Abstract  Tima (Niger-Congo, Sudan) has two morphological markers to
express contrast, a focus marker and a so-called selective marker. Defining
contrast as signalling alternatives, we show that the focus marker in Tima
indicates alternatives that involve exhaustivity, and that it may also signal
mirativity. The selective marker merely indicates alternatives which are
established on the basis of nominal modifiers. We take the distribution
of both markers and their interaction as evidence for contrast being a
gradient phenomenon rather than a categorical one. For Tima, we propose
three dimensions of features that can account for the expression of con-
trast by the focus and the selective marker: the type of contribution that
the contrasted element makes to the current question under discussion,
exhaustivity, and mirativity. Using these three dimensions, we argue for
a weaker type of contrast in which we typically find the selective marker,
and for a stronger type of contrast which licenses focus marking.

Keywords: Tima; contrast; focus; information structure

1 Introduction

This study is concerned with the expression of contrast by two information
structural devices, namely the focus marker and the so-called selective
marker in Tima (Niger-Congo). Based on the data of Tima we argue that
contrast, though often closely associated with focus, is an independent
phenomenon, since it can be expressed morphologically not only by the
focus marker but also by the selective marker. We take this interplay of the
two markers in Tima as evidence for contrast being gradient rather than
categorical: The selective marker is used in weaker types of contrast, while
the focus marker signals stronger ones.

The paper is structured as follows: In Section 2, we introduce the notion
of contrast and related concepts. Section 3 discusses the morphological
marking of contrast in Tima, presenting the focus and the selective markers
and their interaction. In Section 4, we propose an account that captures the distribution of both markers, and we discuss the implications that the Tima pattern has for contrast in general. Section 5 concludes with an outlook with regard to further related issues.

2 Contrast

Contrast is a central information structural notion which has been used and defined in various different ways (Molnár 2001; Repp 2016; Umbach 2004). Often, contrast is discussed together with focus, since a common distinction of focus types includes information focus on the one hand and identificational focus (including contrastive and corrective focus) on the other. An example of corrective focus, a contrastive context par excellence, is shown in (1): we see the two explicitly mentioned and contrasted alternatives coffee_{A1} and tea_{A2}. The assertion of A_2 is exhaustive, rejecting A_1 to hold true at the same time.

(1) Lea doesn’t drink [coffee]_{A1}, she drinks [tea]_{A2}.

While example (1) involves exhaustivity, the parallelism in example (2) shows that this is not necessarily the case for contrastive contexts: the contrasted actions of mowing the lawn done by John_{A1} and pruning the roses done by Pete_{A2} do not exclude each other and can both hold true at the same time.

(2) [[John]_{A1}' was mowing the lawn]_{A1}. [[Pete]_{A2}' was pruning the roses]_{A2}.

(Repp 2016: 8)

The third important property of contrast, which is shown in (2), is that it is not restricted to constituents or phrases but can also hold on the discourse level and is relevant for a number of discourse relations.

What all contexts involving contrast have in common is that they concern alternatives or membership in a set, as has been pointed out by various authors (e.g. Chafe (1976); Rooth (1992: 79-82); Vallduví & Vilkuna (1998); Selkirk (2008)). Following this line of tradition, we define contrast as follows:

**Contrast:**
Contrast is the signalling of alternatives that are relevant for the interpretation of a linguistic expression.
This definition corresponds to the definition of focus in Alternative Semantics (e.g. Rooth (1992); Krifka (1993)). Defining contrast in such a way is motivated here by the data from Tima that we will discuss in Section 3: Tima uses two morphological markers to signal different types of contrast: the focus marker in Tima by default involves exhaustivity in addition to the signalling of alternatives, while the selective marker does not include any exhaustivity and simply indicates alternatives, as we will show. Thus, defining contrast as the signalling of alternatives can capture the distributions of both markers.

Those two properties of signalling alternatives and exclusion are also the two properties of contrast discussed in Umbach (2004): the former is more specifically referred to as contrast being based on similarity plus dissimilarity of the contrasted elements. In order for two (or more) elements to be relevant alternatives, they have to share certain properties, i.e. be similar in some respect. At the same time, in order to qualify as alternatives, the elements have to differ from each other in some respect as well. The second property, the exclusion of alternatives other than the current one, is an integral part of certain types of contrast but is irrelevant for others (Umbach 2004: 164). For instance, corrective contexts are necessarily exhaustive in that they reject and thus exclude another explicit alternative. Apart from that, there are types of contrastive contexts which may implicate exhaustivity, but do not necessarily entail it, since the exhaustivity-effect can be cancelled (Umbach 2004; Repp 2016). Example (3) illustrates this with a question-answer pair; the implicature in the answer, namely that the speaker met only John, can be cancelled without contradiction by adding the information that she also met Paul.

(3) Q: Who did you meet yesterday?
   A: I met [John]. (And I met [Paul] too.)

The example in (3) shows a SELECTION context: An alternative, John, is selected out of a set of alternatives, opened by the wh-word who in (3). Another, and probably the most typical, type of SELECTION contexts is shown in (4). From the explicit set of alternatives tea and coffee given in the question, one alternative, coffee, is selected in the answer.

(4) Q: Do you want [tea] or [coffee]?
   A: (I want) [coffee].

1 The formulation is taken from Krifka (2007: 18).
2 The focus marker can also be used in a different way which we tie to mirativity. In such uses, exhaustivity may or may not be involved (see Section 3.2).
The two examples (3) and (4) illustrate that alternatives to the current one can be explicit and form a closed set (4) or they can be implicit and form an open set (3) (restricted to the contextually plausible alternatives). As we will show in Section 3, the openness of the set of alternatives does not have an impact on the expression of contrast in Tima insofar as it cannot be used to distinguish between the use of the selective and the focus marker. Both markers are compatible with contexts of closed, explicit sets of alternatives as well as open, implicit (sets) of alternatives. With regard to the Tima data discussed in Section 3.3, note that we do not restrict SELECTION contexts to prototypical ones as shown in (4). Rather, we also apply this relation to those contexts in which one alternative is selected from an implicit set of alternatives, without necessarily excluding other alternatives.

An important question concerning contrast emerges from the properties of contrast outlined above: namely whether contrast should be taken as a categorical or as a gradient concept. In this study, we follow Repp (2016); Molnár (2006); Paoli (2009); Calhoun (2010), who argued that contrast is gradient, meaning that an element is not necessarily either contrastive or non-contrastive, but can be more or less contrastive. For instance, Molnár (2001: 108) distinguishes between three degrees of exhaustivity which are relevant for different degrees of contrast as well: non-exhaustive (several alternatives can hold true), some-exclusion (a single other alternative cannot hold true), and all-exclusion (all alternatives other than the selected one cannot hold true). This translates into different types of contrast, namely SIMILARITY, OPPOSITION, and CORRECTION relations, which we will introduce in turn.

Contexts of SIMILARITY feature alternatives that make a similar contribution to the current question under discussion (cf. Repp 2016). They are non-exhaustive, since the current alternatives do not exclude the proposition to hold true for other alternatives. An example of SIMILARITY as a contrast-relevant discourse relation is given in (5).

(5) I made [the muffins]_{A1} and I also made [the cake]_{A2}.

As argued in Umbach (2004: 171-173), the discourse relations of OPPOSITION and CORRECTION can be distinguished on the basis of different degrees of exhaustivity.³ An OPPOSITION compares the current alternative to another explicit/implicit background alternative; both alternatives make opposing contributions to the current question under discussion (Repp 2016). Such a

³ Umbach (2004) uses the label of ‘contrast’ for OPPOSITION, and she uses it in a more restrictive way. In this study, we follow Repp (2016) who uses the label ‘oppose’ in order to avoid the use of ‘contrast’ for this type of discourse relation.
context was shown in example (2) above: the current alternative $John_{A1}'$ is opposed to the alternative $Pete_{A2}'$. Both make different contributions to the current question under discussion and both can hold true.

In contrast to OPPOSITIONS, a CORRECTION explicitly denies another alternative $A_1$ to hold true in addition to the current one; the current alternative $A_2$ either rejects $A_1$ because certain background assumptions for the felicitous use of $A_1$ are not met, or because the propositions of *making dinner* associated with $A_2$ and $A_1$ cannot both be true in the evaluation world (Repp 2016):

(6) [Tom]$_{A1}$ did not make dinner, [Lea]$_{A2}$ made dinner.

In addition to the different types of contrast defined above, the parameter of mirativity as used by Cruschina (2012; 2016; 2019), Cruschina & Remberger (2017), and Zimmermann (2007) is relevant for the expression of contrast in Tima. Mirativity in this sense refers to the surprisal and unexpectedness of new information.

3 Contrast in Tima

Having approached the discussion from a rather theoretical end in the previous section, we will now take a more practical look at Tima. After giving some background information on the language (Section 3.1), we will describe and analyse the two morphological devices of focus (Section 3.2) and selective marking (Section 3.3), then end this section with a description of the interaction of both marking options (Section 3.4).

3.1 Preliminary remarks

Tima, spoken by roughly 7,000 speakers mainly in the Nuba Mountains in Sudan, is one of three languages which constitute the Katloid family within the Niger-Congo phylum (see e.g. Dimmendaal 2018). Tima is a tonal language with both lexical and grammatical tones. Since a systematic analysis of tone in Tima is still pending, the tone markings in the examples reflect their surface realisation. As is the case with other languages in the Nuba Mountains (see Rose 2018), Tima has ATR (advanced tongue root) harmony (see Bashir 2013: 272).

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4 Zimmermann (2007) uses the label of ‘unexpectedness’ instead of ‘mirativity’.
The basic word order in Tima is AVO; case marking being absent with this order. By default, the sentence-initial position (a-centre) is reserved for the attentional centre, i.e. the A argument in AVO constructions (see Schneider-Blum submitted). The alternative word order OVA can occur when the object occupies the a-centre; in this case, the subject A requires ergative marking. Additional word orders are possible with focus constructions, which may, in addition to the already mentioned ones, allow for AOV and OAV orders.

As information structural devices, Tima has, next to the morphologically unmarked attentional centre, constituent focus marking as well as selective marking. The latter two markers differ with regard to their effect on word order: The focus-marked constituent in a focus construction must occur in a preverbal position; thus, depending on the type of constituent that occurs with the focus marker, in Tima, focus marking requires changes in word order. The selective marker, on the other hand, does not involve any word order changes and the selective-marked constituent remains in situ.

The data used in this study is primary data obtained during numerous fieldworks between 2007 and now. Most of the material was gathered from storytelling, from utterances having been stimulated by showing photos/pictures, or from other prompted sentences. Certain elicited material relevant for this study was inspired by Malchukov (2004); Umbach (2004); Davies (2012); Repp (2016).

### 3.2 Focus marking in Tima

Constituent focus in Tima is marked by a variety of exponents which are conditioned by morpho-phonological, morpho-syntactic, and semantic factors (see Table 1, for details see Schneider-Blum 2018).

Diachronically, the focus marker in Tima is considered to be related to the predication marker used in non-verbal predicative contexts. This assumption is based on the synchronic observation that the focus marker is obligatory with non-verbal predication in equative constructions (see example (7), for more details see Schneider-Blum 2018). This is supported by the fact that a development of focus markers from copulas is cross-linguistically not uncommon (cf. Heine & Kuteva 2002: 109-110).

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5 For the terminology see Himmelmann & Primus (2015).

6 Utterances were prompted by showing (series of) pictures, which were either photos the authors had taken in the area, or material compiled by Skopeteas et al. (2006).
Table 1: Exponents of the focus marker.

<table>
<thead>
<tr>
<th>exponent</th>
<th>context</th>
</tr>
</thead>
<tbody>
<tr>
<td>=li/=lɪ</td>
<td>singular (unmarked S/A or O)</td>
</tr>
<tr>
<td>=(G)ʌ/=(G)a</td>
<td>singular (1/2/3 person, proper names, oblique, ergative subject)</td>
</tr>
<tr>
<td>=(y)e/=(y)ɛ</td>
<td>plural</td>
</tr>
</tbody>
</table>

(7) \textit{Tima} (07.03.10_11_01)
[kɪbʌ́ʌ́ŋ lɛ́ɛ́n=ɪ́=lɪ\textsuperscript{PRED} [nʌ̀ŋ]\textsubscript{SUBJ}; [kɔpʌ́n\textsuperscript{PRED} dɪ́=lɪ\textsuperscript{PRED}]
friend LOC:1SG = SEL = FOCS.G gun subj
[ŋɪn\textsuperscript{SUBJ}] 3SG

‘This is my friend; she is a teacher.’
(Context: The speaker introduces her friend to someone.)

Synchronically, the marker under consideration is a priori functionally ambiguous. For instance, the statement kɔpʌ́n\textsuperscript{PRED} dɪ́ ‘She is a teacher.’ does not only fit into the context as described in (7), but would also be a grammatically, as well as pragmatically, correct answer to the question \textit{Is your friend a nurse or a teacher?}, which is a typical context for focus. Moreover, predicate marking and focus marking (here by = lɪ) follow the same tonal patterns. Therefore, a formal difference between the focus marker and the predicative marker cannot be established, and the marker’s function can only be determined by the context.

In a similar vein, there is neither a tonal nor a morphological difference in the answers of wh-questions compared to answers of alternative questions. Thus, showing the picture of a lamb (see Figure 1) and asking \textit{What is this?} (8a), consultants provided equivalent answers to the alternative question \textit{Is this a sheep or a goat?}. Both versions, (8b) and (8c), are adequate in both contexts.

(8) \textit{Tima} (20190120_06)

a. Is this a sheep or a goat? / What is this?

\textsuperscript{7} The isomorphism of predicate and focus marker, and the fact that the marker occurs more often in its function as focus marker, let us use the gloss FOCS in any case, that is, independent from its function as predicate marker or as focus marker.
b. káŋàl = If
cí‘ná
sheep = FOC.SG SG:DEM.PROX
‘This is a sheep.’
c. káŋàl = If
sheep = FOC.SG
‘It’s a sheep.’

Figure 1: Stimulus of example (8a).

Example (9) illustrates that an expression containing information focus in the answer to a wh-question (9b) is formally, i.e. morphologically and with regard to the tonal pattern, equivalent to the expression we find in a construction with corrective focus, as in (9d).

(9) Tima (20190206_03)
a. ‘What is this (pointing to the leg)?’
b. kìdìì = If
leg = FOC.SG
‘It’s a leg.’
c. kìdìì = If = yè?
back = FOC.SG = REP
‘Is it a back?’
d. ?aʔa, kìdìì = If
no leg = FOC.SG
‘No, it’s a leg.’

As demonstrated in (10) and (11), the focus-marked constituent needs to be moved to a preverbal position. Where the A argument is focus-marked, no changes in word order are necessary since A is already preverbal by default (cf. example (16)). However, if an object is in the sentence-initial

8 Though the examples we had at our disposal, concerning the tonal patterns in connection with the various functions of focus, let us assume that tone is not decisive when trying to determine the grade of contrast, surely more systematic research would be desirable in that direction.
position of the attentional centre and the ergative-marked A argument (ŋ̀kóló ‘shame’ in example (10)) receives focus marking, A moves to the position that immediately precedes the verb, following the object (cibóónín ‘girl’). If, as in (11), the A argument (kʌ̀húnénna ‘this woman’) remains in the a-centre, the focus-marked object (yʌ́kɨ́r ‘remainders’) moves into the preverbal position.

(10)   \textit{Tima} (06.04.09-05-15) 
\begin{verbatim}
cibóónín ŋ̀kóló = ḳálúk  
girl\text{ ERG = shame} = \text{FOC.SG} eat  
\end{verbatim}
'\textit{The girl is ashamed.}' (literally: ‘Shame eats the girl.’)

(11)   \textit{Tima} (12.04.09-02-07) 
\begin{verbatim}
kʌ̀húnén = ná \ yʌ́kɨ́r = è  
woman = \text{DEM.PROX} \text{ remainders} = \text{FOC.PL} rake = \text{COMPL}  
á = yɛ̀ɛ̀h \ 
SRC = sorghum  
\end{verbatim}
'\textit{This woman is raking the remainders from sorghum.}'

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure2.png}
\caption{Stimulus of example (11).}
\end{figure}

Concerning the distribution of the focus marker, its use is obligatory in the following contexts:\footnote{The photo of the raking woman was one of a series of photos with people performing different actions.}
\begin{itemize}
\item answer to a wh-question (8b), (8c), (9b), (12b), (13)
\item answer to an alternative question (8b), (8c), (18b), (18c)
\item correction (9d), (14), (15)
\item in addition, its occurrence may signal mirativity/unexpectedness (16), (17b)
\end{itemize}
\footnote{Furthermore, focus marking may be used in other types of contexts considered irrelevant for this study; for more information and examples see Schneider-Blum 2018.}
Each context will be illustrated, starting with possible answers to the wh-question in (12a). The bracketed constituents in the answer of (12b) are optional.

(12)  

Tima (20190120_01)  

a. ‘Who did she (i.e. Mariyam) see?’  

b. kàpìŋ = á ùkúmùn (mínà) (tùn)  

Kaping = FOC.SG 3:saw  ERG:3SG only  

‘She saw (only) Kaping.’

Additional information provided in the answer is not focus-marked, as can be seen with regard to lît̪ʌ̂ŋ in (13), showing another valid answer to the question in (12a).

(13)  

Tima (20190120_02)  

kàpìŋ = á ùkú’mún nà l-ît̪ʌ̂ŋ  

Kaping = FOC.SG 3:saw  and LOC-Ithang  

‘She saw Kaping and Ithang.’

Typical examples of CORRECTION are given in (14) and (15). With regard to the former, the presupposition Kokuung ate soup was rejected and corrected by the speaker: No, Aka had soup, Kokuung ate meat.

(14)  

Tima (20190120_18)  

ʔáʔà, òká = wà ùmsók fídí ‘yábóh, yábóh = é ıká’lúk  

no,  Aka = FOC.SG 3:drank water meat,  meat = FOC.PL 3:ate  

ŋ̩ = kòkùúŋ  

ERG = Kokuung  

‘No, Aka had soup, Kokuung ate meat.’  

(Context: The addressee thought Kokuung ate soup.)

In the recording of a dialogue on turn-by-turn directions, one of the speakers asked about a certain place, Is this Harunkwa?. His collocutor contradicts the assumption in (15), because Harunkwa is part of the Tima area and not the area he was talking about:

(15)  

Tima (310108_31_AdanaanWayExplaining 015)  

àʔá, màk kihí í = ìhwáà tímà = lí cí-yàá  

no  but  place DIR = people Tima = FOC.SG SG-DEM.DIST  

‘No, but that (i.e. Harunkwa) is surely a place of the Tima people.’
As can be seen in (15), the focus marker is attached to the rightmost element of the phrase (unless negation or reported speech marking occurs). Also note that the sentence would be ambiguous between a predicate construction and a focus construction if one did not know the context.

The last relevant type of contexts in which the focus marker is used involves mirativity, which is associated with unexpectedness and surprise (cf. Zimmermann 2007; Cruschina 2019). As we will discuss in more detail in Section 4, we take this function to be an extension of focus marking, since the latter usually comes with a certain degree of unexpectedness. In the context of mirativity, exhaustivity and contrast seem less relevant, while the notion of unexpectedness (which plays a minor role in corrections) is foregrounded. Example (16) shows the focus marker being used to convey unexpectedness. The preceding context of the utterance in (16) is a demonstration held in Khartoum during the political turmoil of February 2019 in Sudan. The focus marker =yɛ́ used with ḣwáá:ná ḭwá:wók ‘many people’ indicates that the speaker wants to point out an unusual event, i.e. the fact that there were many people in the street the previous day is somewhat surprising and out of the ordinary.

Example (17b) is another example in which unexpectedness, rather than exhaustivity, is considered to account for the presence of the focus marker. This and similar examples were triggered with pictures designed by Skopeteas et al. (2006). The consultant was shown different series of three pictures, each of which reflect a coherent short story. When being shown the series in Figure 3 and asked What happened?, all replies featured an initial focus-marked constituent, as in (17b) (Condition A3, Task 15 in Skopeteas et al. 2006):

\[11\text{ Cf. Cruschina (2019: 19): ‘[...] the corrective context involves both contrast and a given focal alternative, the mirative context needs neither contrast nor a given alternative, [...]’} \]
(17)  *Tima* (15_3_C1D2A3B4)

a. What happened?

b. ćíŋì= lí́ úkùdì-yák mètèn=yáŋ ụ = kùrtú, ụkó

*fire = FOC.SG* 3:started-AP beside = LOC:3 DIR = house COP

štàp-štł-àà = yáŋ ụ = kùrtú,

3:moved.over-MID-INS = LOC:3 DIR = house

wùdá-yík-ááátáŋ kùrtù

burn-CAUS-INS:COMPL house

‘A fire started next to a house, it jumped over to the house and burnt the house.’

*Figure 3:* Stimulus of example (17).

With a more precise question, e.g. *What happened to the house?* (Condition B3, Task 15, Skopeteas et al. 2006), we received an answer almost identical to the one in (17b). However, with the same type of question (What happened to X?) in other series of pictures, not all of the answers included focus marking, that is to say if the referent was already established as attentional centre and therefore expected.

As was mentioned Section 2, the explicitness of the set of alternatives formulated in a question is irrelevant for focus marking in answers in Tima; this means, focus marking can occur with both explicitly given and implicit sets of alternatives (the same holds for the selective marker, as we will show in Section 3.3). An example showing an explicit set can be seen in the alternative question in (18a). In Tima, this kind of question allows for two types of quite natural answers: a shortened one with the constituent only, as in (18b), and a longer one containing the constituent in question as well as
the verb (while not mentioning the object), as in (18c). In both cases, focus marking is necessary on the constituent that selects the alternative for which the predication holds true (káádíh ‘monkey’) from the set of alternatives given in the question (monkey vs. cat).

(18) **Tima** (20190206_06)

a. Did the cat or the monkey steal the bread?
   b. ŋ̀=káádíh=ʌ́
      ERG = monkey = **FOC.SG**
      ‘It was the monkey.’
   c. káádíh=ɪ́ú
      monkey = **FOC.SG** 3:stole:AP
      ‘The monkey stole it.’

A wh-question such as in (19a) leaves the alternatives implicit, so that the set of alternatives is only constrained by contextual plausibility. A possible answer to that question is shown in (19b). We see that the first selected alternative intùkùbúk ‘groundnuts’ requires focus marking, while the second one, intùk ‘bread’, cannot be focus-marked (cf. example (13)).

(19) **Tima** (20190206_06)

a. Do you know what was stolen from your colleagues?
   b. intùkùbúk = é
      áy = àbûr, intùk (*intùk = e)
      groundnuts = **FOC.PL** SRC = Abeer bread (*bread = FOC.PL)
      á = nàtálíyà
      SRC = Nataliya
      ‘It was groundnuts from Abeer and bread from Nataliya.’

As was mentioned at the beginning of this section, focus marking in Tima indicates exhaustivity by implicature rather than by entailment. Example (20b) shows this, giving an answer to the question in (20a): The exhaustivity effect resulting from the first part of the answer, kàpîŋà ụkùmùn mú́nà ‘she saw Kaping’ can be readily cancelled by the additional segment ụkùmùnỳàŋ ụtåŋ ‘she also saw Ithang’.

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12 In the one-word utterance, A must occur in its ergative form when dealing with a transitive situation, which is not the case when A/S precedes the verb. Note the different allomorphs of focus marking.
As opposed to (20b), where exhaustivity is merely implied, in (21b) exhaustivity is entailed, because the contrast-sensitive lexeme tɪ̀ɪ́n ‘only’ is added. Thus, the completeness has to be denied and corrected if the set of alternatives for which the relevant propositions hold is expanded, as is exemplified with (21c).

In summary, this section showed that the focus-marked constituent must occur preverbally, and that in answers to wh-, as well as alternative questions, only the first constituent of a phrase is marked for focus, never the second (third, etc.). With regard to its function, focus marking in Tima is generally exhaustive by implicature (not by entailment), but, if focus marking occurs in the context of mirativity, exhaustivity seems to no longer be a necessary criterion.

### 3.3 Selective marking in Tima

The other contrast-expressing marker in Tima is the so-called selective marker = (G)i/ = (G)i. The exponents of the selective marker are morpho-phonologically conditioned, following the same regularities as described in focus marking with regard to the choice of the glide and the ATR-feature of the vowel. The very presence of selective marking shows that alternatives also exist. With explicit alternatives, selective marking may oppose constituents in a sentence or refer to these alternatives on the discourse level. Its occurrence is attested with:

- wh-questions (22), (23), (24)
• modified nouns (25), (26), (27), including subordinate clauses (31)
• nominalised modifiers (33)

In contrast to focus marking, selective marking has no influence on word order and generally occurs on the constituents in situ. With clausal constituents, e.g. a subordinate clause and wh-questions, the marker occurs at the right edge of the entire clause (cf. examples (22) - (24), (31)).

Similar to the compatibility of the focus marker with both implicit and explicit sets of alternatives (cf. (18) - (19b)), the selective marker can also occur with both kinds of sets. Examples (22) and (23) illustrate this with wh-questions, the former with an implicit and the latter with an explicit set of alternatives.

(22) Tima (20190120_07)
yèé‘mé ʊ́kɔ̀yɔ̀ kùrtú = wí?
who 3:built house = SEL
‘Who built the house?’

(23) Tima (20190206_01)
yèé‘mé ìcóó kìrkì = yí?
who 3:pierced lie = SEL
‘Who (of you two people standing in front of us) lied?’

Subject, as in (22) and (23), as well as object constituents, as in (24), may be asked for equally. In the case of the latter, the wh-word is the attentional centre; therefore, the word order in the question is OVA (with the postverbal subject marked for ergativity):

(24) Tima (20190120_01)
yèé‘mé úkùmùn mínì = yí?
who 3:found erg:3sg = SEL
‘Who did he see?’

Besides its occurrence in wh-questions, the selective marker mainly occurs in noun phrases consisting of a head noun and one or several modifiers, e.g. attributive adjectives, as in (25) and (26), or another noun, as in (27), in order to signal the existence of alternatives which are similar on a higher taxonomic level (i.e. the semantic level of the head noun), but differ on a lower taxonomic level (i.e. the level of the attribute).

Example (25) shows an OPPOSITION context with explicit alternatives, as cìbànà kùùnén ‘this female child’ is opposed to cìbànà kəmáádə̀h ‘this male child’ in a parallel construction. Both constituents feature the selective marker =i to signal that OPPOSITION. Note that the other pair of alternatives
that are opposed in example (25), kúú ‘dog’ and kʊ́ràáŋ ‘cat’, cannot receive selective marking as the syntactic requirements are not fulfilled (even though, semantically, they would qualify as two opposed alternatives sub-ordinated to the category of animals as the higher taxonomic level). Hence, the use of the selective marker is restricted to the type of noun phrase which contains both head and modifier (and, as we will show later, to nominalised modifiers); on the basis of the modifier, alternatives are related to the head noun in question.

(25) *Tima* (Skopeteas_12_1_C1)

...kúú ɗkálśl'm cíbɔl = ná  kúúnén = í  wɔlá  kʊ́ràáŋ
...dog 3:bite  child = DEM.PROX  SG:female = SEL  aah  cat
 ɗkálśl'm cíbɔl = ná  kɔmáádɔh = í
3:bite  child = DEM.PROX  SG:male = SEL

‘The dog bites the female child, the cat bites the male child.’

![Figure 4: Stimulus of example (25).](image)

Example (26) shows a selection context (partial topic) with the preceding question that contains an explicit set of alternatives (‘these people’). The answer of the speaker reads as follows:

(26) *Tima* (Skopeteas_24_1_A1C6)

a. Are these people wearing hats?

b. àʔà, fɔl = ná  imáádɔh = í  ḋɔcè¹³  ḋkwáář-ɔk
no  child = DEM.PROX  PL:male = SEL  COP:PL  3:wear-CAUS
itùŋkwítəyάk í = yáàh
hats  DIR = heads
‘No, the male children are wearing hats on their heads.’

¹³ The number sensitive copulas ɲɔ (COP.SG) and nɛɛ (COP.PL) occur in contexts where =lɪ/ =l and = (y)e/ = (y)ɛ are not appropriate. In this case, the alternative set was given in the first place, (‘these people’), though not individualized, but as a collective. Thus, focus
Similarities are another type of discourse relation involving the signalling of alternatives, and, thus, contrast. Example (27) shows such a context. This example also stands as evidence for the selective marker being non-exhaustive: It corresponds to an enumeration of feasts (organised by different Tima clans) which all make a similar contribution to the current question under discussion and the list could still be extended. The superordinate set of alternatives, i.e. the events celebrated by the Tima people, is left implicit.

(27)  
\[ Tima \ (20190206\_10) \]
\[
\text{kùlná = nà \ ü = kúú = yí \ nà \ kùlná = ná}
\]
\[
\text{feast = DEM.PROX \ DIR = dog = SEL \ and \ feast = DEM.PROX}
\]
\[
\text{í = ihòòk = í \ jù = ihwáá \ kàrkàmán = ë \ ùkòyì, \ ádù}
\]
\[
\text{DIR = birds = SEL \ ERG = people Kàrkàmann = FOC.PL \ 3:made also}
\]
\[
\text{kùlná = nà \ í = ilòòbá = yí}
\]
\[
\text{feast = DEM \ DIR = seeds = SEL}
\]

‘The feast of the dog and the feast of the bird were organized by the Kàrkàmann clan, also the feast of the seeds.’

Though selective marking is typically found in syntactically parallel structures of pairing events, as in example (25), a parallel structure is not required for the use of the selective marker. This is illustrated in (28): The sentence is part of a description about the use of a number of different local plants and concludes the discourse segment where the question under discussion is the ‘sausage tree’. The explicitly mentioned kwàyàwù ‘sausage tree’ in (28) occurs together with the selective marker =wí, in order to relate the ‘sausage tree’ to the other plants that were the topic of different discourse segments within that conversation.

marking was avoided. If the (implied) question was *Who is wearing hats?*, the focus marker would have been called for.
Two more constructions in which the selective marker is preferentially used (though not necessarily in all cases) involve two types of nominal modifiers: possessive pronouns (29), and directional/spatial modifiers (30). Both, possessive and directional modifiers, only rarely occur with explicitly mentioned alternatives. Example (29) is an exception to the rule.

Example (30) was elicited with the picture in Figure 6 in the context of Task 4 of Skopeteas et al. (2006): Several pictures of that kind (i.e. a certain item being situated in relation to another item) were shown to the consultant who was supposed “to describe each picture by indicating the placement of one of the objects relative to the other one” (Skopeteas et al. 2006: 74).

In Tima, a spatial relation is not indicated from the speaker’s perspective but from the perspective of the relatum (i.e. the chair).
Both examples (31) and (32) show the selective marker at the right edge of a subordinate clause. Such systematic occurrences of the marker in relative and adverbial clauses could be described as an extension of its use, from nouns that have phrasal modifiers, to nouns that have clausal modifiers.

(31) *Tima* (25.02.10_03.09)

`kóyɔ̀ dárkɔ̀nà [á-pɔ̀’lá má-A-kóyɔ̀ = yf],
do   like.this 2SG-want OPT:2SG-do = SEL`

ká = à-hiyanà dà = àŋ
NEG = 2SG-ask:INS = 1SG = NEG

‘Do what you want to do, but don’t ask me!’
(literally: ‘Do like this (what) you want to do, don’t ask me!’)

(32) *Tima* (20190120_10)

`kùlú àyìnà [ǹ-díyàñ-áá = ’ná ó = l-ɔ̀ = yf],
yesterday when P-came-INS = ERG:1SG DIR = LOC-home = SEL`

kàpìñ ìgìrà, ítì ×ìyàtù
Kaping 3:read Ithang 3:rested

‘Yesterday, when I came home, Kaping was reading, Ithang was sleeping.’

In *Tima*, adjectives and quantifiers can generally be used without a head noun. In which case, the selective marker occurs on the nominalised modifier itself, e.g. *kǫ́kɔ́lɔ̀ŋ* ‘the big (one)’ in (33).

(33) *Tima* (20190206_09)

`àlkúyíñ íhú ‘hììk, màk kò-kòlɔ̀ŋ = í`

last.year giraffes STAT.PL-two but SG-big = SEL

àm-búlú’k = átìñ
3:PRF-die:CAUS = COMPL

‘Last year, there were two giraffes (lit.: giraffes are two), but the old one has died.’

In conclusion, we have seen that the selective marker occurs in different contexts of contrast in which alternatives are signalled (without indicating exhaustivity). It systematically occurs in wh-questions, which open a set of alternatives to be filled by the answer. Equally, the selective marker occurs with modified nouns in order to signal alternatives. In general, the selective marker expresses certain types of contrast, namely SIMILARITIES, SELECTIONS, and OPPOSITIONS. It attaches to nominal or nominalised modifiers.
and indicates semantic alternatives to the current one on the attributive level.

### 3.4 The interaction of the focus and the selective marker

Having discussed the distribution and function of the focus marker in Section 3.2, and the selective marker in Section 3.3, we now turn to a brief discussion of constructions in which both markers co-occur. Example (34) is a variant of the utterance presented in (33). While the structure in (33) was uttered by a consultant without any specific preceding question, the one presented in (34) below is the answer to the question *Which giraffe died?*. It features both the selective marker =ɪ́ and the focus marker =ꜜlɪ́.

(34) *Tima* (20190206_09)

kʊ́-kɔ́lɔ́ŋ=ɪ́ɪ́=lɪ́ sg-big = sel:lv = foc.sg 3:died:caus = compl

‘The old one (i.e. giraffe) died.’ (Context: The addressee knew that one of two giraffes had died and wanted to know which one.)

Thus, in (34), selective marking indicates that kʊ́kɔ́lɔ́ŋ ‘the old one’ is a subset of the aforementioned explicit set of alternatives, whilst focus marking is triggered by the selection of one of the alternatives given in the preceding wh-question.

In example (35), focus marking has a corrective function. The context has to be imagined as follows: A discourse participant assumed that the younger of two giraffes had died. This is not true and the speaker of (35) expresses a CORRECTION which requires the use of the focus marker. In addition, the selective marker is present on both alternatives to signal the relationship between the current alternatives (the old vs. the young giraffe).

(35) *Tima* (20190206_09)

kùhú=nʌ̀ giraffe = dem.prox kʊ̀-kɔ̀lɔ̀ŋ=ɪ́ɪ́=lɪ́ sg-big = sel:lv = foc.sg

‘The old giraffe is dead (lit.: died), not the young one.’

Example (36) presents another CORRECTION context. The speaker of those two sentences rejects the proposition *your sister gave birth* and corrects it with *my aunt gave birth*. The two contrasted constituents wɛ̀ɛ́nlɛ́ɛ́nì́ ‘kòtɛʔɛ̀n ‘my
(younger) aunt’ and lũwĩ lẽn ‘my sister’ are focus-marked in both (36a) and (36b), similar to the contrasted elements in example (35). The difference between (36a) and (36b) is in the use of the selective marker. Generally speaking, the selective marker has no fixed position in the phrase and can be attached to any one of the modifiers, some of them, or all of them, in case the noun has more than one modifier. In example (36a), the selective marker =ĩ attaches to lẽn ‘my’ and thus precedes the second modifier kɘʔeʔɛn ‘small’. In (36b), on the other hand, the selective marker =ĩ occurs on both modifiers, i.e. on lẽn ‘my’ and kɘʔeʔɛn ‘small’.

(36) Tima (20190120_06)

a. ᓄᑉ蛭 ᓄᑉ蛭 =í iotics-

kɘʔeʔɛn =ivité

ú‘kùún,

mother POSS:1SG = SEL SG-small = FOC SG 3:gave.birth

kú = lũwĩ

lẽn = ìf = îf = îŋ

NEG = sister.of.male POSS:1SG = SEL:LV = FOC:SG = NEG

‘It is my aunt (a younger sister of the mother) who gave birth, not my sister.’

b. ᓄᑉ蛭 ᓄᑉ蛭 =í iotics-

kɘʔeʔɛn =ivité

ú‘kùún,

3:gave.birth NEG = sister.of.male

lẽn = ìf = îf = îŋ

POSS:1SG = SEL:LV = FOC:SG = NEG

‘It is my aunt (a younger sister of the mother) who gave birth, not my sister.’

This difference in usage between examples (36a) and (36b) entails the following semantic difference: In (36a), where the selective marker only occurs with the possessive pronoun lẽn ‘my’, the speaker indicates that there are mothers other than his own. An explanation slightly off the topic seems to be called for: The term ᓄᑉ蛭 in Tima does not only refer to a person’s biological mother, but also to all the sisters and female cousins of the mother and the father, in addition to the mother’s co-wives; moreover, it may be used to refer to any respected woman who is older than the speaker. Thus, to narrow down potential referents, kinship terms like ᓄᑉ蛭 are often specified. This is achieved first and foremost by possessives, but also by reference to the age of the person, here kɘʔeʔɛn ‘small’. The phrase ᓄᑉ蛭 lẽn iotics-

kɘʔeʔɛn, literally, ‘my small mother’, excludes any non-relatives and refers to an ‘aunt younger than the mother’. In (36a), kɘʔeʔɛn ‘small’ does not receive selective marking. Thus, the ‘aunt’ is simply described as being younger than the
mother. In example (36b), on the other hand, the selective marker is also used on kɛ́tɛ́ʔɛ́n ‘small’, which signals existing alternatives on the level of that modifier, i.e. one or more aunts who are older than the biological mother.

Another example with both selective and focus marking on the same phrasal constituent was presented in Section 3.2, repeated here for convenience as example (37). The two markers are attached to the last element in the phrase (ɪ̀háꜜwʊ́k ‘many’). This example shows their co-occurrence in a context in which the focus marker is used to signal unexpectedness rather than exhaustivity. The selective marker in the two phrases ɪ̀hwááꜜná ɪ̀háꜜwʊ́kɪ́ ‘lots of people’ and ɪ̀nʌ̀ɪ̀háꜜwʊ́kɪ́ ‘most of them’ refer to the same group of people; the quantifier modifies either a noun or a demonstrative pronoun. The third phrase with which the selective marker appears again consists of a nominalized modifier, i.e. ibèʔéŋ ‘some, a few’.

(37)  
Tima (20190204.07)  
kùlʌ́ ɪ̀hwáá = ‘ná ɪ̀háꜜwʊ́k = f = yé ʊ = ŋndɔ̀; ɪ̀nʌ̀ɪ̀háꜜwʊ́k = ɪ́many = sel = foc.pl ìnd = road pl:dem ɪ̀háꜜwʊ́k f = ɪ̀ókwɛ́ɛ́ ɪ́exék ɪ̀bɛ̀ʔɛ́ŋ = f ɪ́pɛ̀k-ʌ̀k = ɪ̀yɛ́wùh ɪ́necks few = sel 3:threw-AP = ins many = sel 3:held 3:held many = sel 3:held necks few = sel 3:threw-AP = ins stones ‘Yesterday, lots of people were in the street; (while) most of them were peaceful, some threw stones.’

To sum up: both the selective and the focus marker share the function of indicating alternatives. However, the co-occurrence of the two markers in a sentence, especially when they encliticise to the same constituent, is proof that these two information structural devices are two phenomena with functionally distinct, though overlapping, domains: Focus marking, at its core, singles out the current alternative, either exhaustively (by implicature), or as an unexpected, surprising alternative. The selective marker signals alternatives that are available on the basis of nominal modifiers, which semantically specify the referent and relate the chosen alternative to others which are similar, yet different.

4 Contrast as a gradient concept: Implications from Tima

As we have shown, Tima employs two different morphological markers for the expression of contrast. Figure 7 summarises the contexts in which the
two markers of contrast are used, referring to the examples discussed in Section 3.

**selective marker** \(=\text{i/}=\text{I}\)

- signalling alternatives in
  - similarities (27), (28)
  - oppositions (25), (29), (16)
  - selections (26), (33), (34), (35), (36)
  - wh-questions (22), (23), (24)

**focus marker** \(=(G)\text{ʌ}/=(G)\text{a}\)

- signalling alternatives
- signalling exhaustivity in
  - selection
    - answer to wh-question (8a), (9b), (12b), (13), (19b), (20b), (21b), (34)
    - answer to alt. question (8a), (18)
  - correction (9d), (14), (15), (21c), (35), (36
- signalling mirativity (16), (17b)

**Figure 7:** Contexts of the selective and the focus marker.

The selective marker is used in those contrastive contexts that simply signal alternatives. The focus marker, on the other hand, does not only signal alternatives, but additionally involves exhaustivity and/or mirativity. The gradient nature of contrast is thus directly reflected in the additional requirements for the use of the focus marker: The selective marker is used to express weaker types of contrast whereas the focus marker signals stronger ones. According to Repp (2016), this is exactly what we expect: “If contrast comes in different degrees we may expect that these degrees correlate with the application of additional or different grammatical means. For instance the peak of a pitch accent may be raised higher and higher with an increasing degree of contrastiveness, or languages may differ as to how contrastive a discourse must be before certain marking strategies are applied” (Repp 2016: 8).

Often, only stronger contexts of contrast require / allow for a certain prosodic or syntactic structure that weaker types of contrast do not do. Examples of this include: contrastive and mirative focus fronting in Romance (cf. Cruschina & Remberger (2017); Cruschina (2019) and references therein), contrastive fronting and prosody in German (cf. Frey 2010), exhaustive focus fronting in Hungarian (cf. Horvath 1985; É. Kiss 1998), prosodic patterns of contrast in English (cf. Katz & Selkirk 2011), exhaustive focus marking in Hausa (cf. Hartmann & Zimmermann 2008), and mirative focus fronting / marking in West Chadic (cf. Zimmermann 2007), to mention a few.
In some ways, the Tima pattern is similar to the ones observed in other languages. However, Tima differs from other well-known patterns of contrastive marking in that it has two distinct morphological markers, i.e. a morphological marker for weaker contrast in addition to a marker for strong contrast. Given that contrast is built into the grammar of Tima in that way, we have shown in Section 3.4 that both markers can interact and co-occur. For instance, contexts with a SELECTION require the selective marker; at the same time, such contexts may involve mirativity, which in turn licenses the presence of the focus marker (cf. example (37)). Another example of a contrastive context in which the two markers co-occur was shown in (34): the selective marker was used because the context was the SELECTION of an alternative from an implicit set. Since the utterance was also an answer to a wh-question, the use of the focus marker was required in addition.

The co-occurrence of the two markers in Tima is important, not only because it shows that contrast is a matter of degree, but because it also shows that contrast is not built into the grammar on the basis of a single feature. Rather, we have to relate contrast to three distinct dimensions in Tima, as is sketched in Figure 8.

![Figure 8: The gradient nature of contrast.](image-url)

The first dimension relates to the contributions made to the current question under discussion (QUD). We have seen that alternatives signalled by the
selective marker in SIMILARITY contexts make a similar contribution to the current question under discussion, whereas both OPPOSITIONS and CORRECTIONS have alternatives with different contributions to the current question under discussion. OPPOSITIONS were shown to be marked by the selective marker as well, and only in CORRECTIONS was the focus marker used.

The second dimension concerns exhaustivity. We saw the selective marker used in non-exhaustive contexts, i.e. in those contexts that do not exclude other alternatives, in OPPOSITIONS, SELECTIONS and in wh-questions. The other extreme, namely CORRECTIONS which entailed exhaustivity, required the presence of the focus marker. Explicit SELECTIONS in answers to alternative or wh-questions, which implicate exhaustivity (which can be cancelled) are focus-marked in Tima. However, we also saw that explicit selections from a closed set can be marked by the selective marker, which directly reflects the gradient character of that dimension in that the extreme values are prototypical contexts for either marker, while the central value is compatible with both.

The third dimension is the one of mirativity. Understood as unexpectedness, mirativity can license the use of the focus marker even in contexts that are non-exhaustive. Thus, in addition to providing evidence for the gradient nature of contrast, Tima also shows which features, along three separate dimensions, can be involved in the grammatical encoding of contrast.

5 Final thoughts

In this study, we argued that contrast is gradient rather than categorical, providing evidence from Tima, where two different morphological markers are used in order to signal different types of contrast. As for the selective marker, we showed that it required a noun-modifier structure in order to be used. The use of the focus marker was shown to be obligatory in wh- and alternative questions as well as in corrections, and we showed that its use may additionally be conditioned by a number of pragmatic factors along the lines of mirativity. However, in Tima, not all contexts which involve contrast in the way defined in Section 2 have to be marked morphologically: contrast may occur in examples that have neither selective nor focus marking. In such cases, a parallel structure of the clauses and/or the discourse particle màk ‘but’ may suffice to convey contrast.

Another dimension of contrast-marking in Tima that requires more detailed study in future is the involvement of prosody. Tima does not seem to use different tonal patterns to express contrast; a closer look at the prosodic
patterns may, however, reveal even more differences in marking different types of contrast.

**Abbreviations**

1 = first person, 2 = second person, 3 = third person, AP = antipassive, CAUS = causative, COMPL = completive, COP = copula, DEM = demonstrative, DIR = directional, DIST = distal, ERG = ergative, FOC = focus, G = glide, INS = instrumental, LOC = locative, LV = lengthened vowel, MID = middle, NEG = negation, OPT = optative, P = person, PRF = perfect, PL = plural, POSS = possessive, PROX = proximal, REP = reported, RESP = respect marker, SG = singular, SEL = selective marker, SRC = source, STAT = stative

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