - There is variation in the precise interpretation of focus.
> - Not all aspects of a focus interpretation are semantic, nor are they all pragmatic.
> - Tests can be used to identify whether an aspect of the focus interpretation is semantic or pragmatic.

To end this part on the function of focus, there is one last exercise to practise with all the different types of focus.

---

**Exercise 15**

For each of the example sentences below in (36) and (37), answer the following questions:
  a. Which linguistic strategy is used?
  b. What is the size of the focus?
  c. Based on the translation and/or context, which focus interpretation do you expect the sentence to have?
  d. Which tests could you apply to diagnose whether your expectation is true?
  e. Which tests could you apply to check whether the sentence can also be used with another interpretation?

Kîîtharaka (Abels and Muriungi 2008: 712)
(36)    N-îî-buku      Ruth      a-gûr-ir-e.
        FOC-5-book    1.Ruth    1SM-buy-PERF-FV
        'It's a book that Ruth bought.'

Fwe (Gunnink to appear)
(37)    (Kà-rì    nd-ákù-rìr-à,)              ku-shèk-à      nd-ákù-shèk-à.
        NEG-be    1SG.SM-NPST.IPFV-cry-FV    INF-laugh-FV  1SG.SM-NPST.IPFV-laugh-FV
        '(I was not crying,) I was laughing.'

## 8. Topic and accessibility

Next to the focus-background division of a sentence, a second split has been studied for a long time: TOPIC-COMMENT. This is also sometimes referred to as theme-rheme (see the Prague School, e.g. Hajičová's 1994 overview). The topic functions as the anchor for the information in the sentence, it is said to be 'what the comment is about'. Note that this is a function within the sentence – it need not be the wider topic of the conversation, or 'discourse topic'. So we may be involved in a conversation about healthcare (the discourse topic), and one sentence within that conversation may say something about my dentist (the sentence topic). Furthermore, we need to distinguish between the topic referent and the topic expression. Just as for focus, the referent is the actual person or thing in the outside world, which in this case happens to function as the topic; the expression is the linguistic form that refers to that referent, as explained earlier in section 3.

The function of the topic is thus to link the information given in the comment to a topic referent. For example in (38), the topic expression is 'it', the topic referent is the bottle, and the comment that is said about the topic is that is was found by an old fisherman.

(38)    (You see that bottle?) It was found by an old fisherman.

An analogy for topics is storing information in files (Reinhart 1982): the information in the message is only relevant for that file. For example, when you tell me something about my cat (that you saw it on the corner of the street, or that you hate its noise at nighttime), I will store that information in the file 'cat' in my mental storage.

> **Exercise 16**
> Let's think about the properties of topics a bit more. If the topic is the referent that the addressee attaches or anchors the information in the comment to, which properties would be helpful for a topic to have? Is it better to be active or brand-new? And better to be at the beginning or end of a sentence? Can a wh question word be a topic?

In general, human cognition works in such a way that people highly prefer to attach new information to something that they already know. The topic is thus ideally something that is familiar, that is already active in the mind. Lambrecht (1994) captures this preference in the 'Topic Acceptability Scale' as in (39): the higher a referent is on the scale, the better it can function as a topic.

(39)    Lambrecht's (1994:165) Topic Acceptability Scale
        active > accessible > unused > brand-new anchored > brand-new unanchored

It may be useful to make explicit here that the activation status of a referent is independent of its function in the sentence, even though there is a correlation. As we will see later, the topic cannot be defined as 'the given information', nor can we say that all accessible referents are topics.

Nevertheless, topics must at least be identifiable: the addressee, as an information sorter, must be able to identify where to store the information. This not only rules out the left-hand side of the Topic Acceptability Scale, but also three other types of 'untopicables':

wh words, non-specific indefinites, and parts of idioms. Wh words and non-specific indefinites do not refer to any identifiable referent – it is as if the information is addressed to 'who' or 'anyone'. Therefore, the (rest of the) message cannot be properly stored. Parts of idioms do not refer either, at least not in their idiomatic reading. The idiom 'to let the cat out of the bag' means 'to reveal a secret', but 'the cat' in this idiomatic reading refers neither to a cat nor to a secret, and can as such not be used to anchor information to. If it were to function as the topic, the referential non-idiomatic reading would be the only possible reading: 'the cat, he let it out of the bag' only means literally that he released a feline creature from a bag, not that he revealed a secret. We will come back to these 'untopicables' as diagnostics for topic in section 13 in Part II (tests 16, 22, 25).

---

**Exercise 17**

Have a look at the examples in (40), from the imaginary language Fanterese. Which strategy marks topics here, do you think? Fill in all the steps of the scientific method that you would follow to find out whether this is indeed a dedicated topic strategy:

Observation:
Hypothesis:
Prediction:
Test:

Fanterese

(40)  a.  Tut snorrok dum.
          'Uncle woke up the baby.'

      b.  Dum pwep tut snorrok.
          'The baby, uncle woke her up.'

      c.  Tut snorrok hewa?
          'Who did uncle wake up?'

      d.  Tut tshik flapa.
          'Uncle finally started the work.',
          literally: 'Uncle grabbed the tail.'

      e.  Snor pwep tut snorrok dum.
          'Uncle really woke up the baby.',
          literally: 'As for waking up, uncle woke up the baby.'

---

Coming back to the Topic Acceptability Scale (39), it states that the most active referent is ideal as the topic. This has been called a CONTINUATION TOPIC or FAMILIARITY TOPIC. However, if we always keep the same active referent as the topic, then we would never talk about anything else! So what happens when we shift the topic to a less active referent? Speakers usually mark such a shift so as to alert the addressee that they need to attach the following information to another anchor. This is related to the activation status of the topic referent, as we shall see after the next exercise.

Read the following short text from Makhuwa, and identify the following two things:

    a. Where does the topic shift? Which sentences are 'about' a different referent than the previous one?

    b. How are these shifts marked in the language? You can think about different agreement, word order, extra marking on the noun by particles or demonstratives, for example.

If the marking is too difficult for you to detect in the original Makhuwa, then note what is marked in the English translation.

(There was a muslim man who inherited a money tree, which gave money every Friday after he came back from prayers.)

1a.    Oo-ttótt-élá        ntsúrúk' uulé     esaákú esaákú-ts-éne,
      1SM.PFV.DJ-catch-APPL 3.money 3.DEM.DIST 10.sack 10.sack-PL-INT

1b.    oo-hélá     mpáani.
      1SM.PFV.DJ-put 18.inside
      'He gathered the money in many sacks and put (them/it) inside.'

2a.    Kátá   ecuumá   y-aa-vény-ér-aáwé
      every  9.Friday 9-IMPFV-get.up-APPL-POSS.1.REL

2b.    a-phiy-áká    wú,   a-swal-íkí   ecuúmá,
      1SM-arrive-DUR 17.PRO 1SM-pray-DUR 9.Friday(prayers),

2c.    a-w-aáká, aa-ttóttélá    ntsurukhú.
      1SM-come  1SM.IMPFV-gather  3.money
      'Every Friday he went out, he arrived there, prayed, and coming back, he gathered money.'

3.    Vánó oo-phíyá     okáthí w'    oóthéla.
      now   14SM.PFV.DJ-arrive 14.time 14.CONN 15.marry
      'At some point it was time to marry.'
      (lit. now arrived the time of marrying)

4.    Oo-khálá     válé thaácíri.
      1SM.PFV.DJ-stay PM   1.rich
      'By now, he was rich.'

5.    Oo-thélá,     o-ń-thélá     mwaár' áwe.
      1SM.PFV.DJ-marry 1SM.PFV.DJ-1OM-marry 1.wife  1.POSS.1
      'He married, he married his wife.'

6a.    Masi ólé    mwaár' áw'    oolé    aá-háaná    mpátthány'áawe
      but  1.DEM.DST 1.wife 1.POSS.1 1.DEM.DST 1SM.IPFV-have 1.friend  1.POSS.1

6b.    eétt-án-ak-ááwe     khalaí.
      1.walk-ASSO-DUR-POSS.1.REL  old.times
      'But his wife had a friend, whom she had known for a long time.'
      (lit. who was walking with her since long ago)

7a.    Vánó ólé     oo-pácérá:
      now   1.DEM.DIST 1SM.PFV.DJ-begin

7b.    "Oo mahíkw' éeny' áala     khu-ń-kí-shika=tho
      oo  6.days  INT   6.DEM.PROX NEG.2SG.SM-PRS-1SG.OM-care=REP

7c.    nláttú   o-núú-thél-íya       ni    thaácíri, kahiyo?
      5.problem 2SG.SM-PFV.PERS-marry-PASS with 1.rich    NEG.COP
      'And she started (to say): "Hey, these days you don't care about me anymore because you're married to a rich person, isn't it?"'

We deduced earlier that topics ideally are active referents, and as already established in section 3, more accessible referents tend to be expressed by shorter forms than less accessible referents. Combining this, a referent that continues to be the topic and is thus the most active in the mind of the addressee tends to be expressed as null, or a (bound) pronoun (in Bantu languages typically by subject marking only). We also saw that less accessible referents typically require more marking, for example strong forms of pronouns, full NPs, and modified NPs. Switching topics automatically means referring to a referent that is at that moment less accesible than the current topic. Therefore, the form that is chosen to refer to this new topic referent will likely contain more material. In the Makhuwa text, the continued topic in the first sentences is simply expressed by the subject marker, and in constrast, the switch topics are expressed by an NP with demonstratives, and by a pronominal demonstrative, respectively. This is because they are less accessible, and not because 'switch topic' is a separate type of topic: the topic function is still the same of anchoring the information in the comment.

The same marking and logic may be applied for contrastive topics, that is, when two topics are mentioned in contrast to each other. Consider the example sentence 'In the river live crocodiles and in the forest monkeys can be found', where the locations (river and forest) are contrasted, and they both function as the anchor for their respective comments ('crocodiles live there' and 'monkeys can be found there'). When two referents are under discussion, neither one is the most active and both may be coded differently than highly active continuation topics, more like shift topics. In Ngoni, a medial demonstrative can be used to 'boost' the accessibility of a referent, as often happens when a referent has just been introduced, as in (41). The same demonstrative can also be used to mark shift and contrastive topics, as in (42).

Ngoni (H. Kröger ms.)
(41) a.     Aka-ve'     mu-nalôme, n-nupata-ji
           3SM.PST-be 1-man      1-hunt-1.NMLZ
           'There was a man, a hunter

     b.     ni     n-tega-ji      mi-tego ya    nyama.
           and   1-trap-1.NMLZ 3-trap   3.of   9.animal
           and a trapper.'

     c.     **Jôno'**    aka-ve'      na    a-hana=mundu   va    w-iwo.
           1.DEM.M   3SM.PST-be   with  1a-wife=his      2.of   14-jealousy
           'He had a jealous wife.'

(42) a.     Hêno ka-ikêge     va-vêna… a-jaula kw-a-lola a-nyonga   Itikamili.
           now   2a-woman 2-two      1SM-go  15-2-see 2-mother   Itikamili
           'Meanwhile two women … went to see Itikamili's mother.'

     b.     A-ikêge      va-um  a-panginai    ma-hengo ku-xi-pitali    ni
           1a-woman 2-one    2SM-work.IPFV 6-work      17-7-hospital  and
           'One woman was working in the hospital and

c.  vangi=**a**           aka-ve' va-ukombo'     ku-tangana hi-tau' yambone.
    2.other=**2.DEM.M**   2SM-be 2REL-15-be.able  15-tell      8-story 8.good
    and the other was able to tell good stories.'

---

Important points in this section:
- The topic functions as the anchor for the comment, it is what the sentence is about.
- Topic referents need to be at least identifiable, and prefer to be high in accessibility.
- When the topic is shifted, the new topic referent is less accessible and therefore usually more marked than a continuation topic.

---

## 9.  More on topics

A question that is debated is whether 'contrastive topic' is a separate function that is different from 'topic', or whether there is just one topic function which happens to induce a contrast in some context or with some (less accessible) referents (cf. Büring 2003). One of the reasons to suspect a separate function is that the perceived contrast may also be implied and not expressed explicitly. An example is the Rukiga marker -*o*, as illustrated in (43). The marker *zo* is optional here, but when it is present, a contrast is perceived: the addressee infers that either there are other animals that he will perhaps not let graze, or other jobs than cow-grazing.

Rukiga (Asiimwe & Van der Wal database)
(43)    E-nté          **z-ó**    a-ryá-zi-rí-is-a.
        AUG-10.cows    10-CM     1SM-FUT-10OM-eat-CAUS-FV
        'As for (the) cows, he will let them graze.'

Typical for contrastive topics is that there is an implicit or explicit contrast but no exclusion (unlike with focus). Therefore, the question whether the predicate is true or false for other referents or not can remain open, as can be indicated by a following clause 'but I don't know about other referents'. This can be tested with a subset answer, as in (44). The question is about food in general, but the plantains are mentioned as a subset of the food. Including the marker *byo* suggests that there are other things, which may or may not have been cooked. We know that the noun phrase *ebitookye* 'plantains' is in a left-dislocated position, which is used for topics, because the verb contains an obligatory object marker -*bi*-.

Rukiga (Asiimwe & Van der Wal database)
(44)    Q: Has Saudah cooked food?

        A: Ebitookye (byó) yáábitéeka - ebíndi tíyaabiteeka / ebíndi tíndikumanya.
        e-bi-tookye     bi-o a-a-bi-teeka          e-bi-ndi      ti-a-a-bi-teeka
        AUG-8-plantains 8-CM 1SM-N.PST-8OM-cook AUG-8-other  NEG-1SM-N.PST-8OM-cook

        / e-bi-ndi      ti-n-riku-manya
        AUG-8-other  NEG-1SG.SM-PROG-know
        'The plantains she cooked - the rest she didn't cook / the rest I don't know.'

Another debate concerning topics is the status of multiple topic expressions in one sentence. There are three ways of conceptualising multiple topics. The first is as subsets of each other, with each topic further specifying and narrowing down the precise topic referent to which the comment applies. In our file analogy, this is like first finding a folder, then another folder within that folder, and then a file within that subfolder. Asian languages are well-known for such sequences of topics, as in (45), where subsequent topics must form a subset of earlier topics and not the other way around. Thus, the situation is narrowed down from China to big cities in China, and then to Shanghai, and to this specific topic the comment applies.

Chinese (Paul & Whitman 2015: 12)
(45) a.  Zhōngguó,  dà  chéngshi,  Shànghǎi,  jiāotōng  bǐjiào  luàn.
         China       big city     Shanghai    traffic    relatively  chaotic
         'As for China, as for its big towns, Shanghai, the traffic is rather chaotic.'

     b.  *Shànghǎi,  Zhōngguó,  dà  chéngshi,  jiāotōng  bǐjiào  luàn.
         Shanghai     China       big  city      traffic    relatively  chaotic
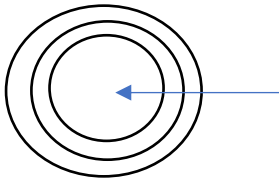


*Figure 12 Multiple topics as specifying subsets*

Alternatively, multiple topics can sketch in more detail the situation to which the comment applies. In our file analogy, this would be like pasting the information into two files. This is often the case with adverbs, such as the traditional fairy tale opening in (46): the situation to which the comment ('a dragon lived there') applies holds true for both 'a long time ago' and also 'a country far away'.

(46)  A long time ago, in a country far far away, there lived a dragon.
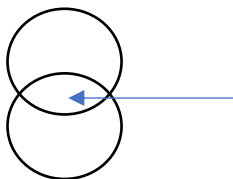


*Figure 13 Multiple topics as intersection*

A third construction with multiple topics embeds a whole topic-comment combination within the comment of another sentence, as illustrated in (47). Here, the information 'those cows gave birth there' is about the topic 'that person', and within that information, 'those cows' functions as a topic for 'they gave birth there'.

Malila (Eaton 2015: 10, via Nicolle 2015: 51)

| (47) | TOPIC1 | | COMMENT1 | | | | | |
|------|--------|--|----------|--|--|--|--|--|
| | | |TOPIC2 | |COMMENT2 | | | |
| | Pe | umuntu ʉla | ing' ombe | ziila | zikhanyaama | pakhaaya | paala. |
| | then | person that | cows | those | they.gave.birth | at.home | there |

'Then as for that person, those cows gave birth there at home.'

Crosslinguistically, topics have a preference to occur at the beginning of the sentence. Especially such multiple topics, the first or more of which are usually loosely tied to the sentence, typically occur sentence-initially, and may typically be followed by an intonation break. Gundel (1988) states as a universal of information structure: "Every language has syntactic topic constructions in which an expression which refers to the topic of the sentence is adjoined to the left of a full sentence comment." Such topics have been called SCENE-SETTING TOPICS (mostly adverbs as in (46)) or HANGING TOPICS (as in (47)). However, note that such 'types' of topics only tell us something about the *expression* (that is, the strategy to express them) - their function as topics is still the same: restricting what the comment applies to.

> **Exercise 19**
> In a language you speak natively, create a sentence with multiple topics. Is there any marking (particles, tones, pauzes)? Is it acceptable to swap the order of the topics? If not, why not, do you think?

---

Important points in this section:
- Different types of topic have been proposed, the best known are contrastive topic, scene-setting topic, and hanging topic.
- It remains to be seen whether these are primitive categories, or combinations of the topic function with another category.

---

## 10. Further background

The separation of accessibility status and the function of topic means that not every referent that is given, or active, is necessarily topical. Active referents can also be in focus, or they can simply be part of the background. There seem to be roughly three conceptual categories for given non-topical referents. The first are so-called AFTERTHOUGHTS, where a referent is mentioned again at the end of the sentence, for example in 'She came by yesterday… your mum (I mean)'. These are always full NPs, and clearly outside the sentence, usually marked by a pause and/or intonation break. The speaker assumes that the intended referent (addressee's mum) is active enough for the addressee to identify it, therefore using a pronoun 'she' in the sentence. However, realising by the end of the sentence that this may not be the case, the speaker mentions the full NP to be completely clear.

> **Exercise 20**
> If you speak or study an SVO or SOV language with flexible word order, make a sentence with verb-subject order. Is the subject interpreted as an afterthought? Can you also make a verb-subject sentence where the subject has a different interpretation? If so, what did you change in the sentence to change the meaning?

A second category are what Chafe (1976) and Lambrecht (1994) call ᴀɴᴛɪᴛᴏᴘɪᴄs; or 'tails' in Vallduvi's (1992) terms. These are usually elements in the right periphery of the clause but with a stronger connection to it than afterthoughts, which have been called 'right-dislocated' (although this is also used as a cover term for all elements that occur out of their canonical position in a position in the right periphery of the sentence). Lambrecht (1994: 203) provides the following example, where the antitopic 'your brother' is unaccented.

(48)   He's a nice GUY, your brother.

Expressing a referent as an anti-topic is a fully conventionalised strategy, Lambrecht shows, which he claims makes it different from a real afterthought. It is known that there are differences in the syntactic status of right-peripheral elements (see overviews on dislocation in Lambrecht 2001, López 2015, and also Samek-Lodovici 2015, and references therein), but in terms of information structure they have much in common: all right-peripheral elements must be accessible; they can neither be completely new to the discourse situation, nor can they be highly active.

   A third category are elements that are not specifically marked or moved to a periphery, which form part of the comment but are not the focus. These are simply the ʙᴀᴄᴋɢʀᴏᴜɴᴅ, although the term sᴇᴄᴏɴᴅᴀʀʏ ᴛᴏᴘɪᴄ has also been proposed (Givón 1979 and later, Lambrecht 1994, Nikolaeva 2001, Dalrymple & Nikolaeva 2011). Nikolaeva (2001: 26) defines secondary topic as "an entity such that the utterance is construed to be *about* the relationship between it and the primary topic". As with the other types of topic, we may wonder whether this is a different function, as Nikolaeva describes and defines it, or an effect of activation status. It is necessary for a secondary topic to be active (not just accessible), and secondary topics are typically identified as the non-focus part within the comment. This is illustrated in (49), where both the subject John and the object Peter are active, and in Ostyak, the agreement on the verb must reflect the active (secondary topic) status of the object.

Ostyak (Nikolaeva 2001: 30)
(49)   What did John do to Peter?
        luw      Pe:tra/luw-e:l    re:sk-əs-li / *re:sk-əs-∅
        he       Peter-he-ᴀᴄᴄ      hit-ᴘsᴛ-3sɢ.s+ᴏ / *hit-ᴘsᴛ-3sɢ
        'He HIT Peter.'

Another question that comes up in the context of the background is whether backgrounded referents themselves receive any specific marking. In languages that use intonation, the background can be deaccented, for example. In the Bantu languages, we may think of word order playing a role here: if a language has a dedicated focus position, then the non-focus part of the comment may be right- or left-dislocated in order to not occur in the focus position. This is a negative or altruistic motivation: the backgrounded phrase is dislocated not because it needs to be there to receive a certain interpretation, but because it wants to *avoid* a focus interpretation, or allow another referent to be in the focus position.

**Exercise 21**
Take a look at the Zulu sentences in (50). The brackets in this example indicate phonological phrases. For each sentence, comment on the likely activation state of its referents, and indicate which function (topic, focus) you think they have, if any.

Zulu (Cheng and Downing, 2012: 248, adapted)
(50)  a.     (Bá-níké       ú-Síphó     í-mà:li.)
              2SM-give.PFV 1-Sipho    9-money
              'They gave Sipho money.' (answer to 'What did they do?')

      b.     (Bá-m-níké:           í-ma:li)        (ú-Si:pho.)
              2SM-1OM-give.PFV  9-money      1-Sipho
              'They gave money to Sipho.' (answer to 'What did they give to Sipho?')

---

Important points in this section:
- Not every element in a sentence has a special information-structural function.
- What is neither topic nor focus we call the background.
- The background can but need not be marked as such.

---

## 11. Thetic sentences

We have seen two ways of splitting the sentence: focus-background, and topic-comment. Most sentences have a split between topic and comment, because there is usually some referent to which the new information can be anchored. As mentioned, we humans really like to attach new information to something we already know, and this is why both speakers and addressees ideally pick a topic to comment on, even if the expression may be minimal, for example only as a subject marker. However, there are also sentences that do not contain a topic expression. We can say that such sentences are about the 'here and now'. This has been called a STAGE TOPIC (Gundel 1974, Erteschik-Shir 1997). As a result, the whole sentence is the comment, presenting all the information as one piece. Such sentences are called THETIC. A thetic sentence is thus one without a topic *expression*, even if there is a topic *referent*: the here and now. The opposition between thetic and categorical sentences is illustrated in (51), where the topic is underlined:

(51)     categorical:  <u>My auntie</u> arrived home. (e.g. What about your auntie?)
         thetic:           ___ My AUNTIE arrived home! (e.g. 'Why are you excited?')

There is a universal preference for the subject to be the topic (and vice versa), but in a thetic sentence, none of the phrases should be interpreted as topical. If the subject is *not* to be interpreted as the topic, as would happen by default, the speaker needs to indicate this. What languages tend to do is to use marking that is otherwise used for the focus, e.g. sentence stress in English, as in (51). Bantu languages tend to use other strategies to mark the subject as 'detopicalised', for example word order and subject marking. One example was given in Exercise 21, and another example of Default Agreement Inversion is given in (52b). In order to be interpreted as part of the comment (and not as the topic, as in (52a)), the logical subject appears in a postverbal position, and does not trigger agreement on the verb. It is even doubtful whether it is still the grammatical subject of the sentence!

Tswana (Creissels 2011, adapted)

(52)  a.  Basadi      ba-opela      (mo-kereke-ng).
          2.women   2SM-sing     18-9.church-LOC
          'The women are singing (in the church).'

      b.  Go-opela    basadi.
          17SM-sing   2.women
          'There are women singing.'

Different types of thetics can be distinguished. A first distinction separates specific lexical predicates or semantic fields that are typically used as thetics. Within the rest, different types are distinguished according to their discourse functions, as in the overview in Figure 14. These types combine insights from Sasse (1996, 2006) and Garcia (2016).
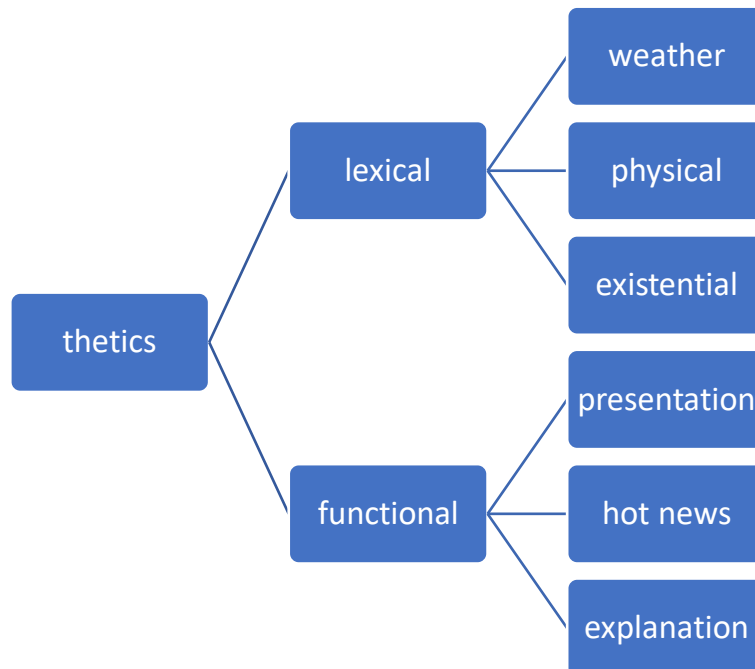


*Figure 14 – Types of thetics*

The types are illustrated in (53), and prompts for each of these are included in Part II:

(53)  a.   *It is snowing* (weather statement)
      b.   *My HEAD hurts* (physical sensation)

c. *There are three Tasmanian devils in the zoo* (existential)
d. *HERE's John / And then there appeared a SHIP* (presentation)
e. *The POPE died / DINNER's ready* (hot news statement)
f. (I couldn't come because) *my SON was ill* (explanation)

As with other semantic-pragmatic categories of information structure, thetic sentences are best recognised in context, which for presentatives and hot news statements is typically an 'all new' or 'out of the blue' context. It is often said that the answer to a question 'what happened?' is necessarily 'all new', but this is problematic. Because some referents are permanently or situationally available, these can be pushed into a topic function (Givón 1983, Erteschik-Shir 2007). For example, 'the moon', 'the queen', or 'the newspaper' are all such that they can always form the topic, even if they have not been mentioned in the previous discourse, or the sentence is uttered without any preceding discourse. Since speakers have a very strong preference to form categorical sentences containing a topic and comment, it is likely that such permanently available referents function as topics even in a context that might otherwise favour a thetic statement. Therefore, while the question 'what happened?' may indeed trigger a thetic sentence in the reply, we should be careful to check (in the context and interpretation) whether it really is thetic.

> **Exercise 24**
> For each of the following sentences, try to find two different contexts: one context in which the sentence receives a thetic interpretation, and one in which the interpretation is categorical. The intonation of the sentence may differ between the two.
>
> (54) a. My nose itches.
> b. The shower broke.
> c. There arrived a pirate.
> d. A mouse ran across the table.

García (2016) also shows that in many languages across the world, the strategies used to express thetic sentences overlap with those expressing MIRATIVITY, that is, surprising or unexpected information. The contrast with the addressee's expectations also brings it into the domain of focus: apparently there are alternative propositions that the addressee finds more likely. For Italian, Cruschina (2012) shows that the unexpected information can be fronted, as in (55), and that this is not necessarily a focus strategy, at least not to focus on the fronted element itself – rather, the whole situation is presented as surprising. The relation with thetics can easily be seen, as these too present a situation as one piece of information.

Italian (Cruschina 2012:120)
(55) a. Ma guarda       te!  IN  BAGNO    ha    messo le   chiavi!
             but look.IMP.2SG   you  in  bathroom  have  put    the  keys
             'Look at that! He put the keys in the bathroom!'

    b.       Non-ci  posso           credere!
                not-to.it can.PRS.1SG     believe
                DUE     BOTTIGLIE    ci        siamo        bevuti!
                two     bottles         REFLCL   be.PRS.1PL   drink.PP
                'I can't believe it! We drank two bottles!'

It remains to be seen whether unexpectedness fulfills a separate role in information structure, or whether it is a (pragmatic) part of theticity or focus.

---

Important points in this section:
- Not all sentences have an internal structure (topic-comment/focus-background): thetic sentences form one piece of information.
- Thetic sentences have a stage topic, and may lack a topic expression.
- The subject is detopicalised in thetic sentences.

---

We have come to the end of Part I. With the information in Part I and the practice gained from the exercises, you now have the basic knowledge and skills to work with information structure in the languages of the world. The most important points overall are
1. We want to know the mapping between an information-structural interpretation and its expression in a language,
2. We work in two directions: form-interpretation and interpretation-form,
3. We want to have evidence for our analyses, in spontaneous speech and in diagnostics.

Part II offers a range of diagnostics to be used in testing both interpretation and expression of information structure.

# Key to exercises BaSIS basics of information structure

The exercise is repeated, and (possible) answers are given in blue.

## Exercise 1
For each argument in the following sentences, identify its role at the three levels, filling in the table.
- I.  (Who will the shark bite?) The shark will bite the turtle.
- II.  (What about the octopus?) The octopus was bitten last week.
- III.  It's the jellyfish that swam away.

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

## Exercise 2
A referent becomes active in the addressee's mind when a speaker mentions that referent. But can referents be activated in other ways too? How else can a referent be active in the addressee's mind?

A referent can also be active in someone's mind simply by being present in the surroundings; for example if there is a plant in the room, or a chicken in the yard where we are talking, this referent will be more accessible. Items that are in current news may also remain active in the addressee's mind, for example a report about a waterspout or a wedding may activate these concepts so that in a conversation you can mention 'the wedding' and the addressee knows that you are talking about that wedding that the whole town has been talking about over the last days. Referents can also become (somewhat) active when they are associated with an active referent, for example in 'We went to a restaurant. The waiter was very funny.' – the waiter has not been mentioned but can be inferred from the mentioning of a restaurant (cf. Clark's 1977 'bridging').

## Exercise 3
Below you find a short text, which is an English translation of a Makhuwa recounting of the picture book 'Frog, where are you?' (Mayer 1963). This 'Frog Story' is a wordless story about a boy and a dog who search for a frog. Speakers of any language can 'read' the book and tell the story, which allows the linguist to gather spontaneous narrative speech in an easy way.

Assignment 1: Track each referent in the text. In order to do that, assign each referent a colour, for example the boy gets yellow and the frog is blue, and the combination of the boy and the dog are orange. Mark each expression in the text that refers to the same referent with the same colour. For example, mark a pronoun referring to the frog by underlining it blue, as well as the NP 'the frog', and maybe even note where the referent is omitted (phonologically null) but still interpreted.

Assignment 2: Using the hypotheses about referent accessibility and activation presented above, explain why the referents are expressed in the way they are in this text.

There once were `a dog` and `his boss`. `They` found `a frog` in `a jar`. `They` were thinking: `that frog`, how are `we` getting `it` out? `The dog` entered `_` with his head wanting to get `the frog`. `He` didn't manage to get `that frog`. Then `the boy` said "let's leave it and let's wait". `He` took off his shoes, `he` took off his shirt, `he` took off his slippers and `_` went to sleep. Now the time that `they` slept, `the frog` came out of `the jar`.

What can be observed here is that at the beginning, all referents are brand-new, and hence presented as indefinite noun phrases: a dog, a frog, a jar. Later on, definite noun phrases and pronouns are used (the dog, the frog, the jar).

The introduction of the boy happens by means of the possessive 'his boss'. This creates bridging, where the boy is new but anchored to another referent, namely the dog. Since dogs have bosses, by activating the dog, the associated referent 'boss' is also activated.

Pronouns are only used when the referent is mentioned as a noun phrase in the previous sentence: 'they' refers to the dog and the boss/boy; 'he' refers to the dog, being the subject of the previous sentence, and later instances of 'he' again refer to the boy, who is the subject of the previous sentence.

When another referent is mentioned in between, the previously active referent needs to be reactivated. For example, the boy is an active referent in the second and third sentence (as part of 'they'), after that the most active is the dog, and when we return to the boy, he is first referred to with a full noun phrase 'the boy', rather than by a pronoun.

A distinction can be made between major participants and minor participants or props. The boy and the dog are clearly major participants, but the jar less so, and the shoes/shirt/slippers are insignificant.

Twice in the text a referent is implied but not expressed: the first is the jar, that the dog sticks its head into, and the second is the boy ('and _ went to sleep'). This zero reference comes right at the end of a whole series of actions that he is involved in, making the boy highly active.

## Exercise 4
In the following question-answer pairs, underline what is in focus.

VII. <u>Who</u> wanted to feed the giraffes? <u>Jesse</u> wanted to do so.

VIII. <u>What</u> will you buy at the market? At the market, I will buy <u>watermelon</u>.

IX. <u>Where</u> can they find good eggs? They will find good eggs <u>halfway the main road</u>.

X. <u>Who</u> did the king offer an award? The king gave <u>Abdul</u> an award.

XI. <u>Which cups</u> did he use to serve the guests? He used the <u>blue</u> cups.

XII. What did Masha do with the cupcakes? She <u>ate</u> the cup cakes.

## Exercise 5
Taking the example sentence 'Ali showed Evie a purple book in the library, how can you check whether it can express all the different sizes of focus? Give the questions to which the sentence can form a felicitous answer.

Term focus
The sentence forms a felicitous answer to all the following questions:
Patient object:        What did Ali show Evie (in the library)?
Subject:        Who showed Evie a purple book (in the library)?
Recipient object:        Who did Ali show a purle book to (in the library)?

Adjunct:            Where did Ali show Evie a purple book?

PCF
The sentence forms a felicitous answer to only the SoA and VP questions, but cannot express truth focus of TAM focus, for which a different sentence needs to be used.

Truth:              Did Ali really show Evie a purple book (in the library)?
                    -> Yes, Ali DID show…

TAM:                Will Ali show Evie a purple book (in the library)?
                    -> No, Ali HAS shown / DID show…

SoA:                Did Ali give Evie a purple book (in the library)?

VP:                 What did Ali do (in the library)?

**Exercise 6**
Form 3 question-answer pairs in a language you speak natively. Make explicit which linguistic strategy is used to express which size of focus.

An example from Dutch:

| Q: | Wat | heeft | de | wolf | gegeten? |
|----|-----|-------|-----|------|----------|
|    | what | has | the | wolf | eaten |

| A1: | De | wolf | heeft | een | GEIT-je | gegeten. |
|-----|-----|------|-------|-----|---------|----------|
|     | the | wolf | has | a | goat-DIM | eaten |

| A2: | Een | GEIT-je | heeft | de | wolf | gegeten. |
|-----|-----|---------|-------|-----|------|----------|
|     | a | goat-dim | has | the | wolf | eaten |

➔ Dutch can use sentence stress to indicate object focus.
➔ Dutch can prepose a stressed object to clause-initial position to indicate (contrastive?) focus

| Q: | Wat | zal | de | wolf | met | de | kaas | doen? |
|----|-----|-----|-----|------|-----|-----|------|-------|
|    | what | will | the | wolf | with | the | cheese | do |

| A: | Hij | zal | de | kaas | SMELTen. |
|----|-----|-----|-----|------|----------|
|    | he | will | the | cheese | melt |

➔ Dutch can use sentence stress for state-of-affairs focus

An example from Luganda:
In the question in (56) we note that the question word appears adjacent to the verb, even if in a simple sentence it would be in a final position, following the object. The answer can just be a fragment, like in A1, and when it is a full sentence, the focus also wants to be in the position immediately after the verb, as seen in A2. The object which would otherwise intervene between the verb and the focus is dislocated or pronominalised. Word order thus plays a role in expressing focus in Luganda.

Luganda (Van der Wal & Namyalo 2016: 357, 358)

(56)  Q:  A-fúmbyé          á-tyá      e-m-púúta?
          1SM-cook.PFV      1-how      9A-9PX-Nile.perch
          'How has she cooked the Nile perch?'

      A1:  Bulúngi.
           'Well.'

      A2:  (Empúúta)          a-gi-fúmbyé          búlúngi.
           9A-9PX-Nile.perch   1SM-9OM-cook.PFV     well
           '(The Nile perch) she has cooked it well.'

**Exercise 7**
Can you think of an idiom in your own language? Once you have identified one, this can be used in the strategy/ies that you identified in Exercise 6. When used with this focus strategy, does the idiom still have its idiomatic interpretation, or only a literal one? What does this tell you about the interpretation/meaning of the strategy?

(see the exemplification of Rukiga in the text)

**Exercise 8**
Below are two examples from Luganda. In (28), the question is formulated using SVO order, and it is possible to answer this question by 'nobody'. In (29), the question uses a focus strategy (sentence-initial position followed by a focus marker *gwe*). The answer to this question cannot be the empty set 'nobody' – it is infelicitous to deny that anyone was hit. What does the (un)acceptability of an answer giving the empty set tell us about the strategy used in the question? If the strategy does not contain a presupposition, would if be felicitous to answer 'nobody'? Why (not)?

Luganda (Van der Wal & Namyalo 2016: 360)
(57)  Q:  W-á-kúbyé          ání?
          2SG.SM-PAST-hit.PFV   who
          'Who did you hit?'

      A:  Te-wá-lî
          NEG-16SM-be
          'Nobody.', lit. 'There is not.'

(58)  Q:  Aní     gw-e   w-á-kúbyê?
          who     1-FOC   2SG.SM-PAST-hit.PFV
          'Who is it that you hit?'

      A:  #Te-wá-lî.
          NEG-16SM-be
          'Nobody.', lit. 'There is not.'

If a strategy contains a presupposition of existence, then we know that there exists a referent for which the predicate is true. In this case: we know that somebody was hit. The

question just aims at identifying who this referent is. The answer 'nobody' indicates that the predicate is not true for any referent, that is, the set of referents for which the predicate 'hit' is true, is empty. Therefore, a focus strategy that contains a presupposition is logically incompatible with the empty set; they contradict each other.

The fact that the empty set answer is felicitous with the SVO order in question (28) suggests that there is no presupposition of existence in the question. Conversely, the incompatibility of the empty set answer with the *gwe* strategy in (29) shows that this strategy does contain a presupposition of existence, and hence that the strategy may express identificational focus.

**Exercise 9**
In a language you speak natively, identify a linguistic strategy that can felicitously be used with a phrase containing 'only', and that does not allow a non-specific indefinite interpretation of 'someone/person'.

(own answer)

**Exercise 10**
What is your prediction if you combine a phrase with 'even' and an exclusive linguistic strategy? Are they compatible or not? Explain why you predict this, using only logic and no examples.

A phrase with 'even' is predicted to be incompatible with an exclusive focus strategy. This is because 'even' indicates that all alternatives are included: the proposition is true for all the lower-ranked alternatives, up to and including the least likely referent. Since no alternative is excluded, and the focus strategy requires at least some alternatives to be excluded, the two cannot combine.

**Exercise 11**
Construct a sentence using the strategy you identified in Exercise 9. Now replace the focused element by a phrase modified by 'even', and check whether the result is acceptable or not. Is your prediction borne out?

If the strategy you identified in Exercise 9 is indeed exclusive, the sentence containing that strategy and an 'even' phrase in the focus position should not be acceptable.

**Exercise 12**
Is a phrase with a universal quantifier like 'every' and 'all' logically compatible with exclusive focus? Why, or why not?

Just like phrases with 'even', phrases with universal quantifiers include all the referents, excluding none. Therefore, we might expect universally quantified phrases to be unacceptable in an exclusive focus strategy (É.Kiss 1998): <sup>??</sup>'It's every bird that he spotted'. However, the incompatibility of a universal quantifier and exclusive focus can be remedied if the set of alternatives is specified. This can be done for example by adding a restrictive relative clause, which splits the referents in two, excluding one part. For example, in 'He spotted every bird that had a red beak', the ones that had a different colour beak can still be

excluded. Another way of specifying alternatives for universally quantified referents is to mention an alternative set in the context: 'It was every BIRD he saw, not every ELEPHANT.'

**Exercise 13**
Imagine that you're showing the picture in Figure 9 to a speaker of the language you are studying. You want the speaker to give you corrections for different parts of the sentence (subject, object, verb (state of affairs), TAM, etc.). List the questions you can ask to which the speaker will give a corrective answer. Indicate for each question what the target of the correction is (and hence the scope of the focus). To target subject correction, for example, you could ask 'Is a child pushing the bike?'.



*Figure 15*

Example questions and answers (other questions are also possible):
subject:           Is a child pushing the bike? – No, a man is pushing the bike.
object:           Is the man pushing a cart? – No, he is pushing a bike.
adjective:           Is there a red bucket on the side? – No, there is a blue bucket.
adjunct:           Is the man walking on a bridge? – No, he is walking in an alleyway.
verb phrase:           Is the man reading a book? – No, he is pushing a bike.
truth:           I don't think the man entered into the alleyway, did he? – (No) he DID enter.
state of affairs:     Is the man repairing the bike? – No, he is pushing the bike.
TAM:           Will the man push the bicycle? – No, he IS pushing it (now).

**Exercise 14**
In a language you speak natively, identify two (or even more) ways of asking 'does Thomas have a cat?'. Now, in the situation as depicted in Figure 16, what would your first response be, yes or no? Does the way in which you ask the question make any difference?
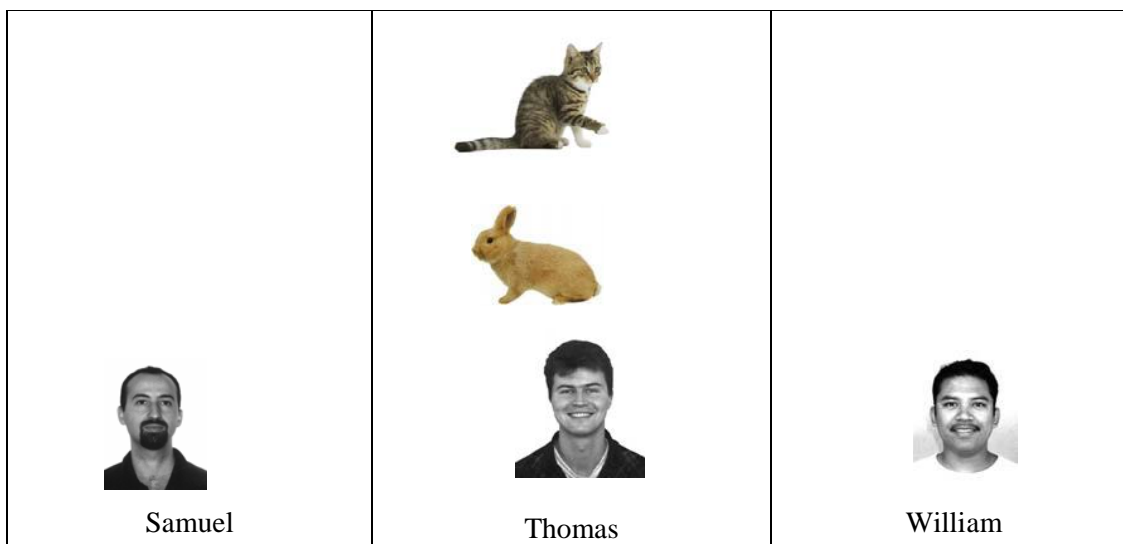
*Figure 16 – QUIS picture incompleteness*

See the text under the exercise for explanation. An example of the test for Luganda is presented in Van der Wal & Namyalo (2016: 362), where we compared the preverbal focus construction (PCF) with the in-situ construction (SVO). The answer 'no' to the question negates not that Thomas has a cat, but that Thomas has *only* a cat. The fact that the answer 'no' is possible for the PFC as in (16) suggests that the PCF expresses an exhaustive meaning. Vice versa, for an SVO question as in (60a), the answer is either a simple 'yes' (17b), or a 'yes but/and' (17c), but not a straight 'no', suggesting that this strategy does not carry exhaustivity as part of its interpretation.

Luganda (Van der Wal & Namyalo 2016: 362)
(59)  PFC question
      a.    Kkápa   Thomas        gy-e   a-li-nâ?
            9.cat    1.Thomas      9-e    1SM-be-with
            'Is it a cat that Thomas has?'

      b.    Nédda,  sí          y-okkâ,  Thomas      a-li-ná        n'   á-ká-myû.
            no      NEG.COP  9-only    1.Thomas    1SM-be-with  and  12A-12PX-rabbit
            'No, not only, Thomas also has a rabbit.'

(60)  SVO question
      a.    Thomas      a-li-ná          kkápâ?
            1.Thomas    1SM-be-with    9.cat
            'Does Thomas have a cat?'

      b.    Yee,  Thomas      a-li-ná          kkápa.
            yes   1.Thomas    1SM-be-with    9.cat
            'Yes, Thomas has a cat.'

      c.    Yee,  Thomas      a-li-ná          kkápa,
            yes   1.Thomas    1SM-be-with    9.cat

50

## Exercise 15

For each of the example sentences below, answer the following questions:

a. Which linguistic strategy is used?
b. What is the size of the focus?
c. Based on the translation and/or context, which focus interpretation do you expect the sentence to have?
d. Which tests could you apply to diagnose whether your expectation is true?
e. Which tests could you apply to check whether the sentence can also be used with another interpretation?

Kîîtharaka (Abels and Muriungi 2008: 712)

(61)     N-îî-buku     Ruth     a-gûr-ir-e.
         FOC-5-book    1.Ruth   1SM-buy-PERF-FV
         'It's a book that Ruth bought.'

Fwe (Gunnink to appear)

(62)     (Kà-rì    nd-ákù-rìr-à,)                    ku-shèk-à    nd-ákù-shèk-à.
         NEG-be    1SG.SM-NPST.IPFV-cry-FV    INF-laugh-FV  1SG.SM-NPST.IPFV-laugh-FV
         '(I was not crying,) I was laughing.'

Below are some possible tests for these examples – others may very well be possible and useful too!

For the Kîîtharaka example:

a. Preposing the focused element and marking with a marker n- (ni).
b. This is term focus, specifically focus on the patient/object.
c. There seems to be an interpretation of exclusion, and there might be a presupposition of existence and possibly of maximality (i.e. the focused referent is the maximal referent for which the proposition holds, i.e. exclusion of alternatives).
d. To test whether this is a focus construction at all, we can use it with an idiom. If the idiomatic reading is retained in this ni- construction, it is not a focus construction.
   To test the presupposition, we can use the empty set answer. We construct a question of the form 'ni *what* Ruth agûrire?' and check whether this can felicitously be answered by 'nothing'. If so, then there is no presupposition of existence.
   To test exhaustivity, we can add a following phrase '… and also an umbrella'. If this results in a contradiction, then we conclude that the strategy is exhaustive.
   To test exclusivity, we can replace the focused element with a non-specific indefinite or a phrase with 'even' (such as 'ni *even onions* Ruth agurire'). If the result is acceptable, we know that the strategy is not exclusive.
e. To test whether this construction can be used as a thetic sentence (see section 11 in Part I), we can try whether it is acceptable in an out-of-the-blue context, for example sketching a situation in which the neighbours are all excited and you ask them why they're excited, or what happened.

For the Fwe example:
a. An infinitive followed by an inflected form of the same verb
b. This is predicate-centred focus, specifically state-of-affairs focus
c. The preceding clause creates a contrast between two states of affairs, and explicitly excludes one of these alternatives ('crying'), thus has an exclusive interpretation
d. Perhaps it is possible to modify the verb by 'even', forming something like 'even to laugh I laughed' or 'to laugh I even laughed'. If this is acceptable, then the strategy is not inherently exclusive.
If the fronted infinitive construction expresses exclusive focus, it should be possible to use it with 'only' ('I only laughed'), if 'only' can be used with predicates at all.
e. To test exhaustivity, we can add '... and I also fell'. If the result is natural and acceptable, then the strategy is not exhaustive.
To test whether the fronted infinitive construction can also express truth focus, we can ask whether the construction can be used as a reaction to 'you weren't laughing'. If (62) can felicitously be used as a reaction, then it (also) expresses truth focus.
To test whether the fronted infinitive construction can also express TAM focus, we can ask wether the construction can be used as a reply to a question 'Will you be laughing?'. If (62) can felicitously be answered, then it (also) expresses TAM focus.
Testing whether the infinitive fronting construction can be used as an answer to the wh question 'What were you doing?' can reveal whether the construction is also felicitously used in a context of simple VP focus.

## Exercise 16
Let's think about the properties of topics a bit more. If the topic is the referent that addressees attach or anchor the new information to, which properties would be helpful for a topic to have? Is it better to be active or brand-new, or in between? And better to be at the beginning or end of a sentence? Can a wh question word be a topic?

See the explanation under the exercise in the text.

## Exercise 17
Have a look at the examples in (40), from the imaginary language Fanterese. Which strategy marks topics here, do you think? Fill in all the steps of the scientific method that you would follow to find out whether this is indeed a dedicated topic strategy:

Observation:	In (b), the object *dum* 'baby' is in a sentence-initial position, and followed by the word *pwep*, and the interpretation seems to be that of a topic

Hypothesis:	*pwep* is a topic marker in Fanterese, which marks the element that precedes it as topic

Prediction:	If *pwep* is a topic marker, then it is predicted to be incompatible with elements that cannot be topics, such as wh items and parts of idioms

Test:	We could ask a native speaker whether the following are correct:
- *flapa pwep tut tshik* to mean 'the work, uncle finally started it'
- *hew pwep tut snorrok* to mean 'who did uncle wake up?'
If these are acceptable to the native speaker, that means that *pwep* is compatible with elements that cannot be topics, and we conclude that our

Fanterese

(63)  a.  Tut snorrok dum.
          'Uncle woke up the baby.'

      b.  Dum pwep tut snorrok.
          'The baby, uncle woke her up.'

      c.  Tut snorrok hewa?
          'Who did uncle wake up?'

      d.  Tut tshik flapa.
          'Uncle finally started the work.',
          literally: 'Uncle grabbed the tail.'

      e.  Snor pwep tut snorrok dum.
          'Uncle really woke up the baby.',
          literally: 'As for waking up, uncle woke up the baby.'

## Exercise 18

Read the following short text from Makhuwa and identify the following two things:
   a. Where does the topic shift? Which sentences are 'about' a different referent than the previous one?
   b. How are these shifts marked in the language? You can think about different agreement, word order, extra marking on the noun by particles or demonstratives, for example.

If the marking is too difficult for you to detect in the original Makhuwa, then note what is marked in the idiomatic English translation.

(There was a muslim man who inherited a money tree, which gave money every Friday after he came back from prayers.)

1a.  Oo-ttótt-élá           ntsúrúk'  uulé        esaákú     esaákú-ts-éne,
     1SM.PFV.DJ-catch-APPL   3.money   3.DEM.DIST  10.sack    10.sack-PL-INT

1b.  oo-hélá          mpáani.
     1SM.PFV.DJ-put    18.inside
     'He gathered the money in many sacks and put (them/it) inside.'

2a.  Kátá    ecuumá    y-aa-vény-ér-aáwé
     every   9.Friday  9-IMPFV-get.up-APPL-POSS.1.REL

2b. a-phiy-áká        wú,        a-swal-íkí        ecuúmá,
    1SM-arrive-DUR        17.PRO        1SM-pray-DUR        9.Friday(prayers),

2c. a-w-aáká,        aa-ttóttélá        ntsurukhú.
    1SM-come        1SM.IMPFV-gather        3.money
    'Every Friday he went out, he arrived there, prayed, and coming back, he gathered money.'

3. Váná        oo-phíyá        okáthí        w'        oóthéla.
    now        14SM.PFV.DJ-arrive        14.time        14.CONN        15.marry
    'At some point it was time to marry.'
    (lit. now arrived the time of marrying)

4. Oo-khálá        válé        thaácíri.
    1SM.PFV.DJ-stay        PM        1.rich
    'By now, he was rich.'

5. Oo-thélá,        o-ń-thélá        mwaár'        áwe.
    1SM.PFV.DJ-marry        1SM.PFV.DJ-1OM-marry        1.wife        1.POSS.1
    'He married, he married his wife.'

The man is the topic of each clause until here, referred to by subject markers only.

6a. Masi ólé        mwaár'        áw'        oolé        aá-háaná        mpátthány'        áawe
    but        1.DEM.DST        1.wife        1.POSS.1        1.DEM.DST        1SM.IPFV-have        1.friend        1.POSS.1

6b. eétt-án-ak-ááwe        khalaí.
    1SM.walk-ASSO-DUR-POSS.1.REL        old.times
    'But his wife had a friend, whom she had known for a long time.'
    (lit. who was walking with her since long ago)

In the previous sentence (5), the wife is introduced. In this sentence (6), she is the topic, so the topic shifts from the man to his wife. She is referred to by a full noun phrase with two demonstratives.

7a. Váná        ólé        oo-pácérá:
    now        1.DEM.DST        1SM.PFV.DJ-begin

The topic here switches again, from the wife to the friend. The friend was introduced in the previous sentence, and is here referred to by a pronominal demonstrative *ole*.

7b. "Oo        mahíkw'        éeny'        áala        khu-ń-kí-shika=tho
    oo        6.days        INT        6.DEM.PROX        NEG.2SG.SM-PRS-1SG.OM-care=REP

7c. nláttú        o-núú-thél-íya        ni        thaácíri,        kahiyo?"
    5.problem        2SG.SM-PFV.PERS-marry-PASS        with        1.rich        NEG.COP
    'And she started (to say): "Hey, these days you don't care about me anymore because you're married to a rich person, isn't it?"'

**Exercise 19**

In a language you speak natively, create a sentence with multiple topics. Is there any marking (particles, tones, pauses)? Is it acceptable to swap the order of the topics? If not, why not, do you think?

As seen in the Chinese example in the text (China>big cities>Shanghai), some topics must be ordered such that they become ever more specified: the next topic is a subset of the previous one.

A similar example comes from Copi, where the first topic needs to be marked by *ka*:

(64) ka    mi-céló   ǹ-dhundh-a    ma-dî:mwa
     LOC  4-fruit   1SG.SM-like-FV  6-orange
     'Of/between fruits I like oranges.'

Another ordering restriction that has been proposed is that shift topics come first, and contrastive topics precede continuation topics (Frascarelli & Hinterhölzl 2007). This is illustrated in (65), where shift topics are italics, contrastive topics in boldface, and continuing topic underlined. Note again that these can be seen as primitive types, as Frascarelli & Hinterhölzl do, among others, but that they may also all have the same topic function and the different interpretations are due to the accessibility status of the referent and/or the context.

(65)   a.    (What about the vegetables? What did Peter do with them?)
             **The potatoes** <u>he</u> cooked, and **the carrots** <u>he</u> ate raw.
       b.    (The farmer had a chicken.)
             Now *the chicken*, **maize** it really liked but **wheat** it avoided.

## Exercise 20

If you speak or study an SVO or SOV language with flexible word order, make a sentence with verb-subject order. Is the subject interpreted as an afterthought? Can you also make a verb-subject sentence where the subject has a different interpretation? If so, what did you change in the sentence to change the meaning?

In many Bantu languages it is possible to create two VS constructions: one where the subject is indeed an afterthought, as in (66a), and one in which the postverbal logical subject is presented as new information, that is, it forms part of the comment (66b); see also the section on thetics. In Herero, the afterthought interpretation requires an intonation break between the verb and the postverbal subject, the subject marker is in the same class as the postverbal subject (here, class 2), and the postverbal subject is in the so-called 'default tone case', illustrated in (66a). In the other interpretation, the subject marker is in class 18, referring to some location, there is no prosodic break, and the postverbal noun is in the 'complement tone case', as in (66b).

Herero (Kavari et al. 2012: 332, 333)
(66)   a.    v-á         hìt-í,      òvà-ndù
             2SM-PAST   enter-FV    2D-people
             'They entered, the people.'

       b.    mw-á        hìt-í       òvá-ndù
             18SM-PAST   enter-FV    2C-people
             'There entered people.'

## Exercise 21

Take a look at the Zulu sentences in (67). The brackets in this example indicate phonological phrases. For each sentence, comment on the likely activation state of its referents, and indicate which function (topic, focus) you think they have, if any.

Zulu (S42, Cheng and Downing, 2012: 248, adapted)
(67)   a.        (Bá-níké        ú-Síphó        í-mà:li.)
                  2sm-give        1-Sipho        9-money
                  'They gave Sipho money.' (answer to 'What did they do?')

       b.        (Bá-m-níké:     í-ma:li) (ú-Si:pho.)
                  2sm-1om-give 9-money        1-Sipho
                  'They gave money to Sipho.'   (answer to 'What did they give to Sipho?')

In both sentences, the subject referent is very active – we know the 'they' that we're talking about, apparently, as 'they' are also the subject and likely topic in the question. In a) all of the verb and the two objects are presented as VP focus: from the context question we can deduce that 'giving' as well as Sipho and the money are intended as new information about the topic 'they'. In b) the context question indicates that everything apart from the patient object 'money' is active information. 'Money' forms the focus of the sentence, because it is the answer to the wh question. The subject forms the topic here (it is about 'them') and the recipient object 'Sipho' is neither the topic nor the focus: it is the background. Sipho is in a right-peripheral position, as can be seen by both the object marking on the verb, and the phonological phrasing. Buell (2009) explains that such dislocation may be due to Zulu's Immediate After the Verb focus position: because the focused object 'money' needs to be in that position adjacent to the verb, anything else needs to evacuate that position.

**Exercise 22**
What are typical contexts in which there is no active referent to take the topic function, i.e. when everything is presented as one piece of information?

- At the beginning of stories, when all referents are still to be introduced
- Out of the blue, for example when someone has 'hot news'
- Other statements about the here and now, for example about the weather

**Exercise 23**
Look back at the short story in Exercise 18. Can you spot a thetic sentence there? If so, what makes this a thetic sentence?

Vánó   oo-phíyá            okáthí   w'        oóthéla.
now    14sm.pfv.dj-arrive   14.time  14.conn   15.marry
'At some point it was time to marry.'
(lit. now arrived the time of marrying)

This is a thetic sentence because it presents all the information at once. This is not 'about' the time, or 'about' the man; instead, the fact that it was time to marry is presented as one piece of information. In Makhuwa, thetic sentences often have a VS word order (as in this example). An extra indication is the pragmatic marker *vano* 'now', which indicates that a new episode in the narrative has started.

**Exercise 24**

For each of the following sentences, try to find two different contexts: one context in which the sentence receives a thetic interpretation, and one in which the interpretation is categorical. The intonation of the sentence may differ between the two.

(68)    a.      My nose itches.
          thetic: as answer to 'why do you make funny faces like that?'
          caterogical: as answer to 'what is wrong with you nose?' – this introduces the nose, which can therefore function as a topic and anchor the new information (i.e. that it itches)

       b.      The shower broke.
          thetic: as answer to 'how come the whole place is wet?'
          categorical: 'I heard that you had trouble with your shower, what happened?' – even though this is a 'what happened' question, it only asks about what the action was that applied to the shower and therefore the answer contains a topic to which the comment ('it broke') is added

       c.      There arrived a pirate.
          thetic: someone comes running from the harbour/bus station, yelling about this news.
          categorical: it does not seem to be plausible to use this sentence in a categorical way. If 'there' would be interpreted as a specific place ('there, on the market'), the sentence would probably be 'there, a pirate arrived'.

       d.      A mouse ran across the table.
          thetic: as answer to 'you look so scared, what's up?' or when someone warns others who didn't see it
          categorical: again it is difficult to make a categorical sentence, because of the indefinite article: we need a topic to form a categorical sentence, and it would be unnatural to say 'a mouse' in that case (rather: the mouse). There is a definite referent here, though: 'the table'. If the preceding question were 'Hey, I can see tiny footprints… what happened to the table?' then the most natural would be 'a mouse ran across it', replacing the given referent (which can be seen as the topic) with a pronoun.

# PART II – Diagnostics for information structure

This part lists diagnostics for information structure. It consists of three subsections: Section 12 works from information-structural interpretation to form (how does the language express interpretation X?), and section 13 from form to interpretation (what exactly is the interpretation of strategy Y?).

As mentioned earlier, the diagnostics here are based on Van der Wal (2016), and the Questionnaire on Information Structure (QUIS, Skopeteas et al. 2006) and the Questionnaire on Focus Semantics (Renans et al 2011). It is a mix of tests, with translation tasks, visual stimuli, etc.

Here are some general suggestions when carrying out the tests (see also the general introduction to the QUIS); please read these carefully:

- Wherever possible, the tests should be adjusted to local customs and referents. For example, when the test sentence has a name 'Jorien' but this is not a familiar name, change it to whatever name is recognisable (Hamida, Maria, …). Or for activities, when the test sentence states that the women were cooking, but locally cooking is a typical activity for men, then simply change the stimulus. Similarly, if potatoes are not locally eaten, replace 'potatoes' in the example with yam or rice.
- Tests may sometimes turn out to be impossible, for example when a language does not have a passive. Also, some tests may seem too obvious, or you think you already know the answer (especially if you're a mother tongue linguist), but remember that negative evidence is very important too: we need these ungrammatical examples to show other linguists that something is impossible.
- When only the answer to a question is relevant, try to pose the question in the target language as well, e.g. by translating and possibly recording it beforehand.
- It is best to vary the tasks that an informant is asked to do. For example, you do not want to present subject question-answer pairs all in a row, but switch between diagnostics.
- When you encounter a test or phenomenon that would be easier for participants if there were pictures, you can easily find pictures on the internet, or draw things yourself. You'd be surprised how much even a clumsy drawing can explain!

The following sections contain number of tests for various categories of information structure. Each test contains
- a brief description of the task,
- an indication of which categories or areas are tested,
- an explanation of how the test works,
- concrete stimuli in words,
- visual stimuli (photos), and/or
- examples.

The stimuli attempt to cover the different semantic and grammatical roles, and are often separated accordingly (subject, object, patient object, recipient object). Different predicates are also used, ranging from unaccusatives and unergatives to mono- and ditransitives.

Many of the pictures can be used in multiple tests. For example, a picture of Daniel having bananas can be used for a question-answer pair 'Who has bananas? Daniel has bananas' or to elicit a correction by asking 'Does Frida have bananas?' ('no, Daniel has

bananas'). You are encouraged to be as creative as you want with these. All the pictures are available individually from the [BaSIS website](#).

> A final and important warning:
>
> The diagnostics are meant as a tool to help the research. This means that the researcher's questions and intuitions are the starting point and the data from the language should be the driving force in the research.
>
> Do *not* simply check all the things on the list without thinking about what they mean or without understanding why the test would be interesting. Take time to reflect on the outcome of the tests. Pay attention to what the language is showing and dig deeper where it promises to be interesting!

## 12. Interpretation to form

The diagnostics in this section are aimed at finding which linguistic strategies a language uses to express certain aspects of information structural interpretation. That is, we start out from a certain meaning and ask speakers how they express it (in an indirect way).

These diagnostics can also be used to check the appropriateness of suspected strategies in the contexts sketched in the diagnostics. By 'suspected strategy' I mean the linguistic strategy that you want to test, for example if your hypothesis is that *pwep* is a topic marker, then *pwep* is a 'suspected topic strategy'. The reason for calling it that, is that we cannot be sure whether it is a topic strategy until we have tested it.

### 1.  Referent tracking

*To do:*　　　*Find a larger stretch of text or ideally record and transcribe it, annotate the various referents (for example by colour), study how they are expressed.*
*Investigates:  Accessibility*

We want at least two texts (300-500 words), potentially the following:
- A rendition of the 'Frog story' (for easier crosslinguistic comparison)
- A traditional folktale (to reveal narrative patterns)
- A conversation between speakers (to show interaction)
- A recipe for a traditional dish
- A personal story ('when I was young…')

It may also work to ask speakers to pretend that they are quarreling, as this will likely lead to question-answer pairs and lots of corrections.

In order to track the activation status of referents in a text, marking each referent by a unique colour, as in Exercise 3**,** can be very helpful, as it allows an immediate overview of intervening referents, paragraph breaks, and recency of mention. Detailed guidelines exist for how to annotate referents and their status in a text, see for example Baumann & Riester (2012, 2017).

In the text annotated for referents, we can check whether the hypothesis is borne out that more active referents are coded by less material, and less active by more material. Additionally, it will help us in determining the interaction between on the one hand a referent's activation state and on the other hand 1) its function in a sentence, and 2) the

linguistic strategies for other information-structural aspects it occurs in. For example, it would be interesting to find that only active referents are used in clefts.


2. Map task (QUIS)

*To do:*        *Place two informants such that each has one of the two maps below, but they cannot see each other's map, for example by putting a bag or laptop between the two. Make clear that they should not look at each other's map. Instruct each of the informants: the task of the person with the route is to explain the route to the other; the task of the other is to try and follow and ask for clarification where necessary. You can also suggest that they pretend to be on the phone and the one without the route is 'lost'. It may take a while before speakers get the idea, so make sure that the task is fully understood before starting.*

*Investigates:* *(potentially all)*

*Aim:*          *Because the maps are not the same, speakers will likely ask questions, give answers, correct each other (also on the sub-NP level). We can see which linguistic strategies they use for this.*
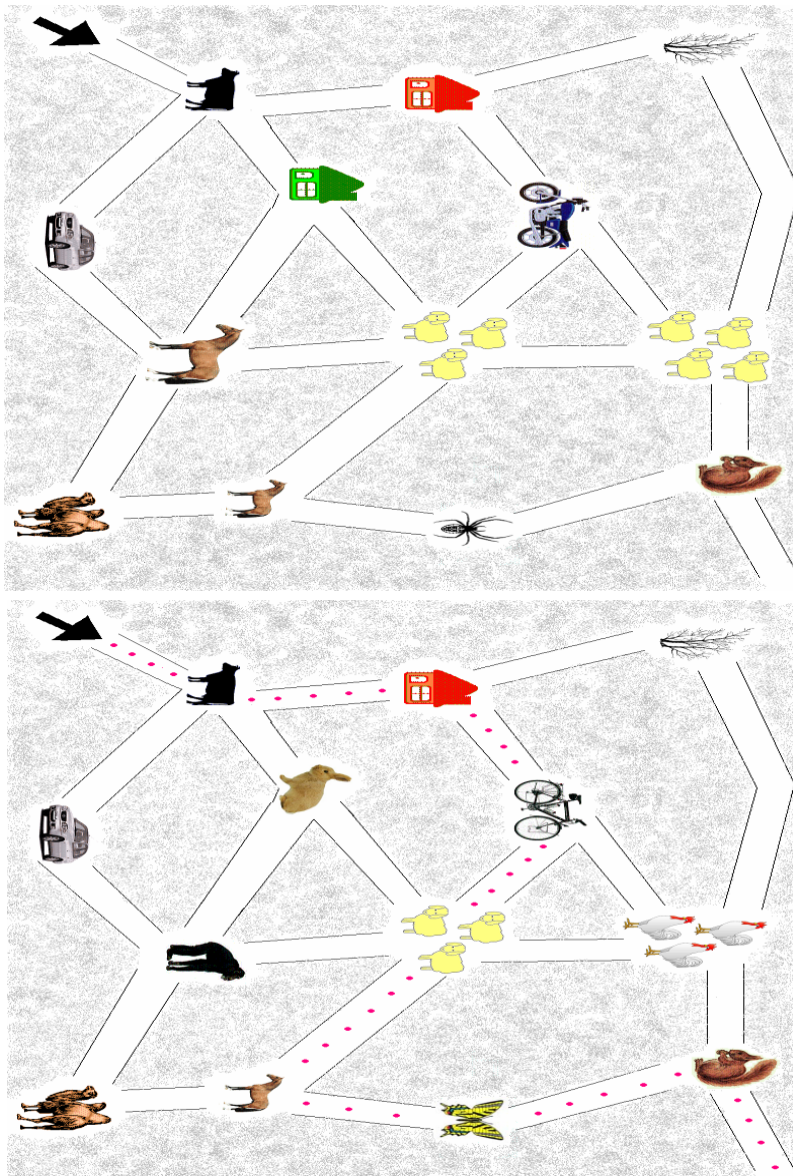
Wh questions and answers A

*To do:*      *Ask the informant to translate the wh question and to answer it using a full clause. Note also, however, whether fragment answers are deemed more natural. The answers can in principle be given as the informant pleases – the suggestions in brackets are only given to provide guidance in case both informant and researcher are out of ideas. Additionally, the influence of animacy can be taken into account (e.g. inanimate subject 'what fell down?').*

*Investigates:*   *Focus*

*Aim:*        *Both the question and the answer are interesting, as both have a focus, and both take a particular linguistic strategy. After learning which strategy is used naturally, we can also test whether other strategies are equally acceptable, for example if a cleft construction is volunteered, we may ask whether the question word can also remain in situ. See section 4 in Part I.*

Subject
- Who died? (my uncle)
- Which politician died? (the leader of the green party, the president)
- What had fallen? (the ladder, a glass)
- Who sneezed? (the teacher)
- Which student sneezed? (the tall one, Jack)
- Who closed the door? (the neighbour)
- Which idiot closed the door? (your brother)
- Who gave your dog a ball? (Kathy)
- Which kid gave your dog a ball? (the fat kid, Kathy)

Patient object
- What did Haza bake? (a cake)
- Which cake did Haza bake? (chocolate cake)
- Who did you see? (a famous football player/Joshua/the neighbour)
- Which football player did you see?
- What did grandma give the children? (a book/maize)
- Which books did grandma give the children? (books about bats)

Recipient object
- Who did grandma give mangos? (the boys)
- Which boys did grandma give mangos? (the nice ones / the football team)
- Who did she buy a necklace for? (her friend)
- For which person/party did they prepare food? (their son's birthday)

Adverbs
- How/when/where did he die? (of a heart attack, quickly / yesterday / at work)
- How/when/where did they bake the cake? (using a recipe, slowly / this morning / at school)
- What will she prepare the food with? (with a special pan / with herbs)

Predicate
- What did Jamie do to Claire? (kiss/hit/help)
- What is grandma doing with the pancakes? (eat/throw away)
- What will Omar do tomorrow? (run/visit friends/stay home)

## 4. Wh questions and answers B

*To do:*        *Present a situation by visual stimuli and pose a question. Ideally have the question translated and possibly recorded beforehand. Pose the question and ask the informant to answer it, again in a full sentence but noting whether a fragment answer is also acceptable or even preferred.*

*Investigates:*  *Focus*

Patient object: What is the woman eating? (rice)



Recipient object: Who is the woman giving a gourd to? (her colleague/friend)

VP focus: What are the women doing? (make the bed)



State of affairs/verb: What is the woman doing with the food? (throw away)



### 5. Wh questions and answers C

*To do:*     *Present a situation with multiple referents involved in multiple actions, either verbally or by visual stimuli. Ask the informant how to formulate a question about two referents, and then ask them to answer it. Alternatively, ask the informant to translate a question with multiple wh words and to answer it. Note whether the answer can be just a single answer ('Alex kissed Robin') or needs to be a so-called 'pair-list answer' (A kissed B, C kissed D, etc.). The answers in brackets are provided as a suggestion, but see first whether the informant may have their own answer.*

*Investigates:*   *Focus*

*Aim:*       *This diagnostic tests whether the language allows multiple focus constituents, and if so, how they are marked. It may also be that question words behave differently from focused answers in this respect, and it has also been observed that two arguments (e.g. who and what) may behave differently from an argument and an adjunct (e.g. who and where).*

*Note:*     *It is not common for Bantu languages to allow proper multiple interrogatives. Often, speakers will resort to posing two questions: 'Who kissed someone,*

*and who did s/he kiss?'*

*Furthermore, you can check which strategies can be used, for example whether a cleft ('It is who that she gave what?') allows different options than two in-situ wh words ('She gave who what?').*

*Also be aware of the potential interpretation as an echo question, typically when a message was not heard well ('They ate what?!').*

Subject+object

- *Situation: There is a rumour going around that various students were found kissing, but I don't know who exactly.*
  Q: Who kissed whom?
  (Alex kissed Robin (and Jan kissed Andrea))
- *Situation: The children in class have just been told about what different animals eat. The teacher wants the children to repeat their knowledge.*
  Q: Who eats what?
  (The birds eat grapes (and the aligators eat fish))

Who is carrying what?

Who is carrying what?



Object+object
- *Situation: The priest gave people different things.*
  Q: What did the priest give to whom? / Who did the priest give what?
  (The priest gave the old people rice and the young people shoes.)
- *Situation*: In a hospital, a nurse calls patients for various doctors. She calls out two patients this time, but I couldn't follow her announcement.
  Q: Who did the nurse call for whom?
  (The nurse called Mr. Kinunda for Dr. Aslan, and Mr. Hasafi for Dr. Muriungi)

Object+adverb
- *Situation: Pedro has a knack for finding valuable things; he finds things throughout the day.*
  Q: What did Pedro find when?
  (He found coins in the morning (and a phone in the evening))
- *Situation: Mariam has tidied up the house this morning, and I'm having trouble finding my things.*
  Q: What did Mariam put where?
  (She put they keys on the table (and the shoes near the door))
- *Situation: Emma is quite unreliable in the speed with which she repairs things. Before I take anything to her for repair, I ask a friend about it.*
  Q: How does Emma repair what?
  (She repairs laptops quickly (and bicycles slowly))
- *Situation: There is a rumour that a policeman hit someone.*
  Q: Who did the policeman hit why?
  (reason: He hit the thief because she was stealing / purpose: He hit the thief because he wanted her to listen) – here, it is important to establish whether either answer can be given, since a reason may be different than a purpose

## 6. Wh questions and answers D

*To do:*     *Present a situation with multiple referents involved in multiple actions, either verbally or by visual stimuli. Ask about two referents separately.*

*Investigates:*  *Focus, Accessibility, Topic, Contrast*

*Aim:*      *This sets up a contrastive context in the question, allowing us to see how the language expresses focus and topic in a contrastive context. Note that the referents given in the question will function as (contrastive) topics, whereas the answers to the wh questions will be the focus.*

- *Situation: You saw a man wearing a hat and a child wearing a jumper.*
  A friend asks 'What was the man wearing, and what was the child wearing?'
  Another friend asks 'Who was wearing a hat, and who was wearing a jumper?'
- *Situation: You heard a dog sneeze and a child cry.*
  A friend asks 'What did the dog do and what did the child do?'

Subject: Who is throwing the stone and who is throwing the bottle?



Patient object: What is the woman holding and what is the man holding?



Predicate/VP: What is the girl doing and what is the woman doing?

## 7. Sub-NP questions

*To do:*      *Present a situation to the informant, either verbally or by visual stimuli, that holds the answer to the questions that will be asked (e.g. a small boy cutting a banana). Ask one of the questions about a subset of referents, according to the nominal modifier (adjective, demonstrative, numeral). Make sure that the answer contains the modifier as well as the noun.*

*Investigates:*   *Contrast, Focus*

*Aim:*       *Smaller parts of noun phrases can be in focus or contrasted, and here we test adjectives, demonstratives, numerals, and nouns. We want to find out whether there is a difference in marking focus or contrast on the whole noun phrase vs. just one part of the NP. The first three contexts questions target the modifier, and the last targets the noun itself. We can compare whether the same linguistic strategy is used in focussing the modifier and focussing the noun, and whether these differ from focus on the noun phrase (as in other Q-A tests).*

*Check also whether contrast on a modifier allows for a split DP, e.g. 'Mangos she took three'.*

Subject
- Adjective
  *Situation: the small boy cut the banana.*
  Q: Did the big boy cut the banana?
  Q: Which boy cut the banana?
  Q: Who cut the banana, the big or the small boy?
  Q: Did the small boy or the small girl cut the banana?
- Demonstrative
  *Situation: That monkey stole the bread*.
  Q: Did this monkey steal the bread?
  Q: Which monkey stole the bread?
  Q: Who stole the bread, this monkey or that monkey?
  Q: Did that monkey or that elephant steal the bread?
- Numeral
  *Situation: Two women came into the house*.
  Q: Did three women come into the house?
  Q: How many women came into the house?
  Q: Did two women or two children come into the house?

Subject adjective: Is the short man reading a book?



Patient object
- Adjective
  *Situation: They bought unripe mangos.*
  Q: Did they buy ripe mangos?
  Q: What sort of mangos did they buy?
  Q: What sort of unripe fruit did they buy?
- Demonstrative
  *Situation: You saw the boy further away (= that).*
  Q: Did you see this boy?
  Q: Which boy did you see?
  Q: Who did you see, this boy or that boy?
  Q: Did you see that boy or that girl?
- Numeral
  *Situation: We will bring 2 bags of beans*.
  Q: Will we bring (two or) three bags of beans?
  Q: How many bags of beans will we bring?
  Q: Will we bring two bags of beans or two chickens?

Object adjective: Does the table have red chairs?

Patient object adjective: Did the fisherman catch big fish?
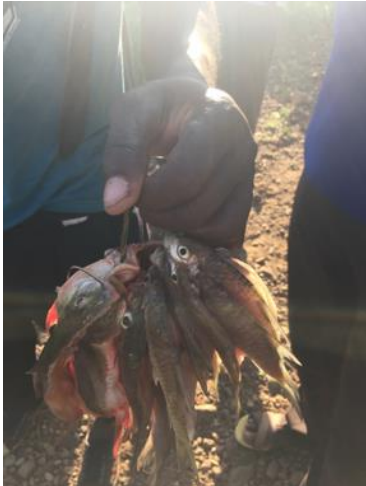


Patient object numeral: Is the man taking three squashes?



Patient object numeral:
Is the woman holding two knives?
Is the woman holding three spoons?

Patient object adjective:
Is the man taking the big cup?
Is the man taking the small plate?



Recipient object
- Adjective
  *Situation: They gave the younger children pencils.*
  Q: Did they give the older children pencils?
  Q: Which children did they give pencils?
  Q: Who did they give pencils, the older or the younger children?
  Q: Did they give the younger children or the younger puppies pencils?
- Demonstrative
  *Situation: We will send books to that school.*
  Q: Will we send this school books?
  Q: Which school will we send books to?
  Q: Will we send books to this school or that school?
  Q: Will we send that school or that church books?
- Numeral
  *Situation: You cooked rice for four people.*
  Q: Did you cook rice for three (or four) people?
  Q: How many people did you cook rice for?
  Q: Did you cook rice for four people or four cats?

## 8. Alternative questions/Selection

*To do:*  *Present a set of alternatives, either verbally or by visual stimuli, one of which should be selected by the informant. Ask the informant to translate the question, and ask for a complete answer. It may be necessary to provide further context for each of the questions.*

*Investigates:*  *Focus, Exclusivity*

*Aim:*  *By mentioning the alternatives in the question, an answer will likely not only indicate for which referent the statement is true (e.g. I want tea), but also that alternatives are excluded. This is not necessarily the case, though. We can observe which linguistic strategy is used to express this (possibly exclusive) selection. Once we have this answer, we can also try to cancel the*

*exclusivity ('and I also want Y') – see also test 29. The yes/no questions for 'Truth' are of course slightly different, but in a way also represent a choice between two alternatives.*

<u>Explicitly mentioned alternatives</u>
Subject
- *You know that one person was late today.*
  Did Kanothi or Kinywa come late?
- *You don't remember who agreed to call the director.*
  Will Patrick or Allen phone the director?

Who has a bottle, Lydia or Mary?



Patient object
- *You offer a guest a choice between drinks.*
  Do you want coffee or tea?
- *We bring home a guest and the cook wants to know:*
  Does she normally eat ugali or rice?
- Do you prefer me or him?
- *The mayor gave an animal as a price in a competition that Usman won, but we don't remember which animal he gave.*
  Did he give Usman a goat or a sheep?

Recipient object
- *We gave a kanga to someone when we visited but can't remember to whom.*
  Did we give Shania or Hamida a kanga?
- *Suzan bought shoes for someone but we don't know who.*
  Has Suzan bought her father or her brother shoes?

Verb and verb phrase
- *The children come home from school earlier than expected. You wonder:*
  Did they run or walk?
- *You offer your child a choice between chores.*
  Will you wash the dishes or do your homework?
- Shall I fry or boil the eggs?

Tense/aspect
- *Someone was supposed to milk the cow. You ask them:*
  Will you milk the cow or have you already done it?
- *The children said they would have a running competition and you wonder whether they already participated.*
  Are the children running or will they be running?

Truth
(Note: by changing the context, you can change the expectations and hence, perhaps, the way the answer is formulated. This is exemplified for the first question.)
- *Context 1: I expect you to have made tea, because you said you would.*
  *Context 2: I smell something and am guessing it is tea.*
  *Context 3: I am surprised that you made tea because you never do so.*
  Did you make tea? (or not)
- Did the bus driver drop Maggy off? (or not)
- Aren't you hungry?
- Did he (or didn't he) go to South Africa?

Implicitly present alternatives:
Subject: Tell me about the banana.



Object: Tell me about Agnes.

Predicate: I will tell you an action and you tell me which person is doing it. Tell me about drinking.



## 9. Thetics

A thetic sentence is one without a topic expression, where typically the subject is marked as *not* being the topic, mostly used in presenting a referent or situation in the here and now, without further context. See section 11 in Part I.

*To do:*        *Present a situation and ask what would be natural to say in this situation*
*Investigates:   Accessibility, Topic, Theticity*

Prompts for 5 types of thetics:
- You're walking past the school and see that there is a crocodile roaming the school yard. Nobody seems to be aware of it. To convey this information to others you shout out: … (hot news)
- You hear a noise somewhere in the house and ask your housemate what it was. S/he answers that there is probably someone knocking on the door. What would s/he say? (hot news)
- There is a village on a remote part of the river, where hardly any boats come to. One morning, a child comes running from the riverbank, shouting about the arrival of a ship. What does the child shout? (hot news)
- At a cultural festival, how would the organiser/MC introduce the next performer? (presentative)
- Imagine you have been searching for your bag together with a friend, and you finally see where it is. What would you say? (presentative)
- You have gone out to get samosas for your colleagues. Upon entering the office again, how would you present them to your colleagues? (presentative)
- Describe the weather: hot, cold, raining, sunshine, mist, clouds, windy? (weather statements)
- Imagine you have pain in your back and can hardly walk. A friend asks 'Why are you walking funny like that?' What would you answer? (physical sensation)
- Your colleague keeps scratching his elbow. You ask whether he is alright, and he answers that his elbow itches. What would he say? (physical sensation)
- We are going for a walk in a nearby park and I ask 'Which animals are there in this park?' How would you answer? (existential)

- You know that there is bean stew in the pot, but I don't know and I just see the pot from a distance. I ask 'What's in the pot?' How would you answer? (existential)

Be careful that generics, gnomics, and 'permanently available' referents (like 'the Queen' or 'the newspaper' may work differently! This can be tested in translations of the following examples:
- Guess what? The president came to our school
- The moon is round (vs. The moon is bright tonight)
- The pigeon is a bird
- The sun rises from the east (vs. The sun was not to be seen today)
- Dogs bark
- Birds fly
- Sugar is sweet

## 10. Mirative/Exclamative

*To do:*  *Present a particularly unexpected or surprising situation. Ask to describe the situation and start the utterance with 'I can't believe it!'. The context sentences help to situate the sentence in an unexpected context.*

*Investigates:*  *Unexpectedness/mirativity, Focus, Theticity*

*Aim:*  *Some 'focus' strategies are licensed in contexts characterised by unexpectedness or surprise. This is how it is related to theticity as well, since unexpected events are often presented as one piece of information. If it is a category independent of focus, this diagnostic can show the potential multifunctionality of the linguistic strategy used. See section 11 in Part I.*

Subject
- *Situation: You just learned that a cat painted the house with its tail*
  (I can't believe it!) A cat painted this house!
- *Situation: A student comes out of the school building, saying to the others:*
  I can't believe it! The principal is mopping the floor!
- *Situation: You go to a traditional healer and find that…*
  The bishop was treated by a traditional healer!

Patient object
- *Situation: Seeing empty wine bottles on the table the morning after a nice party*
  I can't believe it! We drank eight bottles of wine!
- *Situation: Your friend Joshua has been fishing at the river and the other day caught a diamond ring*
  I can't believe it! Joshua caught a ring!

Recipient object
- *Situation: The president got really excited and started giving away money.*
  I can't believe it! He gave the dog money!
- *Situation: We're on a tour of a historic site and learn about the religious practices in the past.*
  I can't believe it! They built a temple for a lion!

Verb
- *Situation: We've been on a tour through the national park, and saw giraffes.*
  I can't believe it! The giraffes greeted us!

General situation
- *Situation: You organised a party but didn't really expect people to turn up. But many did and you say:*
  Oh! People really came!
- *Situation: A foreigner arrives at the airport and greets the officer in the local language. He hadn't expected this and says*:
  Oh, you speak our language!
- *Situation*: *You think you're all out of cash, but when you open your wallet there is still a note. You say:*
  Hey, I (still) have some money!
- *Situation*: *Arsenal are having a very bad season and nobody expects them to win the match against Manchester United. But they do! You say:*
  Arsenal won!
- *Situation*: *On the programme for the local cultural festival is the name of a fairly unknown singer called Mwakapi who you've never heard before. But it turns out she is an amazing singer.*
  Woah! Mwakapi can really sing!


## 11. Correction falsehood

*To do:* Present a situation, either verbally or by visual stimuli. Present a sentence or question making a wrong statement about the situation. Ask the informant to correct you. Vary the point of correction for different parts of the sentence.

*Investigates:* Focus, Contrast, Exclusivity

*Aim:* Giving a false statement, or a yes/no question with a false presupposition, will trigger a reply that corrects that part of the sentence that is not true. More precisely, the background/presupposition of the corrective statement given by the informant will be the same as in the false statement, and the focus is the contrasting part. We observe which linguistic strategy is used to correct different parts of a clause, and also see the potential variation in expression for different types (e.g. objects may be corrected in situ and subjects by a special construction). See section 7 in Part I.

- The true situation is that Masiko wrote a letter.
  Questions/statements to be corrected:
    o *Subject*: We think that Victoria wrote a letter / Did Victoria write a letter?
    o *Object*: I heard that Masiko wrote a book / Did Masiko write a book?
    o *Verb*: Masiko received a letter. / Did Masiko receive a letter?
    o *Truth*: Surely Masiko didn't write a letter.
    o *TAM*: Will Masiko write a letter?
- The true situation is that the nurse gave the women tea.
  Questions/statements to be corrected:

- o *Subject*: We think that the family gave the women tea / Did the family give the women tea?
  - o *Patient object*: I heard that the nurse gave the women fruit / Did the nurse give the women fruit?
  - o *Recipient object*: We think that the nurse gave the guard tea / Did the nurse give the guard tea?
  - o *Verb*: I heard that the nurse sold the women tea / Did the nurse sell the women tea?
  - o *Truth*: Of course the nurse didn't give the women tea.
    (The nurse DID give the women tea!)
  - o *TAM*: Is the nurse giving the women tea? (now)
- The true situation is that goats are jumping in the field.
  Questions/statements to be corrected:
  - o *Subject*: I heard that the cows are jumping in the field / Are the cows jumping in the field?
  - o *Locative object*: We think that the goats are jumping on the road / Are the goats jumping on the road?
  - o *Verb*: The goats are sleeping in the field / Are the goats sleeping in the field?
  - o *Truth*: I bet the goats are not jumping in the field (They ARE jumping!)
  - o *TAM*: Were the goats jumping in the field (e.g. yesterday)?
- The true situation is that the cook fell down.
  Questions/statements to be corrected:
  - o *Subject*: I heard that the manager fell down / Did the manager fall down?
  - o *Verb*: We think that the cook hit her head / Did the cook hit her head?
  - o *Truth*: Surely the cook didn't fall down. (She DID fall down!)
- The true situation is that Helen didn't arrive.
  Questions/statement to be corrected:
  - o *Truth*: I heard that Helen arrived / Did Helen arrive?

*Truth focus*: This man is not wearing a hat.

*Truth focus*: There is no-one under the tree.



*Verb*: The monkey is sitting on the ground / Is the monkey sitting on the ground?



*Object*: The girl has a basket on her head / Does the girl have a basket on her head?

*Subject*: Is a man tying the net?
*Verb*: Is the woman washing the net?



*Subject*: Does Agnes have a bucket?
*Object*: Does Frida have a banana?



### 12. Mention some

| | |
|---|---|
| *To do:* | *Present a situation in which there are multiple correct answers. That is, there is no exhaustive answer in a normal speech situation. Check whether a suspected focus or exhaustive strategy can be used felicitously in the answer.* |
| *Investigates:* | *Focus, Exhaustivity* |
| *Aim:* | *Instances of non-exhaustive focus are found in answers to so-called mention-some questions, where the context of the question does not require, or even allow for an explicit listing of all the true alternatives. For example, you can usually buy milk or tomatoes in various places, so there is no one correct answer to a question 'Where can I buy milk?'. An exhaustive focus strategy is thus predicted to be infelicitous here, both in question itself, and in the answer to a mention-some question. The test can therefore be used to discover which strategy is used in non-exhaustive focus (function to form) but also to test suspected exhaustive focus strategies in a non-exhaustive context (form to function).* |

Subject
- *Situation: Everyone at the office has multiple pens. I ask 'Who has got a pen that I can borrow?' You say:*
  Martin has an extra pen / Martin has one
- *Situation: We are doing research into hair length. I need to talk to someone with short hair. You suggest:*
  Well, Jennifer has short hair.
- *Situation: We are holding an informal meeting. At the beginning I ask 'Who can chair the meeting?' You reply:*
  The oldest person can chair the meeting.

Patient object
- *Situation: We are in a department store that sells all kinds of things, from make-up to buckets to clothes to bags. I ask 'What can I get in this department store?' How would you answer?*
  (example: You can buy clothes.)
- *Situation: Your friend has been to the market, meeting many people. You ask 'Who did you meet at the market, for example?' How would your friend respond?*
  (example: I met Hilda.)

Other
- Where would one go on a holiday? (You can go to Malawi, for example.)
- Where can I buy phone credit in this town? (You can buy it on the market.)
- How can I break a coconut? (You can use a hammer, for example.)
- What can one do with a machete? (You can cut a stick, for example.)
- What can people do at the lodge? (They can swim, for example.)

## 13. Superset A-B-C

*To do:* Ask the informant to translate sentences with multiple topics. Is special marking necessary for one of them?
Test whether the initial referent can be corrected/negated (the 'lie test').
Test whether initial referents need to be supersets of following referents.

*Investigates:* Topic

*Aim:* This diagnostic checks whether the language allows multiple topics, and if so, whether there are ordering restrictions, and which 'subtype' of topic these can be. See section 9 in Part I.

- Fish, I like tilapia / Tilapia, I like fish
- Fruit, I like apples / Apples, I like fruit
- As for apples, I like red ones / Red ones, I like apples.
- Fruit, apples, I like red ones
- Those trees, (their) trunks are big / Those trunks, the trees are big
- Kampala, as for schools, private perform better than public
- Tanzania, you have to visit mount Kilimanjaro
- That fire, fortunately the fire brigade came quickly
  (Wrong, our kitty in the tree, the fire brigade came quickly)

- Julius, his dad works for the government
  (Wrong, Stefan, his dad works for the government)
- This story, it's name is 'The beginning'
  (Wrong, that story, it's name is 'The beginning')
- Schools in Kampala, private perform better than public
  (Wrong, schools in Jinja, private perform better than public)

Example:
(Paul & Whitman 2015)
A: 'As for big cities in France, the traffic is rather chaotic.'
B1: 'As for big cities in the US, the traffic is rather chaotic as well.'
B2: #'Wrong, as for big cities in the U.S., the traffic is rather chaotic.'


## 14. Subsets A

*To do:*      *Present a situation containing (implicitly or explicitly) two or more referents or actions, either verbally or by picture stimuli. Ask the informant to answer a question about the group of referents. The answers in brackets are provided as a suggestion, but see first whether the informant may have their own answer.*

*Investigates:*  *Topic, Contrast*

*Aim:*       *By presenting more than one referent, we create a context for contrast. When both referents are mentioned explicitly, both are activated and available as topics (though they were not topics before). When asking about a superset (e.g. 'these people') or a related referent (e.g. 'Nobuko'), the referent mentioned is still selected from a set. In both implicit and explicit subset contexts, the referent that is the topic in the sentence given will not be highly active, and we may thus expect a difference in marking this topic. Furthermore, the alternative referent is typically excluded – although this exclusion may be inherent (semantic) or just implied (pragmatic).*


<u>Explicit contrast:</u>
Subject
- 'How many siblings do you have?
  What do they do?'
- *Situation: You saw two thieves entering a house; one broke the door and the other smashed a window.*
  Q: What did you see happening at the burglary?

Patient object
- *Situation: Father did different things with the beans and the carrots, for example cooking, chopping, selling, eating…*
  Q: What did father do with the beans and the carrots?
- *Situation: Eric washed the towels and the shirts, he ironed.*
  Q: What did Eric do with the towels and the shirts?

Recipient/benefactive object
- *Situation: Grandmother gave different types of fruit to Alina and Mariam, one got a mango and one a banana.*
  Q: 'What did grandma give to the girls?'
- *Situation: Jonathan always buys coffee for the boss and tea for the employees.*
  Q: 'What does Jonathan buy for his colleagues?'

instrument
- *Situation: A grandchild sees their grandparent with a toolbox.*
  He or she asks 'What do you do with the tools?'

Subject: Are these people working on their laptops?

Patient object: What are these women eating? (rice and chapati)

Implicational contrast:
- *Situation: You thought the first novel by Grisham was good. The other ones you haven't read or you didn't think were very good.*
  Q: Would you recommend the novels by Grisham?
  (Well, his first novel is very good.)
- *Situation: You only know that Amina went to the beach.*
  Q: What about Zanaira, did she go to the beach?
  (Well, I don't know about Zanaira, but Amina went.)
- *Situation: You have seen Norman eat rice.*
  Q: What about the beans, did Norman eat them?
  (Well, I don't know about the beans, but the rice Norman did eat.)
- *Situation: You saw Taro eat cassava.*
  Q: What about Brian, did he eat beans?
  (Well, I don't know about Brian and beans, but Taro ate cassava.)

## 15. Subsets B

(test by Daniel Büring)

N.B. This test may not work well if birthdays are not something people keep track of.

*To do:*     *Show a calendar with various people's birthdays to the informant and ask them to use the information on the calendar to respond to a question about when everyone's birthday is, pretending that you do not know the answers and so need the consultant to tell you (name the people in advance, and then ask e.g. 'When is everybody's birthday?', 'Who is born when?'; 'What about X, when is their birthday?').*

*Investigates:*   *Contrast, topics*

*Aim:*      *This sets up a contrastive context in the question, allowing us to see how the language expresses topic in a contrastive context. Note that the referents given in the prompt will function as (contrastive) topics, whereas the answers to the wh questions will be the focus.*

JUNE

| 1 | 2 | 3<br><br>Maria | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| 8 | 9 | 10 | 11 | 12 | 13<br><br>Elina | 14 |
| 15 | 16 | 17 | 18 | 19<br>Ari<br>Ina | 20 | 21 |

## 13. Form to interpretation

This section presents tests to determine what the precise interpretation of a strategy is, and whether the associated interpretation is inherently part of the strategy or just in the pragmatics. By 'suspected strategy' I mean the linguistic strategy that you want to test, for example if your hypothesis is that *pwep* is a topic marker, then *pwep* is a 'suspected topic strategy'. The reason for calling it that, is that we cannot be sure whether it is a topic strategy until we have tested it.

## 16. Wh questions and answers E

*To do:*  *In a phrase with a suspected topic or focus strategy, replace the topic or focused noun phrase by a wh phrase, then check whether the result is grammatical and felicitous. Alternatively, rephrase a wh question by using a suspected topic or focus strategy, and check whether the result is grammatical and felicitous.*

*Investigates:*  *Topic, Focus*

*Aim:*  *For focus, since wh elements are assumed to be inherently focal, they are expected to be allowed (or even required) to occur in a suspected focus strategy.*
*For topics, this test is based on the fact that topics need to be identifiable. Therefore, expressions with referents that are not identifiable, such as wh words, are predicted to be incompatible with the suspected topic marker. Hence, when a suspected marker of topicality is acceptable when used with an interrogative NP, this shows that the marker cannot be a dedicated marker of topicality. See section 8 in Part I.*

Example: In Ewe the marker *lá* is suspected to be a topic marker. Using the marker with a wh phrase is ungrammatical.

Ewe (Ameka 1991:153)
(69)  *ame-ka   lá   vá   dí-m?
person-WH   TOP   come   seek-1SG
'Who came to look for me?'

## 17. Wh questions and answers F

*Preparation:*  *Translate a wh question into the target language in different suspected focus constructions, for example in SVO order and in a (pseudo)cleft.*

*To do:*  *Ask the wh questions, and test whether the question can felicitously be answered negatively, by 'nobody' or 'nothing'. You can also use the picture below.*

*Investigates:*  *Presupposition*

*Aim:*  *If a question can felicitously be answered by 'none', 'nothing', 'nobody' (i.e. the empty set), then it can be deduced that the question did not contain a presupposition of existence (e.g. there exists someone sitting under the tree). This means that the strategy used in the question does not express identificational focus. If the empty set is not a possible answer, we deduce that there is a presupposition of existence. See section 6 in Part I.*

Who is sitting under the tree?

## 18. Scalar and additive particles

*To do:*  Ask the informant to translate sentences in which one referent is modified by the particle 'even' or 'also', and check whether a suspected exhaustive strategy can be used felicitously. For clarity, a remark including alternatives can be added, or an appropriate inclusive situation may be sketched beforehand (as suggested in italics).

*Investigates:*  Exclusivity

*Aim:*  The additive particle 'also' indicates that more instantiations of the action/state described in the predicate have occurred for different referents, therefore making the referent it modifies non-exhaustive. Similarly, the scalar additive particle 'even' presupposes that more instantiations of the action/state described in the predicate have occurred, and in addition expresses that the object modified by 'even' is the least likely in the set of contextually relevant alternatives to make the predicate true. Therefore, none of the alternatives are excluded, and a DP modified by 'even' is predicted to be infelicitous if a focus strategy is inherently exclusive. See section 6 in Part I.

Subject

- *Situation: Although we know that Peter doesn't like ugali, everyone at the party ate it.*
  Even Peter ate ugali.
- *Situation: Kizza has a hard time writing, but all the rest of the class wrote a letter, and he did too.*
  Even Kizza wrote a letter.
- *Situation: Selma is normally the quiet type, but yesterday there was a lively discussion in class, where…*
  Even Selma talked.
- *Situation: The family are meeting up for Christmas, but various roads have been blocked so it was uncertain that everyone would be there. Especially dad, who had the worst route to get home and called that he might not make it. Eventually everyone got there.*
  Even dad arrived.
- *Situation: All the tourists give children pens, and we know that the teacher is strictly against giving pens, but he seems to be in a good mood, because…*
  Even the teacher gave the children pens.

- *Situation: My mother is very afraid of travelling, but her whole choir went to Nairobi.*
  Even my mother went to Nairobi.

Patient object
- *Situation: After you and your friend Robert, who does not like beans, returned from a long and tiring walk, you went to the canteen to eat. Later, you are explaining to another friend how hungry you were, and say:*
  Robert ate a lot, he ate even beans (although we know that he hates it)
- *Situation: Lydia is a bit lazy in doing the laundry; she normally does just the clothes. You receive a text on your phone saying that she's washed everything – clothes, carpet, bedding, curtains. You tell your friend:*
  Lydia washed even the curtains.
- *Situation: The school normally doesn't have any resources to support children – parents have to buy all the supplies themselves. Now the teacher has given the children pens and notebooks, and…*
  The teacher gave the children even a bag.

Recipient/benefactive object
- *Situation: The director of our school is very kind to children and sometimes gives them sweets. The other day he was so happy that not only did he give the children sweets but…*
  The director gave even/also the parents sweets
- *Situation: Jonathan hates his boss. Whenever he goes to get a coffee he also buys a coffee for the assistant and colleague, but never for the boss. But today he was in a good mood.*
  Jonathan bought coffee even for the boss.
- *Situation: Abdul normally feeds the the goats grass, and sometimes the cows, but never any other animal. But yesterday he had extra time.*
  Abdul fed even the sheep grass.

Verb/verb phrase
- *Situation: Tara doesn't like running; she normally only swims and cycles. But today she felt great and…*
  Tara even RAN.
- *Situation: Kevin normally only bakes but he doesn't like the taste of cake. This time however, …*
  Kevin even/also ATE the cake
- *Situation: We had already fixed and washed the car, and because we had some time left…*
  We even PAINTED the car.
- *Situation: The helpers normally give the goats water, and let them graze, but now…*
  They even BRUSHED the goats.

## 19. Exhaustive focus particle

*To do:*   *Ask the informant to translate sentences in which one referent is modified by the particle 'only'. Note the spontaneous answer, and then check whether a particular strategy needs to be used or cannot be used. For clarity, a remark excluding alternatives can be added (such as added in brackets).*

*Investigates:*   *Exhaustivity*

*Aim:*   *The particle 'only' asserts that the predicate is exhaustively true for the referent of the focused element, excluding possible alternatives. When a focus strategy can be felicitously used with 'only', this shows that it is compatible with an exhaustive reading.*

*Be careful here in drawing conclusions: the exhaustive reading is always present because of the particle 'only', and hence we cannot deduce anything concusively about the (exhaustive or not) interpretation brought about by the linguistic strategy. See section 6 in Part I.*

Example: the Makhuwa conjoint form is required when the object is modified by 'only'; the disjoint form is ungrammatical (Van der Wal 2009: 236)

(70)  a.   CJ   O-lomw-é          ehopa    paáhi.
                1SM-fish-PFV.CJ      10.fish    only
                'He caught only fish.'

      b.   DJ   * Oo-lówá            ehópá    paáhi.
                  1SM.PFV.DJ-fish      10.fish    only
                int. 'He caught only fish.'

Subject
- *Situation: Various people came to the function by car.*
  Only Joseph cycled (noone else did)
- *Situation: There was an accident and the driver of the car survived but…*
  only a police officer died (noone else did)
- *Situation: The guests were all asked what they wanted for breakfast.*
  Only Nancy chose porridge (noone else did)
- *Situation: Five students were required to write an essay. You are reporting to the Head of Department that the result is disappointing, and…*
  only Kizza wrote an essay (noone else did)
- *Situation: All the nurses were on strike and the family didn't visit, so…*
  only the doctor fed that patient soup (noone else did)

Patient object
- *Situation: Because she didn't feel hungry at all, in the evening…*
  Jasmine ate only porridge (nothing else)
- *Situation: Although he was supposed to make a table as well,*
  the carpenter made only a chair (nothing else)
- *Situation: The doctor thought just liquids are best at this point in recovery, so*
  the doctor fed the patient only soup (nothing else / not bread)

Recipient/benefactive object
- *Situation: After the concert many fans wanted to get an autograph, but…*
  the popstar gave only the children autographs (not the adults)
- *Situation: There are two people in the office, the clerk and the assistant. Sophie was sent out to buy airtime.*
  Sophie bought airtime only for the clerk (not for her assistant)
- *Situation: The doctor was planning to feed everyone in the hospital, but there wasn't enough time, so…*
  the doctor fed only these patients soup (not the other patients or her colleagues)

Verb/verb phrase (this may involve a 'merely' reading)
- *Situation: William is normally very enthusiastic at all parts of athletics, but today he felt poorly and…*
  William only ran (he did not throw the javelin or do high jump)
- *Situation: After eating the cake someone got ill, so we are trying to find the person responsible for baking it. I suspect that Patricia baked it, but you claim that…*
  Patricia only ATE the cake (she didn't bake it)
- *Situation: We were supposed to wash, paint, and fix the car, but there wasn't enough time, so…*
  We only PAINTED the car (we didn't fix it)

## 20. Universal quantifiers for topics

*To do:*  In a phrase with a suspected topic strategy, replace the topic noun phrase by one with a universal quantifier, then check with the informant whether the result is grammatical and felicitous. Alternatively, ask to translate sentences with universal quantifiers, using the suspected topic strategy, and check with the informant whether the result is grammatical and felicitous.

*Investigates:*  Topic

*Aim:*  This test is based on the fact that topics need to be identifiable. Therefore, expressions with referents that are not identifiable, such as certain quantified NPs, are predicted to be incompatible with the hypothesised topic marker. Hence, when a hypothesised marker of topicality is acceptable when used with an NP with a non-specific indefinite interpretation, this shows that the marker cannot be a dedicated marker of topicality.

Subject
- Everybody wants to be healthy.
- Every father loves his child.
- All humans breathe.

Patient object
- He found all the videos.
- Ernest filled in each form.
- The bird pooped on everything.

Example: In Rutul the suffix *ǯuyne* is suspected to be a topic marker. Using this marker with a universally quantified NP results in ungrammaticality.

Rutul (Polinsky 1999: 573)
 (71) a.     sienebɨr    salxes
              all         sleep
        b.    *sienebɨr-ǯuyne    salxes
              all-TOP            sleep
              'Everyone sleeps.'

## 21. Universal quantifiers for exclusivity

*To do:*      *In a phrase with a suspected exclusive strategy, replace the exclusive noun phrase by a universal quantifier, then check with the informant whether the result is grammatical and felicitous. Alternatively, ask to translate sentences with universal quantifiers, using the suspected exclusive strategy, and check with the informant whether the result is grammatical and felicitous. Adding a relative clause or restrictive modifiers may make a difference. When testing a cleft, for example, the grammaticality should be tested of 'It's everybody that is wearing a hat' and 'It's everybody working outside that is wearing a hat'.*

*Investigates:*  *Exclusivity*

*Aim:*        *The universal quantifiers 'all' and 'every' are incompatible with exclusive focus, because all referents are included and therefore there is no exclusion of alternatives in the same set. However, the incompatibility can be remedied by specifying a set of alternatives for the universally quantified DP. This can be done by adding a relative clause (specifying within the referents of the universally quantified DP) – this is indicated as the 'vs.' clause, or by mentioning an alternative set in the context (specifying the whole set as an alternative to other whole sets) – this is mentioned in brackets. See also Exercise 12.*

Subject
  • Everybody is wearing a hat
    vs. Everybody who works outside is wearing a hat
  • Every animal will die
    vs. Every animal in this park will die
  • All humans breathe
    (as compared to rocks or fish)

Patient object
  • He read every book
    (as compared to every article)
    vs. He read every book written by his brother
  • Sami tasted each cake
    vs. Sami tasted each cake baked by his mother
  • Kato broke everything
    vs. Kato broke everything in the kitchen

Example: the Hausa ex-situ focus position may not host a universal pronoun (72); hence this strategy/position can be said to express exclusive focus.

Hausa (Green and Jaggar 2003: 200)
(72) a. Kōwā       yanà̀   sâ   hùlā
        everybody 3M.IMPF put hat
        'Everybody wears a hat.'

     b. * Kōwā      (**nề**) yakề        sâ   hùlā
        everybody FM.M 3M.FOC.IMPF put hat
        'It's everybody who wears a hat.'

## 22. Idioms for topics

| | |
|---|---|
| *Preparation:* | *Find idioms in the target language. Typical areas where idioms are used are feelings expressed in body parts (e.g. 'the heart is heavy'), doing something useless (e.g. 'to write on water') and taboos like death, defecation, sex, and diseases.* |
| *To do:* | *Use (part of) an idiom with a suspected topic strategy, and check whether the idiomatic reading is retained.* |
| *Investigates:* | *Topic* |
| *Aim:* | *Topics need to be referential, and since parts of idioms are not referential but form part of the idiomatic reading, they are predicted to be ungrammatical when coded as topic. If part of an idiom can occur in a suspected topic strategy and retain its idiomatic reading, this shows that it is not a dedicated topic strategy. See section 9 in Part I.* |

Example: In English, the idiomatic reading is not retained when the object is fronted as a topic.

It's raining cats and dogs = it's raining a lot
As for cats and dogs, it's raining them ≠ it's raining a lot

## 23. Idioms for focus

| | |
|---|---|
| *Preparation:* | *Find idioms in the target language. Typical areas where idioms are used are feelings expressed in body parts (e.g. 'the heart is heavy'), doing something useless (e.g. 'to write on water') and taboos like death, defecation, sex, and diseases.* |
| *To do:* | *Use an idiom with a suspected focus strategy, and check whether the idiomatic reading is retained.* |
| *Investigates:* | *Focus* |
| *Aim:* | *Focus naturally only applies to contentful elements that can be conceived of as the new or contrasted information, and for which alternatives are available. Therefore, objects in idioms are non-focusable. If a strategy can be felicitously used with these objects, it shows that the strategy is not a dedicated marker of new information or contrast on the affected phrase. Instead, it may be that such a marked construction is underspecified for broad* |

*or narrow focus, or that it the strategy is not a dedicated focus strategy at all.
See also Exercise 7.*

Example: The conjoint verb form in Matengo cannot be used with an idiomatic reading,
which suggest that focus is inherent in the meaning of the conjoint form.

Matengo (Yoneda 2017)
(73)  a.  ju-a-tend-aje       kú-soma.                           simple far past
          1.SM-PST-do-CJ    INF -read
          'He STUDIED.'

      b.  ju-a-som-iti          mwikindamba.                   neutral verb form
          1.SM-PST-read-PF     18LOC.7.hut                    (idiom retained)
          'He didn't have formal education.'
          lit. 'He studied in a hut.'

      c.  ju-a-som-aje          mwikindamba.                   after-verb focus
          1.SM-PST-read-CJF    18LOC.7.hut                    (idiom impossible)
          'He studied in a HUT. / He STUDIED IN A HUT.'
          * 'He didn't have a formal education.'

## 24. Cognate objects
*To do:*       *Identify verbs that can take a cognate object, such as 'sing a song', 'dance a
               dance', 'sleep a sleep', etc. Use a cognate object with a suspected focus
               strategy, and ask the informant for a grammaticality judgement.*
*Investigates:* *Focus*
*Aim:*         *Focus naturally only applies to contentful elements that can be conceived of
               as the new or contrasted information. Therefore, cognate objects, which do
               not add anything to the interpretation of the predicate, are non-focusable
               (what else would you dream if not a dream?). If a strategy can be felicitously
               used with these objects, it shows that the strategy is not a dedicated marker
               of new information or contrast on the affected phrase. Instead, it may be that
               such a marked construction is underspecified for broad or narrow focus, or
               that it the strategy is not a dedicated focus strategy at all.*

Example: In Rukiga, one can dream a dream, but it is not felicitous to place the cognate
object *ekirooto* 'dream' in a cleft-type construction. This shows that the cleft is a focus
construction.

Rukiga (Asiimwe and Van der Wal database)
(74)    *E-ki-róóto    ni-ky-ó          n-aa-róota.
         AUG-7-dream  COP-7-REL.PRO  1SG.SM-N.PST-dream
         'It was a dream that I dreamt.'

## 25. Non-specific indefinites for topic
*To do:*       *In a phrase with a suspected topic strategy, replace the topic noun phrase by
               a non-specific indefinite, then check with the informant whether the result is*

*grammatical and felicitous. Alternatively, ask the informant to translate sentences with non-specific indefinites and check with the informant whether the suspected topic strategy can felicitously be used. Check that the reading is indeed non-specific, by excluding a generic or specific reading in the context or explanation. The follow-up phrases are meant to help distinguish the specific and non-specific reading.*

*Investigates:*  *Topic*

*Aim:*  *This test is based on the fact that topics need to be identifiable. Therefore, expressions with referents that are not identifiable, such as non-specific indefinites, are predicted to be incompatible with the hypothesised topic marker. Hence, when a hypothesised marker of topicality is acceptable when used with an NP with a non-specific indefinite interpretation, this shows that the marker cannot be a dedicated marker of topicality. This is also relevant for the syntax, since the possibility of a preverbal non-specific subject indicates an (internal) subject position, rather than a dislocated topic position. See section 8 in Part I.*

Subject
- Someone arrived
  - …with a big suitcase (specific)
  - …because I heard a knock on the door (non-specific)
- Someone came into the house
  - …wearing a red shirt (specific)
  - …because the door is open/ because I heard footsteps (non-specific)
  - …and/but I don't know who (non-specific)
- Someone called my phone
  - …and I know who but want to keep it secret from you (specific)
  - …and they must have called the wrong number (non-specific)

Patient object
- I saw someone
  - …but I can't remember his name (specific)
  - …who resembles James (specific)
  - …but I don't know who (non-specific)
- She is looking for a man
  - …, the one she was talking to before (specific)
  - … just anyone who is nice (non-specific)

Recipient object
- They gave someone my phone number
  - … because I asked them to give it to him (specific)
  - … but I don't know who they gave it to (non-specific)
  - … because I'm getting calls from an unknown number (non-specific)

Example: The marker *lá* is suspected to be a topic marker in Ewe. Using this strategie with the word for 'person' results in a necessarily specific or generic reading – indefinite non-specific is not accepted.

Ewe (Ameka 1991:153 and personal communication with Felix Ameka)

(75)        Ame    lá    do    go.
             person   TOP   exit   outside
             'The person left.' (someone identifiable)
             * 'Someone left.'

## 26. Non-specific indefinites for exclusivity

*To do:*      *In a phrase with a suspected exclusive focus strategy, replace the noun phrase with the focus reading by a non-specific indefinite (words with the meaning anyone, no-one, not someone in particular), then check with the informant whether the result is grammatical and felicitous. Alternatively, ask the informant to translate sentences with non-specific indefinites as above in diagnostic 25, and check whether the suspected exclusive strategy can felicitously be used. Check that the reading is indeed non-specific, by excluding a generic or specific reading in the context or explanation. The follow-up phrases are meant to help distinguish the specific and non-specific reading.*

*Investigates:*  *Exclusivity*

*Aim:*        *We know that indefinite non-specific NPs are incompatible with exclusivity, since non-specifics do not generate alternatives to exclude. Therefore, if a non-specific reading is available for a focus strategy, the strategy is not exclusive. See section 6 in Part I.*

Example: The conjoint verb form is suspected to be a marker of exclusive focus in Makhuwa. Using this strategy with the word for 'person' results in a necessarily specific or generic reading – indefinite non-specific is not accepted.

Makhuwa (Van der Wal 2011)

(76)  Ki-m-weh-alé         ntthú,   nki-weh-álé     enáma.
      1SG.SM-1OM-look-PFV.CJ    1.person  NEG.1SG-look-PFV   9.animal
      'I saw a person/human being, not an animal.'
      *'I saw someone.'

## 27. Numerals

*To do:*      *In a phrase with a suspected exclusive strategy, replace the noun phrase with the exclusive reading by a (noun phrase with a) numeral, then check with the informant what the reading is: a lower boundary (minimum amount, can be more) or the precise amount. Alternatively, ask the informant to translate sentences with a numeral and check whether the reading gives a minimum amount or a precise amount. You can check whether it is felicitous to follow up with 'perhaps more'.*

*Investigates:*  *Focus, Exclusivity*

*Aim:*        *The semantics of numerals has been taken to have an underspecified interpretation either as the exact amount, or as a lower boundary 'at least this amount' (Horn 1972, Levinson 2000). However, in (exclusive) focus, numerals lose their upward entailing quality and refer only to the exact*

*quantity. This is presumably because focus triggers alternatives, which for numerals means that the alternatives on the scale become more prominent. This invites the inference that these alternatives are not true. If the effect is pragmatic, this inference should still be cancellable ('in fact, he earns more'). If it is not cancellable, and the given value on the scale is the only alternative that is true, this means that the focus strategy used is inherently exhaustive.*

Example: In Hungarian, when 'one million' follows the verb as in (77a), or is topicalised as in (77b), we get the lower-bound reading, but in the directly preverbal focus position (77c), the meaning narrows down to only the value given in the focused constituent, that is, exactly one million.

Hungarian (É.Kiss 2010: 21, based on Szábolcsi 1981)
(77)   a.   János meg  keres  egy milliót       havonta.
            John  PRT   earns  one million.ACC   monthly
            'John earns a/one million a month.'
            → (one million or more)

       b.   János EGY MILLIÓT keres meg havonta.
            'It is one million that John earns a month.'
            → (exactly one million)

Subject:
   • Six chickens were sold.
   • Fifty people attended the meeting.

Patient object:
   • We need two thousand to finish the house.
   • I have written three books.
   • He earns one million.
   • We have three hundred shilling
     … so we can buy the present
     … so we don't have enough to buy the present

### 28. Correction: restriction of referents (overcomplete)

*To do:*        *Present a situation, either verbally or by visual stimuli, in which the predicate is true for one referent or action (and not others). Ask a yes/no question (or make a statement) about more than one referent. Ask the informant to correct you in the reply, negating the conjoined referents. Check which focus strategies can be used in the correction. If informants spontaneously use the particle 'only', check whether this is required or can be omitted.*

*Investigates:*  *Exclusivity*

*Aim:*          *The corrective reply restricts the assertion to only one of the two referents mentioned. It thereby states that the assertion is not true for the other referent. That means that the other referent is excluded. The strategy that is used for this excluding correction must thus be exclusive. If a strategy can*

*felicitously be used by itself to correct an overcomplete statement, it is exhaustive; if the result is awkward, the strategy is not inherently exhaustive.*

Example: Green and Jaggar (2003) show for Hausa that the ex-situ strategy in (78) excludes the other alternatives and can therefore be used in correcting the conjunction 'Audu and Musa', restricting it to 'Audu'. The fact that this is done by the initial position and optionally the focus marker *nē* (the ex-situ strategy) but crucially not an exhaustive particle 'only', shows that the ex-situ strategy has exhaustivity as an inherent part of its meaning. Contrastingly, the non-exhaustive in-situ strategy in (79) cannot be used to restrict the focus to only one part of the conjoined object, since it leaves open the possibility of the predicate being true not only for Audu but for other alternatives (such as Musa) as well. This reveals that the preverbal position (78) but not the postverbal one (79) triggers an exhaustive reading.

Hausa (Green and Jaggar 2003: 201)

(78)  Bà    Audù  dà   Mūsā   ba    (nè̀)     Kànde  takè̀       sô…
      NEG   Audu  and  Musa   NEG   (FM.PL)  Kande  3F.FOC.IMPF  love
      'It's not Audu and Musa that Kande loves…

      … Audù   (nē)    takè̀        sô
        Audu   (FM.M)  3F.FOC.IMPF  love
      …it's Audu she loves.'

(79)  Kànde  bā   tà       sôn  Audù  dà   Mūsā…
      Kande  NEG  3F.IMPF  love  Audu  and  Musa
      'Kande doesn't love Audu and Musa…'

      # …tanà̀   sôn   Audù
        3F.IMPF  love  Audu
      '…she loves Audu.'

Subject
 - *Situation: Only Hannah arrived early this morning.*
   Q: Did Hannah and Rose arrive early this morning?

 - *Situation: Only the boys washed their hands.*
   Q: Did the boys and girls wash their hands?

Are the pineapples and the coconuts on the sack?



Patient object

- *Situation: Lydia washed just the shirts.*
  Q: Did Lydia wash the shirts and the towels?

- *Situation: Juma swept only the yard.*
  Q: Did Juma sweep the house and the yard?

Does Miriam have a broom and a bucket?



Is the man washing the plates and the cups?

Recipient object
- *Situation: The guest bought bread for Eveline only.*
  Q: Did the guest buy Eveline and Irene bread?

- *Situation: The fox stole a chicken for her cubs.*
  Q: Did the fox steal a chicken for her cubs and her sister?

Verb
- *Situation: Jasmine is reading and not doing anything else*.
  Q: Is Jasmine reading and listening to the radio?

- *Situation: Nancy is just preparing dinner.*
  Q: Is Nancy preparing dinner and doing the dishes?

- *Situation: Karugi usually does various tasks, like grazing the cattle and cultivating the field, but this morning he only cultivated.*
  Q: Did Karugi graze the cattle and cultivate this morning?

- *Situation: Jason prepared ugali but then didn't eat it.*
  Q: Did Jason prepare and eat the ugali?

## 29. Correction: expansion of referents (incomplete)

*Preparation:* Translate the yes/no questions into the target language, in two or more different ways, for example as an in situ question and as a cleft question.

*To do:* Present a situation, either verbally or by visual stimuli, in which the predicate is true for more than one referent or action. Then ask the informant a question about only one of the referents or actions. In the question, use a particular strategy that you suspect to mark exhaustivity, or ask the question with different strategies to compare the difference. First note the spontaneous answer to this question, and then ask whether a reply with 'yes, and also...', 'yes, but also...' and 'no, also...' are felicitous.

*Investigates:* Exhaustivity

*Aim:* If the 'yes' option is answered (or accepted as an answer), then the strategy used in the question is not inherently exhaustive. If the 'yes' option is not acceptable and 'no' is answered (or accepted as an answer), this points to exhaustivity being encoded in the strategy. If the 'yes, but' option is preferred over the 'yes, and' option, there is still a perceived contrast. See section 7 in Part I for further explanation.

Subject
- *Situation: Both Hannah and Rose arrived early this morning.*
  Q: Did Hannah arrive early this morning?
    - (spontaneous answer)
    - no, Rose also arrived early
    - yes, and/but Rose also arrived early

- *Situation: Both the girls and the boyes washed their hands.*
  Q: Did the boys wash their hands?
    - (spontaneous answer)
    - no, the girls also washed their hands
    - yes, and/but the girls also washed their hands

Q: Does Mary have a bottle?
    - (spontaneous answer)
    - no, Nancy also has a bottle
    - yes, and/but Nancy also has a bottle



Patient object
- *Situation: Maria swept both the yard and the house.*
  Q: Did Maria sweep the yard?
    - (spontaneous answer)
    - no, she also swept the house
    - yes, and/but also the house

Q: Is the woman selling tomatoes?
    - (spontaneous answer)
    - no, she is also selling onions
    - yes, and/but she is also selling onions

Q: Did Musa wash the trousers?
- o (spontaneous answer)
- o no, he also washed the shirts and the sheets
- o yes, and/but he also washed the shirts and sheets

Q: Does Daniel have a cabbage?
- o (spontaneous answer)
- o no, he also has a banana
- o yes, and/but he also has a banana

Recipient object
- *Situation: Auntie bought clothes for both her niece and her nephew.*
  Q: Did auntie buy her niece clothes?
  - o (spontaneous answer)
  - o no, she also bought her nephews clothes
  - o yes, and/but she also bought her nephews clothes

Verb
- *Situation: Lydia washed the clothes, and ironed them as well.*
  Q: Did Lydia wash the clothes?
  - o (spontaneous answer)
  - o no, she also ironed them
  - o yes, and/but she also washed them

- *Situation: Paul cooked and ate the beans*
  Q: Did Paul cook the beans?
    o (spontaneous answer)
    o no, he also ate them
    o yes, and/but he also ate them

# PART III Diagnostics for abstract Case effects

Noun phrases do not appear randomly in clauses – which NPs appear and where they appear is restricted by the syntax. Traditionally this has been linked to grammatical roles, such as subject and object. In some languages, such roles can be seen as the case marking on the noun, for example 'she' (nominative) versus 'her' (accusative). Generative grammar has extended this to form a condition: all overt noun phrases need to be licensed for abstract Case (Chomsky's 1981 Case Filter).

While it is certain that all (referents of) noun phrases have a certain semantic/thematic role such as agent, patient, or instrument, and all (referents of) noun phrases have a certain activation and information-structural status, it is not clear that grammatical roles and abstract (structural) Case play an equally big role in all languages. This is what the following diagnostics test for, by targeting constructions and operations that are associated with this prototypical nominal licensing. The diagnostics are based on Sheehan & Van der Wal (2018).

## 30. Passive

The English passive construction operates on grammatical roles, and can therefore be instructive in diagnosing nominal licensing. We first need to know whether a typical passive construction exists in the language under study.

- If yes, we want to know:
  - How is the construction marked?
  - Can the agent be present overtly?
    - If yes, does the agent need to be marked, for example with a preposition like 'by'?
- If no, what strategies are used to express the equivalent of a passive?
  (examples in Bantu languages are preposing of the patient, postposing of the agent, a class 2 impersonal subject, a stative construction, …)

### 30.1.    Passive A

*To do:*        *Provide one example of an active-passive sequence, such as 'Samuel ate the rice – The rice was eaten (by Samuel)'. Ask the informant to provide the passive counterpart of the active sentence.*

*Investigates:*  *Pragmatic and/or syntactic promotion of the patient and demotion of the agent; licensing of the demoted agent.*

*Aim:*          *If a preposition is not needed, it is unclear what licenses the agent phrase, which may indicate that prototypical licensing is less relevant.*

- Johnson will cut down the tree – The tree….
- The girl kisses the cat – The cat…
- The wind opened the window – The window…
- The power cut destroyed the phone – The phone…
- The baker gave the donkey bread – Bread… / The donkey…

### 30.2.    Passive B

*To do:*        *Present the images below, one pair at a time, and ideally at different times (e.g. next day or with some other task in between). Explain that the pictures*

*are part of the same story, and that the second scene happens after the first scene. Ask the informant to describe what happens in each picture.*

Investigates: *Pragmatic and/or syntactic promotion of the patient and demotion of the agent; licensing of the demoted agent.*

Aim: *Different constructions may be used depending on whether the agent is known or unknown; this is captured in the pictures as seeing just the arm or the whole man. If a preposition is not needed to express the agent, it is unclear what licenses the agent phrase, which may indicate that prototypical licensing is less relevant.*

What happens to the boy?



What happens to the boy?

In these diagnostics, we want to find an answer to the following questions:

- Can an overt DP 'subject' occur in a non-finite clause?
- If yes, can the subject appear without additional marking (such as 'for' in English)?

The reason we want to know this, is that non-finite verbs are assumed to not assign Case. Therefore, if a DP appears as the subject of a non-finite verb, the DP is not licensed. If a language allows non-finite clauses to have DP subjects, this shows that typical nominal licensing does not apply in this part of the language.

Example: In Luganda subjects of non-finite clauses (in square brackets) are perfectly fine, without extra marking.

Luganda (Sheehan and Van der Wal 2018: 538)
(80)      Ki-kkiriz-ibwa      [**Tenhwa**   okutambul-ira mu-mazzi]?
          7SM-allow-PASS    1.Tenhwa   15.walk-APPL   18-6.water
          'Is it allowed (for) Tenhwa to walk in the water?'

(81)   a.   N-dowooza      [(nti) omuleenzi  a-yagala   mucheere].
            1SG.SM-think   COMP 1.boy         1SM-like   3.rice
            'I think (that) the boy likes rice.'

       b.   N-dowooza      [**omuleenzi**   okwagala mucheere.]
            1SG.SM-think   1.boy            15.like    3.rice
            'I think the boy to like rice.'

(82)   a.   [Okukola      eensobi]  ki-bi.
            15.make      9.mistake 7SM-bad
            'To make mistakes is bad.'

       b.   [**Joel**      okukola    eensobi]    ki-bi.
            1.Joel       15.make    9.mistake   7SM-bad
            '(For) Joel to make mistakes is bad.'

There are five types of non-finite clauses we want to check, each discussed in the following subsections.

### 31.1.  Complements of raising verbs
*To do:*          *Ask the informant to translate the sentences below. If the language does not have a verb like 'seem' or 'appear', you can try a passive of an object control verb, such as 'be believed'. The first sentence will likely give a non-finite verb, which allows you to form the third sentence in the target language and check with the informant whether it is grammatical.*
*Investigates:*  *Subject of non-finite sentence.*
*Results:*        *If a DP subject is grammatical in a non-finite clause (as in the third sentences), this argues against the relevance of activity and hence Case. If*

the DP is ungrammatical as the subject of a non-finite clause, this argues in
favour of Case.

- John seems to eat pancakes.
  It seems that John eats pancakes.
  It seems John to eat pancakes.
- The cow appears to have escaped.
  It appears that the cow has escaped.
  It appears the cow to have escaped.
- The biscuits are believed to be stolen.
  It is believed that the biscuits were stolen.
  It is believed the biscuits to be stolen.

## 31.2. Complements of control verbs

*To do:*        *Ask the informant to translate the sentences below. The first sentence will*
*likely give a non-finite verb, which allows you to form the second sentence*
*in the target language and check with the informant whether it is*
*grammatical. Check whether the subject of the non-finite clause (John,*
*Barry, grandma) needs special marking, for example a preposition, and*
*whether there is an over complementiser or not.*

*Investigates:*  *Subject of non-finite sentence.*

*Results:*        *If a DP subject is grammatical in a non-finite clause (as in the second*
*sentences), this argues against the relevance of activity and hence against*
*the relevance of Case. On the other hand, if the DP is ungrammatical as the*
*subject of a non-finite clause, this argues in favour of Case.*

- We hope to eat pancakes tonight.
  We hope (for) John to eat pancakes.
- They tried to apply for the scholarship.
  They tried (for) Barry to apply for the scholarship.
- The little girl wished to visit the farm.
  The little girl wished (for) grandma to visit her.

## 31.3. Sentential subjects without overt complementiser

*To do:*        *Ask the informant to translate the sentences below. Contexts to help*
*interpret the sentences is provided in quotation marks. The first sentence*
*will likely give a non-finite verb, which allows you to form the second*
*sentence in the target language and check with the informant whether it is*
*grammatical. Check whether the subject of the non-finite clause (the*
*children, the president, Clara) needs special marking, for example a*
*preposition.*

*Investigates:*  *Subject of non-finite sentence.*

*Results:*        *If an DP subject is grammatical in a non-finite clause (as in the second*
*sentences), this argues against the relevance of activity and hence Case.*
*On the other hand, if the DP is ungrammatical as the subject of a non-finite*
*clause, this argues in favour of Case.*

- *(Situation: We're all out of food so)* (for) the children to go shopping would be good.
- *compare to*: To go shopping would be good.
- *(Situation: The president should be proud of our country;)* (for) The president to compain is bad.
- *compare to:* To complain is bad.
- *(Situation: My friend Clara and I are always very precise, so)* (for) Clara to make mistakes is strange.
- *compare to:* To make mistakes is strange.

## 31.4. Copular clause

*To do:*     *Ask the informant to translate the sentences below. The first sentence will likely give a non-finite verb, which allows you to form the second sentence in the target language and check with the informant whether it is grammatical. Check whether the subject of the non-finite clause (my son, the cat) needs special marking, for example a preposition.*

*Investigates:*   *Subject of non-finite sentence.*

*Results:*     *If a DP subject is grammatical in a non-finite clause (as in the second sentences), this argues against the relevance of activity and hence Case. On the other hand, if the DP is ungrammatical as the subject of a non-finite clause, this argues in favour of Case.*

- What I don't want is to disappear.
  What I don't want is (for) my son to disappear.
- What we expected was to drink water.
  What we expected was (for) the cat to drink the water.

## 31.5. Adverbial clause

*To do:*     *Ask the informant to translate the sentences below. The first sentence will likely give a non-finite verb, which allows you to form the second sentence in the target language and check with the informant whether it is grammatical. Check whether the subject of the non-finite clause (Patrick, my sister) needs special marking, for example a preposition.*

*Investigates:*   *Subject of non-finite sentence.*

*Results:*     *If a DP subject is grammatical in a non-finite clause (as in the third sentences), this argues against the relevance of activity and hence Case. On the other hand, if the DP is ungrammatical as the subject of a non-finite clause, this argues in favour of Case.*

- We got money to buy a bag.
  We got money (for) Patrick to buy a bag.
- I waited a long time to return.
  I waited a long time (for) my sister to return.

Some languages show a construction known as 'pseudoraising'. These look like raising constructions, but are typically of the form 'X is/seems like he is V-ing'. We need to distinguish this construction from true raising, since the underlying structure is hypothesised to be different. An extra test to identify pseudoraising is the "puzzle of the absent cook" (see Asudeh and Toivonen 2006), or the "quiet forest" (Carstens & Diercks 2013):

Present a situation where there is only indirect evidence and check whether the (copy) raising construction can felicitously be used. Two examples:

- *Situation: A and B walk into Tom's kitchen. There's no sign of Tom, but there are various things bubbling away on the stove and there are several ingredients on the counter, apparently waiting to be used.*
  # Tom seems like he's cooking.
  Tom seems to be cooking.

- *Situation: We walk into a forest and it is completely quiet and no animal is to be seen.*
  #The animals seem as if they are sleeping (that must be why we cannot see them)
  The animals seem to be sleeping (that must be why we cannot see them)

If the raising construction is grammatical in these contexts, it is a true raising construction; if not, then it is likely to be pseudoraising.

## 32. Hyperagreement

We want to know whether an argument can trigger agreement more than once, as for example in Luganda, where both 'seem' and 'live' show agreement with the subject:

Luganda (Sheehan & Van der Wal 2018: 541)

(83)  Abaana        **ba**-labika    **ba**-beera    mu-nyuumba  eno.
        2.children    2SM-seem      2SM-live      18-9.house    9.DEM
        '(The) children seem to live in this house.'
        lit. '(The) children seem live in this house.'

In the model assuming abstract Case, noun phrases are supposed to agree only once. This is because agreement is linked to Case licensing in this model, and nouns are restricted to only be licensed once (they can only have one grammatical role) – this is the Activity Condition (Chomsky 2001). If a language allows multiple agreement with the same DP, then it violates this condition, which shows that abstract Case is not as relevant as in other languages.

| | |
|---|---|
| *To do:* | *Ask the informant to translate the sentences below, making sure both verbs are inflected. You can easily continue from the sentences under 'raising' in diagnostic 31.1.* |
| *Investigates:* | *Hyperactivity* |
| *Results:* | *If a DP subject can agree more than once, this argues against the relevance of the Activity condition and hence against Case. On the other hand, if multiple agreement is not allowed, this argues in favour of abstract Case.* |

- Hyperraising
  - John seems (that) eats pancakes.
  - The cow appears (that) has escaped.

- Complex tenses with inflected auxiliary and inflected main verb
  - Ferdinand is waits on the bus.
  - Francesca will visits her cousin.
  - My neighbour has fell.

Ideally we also want to test these with subject idioms, so that we can be sure that the construction involves agreement with the same item twice. If the idiomatic reading is retained in hyperraising, we can be sure that the subject started out as part of the predicate and that both the lexical verb and the raising verb agreed with the same subject, as for example in Zulu:

Zulu (Halpert 2012: 59)
(84) a. Ku-bonakala [sengathi iqhina       li-phum-ile      embizeni].
        17SM-seems that      5.steinbok  5SM-exit-PERF    LOC.9.cooking.pot
        'It seems like the secret came out.'
        lit. 'It seems that the steinbok came out of the cooking pot.'

    b. Iqhina       **li**-bonakala [sengathi **li**-phum-ile      embizeni].
        5.steinbok  5SM-seems that          5SM-exit-PERF    LOC.9.cooking.pot
        'The secret seems to have come out.'

## 33. Argument/adjunct

We want to know whether there is a fundamental and systematic difference between arguments and adverbs. Can adverbials behave as arguments? Under which circumstances (e.g. only with an applicative marker, primarily in inversion constructions, etc.)? Are they marked in a specific way? 'Behaving as arguments' is understood as taking subject/object position (word order), triggering agreement, etc.

This is relevant to our research question because only arguments are structurally licensed for Case, whereas adjuncts are not - they bring their own licensing, for example in the form of a preposition. If non-arguments can fulfill functions that are typical for arguments, the distinction between the two becomes vague, indicating that another sort of licensing may be at work.

In many Bantu languages, the relation between the verb and the following element, be that a prototypical argument or an adjunct, is marked in some way. Examples are metatony (the last vowel being H or L depending on finality), the conjoint/disjoint alternation (the TAM inflection on the verb being dependent on the verb's relation with the following element), focus lowering and H tone spreading (the tone pattern on the following element being dependent on whether it is structurally close to the verb or not), etc. We want to know, if there is such marking, can it apply to prototypical arguments as well as what are thought of as adjuncts?

The example in (85) illustrates locative inversion, and marking of the relation between the verb and a following element. The element following the verb, be that the locative as in (85a) or the logical subject as in (85b), appears with the tonal pattern for complements (glossed as CC for complement case), whereas the preverbal element appears in the tonal 'default case' (DC).

Herero (R30, Marten 2006, Möhlig et al. 2002)

(85)  a.  Òvà-ndù      v-á-hìtí        mó-ngándá.
          2DC-people   2SM-PST-enter   18-9CC.house
          'The guests entered the house/home.'

      b.  Mò-ngàndá    mw-á-hìtí       é-rùngà / *èrúngá.
          18-9DC.house  18SM-PST-enter  5CC-thief / 5DC.thief
          'Into the house entered a/the thief.'

*To do:*      *Ask the informant to translate the sentences in each of the subsections below, and check the questions for each sentence. The contrasting context phrases are meant to help find an appropriate context for the inversion construction to be used. By 'object marked' we want to know whether the intended constituent can be replaced by an object marker in the right context (not necessarily whether the object marker can be added).*

*Investigates:*  *Argumenthood*

*Aim:*     *If extra marking such as an applicative, particle, or preposition is required for what are typical adjuncts, this argues in favour of Case. If such DPs can be present without extra marking, this is compatible with a system that does not use Case.*

## 34. Locatives

- I like in-your-house.
    - Can the locative be object-marked? (What do you think of in-our-house? I like there.)
    - Is an applicative extension necessary on the verb?
- In-house is dirty/big.
    - If 'be dirty' or 'be big' is a verb: can the locative trigger subject marking?
- This school studies children
  (to mean: children study at this school, not adults)
- The airport arrived a priest
  (as out of the blue piece, or the priest as opposed to the president or an imam)
    - Can the locative trigger subject marking?
    - Is the locative marked as such or can it also remain in its own class?
    - Is an applicative extension necessary on the verb?
    - Can the demonstrative come between the locative marker and the NP?
      (e.g., Zulu: ku-lezi-zindlu 17-DEM-houses)

## 35. Instruments

- She walks (with) a stick.
    - Can the instrument be object-marked?
    (What about the stick? Oh, she walks with it.)
    - Is an applicative extension necessary on the verb?
- The/a stick walks grandmother.
    - Can the instrument trigger subject marking?
    - Is an applicative extension necessary on the verb?
- Nima eats (with) a spoon soup / soup (with) a spoon
    - Can the instrument be object-marked?
    (Where is the spoon? Nima eats with it.)
    - Is an applicative extension necessary on the verb?
    - Is either word order accepted? If yes, are pauses necessary?
- The spoon eats Nina (soup) (to mean: Nima eats with a spoon; other people do not)
    - Can the instrument trigger subject marking?
    - Is an applicative extension necessary on the verb?
    - Can the object (soup) be present?


## 36. Manners (e.g. well, quickly, badly, etc.)

- My brother arrived quickly.
- The reverend coughed loudly.
    - (for both) Can the adverb be object-marked?
- Quickly arrived my brother (my sister, on the other hand, is always slow)
- Loudly coughed the reverend (the choir director did not cough, or he coughed quietly)
    - (for both) Can the adverb trigger subject marking on the verb?


## 37. Reasons

- The child fled fear (to mean: the child fled out of fear/because he was afraid)
    - Can the reason NP be object-marked?
    (Was the child afraid? Fear, he fled (because of) it.)
    - Is an applicative extension necessary on the verb?
- Fear fled the child (others were afraid but didn't flee).
    - Can the reason NP trigger subject marking?
    - Is an applicative extension necessary on the verb?
- The bird died hunger.
    - Can the reason NP be object-marked?
    (Hunger, the bird died (because of) it.)
    - Is an applicative extension necessary on the verb?
    - Can the clause be passivised to 'hunger was died the bird'?
- Hunger died the bird (but the cat is still alive).
    - Can the reason NP trigger subject marking?
    - Is an applicative extension necessary on the verb?

## 38. Transitivity

We want to know whether there is a (general or verb-specific) transitivity requirement. 'Free' omitting of arguments can point to their IS status being more important than filling a grammatical role. On the other hand, the obligatory presence of *some* element can also point in that direction (see also the argument/adjunct distinction in diagnostic 33). The environments in which we can encounter this include the following:

- Argument drop: Highly active referents may be omitted, for example in the answer to a question: What did you give Barbara? I gave (her) shoes.
  Who did they buy flowers for? They bought for Sam (flowers).
- Dummy subjects (or expletives, such as 'there' and 'it' in English) are in some languages present in thetic constructions (such as the subject inversion ones in example (33) above or weather expressions).
- Dummy objects or markers are sometimes necessary when no other element follows the verb. Cognate objects can also be thought of as dummy objects.
- Light verb constructions such as 'I did dancing' or 'She made working'.

The data for this diagnostic are obtained through the other tests in Part II (Q-A pairs, thetics, cognate objects). Note that argument drop can be seen particularly well in longer stretches of spontaneous text.

Example: In Aghem, the preverbal subject/topic position must be filled when the agent is focused in a postverbal position

Aghem (Watters 1979:144)
(86) a.   à    mɔ̀   ñɨ́ŋ  ndúghɔ́?
          DS   P2   run   who
          'Who ran?'

     b.   à   mɔ̀  ñɨ́ŋ  éná?
          DS  P2   run   Inah
          'INAH ran'

(Hyman and Polinsky 2010)
(87) a.   ò    mɔ̀   bvɨ̀   *(nò)
          3SG  P1    fall    FOC
          'He fell.'

     b.   ò    mɔ̀   zɨ̀    *(nô)
          3SG  P1    eat    FOC
          'He ate (it).'

     c.   bvɨ̀  ˈtɨ́  mɔ̀  bɛ́   ˈkɨ́  zɨ̀   *(nô)
          dogs  D   P2   fufu  D    eat   FOC
          'The dogs ATE the fufu.'

## 39. Case-based asymmetries

For this diagnostic, we want to know whether there are any asymmetries based on grammatical role only (not on information structure or theta roles). If there are, this forms

evidence for the presence and relevance of grammatical roles. Two areas are mentioned here, but other facts may also show that different grammatical roles are treated differently – keep your eyes open for this.

## 39.1. Extraction asymmetries

- Which arguments can undergo extraction? Since many Bantu languages do not have wh movement, we test extraction in a relative clause. A contrast sentence is added here to ensure that this is a restrictive relative clause, not an appositive one.
  - Subject
    - I saw the girl who cycled to work (not the other girl)
    - I saw the computer that printed this sheet (not the other one)
    - I saw the old man who died (not the alive one)
  - Patient object
    - I saw the potatoes that the neighbours will eat (not the other potatoes)
    - I saw the scarf that Alma gave to her daughter (not the other scarf)
  - Recipient object
    - I saw the woman who Alma gave the scarf to (not the other woman)
    - I saw the woman who Juan bought a ring for (not the other woman)
  - Oblique
    - I saw the chest that the pirate put the money in / in which the pirate put the money (not the other chest)
    - I saw the person who Jenny spoke with (not the other)
  - Possessor
    - I saw the pirate whose parrot flew away (not the other pirate)
    - I saw the doctor whose friend got angry (not the other doctor)
  - Comparative
    - I saw the student who Anna is taller than (not the one she is shorter than)

- How is extraction marked? For example, sometimes subject extraction can trigger a different subject marker (known as 'anti-agreement', see the difference between *a-* vs. *u-* in (88)), or a resumptive marker may be required only for non-subject extractions, like =*zo* in (89).

Kinande (Schneider-Zioga 2007: 404, glosses adapted)

(88) a.    Kambale    **a**-a-langira   Marya.
           1.Kambale  1SM-PST-see  1.Mary
           'Kambale saw Mary.'

     b.    Iyondi   yo    **u**-a-langira       Marya?
           who     RM    1SM.REL-PST-see  1.Mary
           'Who saw Mary?'

Chichewa (Mchombo 2005, via Henderson 2006: 230, 221, glosses adapted)

(89) a.    a-nyaní    a-kú-bá       mi-kánda                      (subject relative)
           2-baboons 2SM-PRS-steal    4-beads
           'the baboons that are stealing beads'

b.     mbuzí     mú-kú-zí-fună=**zo**              (object relative)
      10.goats   2PL.SM-PRS-10OM-want=10RM
      'the goats that you want'

## 39.2.  That-trace effects

In extraction for wh questions, relatives, or clefts, we can also look at a potential difference in the presence of the complementiser, as is the case in English: the complementiser 'that' can be present in object extraction, but is ungrammatical in subject extraction.

- Who$_i$ do you think (*_that_) t$_i$ left? vs. Who$_i$ do you think _that_ Carol likes t$_i$?
- What$_i$ does Harry think (*that) t$_i$ killed his wife? vs. What$_i$ does Harry think his wife ate t$_i$?

# Bibliography Information structure

Note: Most of these are general works, or classics in the field, that typically do not describe or analyse one particular (set of) languages. Also, particularly relevant chapters for each header (contrast, topic, etc.) may be found in edited volumes and are not mentioned separately.

## Overviews

Arnold, Jennifer E., Elsi Kaiser, Jason M. Kahn & Lucy K. Kim. 2013. Information structure: linguistic, cognitive, and processing approaches. WIREs Cong Sci 4.403-13.Erteschik-Shir, Nomi. 2007. Information structure Oxford: Oxford University Press.

Büring, Daniel. 1997. The Meaning of Topic and Focus. Routledge, London.

Foley, William A. 1994. Information structure. The Encyclopedia of Language and Linguistics, ed. by R.E. Asher, 1678-85: Pergamon Press.

Gussenhoven, Carlos. 2008. Notions and subnotions in information structure. Acta Linguistica Hungarica 55.381-95.

Krifka, Manfred. 2007. Basic notions of information structure. Working Papers of the SFB 632, Interdisciplinary Studies on Information Structure, ed. by C. Féry, G. Fanselow & M. Krifka, 13-55. Potsdam: Universitätsverlag Potsdam.

Gundel, Jeanette. 1988. Universals of topic-comment structure. Studies in syntactic typology, ed. by M. Hammond, E.A. Moravcsik & J.R. Wirth, 209-42. Amsterdam: John Benjamins.

Halliday, Michael. 1967. Notes on transitivity and patient in English: part 2. Journal of Linguistics 3.199-244.

Hetland, Jorunn & Valéria Molnár. 2001. Informationsstruktur und Reliefgebung. Language Typology and Language Universals, ed. by M. Haspelmath, E. König, W. Oesterreicher & W. Raible, 617-33. Berlin: De Gruyter.

Krifka, Manfred & Renate Musan. 2012. Information structure: overview and linguistic issues. 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.

Matić, Dejan. 2015. Information Structure in Linguistics. J. D. Wright (Ed.), The International Encyclopedia of Social and Behavioral Sciences (2nd ed.) Vol. 12, 95-99.

Song, Sanghoun. 2017. Modelling information structure from a cross-linguistic perspective. Berlin: Language Science Press.

## Edited volumes

Breul, Carsten & Edward Göbbel (eds.). 2009. Comparative and contrastive studies of Information Structure. Benjamins, Amsterdam/Philadelphia.

É. Kiss, Katalin (ed.) 1995. Discourse configurational languages. New York: Oxford University Press.

Féry, Caroline, Gisbert Fanselow & Manfred Krifka. 2007. The notions of information structure. Potsdam: ISIS Working papers of the SFB 632 6.

Féry, Caroline & Shinichiro Ishihara. 2016. The Oxford handbook of information structure. Oxford: OUP.

Fiedler, Ines, and Anne Schwarz. 2010. The expression of information structure. A documentation of its diversity across Africa. Amsterdam: Benjamins.

Malte Zimmermann and Caroline Féry (eds.). 2010. Information structure: Theoretical, typological, and empirical perspectives. Oxford: Oxford University Press.

van Gijn, Rik, Jeremy Hammond, Dejan Matic, Saskia van Putten & A.V. Galucio Information structure and reference tracking in complex sentences. Amsterdam: John Benjamins.

Güldemann, Tom, Sabine Zerbian & Malte Zimmermann. 2015. Variation in Information Structure with Special Reference to Africa. Annual Review of Linguistics 1.155-78.

Krifka, Manfred & Renate Musan (eds.). 2012. The expression of information structure. Berlin: Mouton de Gruyter.

Chungmin Lee, Matthew Gordon (eds.). 2007. Topic and focus, crosslinguistic perspectives on meaning and intonation. Springer.

Lee, Chungmin, Ferenc Kiefer, Manfred Krifka (Eds.). 2017. Contrastiveness in Information Structure, Alternatives and Scalar Implicatures. Springer.

Mereu, Lunella. 2009. Universals of information structure. Information structure and its interfaces, ed. by L. Mereu, 77-101. Berlin: Mouton de Gruyter.

Neeleman, Ad & Reiko Vermeulen (eds) 2012. The syntax of topic, focus and constrast. Berlin: Mouton de Gruyter.

Repp, Sophie. 2010. Contrast. Special issue of Lingua 120.

Selkirk, Elizabeth O. 2008. Contrastive focus, givenness and the unmarked status of 'discourse-new'. Acta Linguistica Hungarica 55. 331-346.

Winkler, S., Schwabe, K. (Eds.), On Information Structure, Meaning and Form. John Benjamins, Amsterdam,

Methodology

Götze, Michael, Thomas Weskott, Cornelia Endriss, Ines Fiedler, Stefan Hinterwimmer, Svetlana Petrova, Anne Schwarz, Stavros Skopeteas & Ruben Stoel. 2007. Information structure. Information structure in cross-linguistic corpora: Annotation guidelines for phonology, morphology, syntax, semantics, and information structure. Working Papers of the SFB 632, ed. by S. Dipper, M. Götze & S. Skopeteas, 147-87.

Renans, Agata, Malte Zimmermann & Markus Greif. 2011. Questionnaire on Focus Semantics. Working Papers of the SFB 632. Potsdam: Universitätsverlag Potsdam.

Skopeteas, Stavros, Ines Fiedler, Sam Hellmuth, Anne Schwarz, Ruben Stoel, Gisbert Fanselow, Caroline Féry & Manfred Krifka. 2006. Questionnaire on Information Structure (QUIS). Working Papers of the SFB632 (ISIS) 4.

On topics, givenness, accessibility

Ariel Mira. Accessing Noun-Phrase Antecedents. London: Routledge; 1990.

Ariel, Mira. 2001. 'Accessibility theory: an overview'. In T. Sanders, J. Schilperoord & W. Spooren (eds), Text representation: linguistic and psycholinguistic aspects, 29-88. Amsterdam: John Benjamins.

Chafe, Wallace. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. Subject and topic, ed. by C.N. Li & S. Thompson, 27-55. New York: Academic Press.

Frascarelli, Mara & Roland Hinterhölzl. 2007. Types of topics in German and Italian. On Information Structure, Meaning and Form, ed. by S. Winkler & K. Schwabe, 87-116. Amsterdam: John Benjamins.

Givón, Talmy (ed.). 1983. Topic Continuity in Discourse: A Quantitative Cross-Language Study. Amsterdam: John Benjamins.

Gundel, Jeanette, Nancy Hedberg & Ron Zacharsky. 1993. Cognitive status and the form of referring expressions in discourse. Language 69.274-307

Jacobs, Joachim. 2001. The dimensions of topic-comment. *Linguistics* 39 (4). 641-681.

Li, Charles N. & Sandra Thompson. 1976. Subject and topic: a new typology of language. Subject and topic, ed. by C.N. Li, 457-90. New York: Academic Press.

Nikolaeva, Irina. 2001. Secondary Topic as a Relation in Information Structure. Linguistics 39.1-49.

Paul, Waltraud & John Whitman. 2015. Topic prominence. The Blackwell Companion to Syntax, 2nd Edition, ed. by M. Everaert & H. van Riemsdijk. London: Blackwell.

Prince, Ellen F. 1981. Toward a taxonomy of given/new information. In: Cole P. (ed.), Radical Pragmatics, 223–256. New York, NY: Academic Press.

Reinhart T. Pragmatics and linguistics: an analysis of sentence topics. University of Indiana Linguistics Club, 1982 (also Philosophica 1981, 27:53–94)

Roberts, Craige. Topics. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.) Semantics: An International Handbook of Natural Language Meaning, volume 33.2, pp.1908-1934. Mouton de Gruyter

Sornicola, Rosanna. 2006. Topic and comment. In Keith Brown (ed.), Encyclopedia of Language and Linguistics, 12-766.

## On focus and exhaustivity

Skopeteas, Stavros & Gisbert Fanselow. 2011. Focus and the exclusion of alternatives: On the interaction of syntactic structure with pragmatic inference. Lingua 121.1693-706.

Beaver, David & Brady Clark. 2008. Sense and sensitivity Oxford: Blackwell.

Drubig, Hans Bernard. 2003. Toward a typology of focus and focus constructions. Linguistics 41.1-50.

É. Kiss, Katalin. 1998. Identificational focus versus information focus. Language 74.245-73.

Heine, Bernd & Mechtild Reh. 1983. Diachronic observations on completive focus marking in some African languages. Sprache und Geschichte in Afrika 5.7-44.

Kalinowski, Cristin. 2015. A typology of encoding focus in African languages. Buffalo: State University of New York at Buffalo. PhD dissertation.

Matić, Dejan & Daniel Wedgwood. 2013. The meanings of focus: the significance of an interpretation-based category in a cross-linguistic perspective. Journal of Linguistics 49.1-37.

Rooth, Mats. 1992. A theory of focus interpretation. Natural Language Semantics 1.75-116.

Rooth, Mats. 1996. Focus. The handbook of contemporary semantic theory, ed. by S. Leppin, 271-97. Oxford: Blackwell.

Van der Wal, Jenneke. 2016. Diagnosing focus. Studies in Language 40.259-301.

Zimmermann, Malte & Edgar Onea. 2011. Focus marking and focus interpretation. Lingua 121.1651-70.

## On contrast

Horvath, Julia. 2010. "Discourse features", syntactic displacement and the status of contrast. Lingua 120.1346-69.

Molnár, Valeria. 2002. Contrast - from a contrastive perspective. Information structure in a cross-linguistic perspective, ed. by H. Hasselgård, S. Johansson, B. Behrens & C. Fabricius-Hansen, 147-62. Amsterdam: Rodopi.

Vallduví, Enric & Maria Vilkuna. 1998. On rheme and kontrast. In Peter Culicover & Louise McNally (eds.), The limits of syntax, 79-106. New York: Academic Press

Zimmermann, Malte. 2008. Contrastive focus and emphasis. Acta Linguistica Hungarica 55.347-60.

## On theticity

Lambrecht, Knud. 2000. When subjects behave like objects. Studies in Language 24.611-82.

Garcia, Hugo. 2016. From the unexpected to the unbelievable: thetics, miratives and exclamatives in conceptual space. Albuquerque: The University of New Mexico.

Sasse, Hans-Jürgen. 1996. Theticity. Arbeitspapiere Cologne: Institut für Sprachwissenschaft der Universität zu Köln.

Sasse, Hans-Jürgen. 2006. Theticity. In  G. Bernini & M. Schwarz (eds), Pragmatic organization of discourse in the languages of Europe, 255-308. Berlin: Mouton de Gruyter.

# Information Structure Glossary
Jenneke van der Wal and Stavros Skopeteas – November 2019

**Aboutness topic, A-topic**:  The constituent that the comment is about. For some, this is the general definition of the topic function, whereas for others aboutness topics are a subtype of topic, involving a less accessible referent.

**Accessibility, activation**: How accessible or active the mental representation of a referent is. Each referent in our mind is somewhere on a scale between inactive and highly active. Referents can become active or accessible by being present in the context or by being mentioned in the discourse.

**Accommodation**: Accepting the existence of a referent or the truth of a situation when this has not been mentioned in the conversation. That is, presuppositions can be added to the common ground without discussion. For example, when someone says 'Sorry I'm late; the bus made extra stops', the addressee accommodates that there is a bus and that the speaker took the bus to arrive here.

**Afterthought**: A piece of information that comes after the clause is finished. Typically, the speaker thinks that the addressee can identify the referent and does not mention it fully in the clause, but then adds the explicit information afterwards. For example, 'I put them on the balcony… the flowers, that is'.

**All-focus sentence**: Sentence in which everything is in focus; often used to refer to thetic sentences where all information is presented as one piece.

**Alternative question**: An interrogative with a disjunction of subclausal constituents, which asks for a choice between these, for example 'Do you want rice or potatoes?'

**Alternative set**: The set of alternatives that is triggered for the focused constituent. The set consists of contextually relevant alternatives: for the sentence 'I saw a MOUSE in the forest', the alternatives for 'mouse' will naturally be other things I could have seen in the forest.

**Argument focus**: Focus narrowly on an argument in the clause. Sometimes conflated with term focus.

**Assertive focus**: The focus that fills a gap in the addressee's knowledge by asserting a certain proposition, for example in an answer to a question: 'What did they read? They read [a fairy tale]'. See also completive focus and new information focus.

**Background**: The part of the comment that is outside the focus domain. In terms of the Prague school, this follows from the Focus-Background articulation.

**Brand-new**: Inactive in the mind of the speaker, mentioned for the first time. This is the lowest level of activation/accessibility.

**Broad focus**: Focus on a larger constituent than just a noun phrase, or multiple constituents, typically the verb phrase. It can sometimes include the whole sentence, that is, be a thetic sentence. Compare to narrow focus.

**Categorical sentence**: Sentence that is split in a topic and comment, in which the topic is expressed. Compare to thetic sentence.

**Cleft**: A construction consisting of a "clefted constituent" used in a predicative matrix clause, and a relative clause. Typically, the clefted constituent is the focus and the relative clause is the background. The matrix clause may contain an expletive, as in [It's a canoe][that he owns].

**Closed focus**: Focus selecting from a restricted set of alternatives, for example in an alternative question. Compare to open focus.

**Co-text and context**: The co-text is the linguistic environment of a sentence, for example the previous and following sentence or paragraph. The context can refer to the discourse in which a sentence takes place, but also the wider situation, for example the space in which the discourse or narrative occurs.

**Comment**: The complement of topic. Provides the information that the speaker wants to add to the addressee's knowledge (and thus to the common ground).

**Common ground**: The set of propositions and referents that are shared between speaker and addressee. The common ground contains at least the presuppositions in the conversation.

**Completive focus**: The focus that fills a gap in the addressee's knowledge by completing a certain proposition, for example in an answer to a content question. See also assertive focus and new information focus.

**Content question**: A question using an interrogative word (who, what, when, etc.) to ask about specific content. Question words are seen as inherently focused, because they trigger alternatives.

**Contrast/kontrast**: A comparison between two referents or states of affairs, most clearly when both are mentioned explicitly.

**Contrastive focus**: 1. Focus that occurs in a context where alternatives are explicitly mentioned, or 2. Focus that contrasts the focused referent with alternatives for which the proposition is not true. The latter is often mentioned as a pair with new information focus, and is in this book captured under exclusive focus.

**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'.

**Corrective focus**: The focused element replaces an element of an utterance that is salient in discourse. The interpretational aspect of correcting is typically pragmatic; the semantics are captured as exclusive focus. Corrective focus can apply to nouns, verbs or even to sublexical entities/functional morphemes, for example in TAM focus, or with a metalinguistic function, referring to properties of expressions and not the propositional content, as in 'I do not live in BERlin, I live in BerLIN'.
Also called replacive focus.

**Counter-assertive focus**: The focused constituent replaces a constituent of a sentence in the discourse. Counter-assertive focus relates to a previously asserted content, while corrective focus have a broader use, including metalinguistic correction; see corrective focus.

**Deaccenting**: Removing tonal events from a prosodic domain. This typically applies to the background domain of the sentence. It can appear after the intonational nucleus (postnuclear deaccenting), or before (prenuclear deaccenting). In prenuclear deaccenting, the prosodic realization underlines the nucleus more clearly. Deaccented domains have a flat intonation or a generally falling contour without discernible accents.

**Dephrasing**: Erasing signals of prosodic phrasing in a phonological domain, such as edge tones or prosodic breaks. This typically applies to the background domain of the sentence.

**Destressing**: Erasing prosodic prominence in a phonological domain. This typically applies to the background domain of the sentence.

**Discourse configurationality**: The idea that the word order and morphology in a language are determined primarily by information-structural functions, rather than by grammatical functions.

**Discourse status** (of a referent): The relation of a referent to the discourse: in the simplest version, whether the referent is given or new; in a more detailed view, discourse status may refer to the degrees of accessibility of the referent. See accessibility, activation.

**Discourse topic**: What the larger conversation is about, for example the protagonist of a larger discourse unit.

**Dislocation**: Placement of a constituent outside the core clause, either preceding the core clause (left dislocation) or following it (right dislocation).

**Emphasis**: Special importance or prominence given to a particular aspect of meaning. Emphasis refers to any linguistic means that are used to draw the addressee's attention to a part of the utterance. Speakers may use emphatic expression for foci or topics or even further parts of the utterance for stylistic reasons. The concept of

emphasis is used with great variability in grammatical descriptions, and some older grammars used the term emphasis for the concept of focus.

**Exclusive focus, exclusivity**: Indicates that for some of the alternatives triggered by focus, the proposition is not true.

**Exhaustive focus, exhaustivity**: Indicates that for all of the alternatives triggered by focus, the proposition is not true.

**Expanding focus**: When the focused referent extends the set of referents mentioned in a previous (incomplete) statement for which the proposition is true. If the previous statement had an exhaustive aspect of meaning, the extension corrects this exhaustivity (see exclusive and corrective focus), for example 'Did you buy beans?' 'Yes, but I also bought rice.'

**External/internal topics**: External topics are in a position in the left periphery of the clause (CP/TopP) or outside the clause, whereas internal topics occupy a lower structural position in the clause (specTP).

**Familiar(ity) topic, F-topic**: A topic that is highly active and has already been the topic in a previous sentence. Sometimes distinguished from contrastive topics and aboutness topics.

**Focus**: A function that triggers a set of (contextually relevant) alternatives.

**Focus accent**: A prosodic signal that is associated with focus, for example a falling contour in the realization of the stressed syllable of a focused word in English.

**Focus domain**: That part of the utterance that contains the focus.

**Focus-sensitive particles**: Particles like 'only', 'also', and 'even', which associate with the focus of the sentence. The focus triggers a set of alternatives, and these particles operate on that set (for example by excluding or ordering the alternatives).

**Fragment answer**: One-phrase answer to a question, not repeating a whole sentence. For example, answering 'What did you have for breakfast today?' by the simple 'Fruit' rather than 'Today I had fruit for breakfast'. This is often the most natural answer, but not always the most useful answer to discover linguistic strategies at sentence level.

**Generics**: Reference to classes or types of entities (people, animals, objects) in their entirety, rather than referring to individuals of that kind. For example, '*Elephants* eat grass' or '*Balls* are round'. These can be used as topics without being previously introduced in the discourse.

**Hanging topic, dangling topic**: A topic that does not fulfil an argument role in the clause, expressed sentence-initially, often originating in that external position. For example,

'Amsterdam, you have to visit the Rijksmuseum' or 'Professors of linguistics, I know only Baker'.

**Identificational focus**: Focus that identifies a referent in an existential presupposition. For example in 'What I like is sunshine', where the presupposition is that there is something that I like and this something is identified as sunshine. Some authors (for example É. Kiss) us the concept of identificational focus as a hypernym of contrastive and exhaustive foci.

**Implicature**: Something that the speaker suggests without mentioning it explicitly. An aspect of information structure that may be implied is exhaustivity: in asserting that the proposition is true for one referent, it can often be implied that it is not true for other referents (even if this is not said, or if it is indeed not the case).

**In situ/ex situ**: In situ means 'in place' and refers to constituents that occupy their original position. Ex situ means 'out of place' and refers to constituents that occur in a position different from their original position, typically in the left periphery. Some authors take the canonical linear position as the original position (such as the preverbal position for a subject in an SVO language), whereas other authors take the underlying structural position as the original position (such as the VP-internal position for the subject).

**Information structure, information packaging**: The way in which speakers shape their sentences in order to signal to the addressee how parts of the utterance fit in the discourse. This typically includes marking given versus new information, and highlighting contrastive information.

**Logical subject**: The argument combining last with the predicate to form a proposition.

**Mirativity**: The grammatical marking of unexpected information.

**Narrow focus**: Focus on a smaller constituent, and only a single constituent, often equal to term focus, but also used for focus narrowly on the verb or an operator. Compare to broad focus.

**Neutral context**: 1. Out-of-the-blue context (assuming that in neutral contexts all referents share the same accessibility status), 2. When the VP is the new information, forming a topic-comment construction (assuming that neutral contexts are the most typical contexts in discourse). See also unmarked word order.

**New information focus**: A focus constituent presenting new information without further aspects of meaning (such as contrast); typically the answer to a wh question. See also assertive focus and completive focus.

**New vs. old/given**: Whether a referent (narrow sense) or a larger informational unit (broad sense) is part of the Common Ground. A binary distinction (new/old) may be too coarse; see accessibility scale.

**Non-specific indefinite**: Noun or pronoun referring to an unknown entity. For example, '*Someone* smashed the window' or 'They heard *a man*, but didn't know who it was'. Compare to specific indefinite.

**Open focus**:  Focus selecting from an unrestricted set of alternatives, for example in an answer to a wh question. Compare to closed focus.

**Operator focus**: Focus on sentence operators such as tense, aspect, mood, and polarity. Subpart of predicate-centred focus.

**Out of the blue**: The contextual condition in which no relevant presuppositions are present, for example at the beginning of a conversation.

**Parallel focus**: Focus in two juxtaposed clauses, featuring contrastive topics as well. For example 'The troll *passed the giant quietly*, but the fairy *woke him up*', where the troll and the fairy are contrastive topics, and the predicates are in parallel focus. The interpretational aspect of a parallel or contrast is typically pragmatic.

**Predicate-centred focus** (PCF): Focus that is not on a term (argument or adjunct), but on part of the predicate. Subdivided into state-of-affairs focus, tense/aspect/mood focus, and truth/polarity focus.

**Permanently available referent**: Referent that is generally known and to some extent accessible, such as 'the queen' and 'the sun'. These can easily become a topic without having been explicitly introduced into the discourse.

**Polarity focus**: Focus on the affirmation or negation in the clause. See truth focus.

**Predicate focus**: Focus on the verb itself, or the verb phrase. Not to be confused with predicate-centred focus.

**Presentational focus**: 1. Explicitly introducing a new participant into the discourse, as a thetic sentence; 2. Presenting a referent as new information, see new information focus and assertive focus.

**Presupposition**: Tacit assumptions taken for granted by the speaker. For example, 'Do you want to go to the cinema again?' presupposes that the addressee has gone to the cinema previously. See also identificational focus.

**Prominence**: See salience.

**Pseudocleft**: A construction that equates (the referent of) a headless relative clause with (the referent of) a noun phrase, as in 'What he wants is pizza'. Also known as wh-cleft. Typically expresses identificational focus.

**Question under discussion** (QUD): The (often implicit) question that participants in the discourse are trying to answer. For example, the QUD can be what you did over the

weekend, answering by 'We went for a walk', which can be followed by 'and then had a nice cup of tea', which can be seen as answering an implicit QUD 'and what happened then?'. "QUD" can be seen as a framework to understand how sentences in a discourse relate to each other.

**Referent tracking**: Seeing for each referent in a discourse or narrative when and how it is referred to.

**Referent**: An entity (person, animal, thing) in the world that is being referred to in a sentence.

**Replacive focus**: See corrective focus.

**Restrictive focus**: When the focused referent is a subpart of an earlier mentioned (overcomplete) referent, thus being corrected by restricting the truth to just one part. For example, 'No, it's not bananas and mangos that she brought – she just brought mangos'. The interpretational aspect of restriction is typically pragmatic; the exclusion of the other referent is captured in the semantics as exclusive focus.

**Rheme**: The information added to the theme; comparable to the comment.

**Salience**: Special importance given to or inherent to referents or states of affairs, for example due to high animacy, perceptual prominence, or mental activation.

**Scalar focus**: Focus on a referent at the far end of a scale. For example when alternatives are ordered to likelihood, the least likely can be referred to with the focus-sensitive particle 'even'.

**Scope of focus**: The part of the sentence that is in focus, which can be smaller (for example, an adjective within a NP) or larger (for example, a whole VP). Compare focus domain.

**Second occurrence focus**: The semantic focus of a focus-sensitive operator (such as 'only'), but repeated from an earlier focused occurrence. For example, 'Everyone in this group only wears [green shirts]. Even [the chief] only wears [green shirts]!', where in the second sentence 'only' still associates with (second occurrence focus) 'green shirts', while 'even' associates with the focus 'the chief'.

**Selective focus**: When the focused referent is selected from a given set of alternatives. The interpretational aspect of selection is typically pragmatic.

**Sentence focus**: Lambrecht's (1994) term for thetic sentences. See also 'all focus'.

**Shift topic**: A topic whose referent is different from the topic referent of the previous sentence (and therefore less active/accessible).

**Specific indefinite**: A form referring to a referent that is known to the speaker, but not the addressee. For example '*A man* came at the door. He was called Hans.' The fact that

we can refer to him in a second sentence, makes the referent of the NP 'a man' specific, even if it is indefinite. Compare with non-specific indefinite.

**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!'.

**State-of-affairs focus**: Focus on the lexical value of the verb, for example 'She BAKED the cake, she didn't buy it'. Part of PCF.

**TAM focus**: Focus on the tense, aspect, or mood of the clause, for example 'The prime minister MAY resign, but she doesn't have to.'

**Term focus**: Focus on an argument or adjunct, or a subpart of these. Complementary to PCF.

**Theme**: What the rheme is about, comparable to topic, typically an active referent.

**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' or 'all focus'.

**Topic**: What the sentence is about; what the information in the comment is anchored to.

**Topic continuity**: When consecutive sentences share the same topic.

**Truth or truth-value focus**: Focus on the truth of an utterance, contrasting with its negation/denial. For example, 'So you DID eat the cheese!' (as opposed to not eating it). See also polarity focus. Also called verum focus.

**Unmarked word order**: The word order in a pragmatically neutral sentence. Some take this to be a topic-comment construction, with the subject being the topic, and the VP forming the new (but not contrastive) information. This is the most common discourse configuration. Some take an out-of-the blue context to be pragmatically neutral, because all referents are supposed to have an equal accessibility status. See also neutral context.

**Unused**: Indication of activation status fairly low on the activation/accessibility scale.

**Verum focus**: See truth focus.

**VP focus**: Focus on the verb phrase, typically in answer to a question 'What did they do?'

**Wh question**: See content question.

**Wide focus**: See broad focus.