Emotive interjections in Maasai (Arusa)

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The present article studies the interjective category in Arusa Maasai. By using a typologically-based and prototype-driven approach to interjectionality, the authors test all emotive interjections previously collected in fieldwork in the Arusha region for their compliance with non-formal (semantic and pragmatic) and formal (phonological, morphological, and syntactic) properties associated with emotive interjections across languages. The analysis demonstrates that, when treated holistically, the category of interjections largely complies with the prototype of an interjection – in case of some features, tokens, and/or uses, compliance is indeed total. Nevertheless, in case of other features, tokens, and/or uses, compliance is less evident, sometimes even marginal. Overall, both the events of compliance and violation are significant for emotive interjections in Arusa as they jointly determine the boundaries and variation of the interjective category envisaged in its totality.

KEYWORDS: emotive interjections, typology, canonicity, Maasai, Arusa.

1. Introduction

Interjections are one of the most marginalized grammatical phenomena in linguistic scholarship (Ameka 1992). This is particularly evident in studies on African languages (Andrason & Dlali 2020), Maasai being an exemplary case. The only two publications that dedicate more than a sentence or two to interjections are Hollis' (1905) description of the Kenvan Maasai language and culture and Karani's (2018) doctoral dissertation devoted to argument alternation in a Tanzanian Maasai variety – Parakuyo. Even these studies limit themselves to short inventories of interjections, only noting a few, more general properties exhibited by members of the interjective lexical class; specifically, the excessive use of the aspirate [h], the presence of "half-articulate sounds" (Hollis 1905: 101), the ability to form "utterances on their own" (Karani 2018: 50), and the inability to "relate grammatically to any other word in a clause" (ibidem). Other mentions of interjections are either anecdotal (Tucker & Mpaayei 1955: 64, 117) or confined to mere classificatory statements in dictionary entries (Payne & Ole-Kotikash

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2008). Interestingly, despite the scarcity of research on interjections – or perhaps because of it – there are striking points of disagreement. For instance, for Hollis (1905: 101) the interjective category is 'large', while for Karani (2018: 50), it is 'small'.

The present study constitutes the first step towards filling this significant gap in Maasai scholarship that has, for decades, lacked systematic and principled accounts of the interjective lexical class. To be exact, we aim to offer a detailed analysis of emotive interjections in the Arusa¹ variety spoken by some 100,000 Maasais in northern Tanzania by answering the following research question: What is the profile – both non-formal (i.e. semantic and pragmatic) and formal (i.e. phonological, morphological, and syntactic) – of the category of emotive interjections in Arusa Maasai?² The study will be developed within a typologically-based and prototype-driven approach to interjectionality (Ameka 1992; Nübling 2004; Stange 2016; Andrason & Dlali 2020), whereby the selected Arusa lexemes will be tested for their compliance with an interjective prototype and, thus, properties usually associated with emotive interjections across languages.

In the present study, we focus on emotive interjections because these types of constructions are the only ones that are consistently viewed as rightful members of the interjective lexical class (Stange & Nübling 2014; Stange 2016; Andrason & Dlali 2020; Andrason 2022; Heine 2023). In contrast, the so-called conative/volitive/directive and phatic constructions are regarded as "interjections formally speaking" (Stange 2016: 19; see also Stange & Nübling 2014), non-canonical interjections from a semantic-pragmatic perspective (Andrason & Dlali 2020) or are even excluded from the interjective category entirely (Wierzbicka 2003; Meinard 2015; Heine 2023).³

This paper is structured in the following manner: in Section 2, we explain the framework underlying our research. In Section 3, we introduce original evidence related to the non-formal and formal properties of emotive interjections in Arusa. In Section 4, we evaluate this evidence within the adopted framework. In Section 5, we conclude our study.

2. Framework

In this article we employ a typologically-based and prototypedriven approach to the interjective category. This approach draws on the methodological premises used by one of the authors in his previous works on interjections in African, Semitic, and Indo-European languages (see Andrason & Dlali 2020; Andrason, Fehn & Phiri 2020; Andrason & Hutchison 2020; Andrason 2022) and incorporates the various tenets of category structuring defended by cognitive linguistics (Evans & Green 2006; Janda 2015) as well as certain elements of canonical typology (Brown & Chumakina 2013). Conceptually, our method continues the well-established – if not prevalent – manner of dealing with interjections in scholarship adopted in the seminal works by Ameka (1992, 2006), Nübling (2001, 2004), Stange (2016; see also Stange & Nübling 2014), and Heine (2023).

In our approach, the interjective category is understood as a radial network with prototype effects. The crucial element in structuring the interjective category is its prototype – an ideal representative modeled, or constructed rationally, by linguistics (Andrason & Dlali 2020; see also Brown & Chumakina 2013). The prototype itself is defined cumulatively as a set of properties – non-formal (i.e. semantic and pragmatic) and formal (i.e. phonological, morphological, and syntactic) – that are typologically pervasive and cognitively salient: they are commonly attested across languages and distinguish the interjective category in the sharpest way from other categories. While some prototypical properties are more critical than others (see further below in this section), all of them yield an interjective prototype collectively. Below, we list the properties associated with the interjective prototype in scholarly literature:

- (a) With regard to semantics, a prototypical emotive interjection expresses "current, subjective, strong, and basic" feelings (emotions) and sensory events (sensations) experienced by the speaker (Andrason & Dlali 2020: 165). It is (highly) polysemous, thus being compatible with a range of (positive and negative) emotions/sensations and a wide range of contexts upon which its interpretation depends heavily.
- (b) With regard to pragmatics, a prototypical emotive interjection is a 'reflex' (Nübling 2004: 25; Stange 2016: 1, 3). It is produced by the speaker in a semi-automatic manner (i.e. spontaneously and instinctively) immediately after their exposure to linguistic and/or extra-linguistic stimuli. A prototypical emotive interjection is 'monological' (Nübling 2004: 20-21; Stange 2016: 44) having no addressee to which it could be directed. It is also reflexive and 'non-referential' (Stange 2016: 13; Nübling 2004), i.e. it points to the speaker themselves and cannot be used to "talk about third parties" (Stange 2016: 10; for details, see Andrason & Dlali 2020: 165, drawing on Ameka 1992, 2006; Ameka & Wilkins 2006; Stange & Nübling 2014; Stange 2016).
- (c) With regard to phonetics, a prototypical emotive interjection is monosyllabic and exhibits a (C)V structure. Often, the onset conso-

nant is a guttural, e.g. [h] and [fi] (e.g. ha [ha] in Xhosa), or another h-type sound, e.g. [χ] and [x], if the language lacks glottal fricatives (e.g. jo [xo]/[xo] in Spanish). A prototypical emotive interjection contains sounds and sound combinations that are anomalous from the given language's perspective and is also accompanied by distinctive phonation, especially loud volume and articulatory energy. Alternatively, the phonetic anomaly stems from the skewed distributions of sounds and sound combinations that are used in the emotive interjections of a language (Andrason & Dlali 2020: 165-166; see also Ameka 1992; Nübling 2004; Stange 2016).

- (d) With regard to morphology, a prototypical emotive interjection is mono-morphemic, thus being unsegmentable into more basic, meaningful components. This means, in turn, that it does not contain inflectional and derivational morphemes, nor does it make use of compounding mechanisms. It is lexically opaque (i.e. the form of an interjection does not 'automatically' assign it to the interjective lexical class), although this opacity may inversely be understood as a 'pattern' that characterizes and distinguishes emotive interjections in a language (Ameka 1992; Nübling 2004; Andrason & Dlali 2020: 166; Andrason & Hutchison 2020; Andrason 2021).
- (e) With regard to syntax, a prototypical emotive interjection may always function holophrastically, i.e. as a fully-fledged non-elliptical utterance. If it is used non-holophrastically, i.e. as a word within a larger sentence, it resists integration into the core-clause grammar of that sentence. As a result, the interjection is neither projected by the predicate nor is it governed by the internal or external arguments (i.e. subject or object, respectively) and adjuncts. Similarly, a prototypical emotive interjection does not modify the predicate, arguments, or adjuncts. The above is related to the general asyntagmaticity of a prototypical emotive interjection or its inability to enter into constructions with other grammatical elements.4 A prototypical emotive interjection does not participate in syntactic operations such as negation, interrogation, and passivization.⁵ In its non-holophrastic uses, a prototypical emotive interjection is found at the sentence margins (usually at its left edge) and is phonologically detached from the other elements (especially the core clause) by pause and/or contouring, thus constituting an autonomous prosodic unit (Ameka 1992, 2006; Nübling 2004; Stange & Nübling 2014; Stange 2016; Andrason & Durán Mañas 2021; Andrason 2022; Heine 2023).

The typologically-based and prototype-driven approach to interjectionality adopted in our study implies that emotive interjections attested

across languages need not comply with the prototype fully – instead, they can instantiate it to a certain degree. Thus, each property distinguished above may be met to an extent or even not met at all (Stange 2016; Andrason & Dlali 2020). For instance, emotive interjections can express emotions that need not be strong or basic (cf. Goddard 2013: 8). As far as the semi-automatic production of interjections and their lack of deliberateness are concerned (Nübling 2004: 19; Stange & Nübling 2014: 1982-1983; Stange 2016: 20), some emotive interjective lexemes and constructions may be planned and constitute sophisticated, socially sensitive performances of experience. Similarly, all formal properties may be violated in individual languages (e.g. some interjections contain derivational and inflectional morphemes, form constructions and are integrated into clause grammar, and, as already noted above, can be used as word-like elements in complex clauses, sentences, and utterances; Andrason & Dlali 2020; Andrason & Durán Mañas 2021; Andrason 2022).

The radial model adopted in this article allows us to reveal the internal order of the interjective category without eliminating or reducing the undeniable diversity of interjections observed in the languages of the world. If an element (word or construction) complies with all or most prototypical features, it is viewed as canonical and is located in the center of the category. If an element complies with some features, it is semi-canonical and populates areas more remote from the categorial nucleus. If, however, an element only complies with very few features, it is non-canonical and occupies the category's margins. Overall, the inclusion into the interjective category is a question of degree rather than the binary operation of an 'either-or' type (Andrason & Dlali 2020; Andrason & Hutchison 2020; see Janda 2015; Evans & Green).

It should be noted that the formal properties outlined above – especially those related to phonology and morphology – are typical of primary interjections, i.e. elements that are only or mainly used as interjections. These properties are, in contrast, much less characteristic of secondary interjections. Secondary interjections are elements that, despite their common and well-entrenched use as interjections, entertain an evident (structural and functional) relationship with their non-interjective origin, i.e. lexemes belonging to other lexical classes or elaborated pluriword analytical constructions. The least canonical, as far as their form is concerned, are exclamations, which are in essence non-interjective elements (e.g. nouns, verbs, adjectives, and particles) used in an interjective function occasionally and with minimal traces of entrenchment.

Overall, the various degrees of compliance with the formal characteristics associated with a prototypical emotive interjection and

orthogonal distinction between primary interjections, secondary interjections, and exclamations reflect an advancement on the path of interjectionalization (Andrason, Fehn & Phiri 2020; Andrason 2022; see Nübling 2001). Interjectionalization is a type of grammaticalization process whereby non-interjective inputs used interjectively (exclamations) gradually evolve into fully interjective outputs (primary interjections) through a gamut of transitory stages (secondary interjections) (see Nübling 2001; Stange 2016). Nevertheless, the status of a primary interjection may also be reached in a more 'catastrophic' manner. Indeed, many primary interjections emerge spontaneously without drawing on other lexical classes or analytical constructions, while several others are borrowed from other languages in which they have functioned as either primary or secondary interjections of any origin.

Before presenting the non-formal and formal profiles of emotive interjections in Arusa, a few words must also be dedicated to the semantic analysis of emotions adopted in our study. To begin with, the most common is a 'functional' approach (cf. Goddard 2013: 3), which roughly concords with 'a natural-kind view' of emotion experiences (Barrett 2006: 39). Accordingly, an interjection is correlated with an emotion-label existing in whatever second language is used for description (cf. Goddard 2013). Given the current geopolitics of science, this language is typically English. As a result, emotions not lexicalized in English may potentially be overlooked and left outside of analysis; and inversely, some languages may lack lexicalized emotion found in English, rendering English-based labels impractical. To avoid "the danger of the metalanguage of description being contaminated or distorted by English" (Goddard 2013: 3), some studies – especially the ones that are specifically dedicated to semantics – employ a natural semantic meta-language framework or "the mini-language of universal human concepts" (Wierzbicka 2009: 21). In this approach, each emotive meaning is deconstructed into a combination of primary terms extracted from "a controlled vocabulary of simple words which appear to have equivalents in all or most languages" (Goddard 2013: 3). Given that our prototypical approach follows the studies on interjections in which the traditional functional framework is preferred (Ameka 1992, 2006; Stange & Nübling 2014; Stange 2016; see also Andrason & Dlali 2020 and Andrason, Fehn & Phiri 2020) - which is also still widely employed in psychological research (Scherer 2003; also consult Ekman, Sorenson & Friesen 1969 who categorize emotions into six main classes) – we use the typical English emotion-labels. Even more importantly, we are convinced that the collaborative work on this paper with one of the authors being a native Maasai speaker of Arusa has helped us to reduce the effects of 'English-centrism' in our semantic analysis of interjections and avoid any unwarranted and disproportionate interferences and distortions. Overall, the emotion labels distinguished in our study are organized into the following clusters: joy, admiration, happiness, and euphoria; displeasure, discontent, annoyance, anger, rage, and fury; disgust, disdain, and contempt; worry, concern, anxiety, dread, and fear; sadness, sorrow, and grief; and surprise, astonishment, and shock. The sensations that we have identified are related to temperature, smell, taste, pain, and physical condition (i.e. tiredness and exhaustion).

To conclude, given the theoretical framework outlined above, our method will consist of the following: we will test emotive interjections in Arusa, both primary and secondary for their compliance with the non-formal (semantic and pragmatic) and formal (phonological, morphological, and syntactic) prototypical properties. This will enable us to determine the overall profile of the interjective category in Arusa and position it within the broader scope of a typological debate on interjectionality. The interjections that will be examined in this manner have been identified in a preliminary study. In that research, we collected 82 words and constructions that can - at least, in some instances - simultaneously comply with two prototypical interjective properties: they express feelings and sensory events experienced by the speaker and function holophrastically as complete and self-standing utterances. The selection of these two features for the purpose of our preliminary study - features that certainly do not exhaust the definition of the prototype of interjections - stems from the fact that they are often regarded in interjective scholarship as the most critical (Ameka 1992, 2006; Nübling 2004; Stange & Nübling 2014; Andrason & Dlali 2020), sometimes even as essential or definitional (Heine 2023). This, in our view, somewhat 'simplistic' operationalization of the concept of an interjection has allowed us to escape the danger of circularity in our research: examining the categorial compliance of interjections that have in the first place been collected because of their compliance with the prototype.

3. Evidence

The present section introduces the original evidence that was collected during fieldwork in the province of Arusha, Tanzania, in September 2020. Overall, five native Arusa speakers have been interviewed. Several examples demonstrating determined uses of interjections have been extracted from spontaneous discourses. Many others have been elicited through graphic aids and/or specific questions.

Lastly, a few examples have been constructed by native speakers. The language of interviews and elicitation was invariably Arusa.

Our evidence will be rendered by means of (italicized) IPA symbols rather than the (official) Maasai spelling (see Karani, Kotikash & Sentero 2014). The only divergence is [i] – one of the realizations of the official Maasai grapheme j. This sound, generally defined as an alveopalatal voiced affricate (Payne & Ole-Kotikash 2008), exhibits a few realizations in Maasai varieties and has been represented by a variety of symbols in scholarly literature: [j] (Hamaya 1997: 2), [d3] (Payne & Ole-Kotikash 2008), and [i] (Karani 2013: 7, 2018: 19; Karani, Kotikash & Sentero 2014). Being aware that [i] is not a standard IPA symbol, we use it in our paper in accordance with the practice widely adopted in Tanzanian Maasai scholarship (see Karani 2013, 2018; Karani, Kotikash & Sentero 2014). Additionally, long vowels and consonants (except for ### in which each consonant forms its own syllable) are indicated by the doubling of the respective symbol as is typical of most Maasai studies. Lastly, it should be noted that, because of italicizing Arusa examples, the IPA symbol [a] appears as a. As is customarily in Maasai scholarship, low tone is not indicated in writing while high tone is marked with the acute sign. (We do not differentiate between high tone and downstep high tone.) In long vowels and diphthongs, the tone of each mora is indicated separately.

3.1. Non-formal profile

3.1.1. Semantics

As explained in Section 2, the Arusa language contains 82 interjections with which speakers express their current, subjective, strong, and basic emotional states. In conformity with the approach used in several typological studies (Ameka 1992: 113, 2006: 744; Andrason & Dlali 2020), the emotive interjections that we collected may be divided into two main subtypes: those that express feelings and those that express sensations.

With 65 tokens attested, interjections expressing feelings constitute the main bulk of the emotive interjective stock. Feelings conveyed by such interjections may be positive, negative, or grosso modo neutral.

The positive feelings varying from joy and admiration to happiness and, ultimately, euphoria are conveyed by the following interjections: ááku, dédé, éétáá, entíto, entíto-ejíéjíó, éro, éétáá, hé, hóí, hóó-hóó, ilmúran, míkíjóki, əlkíla, óó, sére, téjo, jíé, and jíéjíó-ai. The most expressive of them – i.e. the ones that tend to be associated with the greatest extent of positive excitement – are éétáá, hé, hóí, and jíé.

Example (1) below illustrates the use of one such interjection. After receiving the news that his wife has just given birth to a boy, the father cannot contain his extreme pride and euphoria. He stands up and exclaims éétáá:

```
    A: É-tó-íwu-o ε-n-kítok ino ε-n-kájio-ni.
    3-PERF-bear-PERF SG-F-woman your SG-F-boy-SG 'Your wife has given birth to a boy'.
    B: Éétáá!

            INTJ<sup>8</sup>
            'Éétáá!'
```

Negative emotions are expressed by a larger set of interjections than positive ones. To begin with, negative feelings that range in extent from displeasure, discontent, and annoyance to anger, rage, and fury are usually conveyed by the interjections $\dot{a}\chi$, $\varepsilon nk\acute{\varepsilon}rai$, $ent\acute{t}to$, $\dot{\epsilon}ro$, $\imath lm\acute{o}rran$, $\imath ltw\acute{a}ti$, $\imath lel\acute{a}\acute{a}$ - $\imath k\acute{a}ke$, $\dot{\delta}r\acute{i}d$, and $\jmath \acute{i}\acute{e}$. The same interjections can additionally be used to express the feelings of disgust, disdain, and contempt. Examples (2a-b) illustrate experiences of displeasure and anger, respectively. In (2a), the boy reacts to an order given by his mother, who tells him to clean the trench. By uttering the interjection $\imath w\acute{a}i$, he shows his discontent, explaining that he is tired. In (2b), an elder is telling a boy for the third time to fetch the cattle. The animals are far away from the place where they were supposed to be and still continue to head in the wrong direction. Angry, almost enraged, the man pronounces the interjection $\imath r\acute{t}d$.

```
(2)
      a. A: Kákui, 10 ſómo
                                      tó-oro
                                                  o-l-kéju!
                                      IMP-clean SG-M-trench
              VOC
              'Hey child, go and clean the trench!'
          B: Wáí!
                       Á-tá-naure
                                      jéjio.
              INTJ
                       1sg-perf-tire mother
              'Wáí! I am tired, mother'.
      b. ſómo
                       tú-ſúku
                                    inkíſu
                                               enaalo,
                                                            óríd!
                       IMP-return cattle
                                               this side
                                                            INTJ
          'Go bring cattle this side, 'sríd!'
```

Another class of negative feelings often encoded by interjections involves worry and concern (3a-b) as well as extreme degrees of these emotions, i.e. anxiety, dread, and fear (3b-c). The interjections that are compatible with all such feelings are $\acute{a}it\acute{n}po$, $\acute{k}iru$, $\acute{o}jie$, \emph{sjombe} , $\emph{fi\'e}$, $\acute{u}\acute{u}\emph{i}$, $\emph{w\'o\'i}$, and $\emph{j\'o\'ope}$. In (3a), a boy has overstayed his visit to a friend. He leaves his friend's place, and when he is ready to go back to his family's compound, he suddenly realizes how dark it is outside. By uttering the interjection $\acute{o}jie$, he profiles his concern regarding his ability to return

home safely. His friend seconds this worry with another interjection, i.e. *fié*. In (3b), a man is told that the cows have been washed away by floods at the river. He is anxious as it is unlikely that he may find them alive – a considerable part of his stock thus being lost. The lexeme *zz* communicates this anxiety univocally. In (3c), the mother sees her son choking. The woman is terrified. She shouts *jóópe* while trying to save her child. Lastly, in (3d), after noticing the police arriving at his place, a young man panics and screams *áitíŋo*. He dreads the possibility of being interrogated and arrested.

```
a. A: Óiie!
                                                   á-ikunári
(3)
                         Káí
                                        daade
                                                                 áán?
                                                   1sg-go how home
              INTJ
                        how
                                        now
              'Ójie! How will I go home?'
         B: ſíé!
                        M-á-ielo
                                        ати
                                                   e-táa
                                                                káarie
                                                                         nalén.
                        NEG-1sG-know because
                                                   3-be
                                                                 dark
                                                                         verv
              'síé! I do not know because it is very dark'.
      b. A: É-éwa
                        nkíſu
                                        ε-n-káre
                                                    to
                                                                o-l-kéju.
                                                                sg-m-river
              3-take
                        PL.cow
                                        SG-F-water at
              'Cows have been swept away by floods at the river'.
          B: Zz!
                        Oo
                                        táátá
                                                    káji
                                                                kínko?
                                                    what
                                                                do
              INTI
                        SO
                                        now
              'Zz! So, what to do now?'
      c. Jóópe,
                     kanóó
                                     i-tá-amá?
         INTJ
                     what
                                     2sg-perf-eat
         'Jóópe, what did vou eat?'
      d. Áitíno!
                     É-etuo
                                     isíkeri.
         INTJ
                     3-come.perf
                                     police
         'Áitíno! Police have arrived'.
```

The feelings of sadness, sorrow, and grief are conveyed by the interjections átʃ, jamani, kílome, kúáde, maskini-ja-Mungu, óóí, jíéjíó-ai, pasmáái, sógó, óúʃɔ, and wój. All these forms may also be used to express compassion and sympathy. For example, in (4a), an older woman finds a little girl crying alone on the road with nobody taking care of her. Profoundly touched by this sight, she utters the interjection maskini. She then takes the baby in her arms and tries to calm it down. Soon after, another woman arrives. Again, seeing a crying child without its mother, she feels sorry for the infant – a feeling made explicit by the interjection kílome. In (4b), a teenage boy sits alone at home. His mother left a few days ago for Dar es Salaam to look for work. His grandmother looks around the house and realizes how lonely the boy is without his beloved mother. The grandmother is very sad and, with tears in her eyes, pronounces the interjection le-máásái, accompanying it with a rhetorical question.

```
a. A: Maskini, kóree
(4)
                                   ηότοπε!?
             INTI
                      where
                                  mother
             'Maskini, where is the mother!?'
         B: Kílome, kánóó
                                  pé-inúa
                                                            ópén!?
                                             ε-n-kέrai
                      why
                                  REL-leave SG-F-child
                                                            alone
             INTJ
             'Kílome, why did she leave the child alone!?'
      b. Le-máásai,
                      koréé
                                             ε-n-kájio-ni
                                                            ai?
                                  déé
         INTJ
                       where
                                  INSF
                                             SG-F-boy-SG
                                                            my
         'Le-máásai, where is my boy?'
```

Another class of feelings expressed by a large number of interjections involves surprise, astonishment, and shock. The most common interjections compatible with the different degrees of this semantic domain are áí, aiséé, áíʃ, ááku, dédé, edúá, éjí, ɛnkáí, háé, héé, héé-hé, hóó, kíbo, kíbó-tcándesi, kíítı, kílome, kíru, kúmbe, kúák, le-máásai, míkijóki, nóó, óó, óóí, ojíé, súmu, téjo, jíé, and zz. The type of surprise conveyed by the above interjections may be positive, negative, or relatively neutral. For example, in (5a), the daughter learns that her mother bought a new house. The use of the interjection héé-hé indicates that she is utterly surprised – neither positively nor negatively – as the event has entirely been unexpected. In (5b), a man confesses to another man that he has stolen something. The other man is shocked, although also appalled – both feelings being communicated by aiſ.

```
(5)
      a. Héé-hé!
                    É-ináŋ-u-a
                                     jíéjíó
                                                            sápúk.
                                               ε-n-káji
         INTJ
                    3-buy-MT-PERF mother
                                               sg-F-house
                                                            big
         'Héé-hé! My mother bought a big house'.
      b. A: Á-tú-púr-ise
                                               kaaríé.
                                     ηole
              1SG-PERF-steal-APAS
                                     last
                                               night
              'I stole something last night'.
         B: Áí(! M-á-ju
                                     lolo
                                               roréi.
              INTJ NEG-1SG-want
                                     those.M stories
              'Áís! I do not want those stories'.
```

The other major semantic sub-type of emotive interjections includes forms that express sensations experienced by the speaker, in particular, those related to temperature, taste, smell, pain, and physical condition. Overall, 17 interjective tokens are compatible with sensorial domains.

To begin with, the most typical lexemes used to express temperature-related experiences are tus for heat and haa or ss (see (6) below) for biting cold.

```
(6) Ss, é-iróbi ena soda naléŋ.

INTJ 3-be_cold this soda very

'Ss, this soda is very cold'.
```

Good smell is expressed by mm (realized ingressively; see 3.2.1) and $qq\hbar$, as well as their combination mm $qq\hbar$. Good taste is expressed by # and mm, like the positive olfactory sensation mentioned above (see (7a) below). Bad odor is expressed by f(%, p(%, p(%, and m%. Bad taste is mainly expressed by e(%) (7b).

```
(7)
     a. Mm.
                  é-jér-i-tai
                                        εndáá
                                                 sídái.
         INTJ
                  3-cook-impr-prog food
                                                 good
         'Mm, someone is cooking nice food'.
      b. Píú!
                  E-nú
                                                 wéi.
                                        ene
         INTJ
                  3-smell
                                        this.F
                                                 place
         'Píú! This place smells bad'.
```

The experience of pain is encoded by the interjections $\acute{a}i$, $\acute{a}i$,

```
(8) Úúí! Áá-tá-rem-okí.

INTJ 3>1-PERF-enter-DAT

'Úúí! It (i.e. a thorn) has entered in my foot (lit. in me)'.
```

Tiredness, fatigue, and exhaustion are expressed by the interjections $\dot{a}\chi$, $\dot{u}\dot{u}$, \dot{o} , \dot{o} , and $\dot{u}\dot{u}$. Their usage is illustrated in (9) below. Having worked the whole day in the field, a woman arrives home. She finally sits down and, exhausted, whispers $\dot{u}\dot{u}$.

```
(9) Íú∫o... é-itá-náur-ifó ε-n-kóruma.
INTJ 3-CAUS-tire-APAS SG-F-farm
'Íúfo... the farm makes one very tired'.
```

Contrary to many languages, emotive interjections in Arusa may be gender sensitive. That is, some interjective lexemes are conventionally associated with either men or women. For example, with regard to the interjections expressing displeasure, discontent, annoyance, anger, rage, and fury, five of them – i.e. $\varepsilon nk\acute{e}rai$, $ent\acute{t}to$, $ent\acute{t}to$ - $ej\acute{e}j\acute{e}j\acute{o}$, ilmuran, and $lel\acute{a}\acute{a}$ - $k\acute{a}ke$ – are only employed by men. In contrast, $iltw\acute{a}ti$, $k\acute{t}b\acute{o}$ - $t\acute{c}\acute{a}ndesi$, $nomb\acute{e}\acute{e}s$, $ilk\acute{t}la$, $ilk\acute{t}$, $ilk\acute{t}$, ilki, and ilki, ilki

```
(10) A: Úúí!

INTJ

'Úú!'

B: Kánóó?

what

'What?'
```

A: ε-n-kítɛŋ ná-á-tá-rwa.
3SG-F-cow REL-1SG-PERF-kick
'The cow has kicked me'.

Most emotive interjections are polysemous. 12 This polysemy is visible in four types of phenomena. First, interjections that belong to one of the specific semantic classes distinguished in this study may generally express all degrees of feelings associated with that class. In other words, interjections tend to be compatible with the entire scale that passes through a particular emotive domain: from its least intense to its most intense nuance. Interjections can thus express feelings that range from displeasure to rage, from moderate joy to extreme happiness and euphoria, from worry and concern to anxiety and dread, from sadness to grief, or from surprise to shock. Second, several interjections are compatible with more than one domain. For instance, dédé, míkíjóki, téjo, and jíé may express joy-euphoria and surprise-shock, while sié may express sadness-grief, displeasure-rage, and worry-fear. Third, interjections that express feelings may also be compatible with sensorial domains, e.g. wój is compatible with the domains of sadness-grief and pain; $\dot{\alpha}\chi$ with displeasure-rage and tiredness-exhaustion; and áíf with sadness-grief, surprise-shock, and pain. Fourth, some interjections express the experience of both positive and negative feelings. For example, entito, éro, and *ilmóran* are compatible with a positive domain of joy-euphoria and a negative domain of displeasure-rage. Similarly, jíéjíó-ai is compatible with joy-euphoria and sadness-grief, and óó with joy-euphoria as well as tiredness-exhaustion and pain.

Although the wide range of polysemy is typical of most interjective lexemes, the meaning of a few interjections is more restricted and, thus, less polysemous. This holds especially true of sensorial interjections, which are often limited not only to a particular sensation (e.g. temperature, taste, or smell) but also to its positive or negative perception. For instance, the lexeme ss is limited to expressing the sensation of cold, while fiú and mm are virtually only used to communicate the experience of bad smell.

The fact that most interjections are compatible with a wide range of semantic domains inversely implies that context plays a crucial role in identifying and/or profiling their adequate reading. Such contextual features include not only the immediate grammatical environment (e.g. other lexemes and grammatical forms) and general extra-linguistic situation in which a given utterance is produced, but also – and critically – intonation and phonation, as well as manual and facial gestures (although these are certainly communicative in much the same way

as the interjections). For example, the specific feeling within a given semantic domain and, thus, the degree of the emotion range (e.g. joy-admiration-happiness-euphoria or displeasure-discontent-annoyance-anger-rage-fury) are often correlated with the manner in which an interjection is pronounced, e.g. louder voice, greater intensity of speech, or lengthening of vowels and consonants (cf. 3.2.1), as well as more expressive gesticulation. On the contrary, the contribution of the linguistic and/or extra-linguistic contexts to the meaning of interjections characterized by limited polysemy is much less decisive.

3.1.2. Pragmatics

In Arusa, emotive interjections may often be viewed as verbal bodily reflexes. In such cases, they constitute immediate responses to linguistic and/or extra-linguistic stimuli, uttered spontaneously, in a nearly instinctive or semi-automatic manner. For instance, in a constructed example, while playing outside, a boy twists his ankle and sprains it. Immediately and impulsively – practically without controlling it – he shouts $w\acute{oj}$. In another example, two teenagers are watching a soccer match. Their favorite team scores a goal at the very end of the game. In the same second, full of euphoria, the youths scream repeatedly $h\acute{e}$ $h\acute{o\acute{o}}$ - $h\acute{o\acute{o}}$, $h\acute{e}$ $h\acute{o\acute{o}}$ - $h\acute{o\acute{o}}$. In both cases, the respective reactions have neither been planned nor effected after a conscious and extended deliberation.

Apart from being 'stimulus-bound' (Goddard 2013: 2: see also Ameka 1992), emotive interjections may also be employed to perform 'didactic' and 'discursive' functions (Goddard 2013: 2-3). In such instances, they are not semi-automatic but rather exhibit a patent deliberate and intentional profile. First, an emotive interjection may be used to influence the behavior of the interlocutor. The situation portrayed in (11a) exploits Goddard's (2013: 2) canonical example of this sort. The mother enters the kitchen and sees her child finishing his breakfast. The boy's hands and mouth are dirty, the tablecloth is stained, and the remains of food are everywhere. She is disgusted and angry. She utters the interjection éif. However, more than a mere spontaneous expression of her feeling, this interjection is used consciously to make the child clean up his mess. 13 Second, emotive interjections may play a certain role in discourse. In such cases, "the stimulus is not something in the immediate context, either a physical-sensory stimulus or a human action or behavior, but rather something the speaker is thinking about" (Goddard 2013: 3). Once again adapting Goddard's (ibidem) example, in (11b), a woman considers a topic of working a month for free in a nearby shop. She is abhorred and shocked by the idea and deliberately exclaims sié.

```
(11) a. Éíʃ, kan55 ená!?

INTJ what this.F

'Étʃ, what is this!?'

b. P-a-itíbír-tʃo tíne péʃo? ʃíé!

SUBJ-1SG-work-APAS there free INTJ

'Should I work there for free? ſíé!'
```

In most instances, emotive interjections are reflexive. They cannot be used to talk about parties other than the speaker themselves and their own experiences, whether feelings or sensations. For instance, in (12a), when hearing her sons' explanations with regard to a fight, the mother visibly irritated, nearly enraged – pronounces the interjection púú. Given the abovementioned reflexivity of emotive interjections, the lexeme púú can only indicate the irritation experienced by the mother even though other persons (specifically, the two boys and the father) are also present in the scene. In (12b), a group of boys is walking to school. The youngest of them pronounces the interjection ss while simultaneously inhaling air (see 3.2.1). His utterance can only be interpreted in reflexives terms: the boy himself experiences the cold. Therefore, the pronunciation of the sentence áníníto enkrjápe 'I am cold' is not necessary (as the interjection itself indicates that the speaker is the experiencer of the sensation) and the interpretation of the interjection as referring to the experiences of the other boys is infelicitous (i.e. the interjection cannot describe sensations experienced by other parties).

```
(12) a. Píú! M-á-ju lolo omón. INTJ NEG-1SG-want those words 'Píú! I do not want that story (lit. those words)'. b. Ss. (\acute{A}-níŋ-íto \varepsilon-n-kıjápe) INTJ 1SG-feel-PROG SG-F-cold 'Ss. (I am cold)'.
```

Although reflexivity is typical of most uses of emotive interjections, some interjective lexemes, especially the sensorial ones, may also be used to inform one about the properties of objects or entities external to the experiencer themselves, e.g. the state of the weather, the taste of food, or the smell of roots and herbs. In (13), the mother asks her daughter about the weather outside. As the girl goes out, she pronounces the interjection *tófo*. This lexeme not only reflexively indicates the child's own sensation but also gives insight into the excessively hot meteoritical conditions of the day (see also examples (6) and (7a-b) presented in 3.1.1, in which the respective interjections indicate the temperature of a drink, the taste of the food, and the smell of a certain place).

```
    (13) A: Kéíjíaa ε-n-kijápe?
        how SG-F-cold
        'How is the weather?'
        B: Íύ∫ɔ!
        INTJ
        'Íóʃɔ!'
```

All emotive interjections analyzed in our study may be used in monologues. This means that in order to be pragmatically felicitous, interjections do not necessitate the presence of addressees to which they would need to be directed. The two following examples, constructed for the purpose of our research, illustrate this clearly. In (14a), a man has received a letter. He opens it and understands that his application for a loan has been denied. Alone at home, sad and profoundly disappointed, he pronounces the interjections $\frac{1}{2}$ leláá. In another example, (14b), a girl is carrying food for her father who works in the field. Suddenly, she stumbles and falls down. Her brother, sitting on a hill, witnesses this from a distance. He jeers at his elder sibling's misfortune and utters the interjection $h\delta\delta$ - $h\delta\delta$. The utterance is not directed to any interlocutor – the boy is alone, and no one can hear him.

```
(14) a. ### leláá. Oo táata?

INTJ INTJ so now

'### leláá. So, what now?'

b. Hóó-hóó! Ncéé é-tu-uróri.

INTJ good_that 3-PERF-fall_down

'Hóó-hóó! It is good that she fell down'.
```

Although all emotive interjections can be monological, their presence in dialogues is not exceptional. Indeed, our database contains multiple examples of dialogical uses of interjections. For example, in (15a), $d\chi$ is employed by a man in response to his boss' command. The man is annoyed at being told to hold a bull so that it can get treated. Similarly, in (15b), where we have slightly reformulated an attested example, a young woman receives sad news from a neighbor about the death of her grandmother. Deeply saddened, she responds by uttering two consecutive interjections, i.e. $w\acute{oj}$ and \acute{ool} , that show sorrow and despair. All interjections expressing sympathy – including $w\acute{oj}$ – tend to be dialogical although their usage in monologues is still fully acceptable and attested.

```
(15) a. A: \hat{I}-ngóma z-l-znj-ni p\hat{e}-udi!

2SG-hold SG-M-bull-SG SUBJ-inject

'Hold the bull so that it gets injected!'

B: \hat{A}\chi!

INTJ

'\hat{A}\chi!'
```

b. A: I-tó-nín-o koko ajo e-twa ino? your 2SG-PERF-hear-PERF that 3-die.perf grandmother 'Have you heard that your grandmother has passed away?' B: Óóí! Á-twa! INTJ INTJ 1sg-die.perf 'Wói! Óói! I am finished!'

3.2. Formal profile

3.2.1. Phonetics

In their majority, emotive interjections do not transgress the rules and constraints of Arusa phonotactics. However, three types of exceptions are attested. First, the interjections ss. zz. mm, mm as well as the lexemes # and ### mentioned above, fail to contain vowels as nuclei in their formative syllables. (All these interjections are monosyllabic – except ##, which has three syllables, [#, #].)¹⁴ This contrasts with a typical syllable structure in Arusa, which requires a vocalic nucleus. Indeed, all Arusa words have either a vowel (short or long) or a diphthong as their syllabic nuclei (cf. Karani 2018: 19-20 for another Tanzanian Maasai variety, i.e. Parakuyo). Second, in addition to clicks which, despite being non-pulmonic, are by definition ingressive sounds, two interjections are pronounced with an inward airstream flow, and thus ingressively: mm [m: \downarrow] and ss [s: \downarrow]. Ingressive realization is unattested in lexemes belonging to other word classes, except for conative calls to animals (Andrason & Karani 2021). For mm [m: \downarrow], the ingressive pronunciation together with a tonal contrast and certain phonation-related features (see further below) distinguish this lexeme (expressing good smell) from the egressive mm [m:1] (expressing bad smell). Third, emotive interjections optionally exhibit extralong vowels and consonants and thus allow for three degrees of length. Accordingly, they diverge from the non-interjective lexicon of Tanzanian Maasai varieties including Arusa, where only two degrees of length are grammatical: short and long (Karani 2018: 16-17). An extralong (trimoraic) pronunciation is the most common in monosyllabic interjections that contain a long vowel. These lexemes (e.g. hóó and 55) often exhibit variants with an extralong trimoraic pronunciation (i.e. [ó::] and [5::], respectively) apart from the more usual (and less marked) bimoraic realization (i.e. [ó:] and [5:]). Similarly, several interjections, especially those that only consist of consonants (e.g. ss and mm) regularly allow for variants with exaggerated length (i.e. [z::] and [m::]). As was the case of lexemes containing extra-systematic sounds, the abovementioned extra-systematic phonotactics are typically attested in primary interjections.

A number of interjections exhibit simple phonetic structure. To be exact, 32 tokens are monosyllables, e.g. áx, áí, áíf, háé, háí, hé, hóí, hóó, kóák, óó, 55, sié, úúi, wái, and jié. The number of disyllabic interjections is nearly identical. There are 31 such lexemes, e.g. ááku, bíris, dédé, íúſo, kíbó, óríd, ójie, sére, sógó, súmú, téjo, úús, and jóópe. 14 interjections are built around three syllables, e.g. áitíno, enkérai, entíto, ilmúran, jamáni, kílome, əlkíla, pasmáái, and jíéjíó-ai. Interjections that exhibit more complex structures are rare. Specifically, two interjections contain four syllables (leláá-káke and míkíjóki); one interjection contains five syllables kíbó-tcándesi); and two interjections contain six syllables (entíto-ejíéjíó and maskini-ja-Mungu). All five- and six-syllable interjections are small analytical phrases originally composed of more elementary segments or independent words. All interjections containing four, five, and six syllables are secondary or have been borrowed from other languages. Nearly all trisvllabic interjections are also secondary except for ### and kílome. In contrast, primary interjections are disyllabic almost twice as often as secondary interjections are. For monosyllabic interjections, almost all are primary, the only secondary one being n55, which functions as a question word outside of the interjective category. The five interjections borrowed from Swahili contain two (e.g. kúmbe), three (e.g. jamáni), or six syllables (maskini-ja-Mungu) (regarding the distinction between primary and secondary interjections and the borrowing of interjections, see Section 3.2.2, dedicated to morphology).

The vocalic nature of Arusa interjections is a complex matter. It is largely correlated with the number of their syllables. That is, monosyllabic interjections – all of them primary – tend to exhibit a marked vocalic profile, i.e. V(V) or AV(V). See, for instance, áí, háé, háí, héé, hé, hóí, hóó, hóí, hóó, hóí, hóó, hóí, wóí, wóí, and jíé. As illustrated by these examples, the nucleic vowel is often a diphthong. In contrast, interjections

containing three, four, five, and six syllables – which as mentioned above are secondary interjections – are not uniquely or predominantly vocalic. Instead, in these interjections – see, e.g., <code>enkérai</code>, <code>míkíjóki</code>, <code>kíbótcándesi</code>, and <code>entíto-ejíéjíó – consonants feature abundantly in a manner fully analogous to what typifies ordinary Arusa lexemes. Disyllabic interjections attest to a 'transitory' or mixed situation. On the one hand, the majority of these interjections (e.g. <code>bíris</code>, <code>dédé</code>, <code>edúá</code>, <code>éétáá</code>, <code>kíbó</code>, <code>súmú</code>, <code>sjombe</code>, and <code>téjo</code>) contain genuine consonants similar to what typifies multisyllabic lexemes. On the other hand, a substantial group of disyllabic interjections, all of which are primary, are vocalic in nature (e.g. <code>aaúí</code>, <code>héé-hé</code>, <code>hóó-hóó</code>, <code>ooi</code>, and <code>óóí</code>) like monosyllabic interjective lexemes.</code>

The vocalic nature of interjections is additionally visible in the initial element used. Most interjections, specifically 48, start with a vocalic element. This vocalic element may be a pure vowel (31x) (the interjections thus being onset-less) or an approximant (semi-vowel) (17x). The following vowels are attested as the first element of interjections: [e]/ $[\epsilon]$ (9x), [a] (9x), [o]/[o] (8x), [i]/[i] (3x), [u]/[o] (2x). Among the approximants, [h] is significantly more common (11x) than [j] (3x) and [w] (3x). In contrast, only 34 interjections start with a genuine consonant ([b], [d], [f], [i], [k], [l], [m], [n], [n], [p], [s], [f], [t], [z], [\dagger], and [\dagger]). This general tendency to select a vocalic element and [h] among the approximants is again correlated with the number of syllables exhibited by an interjection and its primary/secondary status. The vast majority (21x) of monosyllabic interjections start with a vocalic element, typically an approximant (12x), of which the most common is [h] (8x: haa, háé, háí, héé, hé, hóí, hóó, hóí). The other approximants are attested less commonly: [w] appears three times (wáí, wóí, wói) and [i] once (jié). Vowels as the first elements are attested 9 times. In contrast, genuine consonantal onsets (specifically [f], [k], [n], [p] and [[]) only feature in five cases: fíú, kóák, nóó, píú, and fíé. It should be noted that, as explained above, six additional monosyllabic interjections, i.e. \(\psi, mm, \) $\acute{m}\acute{m}$, ss, zz, and \parallel only contain consonants, i.e. [\nmid], [m], [s], [z], and [\parallel]. The situation is different for the 19 interjections that contain three, four, five, or six syllables. Only nine such forms start with a vocalic element. An [h] approximant is unattested. The only approximant found is [j] in jíéjíó-ai. Genuine consonantal onsets are much more common, being found in nine tokens: [m] 3x (e.g. maskini); [k] 2x (e.g. kílome); [p] 1x (pasmáái); and [i] 1x (jamáni). Additionally, ### lacks any vocalic element. For disyllabic interjections, the situation is, as usual, fuzzy. An approximant onset is attested four times. An [h] onset is found three times, although always in composites of héé or hóó, i.e. héé-hé, hóó-hóó,

and $h\acute{o}\acute{o}$ - $t\acute{a}\acute{a}$. The other approximant onset is [j] featuring in $j\acute{o}\acute{o}\acute{p}\acute{e}$. There are also 14 disyllabic onset-less interjections, which start with a vowel, e.g. $aa\acute{u}\acute{t}$, $\acute{e}ro$, $\acute{s}r\acute{t}d$, and $\acute{v}\acute{v}\jmath\acute{c}$. Genuine consonantal onsets appear in 13 tokens: [k] 5x (e.g. $k\acute{t}b\acute{o}$); [s] 4x (e.g. $s\acute{e}re$); [n] 1x ($nomb\acute{e}es$); [b] 1x ($b\acute{t}ris$); [d] 1x ($d\acute{e}d\acute{e}$); and [t] 1x ($t\acute{e}jo$). These onsets are thus more common than onsets containing an approximant, although less common than cases of interjections with no genuine consonantal onset (18x).

Arusa interjections occasionally exhibit harmonious patterns, which by definition can only arise in lexemes containing more than one syllable. Two types of such patterns are attested: reduplication and vocalic harmony. Exact reduplication is rare, only being found in two disyllabic interjections: hóó-hóó and dédé (although in this latter interjection, no true replicative mechanisms have ever operated; see Section 3.2.2). Partial reduplication is attested in héé-hé (see 3.2.2). One interjection, i.e. ###, exhibits a triplicated phonetic structure [#.#.#]. Additionally, there are few interjections that exhibit patterns whose components superficially look like partial reduplication: entíto-ejíéjíó, ójíéjíó-ai, jíéjíó-ai, and leláá-káke. However, in these cases, similar to dédé mentioned above, no true reduplication takes place. Rather, the repetition of identical or similar segments results from the root structure of a non-interjective lexeme from which the interjection is derived (e.g. entito 'girl' and kake 'but') or it emerges as an epiphenomenon of the concatenation of two or more independent lexemes (e.g. leláá in leláá-káke draws on the vocative particle le 'o!' and the noun laa 'men'; and ejíéjíó in entíto-ejíéjíó draws on the possessive clitic e and the noun *jíéjíó* 'mother'). Full vocalic harmony is equally rare as it is only found in five disyllabic interjective lexemes: bíris, kííti, sére, sógó, and súmú. Of course, like many other lexemes in Arusa and Maasai more generally, interjections may be subject to the Advanced Tongue Root (ATR) harmony (see Tucker & Mpaayei 1955; Baković 2001; Guion, Post & Payne 2004). Overall, the vast majority of interjections do not exploit genuine harmonious patterns.

Some interjections are phonetically unstable, thus allowing for other variants. This is typically due to the lengthening of a nucleic vowel found in monosyllabic and disyllabic interjections. As mentioned above, $h\acute{e}\acute{e}$ and $h\acute{o}\acute{o}$ – as well as their composites $h\acute{e}\acute{e}$ - $h\acute{e}$ and $h\acute{o}\acute{o}$ - $h\acute{o}\acute{o}$ – regularly allow for an extralong pronunciation as [hé::] and [hó::], respectively. The same applies to $n\acute{o}\acute{o}$ whose nucleic vowel can be realized with three ([nɔ̃::]) or even more morae. Similarly, interjections containing a short vowel in one of their syllables (e.g. $\acute{e}ro$) or in the only syllable (e.g. $h\acute{e}$) may lengthen it to two or more morae (i.e. [éro:(:)]). Lengthening may also involve consonants, especially if the consonant is syllabic. As explained in the previous paragraphs, the interjections ss, zz, $\acute{m}\acute{m}$, and

mm often exhibit an extralong realization as $[s::\downarrow]$, [z::], $[m::\downarrow]$, and mm $[m::\downarrow]$ or even more exaggerated long pronunciations.

All Arusa interjections are marked for tone. This fact is, however, not particularly noteworthy since tone is a pervasive feature of Arusa phonology and plays an important function in the morphology of this language. Two main tone values are contrastive: low tone and high tone (cf. Tucker & Mapaayei 1955; Levergood 1987; Payne 2012; Karani 2018). In general, no tonal patterns can be identified as specific to interjections. In other words, all tonal arrangements are attested (with H= high, L= low): HL bíris, HH śrid, LH aiséé, and LL sjombe. However, among all patterns, one seems to be particularly frequent: 21 out of 31 disyllabic interjections exhibit a high tone on the first syllable: e.g. bíris, éro, óóí, óríd, sére. Significantly, a few interjections that differ in meaning are only distinguished by different tonal patterns. For example, áíf expressing surprise exhibits a tonal pattern that is different from aif expressing sympathy. Similarly, ooi expressing sympathy and óóí expressing astonishments and despair differ only by tone. The interjection mm [m:] expressing the sensation of good smell is differentiated from *mm* [m:1] expressing bad smell by tone, the direction of airstream, and phonation.

Nearly all interjections can be pronounced in an exclamatory manner. This often implies increased energy, louder volume, and greater intensity. The extent of this exclamatory pronunciation usually depends on the degree of emotions that need to be expressed. In all such cases, interjections typically bear a full accent. Lastly, $\acute{m}\acute{m}$ is regularly accompanied by a marked 'murmured' phonation – breathy voice [\acute{m} :]; while \emph{agh} is whispered.

3.2.2. Morphology

Arusa interjections attest to both simple and complex morphology. The extent of morphological simplicity or complexity largely depends on the status of an interjection as either primary or secondary.

Nearly all primary interjections exhibit a simple mono-morphemic structure. This applies to both interjections that are primary from the beginning of their grammatical life and lexemes that may have acquired their primary status through the interjectionalization of originally non-interjective forms, thus passing through a stage of secondary interjections. To be exact, 49 primary interjections out of 54 are indivisible – at least synchronically – into more fragmentary meaningful components. All such lexemes are monosyllabic (e.g. $\acute{a}\chi$, $\acute{a}i$

In five cases, the morphology of primary interjections is more complex. The interjections *héé-hé* and *hóó-hóó* are built around the segments

héé and hóó, respectively - all of which are primary interjections. The interjection ### draws on another primary interjective segment, i.e. #, that is replicated three times. 17 The initial segments in hóó-táá and kíbó*tcándesi* also correspond to more elementary, primary interjections. In contrast, the final segments of hóó-táá and kíbó-tcándesi are unattested as independent lexemes in Arusa. Nevertheless, as the element táá is also found in the lexeme éétáá, and tcándesi may have been borrowed from the Rutara languages where it had earlier been adapted from the English noun Charles (Muzale 1998: 39), it is possible that táá and tcándesi too were at some stage of their development independent and separable morphemes. Overall, the lexemes héé-hé, hóó-hóó, hóó-táá, ‡‡‡, and kíbó*tcándesi* demonstrate that primary interjections sometimes make – or made - use of compounding mechanisms. However, the only elements that can be merged are primary interjections themselves or vocatives in the case of tcándesi, if the etymology of this segment is correct. In contrast, no primary interjection contains inflectional and derivational morphemes. Crucially, the morphology of primary interjections does not change whether an interjection is used holophrastically or as part of a sentence, and whether such sentences are active or impersonal-passive.

The 23 secondary interjections tend to exhibit a multi-morphemic structure. This structural complexity reflects their nominal, pronominal, verbal, or phrasal origin. In other words, secondary interjections often preserve inflectional and derivational morphemes, as well as make use of compounding mechanisms – all of which are typical of the non-interjective lexical or phrasal sources from which these interjections derive.

13 secondary interjections derive from nouns. Six such interjections contain typical nominal morphemes. This includes: the singular markers, feminine e- (see enkái lit. 'God', enkérai lit. 'child', and entíto lit. 'girl'; see also the first e in entíto-ejíéjíó) and masculine o- (see ɔlkila lit. 'garment'), the plural marker 1- (see *ılmóran* lit. 'the warriors' and *ıltwáti* lit. 'the men of a particular age-set'), and the gender markers, the feminine *n*- (see again *entito* lit. 'girl', enkái lit. 'the God', and enkérai lit. 'the child') and the masculine l- (*Ilmóran* 'the warriors' and *Iltwáti* 'the men of a particular age-set'). ¹⁸ Three interjections make use of bare nominal roots: kúáde lit. 'congratulation(s)', nombéés lit. 'God', and súmú lit. 'poison' (originally borrowed into Arusa from Swahili).19 In one case, such a prefix-less root is accompanied by possessive affixes, specifically the 1st person singular -ai 'my', which is typically used with feminine singular heads (cf. Karani 2018: 32): jíéjíó-ai 'my mother' (see also ójíéjíá-ai and pasmáái discussed below). Interjections may also draw on nouns preceded by the vocative particle le 'o!': le-máásai lit. 'o Maasai (people)'.20 An interjection that is built around a noun with a vocative element (le or o 'o!') may contain an additional segment, for instance, the abovementioned possessive *-ai* 'my' (*ojíéjíá-ai* lit. 'o my mother') or the adverbial/particle *káke* 'but' (*leláá-káke* lit. 'o, but men').²¹

There is one example of a secondary interjection (i.e. $entito-eji\acute{e}ji\acute{o}$) that draws on two nouns connected through a genitive relationship marked by the clitic e-. The first segment in $entito-eji\acute{e}ji\acute{o}$ is entito 'girl' that consists itself of the root tito and the singular feminine prefix e-n-. The second segment is the root $ji\acute{e}ji\acute{o}$ 'mother' linked to the first segment through the genitive morpheme e – a typical linker connecting feminine heads with their feminine singular dependents (Tucker & Mpaayei 1955: 3). In sum, $entito-eji\acute{e}ji\acute{o}$ may be divided into five morphemes: e-n-tito-e- $ji\acute{e}ji\acute{o}$, lit. '(the) girl of (my) mother'.

It should be noted that nouns that are used as secondary interjections or, together with other elements (e.g. gender/number prefixes, vocatives, possessives, and adverbials), appear as parts of secondary interjections, regularly exhibit the so-called nominative tonal pattern. This concords with the fact that the nominative tonal pattern is typical of vocative nouns in Arusa and, more generally, Maasai (Tucker & Mpaayei 1955; Karani 2018: 20).

Two secondary interjections draw on pragmatic or modal particles of which the most initial sources were, in turn, inflected verbs. Thus, inversely, even though these interjections ultimately derive from verbs – like áítíŋo, edúá, míkijóki, and téjo analyzed above – their interjectionalization more likely stemmed from an interjective use of particles into which certain forms of these verbs had previously been grammaticalized. First, the interjection ákú derives from the homophonous 'rhetorical particle' used to 'request [... additional] information' that can be translated as could it be? or is it right? (cf. Payne & Ole-Kotikash 2008). One of its cognates in other Maasai varieties is eaku (ibidem), marked by the prefix e. This form corresponds to the 3rd person singular of the verb a-aku

'become', i.e. 'it will be' used as an interrogative in this context – 'will it be?'. In Arusa, the form eaku has undergone a further phonological assimilation and reduction. It may surface as aaku [á:ku] (with the assimilation of [ɛa] to [a:]) or, much more commonly, it may be pronounced with a short vowel as $\acute{a}k\acute{u}$ (with the reduction of the bimoraic [a:] to its monomoraic counterpart [a]). Second, the interjection $\acute{d}e\acute{d}e\acute{d}$ derives from a homophonous particle 'indeed'. This particle is a phonologically and morphologically reduced form of the verb $\emph{a-d\'ed\'e}\acute{e}$ 'be true, correct, right' inflected in the 3^{rd} person singular, i.e. $e\acute{d}e\acute{d}e\acute{e}$ 'it is true' (cf. Payne & Ole-Kotikash 2008). In Arusa, this verbal morphology has entirely been lost in the lexeme $d\acute{e}d\acute{e}$ both in its use as a particle and as an interjection.

Two further secondary emotive interjections draw on conative attention getters or routine phatic particles. The lexeme $pasma\acute{a}i$ derives from pasma~ai 'my dear' used in direct addresses (cf. Payne & Ole-Kotikash 2008). The exact origin of the element pasma is unknown. The element ai is the 1st person singular possessive 'my' used with feminine singular heads (compare with $ji\acute{e}ji\acute{o}-ai$ discussed above). ²⁴ This suggests that the original source of pasma might have been a feminine noun. It should also be noted that the root sma 'poverty, problem, poor' is attested in other dialects and the prefix pa(r)- is sometimes used vocatively. The other lexeme is $\acute{e}ro$. This emotive interjection most likely derives from a homophonous conative and/or phatic form employed to address and draw the attention of a male interlocutor of the same age as the female speaker, or younger (cf. Payne & Ole-Kotikash 2008; see also $\bar{e}ro$ defined as an imperative 'look or come here' by Hinde 1901: 37). This conative/phatic function is indeed the most common among all functions of $\acute{e}ro$ in Arusa. ²⁵

Lastly, n55 derives from the homophonous interrogative pronominal base -n55 'what'. The interrogative n55 only allows for inanimate referents and is usually headed by the question particle ka-, e.g. ka-n55 (tádua? 'what did you see?' (Karani 2018: 30) and/or gender inflectional markers, e.g. ai-n55 ijíéu? 'what do you want?' (Tucker & Mpaayei 1955: 26-27; see also Payne & Ole-Kotikash 2008). In its interjective uses, n55 fails to exhibit any such morphemes.

Overall, even though secondary interjections may contain inflections and derivations, these are properties of their original segments, not the interjectionalized forms themselves. In other words, inflectional and derivational markers are historical remnants of non-interjective sources instead of constituting some types of 'interjectivizers'. No inflection or derivation is specific to interjections – whether primary or secondary.

It should also be noted that several primary interjections exhibit a structure that suggests that, diachronically, they might have derived from secondary interjections and ultimately non-interjective inputs. Such interjections are: kíbó, kííti, kíru, kílome, and sjombe. Specifically, the fact that these lexemes do not exhibit a prototypical, monosyllabic and purely vocalic form (A/H)V(V), but instead contain two or three syllables and genuine consonants, suggests that they have not been primary from their emergence. Rather, their morphological indivisibility – and thus simplicity – is due to profound interjectionalization and the eventual inaccessibility to the original sources and their morphology.

The last group of emotive interjections is attributed to Swahili influence. The lexemes aiséé, jamani, kúmbe, maskini, and the composite expression maskini-ja-Mungu have all been borrowed from roughly homophonous Swahili interjections (see Eastman 1983: 163, 173, 177-178, Almasi, Fallon & Wared 2014: 371-373). We have included such forms in the set of Arusa emotive interjections because they commonly feature in discourses (monologues or dialogues) that are otherwise constructed entirely with genuine Arusa material. These interjections are also viewed by native speakers as inherent parts of their Arusa repertoire. We classify these forms as neither primary nor secondary interjections from the perspective of the recipient language, i.e. Arusa. Strictly speaking, they should be treated as primary interjections as their usage in Arusa is limited to an emotive function (i.e. they cannot be employed in a non-interjective quality, e.g. as nouns, adjectives, or adverbs). Furthermore, the morphological structure of these interjections is foreign to the Arusa grammatical system - the five forms being unsegmentable into more basic Arusa units. However, as virtually all Arusa Maasais are also Swahili speakers, they are aware of the compositionality of at least some of those borrowed interjections and the role that the various morphemes play in the respective source expressions in the donor language. To be exact, in Swahili, jamani is the plural form of the singular interjection jama extended by the pluralizer -ni (Almasi, Fallon & Wared 2014: 372; see also Eastman 1983: 177). The interjection maskini also originally derives from a noun, specifically 'a poor (person)' (Almasi, Fallon & Wared 2014: 373). Both jamaa and maskini were borrowed into Swahili from Arabic. In addition to maskini, the interjection maskini-ja-Mungu contains the noun Mungu 'god' connected to its antecedent by the possessive ya of class 9 as required by the noun maskini. Aiséé and kúmbe are mono-morphemic in Swahili. Aiséé itself has been borrowed into Swahili from English and originally corresponds to the analytical expression I see (Almasi, Fallon & Wared 2014: 371). Kúmbe is probably related to the homophonous conjunction, particle, or discourse marker kúmbe 'but' widely used in Swahili (cf. Dunn 1990: 158-164).

Overall, interjections, especially the primary ones, exhibit anomalous morphology. Arusa is a highly agglutinative language (see Hollis 1905

and Tucker & Mpaayei 1955 for Kenyan Maasai, and Andrason & Karani 2017a: 209 and Karani 2018: 118 for Tanzanian varieties specifically) and words of most lexical classes - e.g. nouns, verbs, adjectives, pronouns, adverbs, and numerals - exhibit a complex structure being built around a root and prefixes and/or suffixes. Primary interjections do not comply with this and, as demonstrated above, tend to exhibit a simple and monomorphemic form. Similarly, in their totality, Arusa interjections may be viewed as lexically opaque. That is, their word structure does not automatically associate them with determined types of functions and meanings, namely, the expression of feelings and sensations. Indeed, the differences in the morphology between interjections such as óó or ‡ (primary), entíto-ejíéjíó or míkíjóki (secondary), and maskini-ja-Mungu (borrowed) make it practically impossible to establish a clear dependency between an emotive function and a specific form. Therefore, as is typical of interjections across languages (cf. Andrason 2021; see also Nübling 2001, 2004), the morphological structure of a lexeme is not sufficient to postulate its inclusion in – or exclusion from – the interjective category. Such a categorial inclusion/exclusion must be established for each lexeme separately. This contrasts with most nouns, verbs, adjectives, pronouns, adverbs, and numerals, in case of which morphology can be used as a relatively reliable classificatory device. However, at least for primary interjections, their extra-systematic form may paradoxically be viewed as one of the possible exponents of an emotive function in the Arusa language - probably the most salient one. Accordingly, the morphological opacity of this class of interjections would perhaps be lower (cf. Andrason 2021).

3.2.3. Syntax

All emotive interjections analyzed in this study can function holophrastically as non-elliptical complete utterances. Holophrastic interjections are always 'convertible' into predicative structures – for instance, ooi (16a) and jamáni (16b) can be reformulated into expressions such as aiŋásie 'I am shocked' or áátígíle tau 'I am disappointed'. The clearest examples of holophrastic uses arise in cases where an interjection constitutes the only element in a conversational turn, be it a dialogue (16a) or monologue (16b) (see also (1), (10), (13), and (15a) in Section 3.1). In (16a), speaker A informs his interlocutor (speaker B) about the death of a close relative. To express his shock mixed with sadness and compassion, the other man (speaker B) utters the interjection ooi. This interjection suffices to convey the speaker's message and no other words or morphemes are necessary to render the utterance grammatical. In (16b), a woman realizes that she forgot to give her child money for transport. After a time, angry at herself and disappointed with her own action, she

shouts the interjection *jamáni*. Again, no other grammatical elements are needed to make her feelings manifest and the utterance grammatical.

```
(16) a. A: É-twa
                             o-l-ákwi
                                         lai.
                             sg-m-uncle sg.m.my
              3-die.perf
              'My uncle is dead'.
         B: Ooi!
              INTJ
              'Ooi!'
      b. A: Á-tó-ríkín-e
                                         impésai!
              1sg-perf-forget-perf
                                         money
              'I forgot about the money!'
         B: Jamáni!
              INTJ
              'Jamáni!'
```

Although holophrasticity is always grammatical, interjections may form parts of larger utterances (see *entíto* in (17) below; see also (2b), (3c), (4a-c), (6a), (7a)).

(17) Éntíto, é-ewú-o ɔ-l-kársis.

INTJ 3-come-PERF SG-M-rich
'Éntíto, the rich man has come'.

The syntactic behavior exhibited by interjections employed in such non-holophrastic uses is not systematic. That is, contrary to nouns, verbs, adjectives, adverbs, adpositions, conjunctions, and particles, Arusa interjections resist integration into the clause syntax: they are unable to constitute structural elements of a clause and entertain specific syntactic functions. Three clusters of properties illustrate this lack of syntactic integration.

First, Arusa interjections cannot function as predicates projecting syntactic roles to other components of a clause and determining that clause's possible valency pattern(s). In (18a), the predicative use of the interjection *wáí* is ungrammatical. That is, *wáí* may not constitute a predicate that would be coindexed with the 1st person subject argument (see the independent pronoun *nano* 'I') and project the object *endáa* 'food'. In (18b), the interjection *wój* cannot be marked for subject by the 1st person singular prefix *a*- contrary to all intransitive verbs. This property is also related to the fact that, as explained in 3.2.2, interjections do not host inflections and, therefore, the agglutination of external or internal arguments into the interjective base is ungrammatical. When secondary interjections derived from verbs (e.g. *edúá*, *áítíŋo*, *míkijóki*, and *téjo*) are used predicatively, they do not exhibit interjective properties. For example, *edúá* lit. 'it is bitter' in (18c) functions as a mere verb describing the property of food.

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```
(18) a. *Nanυ wáí ε-n-dáa.

I INTJ SG-F-food
Intended meaning: 'I despise food'.

b. *A-wój.

1SG-INTJ
Intended meaning: 'I am sad'.
c. E-dúá ε-n-dáa.
3-be_bitter.IPF SG-F-food
'The food is bitter'.
```

Second, interjections are never projected by the verb: they cannot act as internal (primary or secondary object) or external (subject) arguments. Their use as adjuncts is also very problematic. Example (19a), in which the interjection kííti is intended to be used as an object of the verb átágóre 'feel, experience', is ungrammatical. If secondary interjections derived from nouns (e.g. enkérai, entíto, ɔlkíla ɪlmóran, ɪltwáti, enkái) are employed as arguments, they do not exhibit interjective character. For instance, in (19b), enkérai 'child', which can function as a secondary interjection (see 3.2.2 above), is used as the subject of the verb inan 'buy'. However, in this role, *ɛnkɛ́rai* can only be analyzed as a noun – never as an interjection expressing the emotional state of the speaker. Importantly, noun-based lexemes that in their interjective uses appear in a bare prefix-less form, 'restore' the appropriate gender-number prefixes when employed as arguments or adjuncts. For instance, in (19c), the base kúádé – which can be used as a secondary interjection - is marked by the masculine singular prefix ol- as required from its object function. In this function, however, kúádé is no longer used as an interjection but rather as a canonical noun. Similarly, noun-based secondary interjections, which in their interjective usage regularly exhibit a nominative tonal marking, 'restore' their accusative marking if they are used as genuine nouns and object arguments.²⁶

```
(19) a. *Á-tá-góre
                        kííti.
         1sg-perf-feel intj
         Intended meaning: 'I feel anger'.
      b. E-n-kérai é-inán-áka
                                          ε-n-dáa.
         sg-F-child
                        3-buy-perf.dat sg-f-food
         'He bought food for the child'.
      c. Í-ríw-áka
                       e-n-títo
                                          ene
                                                      ɔ-l-kύáde.
         3-send-PERF
                        SG-F-girl
                                          SG.his/her SG-M-congratulations
         'He congratulated his/her daughter'.
```

Third, interjections do not usually modify the predicate, arguments, and adjuncts. Although this incapacity to function as a modifier is typical of most uses, and indeed when asked to provide canonical examples of the use of any given interjection, speakers never construct sentences

with interjections modifying other components of the sentence, the modifier-usage of interjections is sometimes grammatical. The elements possibly modified by interjections are verbs, adjectives, and adverbs; the interjections that are most prone to be employed as modifiers are primary interjections; and the most common modifying function is emphasis or intensification of the meaning conveyed by the element being modified. For instance, in (20a), the interjection fiu modifies the verb egu 'stink' intensifying its meaning. Similarly, in (20b), the interjection fiu intensifies the adverb abaraki 'thoroughly'. Certainly, one may hesitate in such cases when considering whether the lexemes fiu and fi are still genuine interjections or have rather (at least partially) been grammaticalized into some types of modal particles and/or adverbials of degree.

(20) a. *E-ŋu* ffú *ene!*3-stink INTJ here
'It stinks *fſú* here!'²⁷
b. *Á-ár abaraki* 5rſd!
1SG-beat thoroughly INTJ!
'I will beat you thoroughly *śrſd!*'

Holophrastic interjections are not susceptible to syntactic operations that are grammatical in Arusa. They cannot be negated, interrogated, and impersonal-passivized. In other words, they cannot be reformulated to express the idea of the absence of a feeling or sensation, to question the experience of a certain emotion, or to communicate some type of impersonal occurrence. For example, the interjection *kititi* expressing anger cannot be negated by means of a negator, e.g. *mV-* or *itu-*, to communicate lack of anger. Similarly, *kilome* expressing surprise cannot be headed by the typical interrogative particles *k-* and *ai-*, should the speaker intend to query the experience of this emotion. This distinguishes such interjection-utterances from utterances built around canonical clauses containing predicates.

The above implies that, in their non-holophrastic uses, the reading of an interjection is not affected by a negative, interrogative, or impersonal-passive form of the sentence in which it occurs. For instance, in (21a), the fact that the interjection *kííti* belongs to a sentence that contains a negative clause *malo aaŋ* 'I will not go home' has no bearing on the polarity of the interjection itself. Similarly, in (21b), the interrogative clause *kaŋɔ́ɔ́ ítéjo* 'What did you say?' does not cancel out the affirmative value of the interjection *kílome* and does not convert it into an interrogative variant. These facts are related to another property of interjections: that they entertain their own illocutionary force, which

may be different from the illocutionary force of the remaining part of a sentence.

```
(21) a. M-a-lo aaŋ, kiíti!

NEG-1SG-go home INTJ

'I will not go home, kiíti!'

b. Ka-ŋi55 i-té-jo, kilome!?

what-thing 2SG-PERF-say INTJ

'What did you say, kilome!?'
```

Arusa interjections usually do not enter into constructions with other words. This observation may be supported by nearly all examples provided thus far. Two types of common exceptions are nevertheless attested. First, interjections form constructions with other interjections. An interjection may be replicated, or it may be accompanied by other interjections. In both cases, interjections yield analytical interjective sequences ((22a); see also (14a) above). Second, interjections often form constructions with vocative nouns, either bare or headed by one of the vocative particles (e.g. le in (22b)), or with pronouns used vocatively (e.g. ijie 'you' in (22c)). While the word order of such vocative constructions is not fixed, the preferred sequence by far is interjection + vocative. In contrast, the ability of interjections to form constructions with verbs, adverbs, adjectives, and non-vocative nouns and pronouns is extremely limited. However, as explained above, interjections may very rarely be used as modifiers of verbs, adverbs, and adjectives, thus entering into construction with those types of lexemes (see (20a-b)).

```
(22) a. Hóó-táá jíé,
                                       í-éwúo.
                          nco
                          good_that
                   INTJ
                                      2sg-come.perf
         'Hóó-táá jíé, it is good you have come'.
      b. Héé
                   le
                          pájian,
                                      kóree
                                               nkéra?
         INTJ
                   VOC
                          man
                                      where children
         'Héé man, where are the children?'
                                                                   aji?
                   ijíé,
                          ka-nɔ́ɔ́
                                      í-tá-mán-ie
                                                            ena
         INTJ
                   vou
                          what-thing 2SG-PERF-live-INSTR this
                                                                   house
         'síé you, why did you move in into this house?'
```

When used within a sentence, interjections tend to occupy peripheral positions. According to native informants, the most common is the initial position with the interjection appearing at the left edge of the sentence, as illustrated by *jóópe* in (23a) (the many examples introduced thus far substantiate this claim extensively). Less common, although grammatical, is a final position – the interjection appearing at the right edge of the sentence, as illustrated by *ılmóran* in (23b) (see also (20b) and (21a-b)).

```
(23) a. Jóópe, tá-pala ɔ-l-pájian lai!

INTJ IMP-leave SG-M-man SG.M.my
'Jóópe, leave my husband!'

b. Á-tá-ar-a ɔ-l-ŋátun, ılmóran!
1SG-PERF-kill-PERF SG-M-lion INTJ
'I killed a lion, ılmóran!'
```

While sentence-peripheral positions of interjections are common and/or fully grammatical, their sentence-internal placement is much more constrained, being virtually limited to three specific cases. First, an interjection may appear between two clauses that belong to a single sentence (see úúí placed between nele ɔlásurái 'there is a snake here' and wóu tánáduaki 'come help me' in (24a)). Second, an interjection may appear as the second or further element in a sentence, when following another interjection and/or a vocative noun (see the interjection zzz that is preceded by the vocative noun le murran 'young man' and another interjective lexeme, i.e. ojíé, in (24b)). Third, an interjection may appear as the penultimate element of a sentence or an element more remote from the sentence's end if it is followed by other interjections and/or vocatives (see *úú*so that occupies a penultimate position before another interjection, i.e. kilome in (24c)). In these two last instances, the phrase containing the interjection – sometimes referred to as an interjection phrase (Nordgren 2015, Andrason, Hornea & Joubert 2020, Andrason & Durán 2021) - would still appear sentence initially or finally (see le murran, oié, zzz and íúso kílome in (24b) and (24c), respectively).

```
(24) a. Nele
                                                     tá-ŋádu-akı!
                       o-l-ásurái,
                                   úúúí,
                                             wou
         here.is.M
                       SG-M-snake INTJ
                                            come
                                                     IMP-help-DAT
         'There is a snake here, úúúí, come help me!'
                                                                  í-jawu-a?
                      murran,
                                   ojíé,
                                                     ka-nɔ́ɔ́
                       young_man INTJ
                                                     what-thing
                                                                  2SG-bring-PERF
                                            INTJ
         'Young man, ojié, zzz, what have you brought?'
      c. Á-tá-dua
                      ε-n-dára
                                   kitok.
                                            íúſo
                                                     kílome!
         1SG-PERF-see SG-F-python big
                                            INTJ
                                                     INTI
         'I saw a big python, iúso, kílome!'
```

Almost invariably, interjections occupy a clause-external position. Again, they may appear at the left (initial) edge of the clause (see *ójíéjíó-ai* in (25a)) or at its right (final) edge (see *kúák* in (25b)). This property approximates interjections to left or right dislocation and vocatives, which all tend to appear clause-externally (cf. Andrason & Karani 2017a). A clause-internal position of interjections is extremely rare, being limited to the scarce instances in which interjections are used as modifiers (see example (20a) discussed above).

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```
(25) a. Ójíéjíó-ai, e-twa ɛ-n-kíteŋ.

INTJ 3-die SG-F-cow
'Ójíejíai, the cow has died'.
b. Tú-dúmú-ne kóák!

IMP-wake_up-REF INTJ
'Wake up kóák!'
```

Interjections tend to constitute autonomous prosodic units in a sentence, possibly being separated from its remaining parts by a pause (see 55 in (26a)). This pause may vary in length, being shorter or longer. In cases where an interjection belongs to a larger interjective phrase (see 56 ena kítok in (26b)), it is the entire phrase, rather than a single interjection comprised within it, that is prosodically separated from the rest of the sentence.

```
(26) a. 55, f-éwuo kókó-ai.

INTJ 2SG-come.PERF grandmother-my
'55, here you are, my grandmother'.

b. Ka-n55 i-jawu-a, ſié ena kítok!?

what-thing 2SG-bring-PERF INTJ this woman
'What have you brought, ſié you woman!?'
```

This prosodic separation of interjections or the interjective phrase within which they are contained, is often overtly indicated in written texts by punctuation marks, for instance a comma (see the separation between $p\acute{u}$ and equ in (27a); see also various examples introduced thus far) or ellipsis (see the separation between eji and $k\acute{a}nu$ elotu in (27b); see also (9) in Section 3.1). The prosodic disjunction of interjections is also evident in cases in which an interjection (used holophrastically) and the following text are separated by a full stop.

```
(27) a. Fíú, e-ŋu!

INTJ 3-stink

'Fíú, it stinks!'
b. Éji... kánu e-lotu?

INTJ when 3-come
'Éji... when will he come?'
```

4. Discussion

The evidence presented in Section 3 allows us to answer the research question posed at the beginning of this study, i.e. to determine the non-formal (semantic-pragmatic) and formal (phono-morpho-syntactic) profile of the interjective category in Arusa Maasai.

Regarding semantics: (i) A much larger number of interjective tokens concern feelings (79%) than sensations (21%). Among the feeling-related interjections, more express negative experiences than positive ones. Additionally, 15% of the emotive interjections in Arusa are gender sensitive. (ii) The vast majority of emotive interjections are polysemous. They may express: all degrees of feelings associated with a given domain; emotions related to more than one domain, whether feelings or sensations; and both positive and negative experiences. Sensorial interjections are the least polysemous. (iii) Polysemous interjections are highly context sensitive with both linguistic (other words and intonation) and extra-linguistic (gestures) features playing an important role in the adequate interpretation of their meaning.

Regarding pragmatics: Emotive interjections are often immediate, semi-automatic, and instinctive reflexes produced in response to linguistic and/or extra-linguistic stimuli. The use of interjections may however be more deliberate and intentional if they are employed for the so-called didactic and discursive purposes. Emotive interjections are typically reflexive. Nevertheless, some interjective lexemes, especially the sensorial ones, allow for – at least partial – non-reflexive uses, thus describing entities other than the speaker themselves. Although all emotive interjections can be monological, their presence in dialogues is not exceptional either.

Regarding phonetics: Only a few (and always primary) emotive interjections exhibit anomalous sounds such as clicks and gutturals. Similarly, only a few (and, again, typically primary) emotive interjections transgress phonotactic rules by allowing for extralong, trimoraic, vowels and consonants, by being pronounced ingressively, or by exhibiting a consonantal nucleus (the interjection being thus entirely built of consonants). Emotive interjections tend to exhibit a simple structure (77%): monosyllabic (39%) or disyllabic (38%). In contrast, more complex structures are rarer: three syllables (17%) and four/five/six syllables (6% in total). This simplicity is correlated with the primary status of emotive interjections: primary interjections attest to a much stronger tendency to exhibit a simple phonetic structure than secondary ones. Phonetically simple interjections tend to be vocalic and exhibit a V(V) or an AV(V) structure of their syllables. In contrast, phonetically complex interjections are not markedly vocalic. Phonetically simple interjections tend to start with a vocalic element: an onset approximant (which is predominant) or a nucleic vowel (being thus onset-less). Complex interjections do not show this tendency.²⁸ Harmonious patterns are rare; those that are present may be true (for primary interjections) or accidental (for secondary interjections). Emotive interjections are phonetically

unstable. This especially applies to monosyllabic and disyllabic interjections which regularly allow for the lengthening of short vowels to long and that of long vowels to extralong. Tone is a pervasive feature of the Arusa sound system and therefore all emotive interjections exhibit determined tonal patterns. Although no universal tonal pattern is present in all interjections, the use of a high tone in the first syllable of disyllabic interjections is noticeable. All emotive interjections can be realized with exclamatory phonation.

Regarding morphology: Primary emotive interjections (66% of the tokens) are overwhelmingly characterized by morphological simplicity, whereas for secondary interjections (28% of the tokens), morphological complexity is more representative.²⁹ Critically, primary emotive interjections do not contain inflections and derivations, with compounding only being attested if the joined elements are interjections (the same lexeme or other interjective lexemes) and vocatives. In contrast, secondary emotive interjections attest to inflections and derivations, as well as a greater variety of compounding mechanisms. This morphological segmentability is related to the non-interjective sources of secondary interjections and, in some cases, their origin as analytical constructions. Overall, inflections and derivations are not properties of interjections themselves (whether primary or secondary) and no interjectivizers are attested. Primary emotive interjections are morphologically anomalous, which is not the case with secondary interjections. If all interjections are considered jointly, the category may be viewed as morphologically opaque. However, the morphological anomaly of primary interjections can also be interpreted as a recognizable structure and the most salient exponent of the emotive function in the Arusa language.

Regarding syntax: All emotive interjections can be used holophrastically. When employed in a non-holophrastic manner, emotive interjections resist syntactic integration: they cannot act as predicates, be projected by the verb, and function as arguments and adjuncts, and, with rare exceptions, modify the predicate, arguments, and adjuncts. Emotive interjections are not susceptible to syntactic operations. When accompanied by a clause that undergoes such operations, the syntactic reading of interjections is unaffected, which is related to their illocutionary independence. Emotive interjections do not enter into constructions with other words with the common exception of other interjections as well as vocative nouns and pronouns. Constructions with verbs, adverbs, and adjectives are rare and attested only in cases where interjections are employed as modifiers. Emotive interjections tend to occupy a peripheral position in the sentence, especially initial and, less commonly, final. A sentence-internal position is attested if an interjection appears between

two clauses, and after or before other peripheral elements, especially other interjections and vocatives. Almost invariably, emotive interjections occupy a clause-external position. Interjections tend to constitute autonomous prosodic units in a sentence, being marked by pause. (The last three tendencies are violated in rare cases where interjections are used as modifiers.)

Overall, our study demonstrates that, when treated holistically, the interjective category in Arusa complies with the interjective prototype. For some features, some tokens and/or some uses, this compliance is total. The most pervasive is the fulfillment of the following properties: extensive polysemy and deep context sensitivity, phonetic instability and expressive/exclamatory phonation, clause-external position and phonological detachment, as well as the lack of interjection-specific inflections and derivations (i.e. interjectivizers) and the incompatibility with syntactic operations and clause-grammar integration. (Of course, tautologically, emotive semantics are also exceptionless.)

Nevertheless, despite the abovementioned common compliance with many prototypical features, for some features, tokens, and/or uses, such a compliance is (much) less evident. The least pervasive is the fulfillment of the extra-systematicity of sounds and their combination, as well as the use of harmonious patterns. Indeed, the immense majority of interjections do not draw on anomalous vowels, consonants, and their clustering, nor do they exploit repetitive configurations of sounds. Furthermore, several features are violated under certain conditions. For instance, various sensorial interjections are not polysemous, context dependent, or reflexive; in didactic and discursive uses, emotive interjections need not constitute semi-automatic reflexes; dialogical uses of emotive interjections are as common as monological; secondary emotive interjections do not usually comply with phonetic and morphemic anomaly and simplicity, vocalic nature, and lack of inflections, derivations, and compounding; the rare interjective modifiers (in such instances, perhaps, assuming a categorical status of particles) are syntactically integrated and violate the non-constructionality of interjections and their otherwise common sentence-peripheral and clause-external placement, as well as phonological separation; and lastly, all emotive interjections may enter into constructions with other interjections and vocatives.

Furthermore, the 82 emotive interjections analyzed in this study demonstrate that the interjective category envisaged holistically – including cognitive, conative, and phatic types – is relatively robust in Arusa as impressionistically estimated by Hollis (1905: 101; compare with nearly 343 interjections of all types found in Xhosa (Andrason &

Dlali 2020) and 42 in Tjwao (Andrason, Fehn & Phiri 2020)). Our result is thus contrary to Karani (2018: 50), who sees the Arusa interjective category as 'small'.

From a more general perspective, the range and extent with which Arusa emotive interjections comply with and violate the prototypical features - and thus these features' qualitative and quantitative fulfillment – corroborate both the typological significance of the interjective prototype and certain regularities in its non-observance. In our view, all prototypical features distinguished in previous studies should retain their relevance, as is the case of the violations observed across many languages. Indeed, prototypical features and certain motivated violations jointly determine the boundaries and variation of the interjective category envisaged holistically. In other words, while the prototypical features are relevant given their frequency and/or saliency, the exceptions and non-prototypical properties are no less representative of, at least, some interjections and determined contexts of use. This ruleand-exception relevance is especially patent in two cases. First, with regard to extra-systematic sounds and sound combinations, it is not the frequency of such anomalies that is common of interjections – only the possibility of their appearance. As demonstrated in this study, anomalous sounds and their clustering are not common in Arusa emotive interjections. However, as a grammatical possibility, they do distinguish the interjective category from the remaining lexical classes. Second, in a fully motivated manner, secondary interjections violate several prototypical features associated with the form of emotive interiections in Arusa, especially as far as their phonetics and morphology are concerned.

The most important contribution to the study of the prototypical properties of interjections is the observation that primary interjections favor onset containing approximants and zero-onsets. Indeed, after a revision of the previous work of one of the authors on interjections in Polish (Andrason 2021), Xhosa (Andrason & Dlali 2020), Tjwao (Andrason, Fehn & Phiri 2020), Biblical Hebrew (Andrason, Hornea & Joubert 2020), Ugaritic (Andrason 2020), Canaano-Akkadian (Andrason & Vita 2021), and Biblical Aramaic (Andrason & Hutchison 2020), it is evident to us that #AV and #V initial syllables and thus A/\varnothing onsets are the most typical and the most salient of all syllables and onsets found in primary emotive interjections across languages.

Lastly, the results of the present study may be used to postulate four further hypotheses that expand beyond the scope imposed by our research question. Goddard's (2013) proposal assumes that "cultures which favor the regulation of emotion tend to develop more secondary

interjections [... while] primary interjections are used more in societies in which expressive behavior is more highly valued" (Goddard 2013: 9). From this, one may first hypothesize the following: since primary interjective tokens are more than twice as common as secondary ones in Arusa, expressive behavior should be favored in the Arusa community. Second, since the semantic domain with the largest number of tokens concerns negative feelings, one may wonder whether this too is a reflex of Arusa social relationships or whether, on the contrary, it is a typical property of the interjective lexical class across languages. Third, a similar question may emerge given that, contrary to the vast majority of the languages we have researched thus far - whether Bantu, Khoisan, Indo-European, or Semitic – nearly a sixth of Arusa emotive interjections are gendered. Thus, is there a stricter male-female polarization of the Arusa society?³⁰ Fourth, given the number of secondary interjections, the following hierarchy of derivability – or hierarchy of interjectionalization - may be hypothesized: nouns are more interjectionalizable than verbs; verbs are, in turn, more interjectionalizable than modal/pragmatic particles and phatic/conative elements; and pronouns are the least interjectionalizable.³¹ All these hypotheses remain to be verified.

5. Conclusion

The present study established a detailed profile of the interjective category in Arusa Maasai. Using a typologically-based and prototypedriven approach to interjectionality, we tested 82 emotive interjections, previously identified in fieldwork in the Arusha region, for their compliance with non-formal (semantic and pragmatic) and formal (phonological, morphological, and syntactic) features associated with emotive interjections across languages. The analysis demonstrates that, when treated holistically, the category of interjections complies with the interjective prototype – in case of some features, tokens, and/or uses, this compliance is indeed total. Nevertheless, in case of other features, tokens, and/or uses, such compliance is less evident, sometimes even marginal. Overall, we propose that both compliances and violations are significant for emotive interjections in Arusa (and across languages, in general) as they jointly determine the boundaries and variations of the interjective category envisaged globally.

Abbreviations

1, 2, 3 = first, second, third person; > = subject (1st, 2nd, 3rd person) acting upon object (1st, 2nd, 3rd person); A = approximant; APAS = antipassive; CAUS = causative; C = consonant; DAT = dative; F = feminine; H = guttural/laryngeal (h-type sounds); IMP = imperative; INSF = intensifier; INSTR = instrumental; INTJ = interjection; IPF = imperfective; IMPR = impersonal-passive; M = masculine; MT = motion towards; NEG = negative; PERF = perfective aspect; PL = plural; PROG = progressive aspect; REF = reflexive; REL = relativizer; SG = singular; SUBJ = subjunctive; V = vowel; VOC = vocative; \uparrow = egressive pronunciation; \downarrow = ingressive pronunciation; for further details on phonetic symbols, see §3 and §3.2.1.

Notes

- ¹ Together with Kisongo and Parakuyo, Arusa forms a cluster of Tanzanian Maasai dialects. Arusa exhibits a number of lexical and grammatical differences with Kenyan Maasai (Andrason & Karani 2019; cf. Vossen 1988). Arusa speakers also have their own linguistic and ethnic identity, clearly distinct from other Maasai communities (Andrason & Karani 2019: 177).
- ² We follow the distinction between formal and non-formal features and the terminology used by Andrason & Dlali (2020: 164-165), Andrason, Fehn & Phii (2020), and Andrason & Hutchison (2020: 4). This distinction corresponds to the traditional division between form/structure and meaning/function.
- ³ Conative interjections concern volitive states: they express wishes and commands and are used to draw attention. Phatic interjections concern the speaker's attitude "towards the on-going discourse" (Ameka 1992: 114) and are used to establish, maintain, or terminate the communicative channel. There are also cognitive interjections, which concern the state of knowledge and thought processes of the speaker (see Ameka 1992, 2006; Wierzbicka 2003; Stange & Nübling 2014; Goddard 2013).
- ⁴ Common exceptions are (other) interjections and vocative nouns or pronouns.
- ⁵ Critically, when used in negative, interrogative, and passive sentences, an emotive interjection maintains its own, characteristic illocutionary force, which may be different from the force of the rest of that sentence.
- ⁶ In general, exclamations are not considered to be genuine members of the interjective category in most studies. If they are included in the category, they are located in its outermost periphery (Ameka 199; Andrason & Dlali 2020).
- We are fully aware that joy, admiration, happiness, and euphoria differ in more than the extent of excitement. The same applies to all the other feelings that, in this section, are grouped into clusters. That is, differences among the feelings forming each cluster are more than purely quantitative. Nevertheless, since (a) each cluster can be organized along an axis reflecting the degree of a particular emotive behavior and (b) an interjection compatible with one feeling belonging to a cluster is usually also compatible with all the other feelings included in it, we find such scalar clusters (e.g. from joy to euphoria and from displeasure to fury; see below) useful.
- ⁸ As is common in interjective scholarship (see for example Andrason & Dlali 2020, Andrason, Fehn & Phiri 2020, Andrason & Karani 2021; Heine 2023), in the

numbered examples, the relevant interjections – marked in deitalicized script – are glossed with the abbreviation INTJ. Furthermore, given the difficulty of translating interjections widely recognized in scholarly literature, we do not render the interjective lexemes found in the numbered examples with their English equivalents. Instead, following the approach employed in recent studies on interjections, we use the original lexeme in italics as part of the English translation and explain its meaning in the main text introducing the example (i.e. we identify the emotion(s) and/or sensation(s) this interjection communicates).

- ⁹ The use of the interjection *5ríd* carries an additional nuance of threat: if the boy does not follow the order, he will be punished.
- Kakúi is a vocative term used to address children, besides its primary sense, olkakui 'an old man'.
- 11 Men may use the lexemes óó, éíſ, or wóɨ.
- ¹² We understand polysemy as the ability to express more than one sense. In other words, the compatibility of an interjection with distinct feelings and sensations (some of them being even opposite) is interpreted as large semantic potential and thus polysemy.
- ¹³ Accordingly, in such uses, interjections not only convey emotive nuances, i.e. the feelings experienced by the speaker, but also communicate the speaker's volitional state and, thus, contain a conative component. Since the emotive facet is still highly relevant, we have included such uses and interjections in our database.
- 14 Thus, fricatives, nasals, and clicks may function as syllabic consonants in interjections.
- ¹⁵ In several interjections, the presence of extralong vowels is certainly pragmatically motivated, which means that we deal with prosodic lengthening rather than a phonological property. Nevertheless, for the lexemes mentioned in this paragraph, trimoraic length is equally phonological as bimoraic length. That is, both types of length are equally entrenched and the use of an extralong vowel need not be motivated by pragmatic factors.
- ¹⁶ The symbol A stands for an 'approximant'. As approximants are types of semi-vowels, some of them being even described as voiceless vowels, we consider them as not genuine consonantal material.
- The semantic potential of \neq and \neq ## overlap given that both can express shock. This would be consistent with the derivation of \neq ## from \neq through its triplication. It should however be noted that the semantic potential of \neq is broader than that of \neq ## as \neq may also express surprise, anger, and annoyance.
- ¹⁸ Regarding gender and number nominal morphemes in Maasai see Tucker & Mpaayei (1955: 3-6). For the form and use of these morphemes in Tanzanian Maasai varieties consult Karani (2018: 22-25).
- ¹⁹ This means that Arusa contains the word *esumu* 'poison' that can be used in non-interjective functions.
- 20 Regarding the vocative le 'o' consult Tucker & Mpaayei (1955: 35-36) and Karani (2018: 25).
- ²¹ The lexeme *kake* is also used as a contrastive-adversative marker (conjunction) in Arusa. Compare with *Kélō káke kátōn nan***£** 'He will go but I will stay' (Payne & Ole-Kotikash 2008).
- ²² Arusa verbs are inflected for subject and, in certain instances, object through fused subject-object prefixes (Andrason & Karani 2017a: 209, 2019; see also Tucker & Mpaayei 1955: 53, 71; Hamaya 1997; Karani 2018).
- Regarding negative imperatives in Maasai see Tucker & Mpaayei (1955: 63).
- ²⁴ Concurring with Payne & Ole-Kotikash (2008), we view the origin of *pasma ai* as deriving from an expression *Oh Sinai* farfetched.
- ²⁵ Although conative and phatic constructions are in some models analyzed as

two sub-classes of interjections, they are substantially different. Crucially, they do not comply with the semantic-pragmatic properties associated with a prototypical interjection (see Section 2 above). As the emotive uses of $pasm\acute{a}\acute{a}i$ and $\acute{e}ro$ (i.e. their exemplary interjective uses) are certainly derived from their non-emotive (or non-expressive) functions, we treat them as secondary emotive interjections.

²⁶ Of course, all interjections can be 'introduced' by quotative verbs such as *nejo* 'he/she said', *inji* '(s/he said) like this' in reported speech constructions. This is, however, the property of all types of words and (phrasal or clausal) constructions in Arusa since any word or construction may be embedded in clause grammar as part of reported speech.

²⁷ In a more common usage, the interjection fiu would be placed at the end of this sentence and separated from the core clause by a pause, i.e. *Equ ene, fiu*. In such cases, fiu is a genuine interjection with no modifier-like properties.

²⁸ Given the correlation in point (3), vocalic nature and non-consonantal onsets are (more) typical of primary interjections.

²⁹ Borrowed interjections constitute the remaining 6% of the tokens.

- ³⁰ As far as we know, gender-specific interjections (not gender-prevalent interjections, which constitute a more common phenomenon) are attested in Latin (Ullman 1943: 88) and O'eqchi' Maya (Kockelman 2003).
- ³¹ It is interesting that this hierarchy roughly coincides with the hierarchy of borrowability (Matras 2009).
- ³² Given the extensive semantic potential of most interjections (i.e. their polysemy) as well as the virtual untranslatability of interjections across languages, we do not provide the English translations of the listed tokens (see endnote 8).

Bibliographical references

- Almasi, Oswald; Fallon, Michael & Wared, Nazish 2014. Swahili Grammar for Introductory and Intermediate Levels: Sarufi ya Kiswahili cha Ngazi ya Kwanza na Kati. Lanham: University Press of America.
- Ameka, Felix 1992. Interjections: The universal yet neglected part of speech. *Journal of Pragmatics* 18,2-3. 101-118.
- Ameka, Felix 2006. Interjections. In Brown, Keith (ed.), *Encyclopedia of Language and Linguistics*. Amsterdam: Elsevier. 743-746.
- Ameka, Felix & Wilkins, David 2006. Interjections. In Östman, Jan-Ola & Verschueren, Jef (eds.), *Handbook of Pragmatics*. Amsterdam: John Benjamins. 1-19.
- Andrason, Alexander 2020. Primary interjections in Ugaritic. *Aula Orientalis* 38.2. 211-246.
- Andrason, Alexander 2021. The form of laughter interjections in Polish. *Innsbrucker Beiträge zur Sprachwissenschaft* 166. 29-49.
- Andrason, Alexander 2022. Argument structure of emotive interjections: Evidence from Polish. *Lingua* 277, 103400. 1-30.
- Andrason, Alexander & Dlali, Mawande 2020. The (crucial yet neglected) category of interjections in Xhosa. *STUF Language Typology and Universals* 73.2. 159-217.
- Andrason, Alexander & Durán Mañas, Mónica 2021. Syntax of interjection in New Testament Greek. *Scripta Classica Israelica* 40. 57-93.
- Andrason, Alexander; Fehn, Anna-Maria & Phiri, Admire 2020. Interjections in

- Tjwao. Bulletin of the School of Oriental and African Studies 83,2. 293-319.
- Andrason, Alexander; Hornea, Irina & Joubert, Marcus 2020. The structure of interjections in Biblical Hebrew: Phonetics, morphology, and syntax. *Journal of Hebrew Scriptures* 20,1. 1-43.
- Andrason, Alexander & Hutchison, Allen 2020. Interjections in Biblical Aramaic: A radial model. *Aramaic Studies* 38,1. 1-45.
- Andrason, Alexander & Karani, Michael 2017a. Radial categories in syntax: Non-resumptive Left Dislocation in Arusha (Maasai). *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 134,2. 205-218.
- Andrason, Alexander & Karani, Michael 2017b. The perfective form in Arusa: A cognitive-grammaticalization model. *Asian and African Studies* 26,1. 69-101.
- Andrason, Alexander & Karani, Michael 2019. Dative applicative elements in Arusa (Maa): A canonical approach to the argument-adjunct distinction. *Stellenbosch Papers in Linguistics PLUS* 58. 177-204.
- Andrason, Alexander & Karani, Michael 2021. Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype. Łódź Papers in Pragmatics 17,1. 3-41.
- Andrason, Alexander & Matutu, Haile 2019. The syntax of interjections in isiX-hosa: A corpus-driven study. *Stellenbosch Papers in Linguistics PLUS* 58. 1-16.
- Andrason, Alexander & Vita, Juan-Pablo 2021. A contribution to the study of interjections in Canaano-Akkadian. Die Zeitschrift der Deutschen Morgenländischen Gesellschaft (ZDMG) 171,1. 39-67.
- Bakovic, Eric 2001. Vowel harmony and cyclicity in Eastern Nilotic. *Berkley Linguistic Society* 27. 1-12.
- Barrett, Lina 2006. Solving the emotion paradox: Categorization and the experience of emotion. *Personality and Social Psychology Review* 10. 20-46.
- Brown, Dustan & Chumakina, Marina 2013. What there might be and what there is: An introduction to canonical typology. In Brown, Dustan; Chumakina, Marina & Corbett, Greville (eds.), *Canonical Morphology and Syntax*. Oxford: Oxford University Press. 1-19.
- Dunn, Andrea 1990. *The Pragmatics of Selected Discourse Markers in Swahili*. PhD dissertation. University of University of Illinois, Indiana.
- Eastman, Carol 1983. Exclamations in standard Swahili as cultural communication. *Journal of African Languages and Linguistics* 5. 157-180.
- Ekman, Paul; Sorenson, Richard & Friesen, Wallace 1969. Pan-cultural elements in facial displays of emotions. *Science* 164. 86-88.
- Goddard, Cliff 2013. Interjections and emotion (with special reference to "surprise" and "disgust"). *Emotion Review* 6,1. 53-63.
- Guion, Susan; Post, Mark & Payne, Doris 2004. Phonetic correlates of tongue root vowel contrasts in Maa. *Journal of Phonetics* 32. 517-542.
- Hamaya, Mitsuyo 1997. Vowel harmony in Maasai. Linguistics 607. 1-30.
- Heine, Bernd 2023. The Grammar of Interactives. Oxford: Oxford University Press.
- Hollis, Alfred Claud 1905. The Maasai. Their Language and Folklore. Oxford: Clarendon Press.
- Janda, Laura 2015. Cognitive linguistics in the year 2015. Cognitive Semantics 1. 131-154.
- Karani, Michael 2013. The Arusa Verb System. MA dissertation. University of Dar

- es Salaam, Dar es Salaam.
- Karani, Michael 2018. Syntactic Categories and Argument Structure in Parakuyo-Maasai. PhD dissertation. Stellenbosch University, Stellenbosch.
- Karani, Michael; Kotikash, Leonard & Sentero, Peter 2014. Unified Standard Orthography for Maa Languages Kenya and Tanzania (Arusa, Ilchamus, Maasai/Kisongo, Parakuyu, Samburu). Cape Town: CASAS.
- Kockelman, Paul 2003. The meanings of interjections in Q'eqchi' Maya: From emotive reaction to social and discursive action. *Current Anthropology* 44,4. 467-490.
- König, Christa 1993. Aspekt im Maa. Köln: University of Köln.
- Koopman, Hilda 2001. On the homophony of past tense and imperatives in Kisongo Maasai. *UCLA Working Papers in Linguistics* 6. 1-13.
- Levergood, Barbara Jo 1987. *Topics in Arusa Phonology and Morphology*. PhD dissertation. University of Texas, Austin.
- Matras, Yaron 2009. Language Contact. Cambridge: Cambridge University Press.
- Meinard, Maruszka 2015. Distinguishing onomatopoeias from interjections. *Journal of Pragmatics* 76. 150-168.
- Muzale, Henry 1998b. Linguistic and socio-cultural aspects in interlacustrine Bantu names. *Kiswahili* 61. 28-49.
- Nübling, Damaris 2001. Von oh mein Jesus! zu oje!: Der Interjektionalisierungspfad von der sekundären zur primären Interjektion. *Deutsche Sprache* 29,1. 20-45.
- Nübling, Damaris 2004. Die prototypische Interjektion: Ein Definitionsvorschlag. *Zeitschrift für Semiotik* 26,1-2. 11-46.
- Payne, Doris L. & Ole-Kotikash, Leonard 2008. *Maa Dictionary. Maasai* (*IlKeekonyokie, IlPurko, IlWuasinkishu*) and Samburu. <pages.uoregon.edu/maasai/Maa%20Lexicon/lexicon/main.htm>.
- Payne, Doris L. 2012. Phonological variation in Maasai varieties, with some implications for grammar. *Occasional Papers in Linguistics* 4. 35-65.
- Scherer, Klaus 2003. Vocal communication of emotion: A review of research paradigms. *Speech Communication* 40. 227-256.
- Stange, Ulrike 2016. Emotive Interjections in British English: A Corpus-Based Study on Variation in Acquisition, Function and Usage. Amsterdam: John Benjamins.
- Stange, Ülrike & Nübling, Damaris 2014. Interjections. In Müller, Cornelia; Fricke, Ellen; Cienki, Alan & McNeill, David (eds.), Body Language Communication. Berlin: Mouton de Gruyter. 1982-1989.
- Tucker, Archibald & Mpaayei, John Tompo Ole 1955. *A Grammar of Maasai with Vocabulary*. London: Longmans, Green and Co.
- Ullman, B. L. 1943. By Castor and Pollux. Classical Weekly 37. 87-89.
- Vossen, Rainer 1988. Towards a Comparative Study of the Maasai Dialects of Kenya and Tanzania. Hamburg: Helmut Buske.
- Wierzbicka, Anna 2003. Cross-Cultural Pragmatics: The Semantics of Human Interaction. Berlin: Mouton de Gruyter.
- Wierzbicka, Anna 2009. Overcoming Anglocentrism in emotion research. *Emotion Review* 1,1. 21-23.

Appendix

Alphabetical list of Arusa interjections³²

aaħ ááku aaúí άχ άί aiséé aiſ áíſ áítíŋo bíris dédé edúá éétáá éíſ éji εnkái εnkέrai entíto entíto-ejíéjíó éro fíú haa háé háí héé héé-hé

hέ

hóí

hóó hóó-hóó hóó-táá hới ılmúran ıltwáti íúſo jíé jíéjíó-ai jóópe jamani kíbó kíbó-tcándesi kííti kílome kíru kúádé kúmbe kúák le-máásai leláá-káke maskini maskini-ja-Mungu míkíjóki

mm

т́т

πźź

nombéés (ɛnkai)

əlkíla ojíéjíó-ai óó ooi óóí ójie źź *óríd* pasmáái píú sére sjombe sógó súmú ſíé téjo úúí ύύ∫ο wáí wóí woj zz###