Studies in African
Languages and Cultures, Vol. 55, 2021
ISSN 2545-2134; e-ISSN 2657-4187
DOI: 10.32690/SALC55.2

Alexander Andrason
Stellenbosch University

Laughter interjections in Xhosa

Abstract

The present paper analyzes the system of laughter-based interjections (L-INTJs) in Xhosa. By drawing on corpus and fieldwork evidence, the author concludes the following: the systems of L-INTJs consists of five types of constructions built around the segments *ha*, *he*, *ho*, *hi*, and *yha*, the satellites *te* and *ti*, as well as a number of replicative templates. The pattern *hVhVhV* with a short vowel is the most productive. Other replicative patterns, patterns involving (extra-)long vowels and the pattern *tVhV,* are less productive. Overall, L-INTJs are the canonical members of the interjective category. The presence and range of uses of L-INTJs result from the interjectionalization of laughter-based onomatopoeias or the onomatopoeization of non-laughter-related interjections.

Keywords: typology, Bantu, Xhosa, interjections, laughter

1. Introduction

Laughter, laughing-based, or gelotive interjections (Levisen 2019: 125-126) – henceforth referred to as L-INTJs – belong to the most marginalized types of grammatical categories (Levisen 2019: 110). Their study and theorizing occupy "the margins of the margins" of linguistics (Levisen 2019: 111), peripheral in research on interjections, which is itself a marginal field in language science (Ameka 1992a: 101)[1]. Indeed, seminal studies on interjections – whether typological

[1] From the last decade of the 20th century to the present, the scholarly peripherality of research on interjections has decreased and studies on interjections have gradually penetrated mainstream linguistics (Ameka & Wilkins 2006: 1-2, Levisen 2019: 113-114).

(Ameka 1992a, 2006, Wierzbicka 2003, Ameka & Wilkins 2006, Stange & Nübling 2014, Meinard 2015) or language-specific (Wierzbicka 1992, Nübling 2001, 2004, Bańko 2008, Nordgren 2015, Stange 2016) – "have either little or nothing to say about this type of interjection" (Levisen 2019: 111). Similarly, to my knowledge, references to interjections are negligible in research on laughter (Glen 2003, Jefferson 2004, Glenn & Holt 2013a, Dynel 2013, Trouvain & Truong 2017). When both interjections and laughter are studied thoroughly (O'Connell & Kowal 2008: 133-142, 162-173), they tend to be dealt with separately and treated as two distinct phenomena (see especially p. 133). The only examples of research on L-INTJs are papers written by Schenkein (1972), Kidd (2011), and Levisen (2019).

The marginalization of L-INTJs in linguistic research clashes with the relevance which these words seem to exhibit in human communication and language in general (Levisen 2019: 110). Given their importance, L-INTJs should thus "be […] taken seriously" (Levisen 2019: 111) and studied in a principled manner. To expand our – thus far limited – knowledge of L-INTJs, two urgent and, at the same time, fundamental tasks have been proposed. First, scholars should study the cross-linguistic pervasiveness of L-INTJs by identifying languages in which these words occur. Second, scholars should describe properties of L-INTJs in specific languages, both in relation to their meaning (semantics and pragmatics) and form (phonetics, morphology, and syntax) (Levisen 2019: 125-127). Levisen (2019), who emphasized the necessity of such research, recently provided a compelling analysis of L-INTJs in Danish – the first step towards a comprehensive typology of L-INTJs in the world's languages.

The present paper responds to Levisen's (2019) plea and provides further language-specific evidence that expands our typological knowledge of L-INTJs. The linguistic system under research is Xhosa (S-41) – a Nguni language of the Bantu family, spoken in South Africa. The data presented draw on both a corpus study and original field research. The analysis is developed within a dynamic prototype-driven approach to interjectionality (see Andrason & Matutu 2019, and Andrason & Dlali 2020, following Ameka 1992a, Nübling 2001, 2004, and Stange 2016), making additional use of Levisen's (2019) definition of L-INTJs. To be exact, by testing Xhosa L-INTJs for their compliance with features associated with the cross-linguistic prototype of an interjection, I aim to determine the overall profile of the L-INTJ-ective category and estimate its position within the broader categorial network of interjections.

To achieve its objective, the article is organized as follows: In Section 2 I present the theoretical framework of my research. In Section 3 I describe original evidence related to the meaning and form of L-INTJs in Xhosa. The results of this

description are evaluated within the adopted framework in Section 4. Section 5 concludes the paper.

2. Theoretical background: Laughter interjections and an interjective prototype

In accordance with my previous research on interjections in Xhosa (Andrason & Matutu 2019, Andrason & Dlali 2020) and other languages, e.g. Hebrew (Andrason, Hornea & Joubert 2020), Aramaic (Andrason & Hutchison 2020), Tjwao (Andrason, Fehn & Phiri 2020), and Greek (Andrason & Durán Mañas 2021), I understand the interjective category as a radial network organized around – but not defined by – an idealized representative: a prototype.

The interjective prototype is cumulative. It is defined as a set of non-formal and formal properties that are pervasive and salient in interjections attested across languages. In the determination of the set of these properties, I have eclectically drawn on comprehensive studies on interjections presented by Ameka (1992a, 2006), Ameka & Wilkins (2006), Nübling (2001, 2004), O'Connell & Kowal (2008), Stange & Nübling (2014), Meinard (2015), and Stange (2016), gradually complementing those authors' observations with the results of my own research on Bantu (Andrason & Matutu 2019, Andrason & Dlali 2020), Semitic (Andrason, Hornea & Joubert 2020, Andrason & Hutchison 2020), Khoisan (Andrason, Fehn & Phiri 2020), and Indo-European languages (Andrason & Durán Mañas 2021).

The non-formal facet of an interjective prototype concerns semantics and pragmatics. A prototypical interjection covers emotive and sensorial semantic domains and contains "an 'I feel' component" (Stange & Nübling 2014: 1983). It is produced semi-automatically and instinctively; performs a non-referential and monologic function; and is polysemous and heavily context dependent. The formal facet concerns phonetics, morphology, and syntax. Phonetically, a prototypical interjection attests to a mono-syllabic structure; is mainly vocalic; contains anomalous sounds and sound-combinations (i.e. sounds that are not used or very rarely used in the standard vocabulary of the language under analysis) including non-speech sounds (i.e. sounds that are not present in the International Phonetic Alphabet); and is produced with louder volume and articulatory intensity. Morphologically, a prototypical interjection is mono-morphemic; it does not host inflections and derivations nor does it exploit the mechanism of compounding; and is lexically opaque and aberrant (i.e. it transgresses the principles governing the forms of lexemes in a particular language). Syntactically, a prototypical interjection is holophrastic; if non-holophrastic, it does not belong to and/or is not

integrated in a core-clause grammar (i.e. it is not governed by the predicate, does not project arguments, and does not modify predicates, arguments, and adjuncts); this structural detachment from the core-clause is visible in the peripheral – typically initial – position of an interjection in the sentence and its phonetic isolation from the other components of that sentence marked by pause, intonation, or contouring; furthermore, a prototypical interjection is not compatible with syntactic operations (e.g. negation, interrogation, and passivization); and does not enter into constructions with any other grammatical elements and word classes[2].

The prototype of an interjection structures the interjective category, imposing its representation in terms of a radial network. That is, the prototype delimitates the nucleus and the boundaries of the category and determines the degree of membership of all the members. This membership extent is correlated with the canonicity of a particular categorial member, measured as a degree of compliance with the idealized prototype and depicted accordingly as a shorter or larger distance from the nucleus. Canonical members, which fully comply with the prototype of an interjection, are central. Non-canonical members, which comply with a few prototypical features, are peripheral. Between these two limits, there is a cloud of semi-canonical members which comply with a number of features associated with the prototype – albeit not all of them.

What is proper of the interjective network is that it spreads along two types of continua (Andrason & Hutchison 2020): the continuum of interjectionality and the continuum of interjectionalization. The continuum of interjectionality represents a gradual increase in semantic-pragmatic canonicity of interjections in the following conceptual order: phatic > conative > cognitive > emotive (Stange 2016: 18-19). Phatic interjections – the least interjective ones – express a "speaker's mental attitude toward the ongoing discourse" (Ameka 1992a: 114, 1992b). They initiate, sustain, and terminate communication. They also function as necessary components of several routine acts, such as thanking and apologizing. Conative interjections – including presentational expressions and calls directed to animals – "are aimed at getting someone's attention or they demand an action or response from someone" (Ameka 2006: 744). Cognitive interjections "indicate the state of knowledge or thoughts of the speaker" (Velupillai 2012: 150). Lastly, emotive interjections – the most interjective ones – express "the speaker's state

[2] Additionally, from an extra-linguistic perspective, a prototypical interjection is accompanied by gestures. For a more detailed presentation of the interjective prototype, consult Andrason & Dlali (2020), Andrason, Hornea & Joubert (2020), Andrason, Fehn & Phiri (2020), and Andrason & Durán Mañas (2021), as well as the references therein.

with respect to the emotions and sensations", like the categorial prototype itself (Ameka 1992: 113). The other continuum, that of interjectionalization, represents a gradual increase in formal canonicity – especially the one that pertains to morphology and phonetics – in the following order: exclamations > secondary interjections > primary interjections (Nübling 2001, see also Ameka 1992a). Exclamations are non-interjective lexical classes (e.g. nouns, verbs, prepositions) that are used in an interjective function following an ad-hoc, spontaneous, and/or idiolectal manner. Secondary interjections emerge where such exclamative uses become more entrenched and stabilized – a given lexeme is often employed as an interjection although its non-interjective usages are still available and non-interjective properties relatively patent. Primary interjections are interjections that are only used as such. They can constitute the final stage of interjectionalization, or they emerge "catastrophically", e.g. when coined spontaneously or borrowed (Ameka 1992a, 2006, Nübling 2001)[3]. Given the direction of the two continua, primary emotive interjections are usually the most canonical and thus central members in the interjective category. In contrast, secondary phatic interjections are the least canonical and the most peripheral (Ameka 1992a, 1992b, Nübling 2001, 2004, Stange 2016, Andrason, Fehn & Phiri 2020, Andrason & Hutchison 2020)[4].

Overall, my approach to interjections is inclusive, gradient, and dynamic instead of being selective, essentialist, and static. The category encompasses all possible members – although not all such members have an equal categorial status since their membership, conditioned by the canonicity, is uneven. In turn, this hierarchical variation of more and less representative members reflects and results from – at least to a certain extent – diachronic processes underlying the category[5].

Even though the present study is developed within a dynamic prototype-driven approach to interjectionality, it only focuses on a particular sub-type of interjections, namely L-INTJs. As this type of interjections is absent in the above-mentioned

---

[3] As a result, the continuum of interjectionalization is primarily diachronic although it can also be conceptual. In contrast, the continuum of interjectionality is mainly conceptual.

[4] Given their low interjectionality, conative and, especially, phatic interjections are sometimes denied a place in the interjective category. Similarly, given the low extent of their interjectionalization, exclamations are often not included in the category of interjections.

[5] This type of categorization coincides with an approach used in cognitive linguistics where categories, whether cross-linguistic or language-specific, are represented as dynamic networks with both a synchronic and diachronic dimension, i.e. semantic maps (Haspelmath 2003, Janda 2015, Andrason 2016, Georgakopoulos & Polis 2018).

publications on which my approach draws – being also thus far omitted in my own research – I will tentatively adopt the definition proposed by Levisen (2019: 113). Accordingly, L-INTJs are interjections that (a) are "based on the concept of laughing" and (b) have "a conventionalised expressive semantics" (p. 111-112)[6]. Levisen sees L-INTJs as additional semantic types of interjections, distinct from the other major types: emotive, cognitive, and conative (in his terminology, volitive) interjections[7]. That is, rather than being feeling-, thinking-, or wanting-based, they are laughing-based, i.e. "semantically centered around the concept of laughing" (Levisen 2019: 111). Crucially, Levisen (2019: 111-112) differentiates L-INTJs from the act of laughter and its linguistic representations. To be exact, L-INTJs are not mere (stable or unstable) linguistic strategies mimicking the physiological phenomenon of laughter (Levisen 2019: 112). Instead, they constitute cases of "interjectionalized laughter" (Levisen 2019: 111) – they result from the process of interjectionalization, whereby non-interjective elements (i.e. laughter and its linguistic representations) are conventionalized as exponents of a determined range of meaning typically associated with interjections, especially expressive senses (Levisen 2019: 112-113). In other words, the interjective function of original representations of laughter is entrenched and socially stabilized instead of being spontaneously coined and idiolectal (Levisen 2019: 113).

I will test L-INTJs for their compliance with the non-formal (semantic and pragmatic) and formal (phonetic, morphological, and syntactic) features associated with the prototype of an interjection in linguistic typology. This will allow me to determine, in a principled manner, the profile of L-INTJs, both with regard to their meaning and structure, and, thus, to locate the entire INTJ-ective category within the broader categorial network of interjections.

3. Evidence

The evidence presented in this section draws on a twofold type of research: a corpus study and a field study. The corpus study involved the review of 246 comic strips

---

[6] Of course, the link between conventionalized imitations of laughter and the category of interjections is acknowledged by other scholars (Trouvain & Truong 2017: 341). Indeed, conventionalized imitations of laughter are often classified as interjections in the grammars and dictionaries of those languages in which they occur, e.g. in Polish (Bańko 2008, *Wielki Słownik Języka Polskiego*) and Spanish (*Diccionario de la lengua española*).

[7] Levisen (2019) leaves phatic elements outside the interjective category. In my model, phatic elements are interjections although the least canonical ones from a semantic-pragmatic perspective (see this section).

published in the magazine *Bona* between 1981 and 2009 (Andrason & Matutu 2019) and 69 one-frame cartoons published in the newspaper *I'solezwe* in 2017 and 2018. This research yielded a collection of 160 uses of L-INTJ-ective segments spread across 26 frames in 24 different comic strips and cartoons – a number that enables certain, albeit still tentative, quantitative generalizations. In turn, the field study involved the interview of five native Xhosa speakers, all of whom are university-graduated residents of the Western Cape. Crucially, one of the informants is a trained linguist while another one is a psychologist with whom I have previously conducted research on interjections. This field research was mainly qualitative and consisted of discussing the details of the semantic potential of specific L-INTJs, eliciting examples that illustrate it, and determining the functions of L-INTJs attested in the written corpus[8].

In general, L-INTJs are relatively uncommon in my corpus. Out of 1849 uses of interjections attested in the comics that were published in the magazine *Bona* across three decades, L-INTJ-ective segments appear 150 times, i.e. less than 1% of the total corpus. Similarly, in the two-year corpus of comics published in *I'solezwe*, L-INTJs are only found 10 times. This sparsity in terms of use coincides with a limited number of L-INTJ-ective structures in Xhosa. Overall, the corpus and the field study yield a set of five stabilized L-INTJs – those built around the segments *ha*, *he*, *ho*, *hi*, and *yha*, of which two (*he* and *hi*) can additionally be accompanied by the "satellite" element *te*/*ti*. This, at most, constitutes 2% of the total number of interjections in Xhosa which ascend to nearly 350 words and constructions (Andrason & Dlali 2020).

In compliance with Levisen's (2019) definition of L-INTJs, the lexemes identified as L-INTJs in Xhosa are not mere spontaneous, idiolectal, extra-linguistic (imitations of the) acts of laughter. First, although they are associated with laughter,

---

[8] It should be noted that the two evidence sources presented in this article – i.e. the corpus study which draws on the written language and the field research which reflects the spoken language – are closely related. That is, comic strips tend to be a written codification of speech. They are very similar, nearly undistinguishable, from natural conversations and spoken language itself. This close relationship between the comic genre and the spoken language has widely been noted in scholarship and explains the abundant presence of interjections in comic strips: Interjections are primarily spoken language phenomena and, if attested in written texts, they tend to occur in those genres that imitate or approximate spoken language the most, in particular comic strips, drama plays, e-mails etc. (Nübling 2004, De la Cruz Cabanillas & Tejedor Martínez 2009, Forster, Borgwaldt & Neef 2012, Stange & Nübling 2014, Andrason & Matutu 2019).

they do not equal laughter[9]. They are conventionalized lexemes, words and/or constructions, on a par with any other words used in the Xhosa language, being characterized by a specific extent of semantic potential that is entrenched and stabilized among native speakers. Second, speakers use them not only to imitate laughter (as is typical of onomatopoeias that mimic sounds experienced in nature, including those made by humans themselves) but also, and, as it seems, primarily, to communicate emotive states and attitudes towards discourse (as is typical of interjections).

3.1. *Ha*-type

L-INTJs built around the segment *ha* are by far the most common among all the L-INTJs in Xhosa. First, in the analyzed corpus, a *ha* segment appears 94 times, which amounts to 59% of all the uses of L-INTJs. Out of 26 frames, *ha* is present in 22 (≈ 85%). Second, the native speakers interviewed in my field research viewed the *ha*-interjection as most directly associated with laughing-based or laughing-related meanings – the "first-come-to-mind" L-INTJ in their language.

The semantic potential of *ha* L-INTJs is broad. It ranges from a mere imitation of a physical act of laughter to complex expressions of speakers' emotions and sensations, as well as their mental attitudes towards communication. Below I explain these various meanings and uses in detail.

As far as mimicking uses are concerned, *ha* L-INTJs are compatible with all types of laughter episodes irrespective of their real pitch and intensity, and the physical characteristics of human sources, i.e. age, sex, body type, etc. Whether produced by young children or old people, by boys/men or girls/women, and by fat/big or slim/small persons, laughter can always be encoded by a *ha* L-INTJ. While the imitative usage links *ha* L-INTJs to the category of onomatopoeias, the two other senses mentioned above are genuinely interjective, i.e. emotive and phatic. Within the emotive range of uses, *ha* L-INTJs can express positive feelings of amusement and pleasure produced, for instance, after hearing something humorous or after experiencing something enjoyable. *Ha* L-INTJs may also be used to communicate happiness, excitement, and enthusiasm. Examples (1a-b) illustrate this. In (1a), having won a price for the best pupil at the school, a boy

---

[9] Indeed, the instances of true laughter recorded in an additional empirical study differ (more or less significantly) from the L-INTJs discussed in this paper. Therefore, my study of L-INTJs should not be confused with the study of laughter among Xhosa and/or human laughter as a biological/physiological phenomenon, more generally. It should only be viewed as the study of purely linguistic forms (in particular, interjections) related to laughter.

shouts *ha ha ha* out of excitement and pride. In (1b), a boy sees a girl and pays her a compliment, praising her beauty. She is utterly pleased and, to express it, uses a sequence of *ha* L-INTJs. My corpus provides two further illustrative cases of such emotive uses. In one (*Bona* 2000/9: 161), Denis the Goat, a character in a comic strip, is enjoying a beer. His enjoyment is communicated overtly by chains of *ha* L-INTJs. In another comic strip (*Bona* 1983/2: 155), the Bafanas, a group of young men, are excited about New Year's Eve and channel this by means of many *ha* L-INTJs. Nevertheless, *ha* L-INTJs are also compatible with negative feelings, often being used to mock or ridicule someone (e.g. *Bona* 1985/5: 155, 1987/2: 139)[10]. Specifically, they express malicious joy at someone else's misfortune (e.g. stumbling, falling, losing in a competition) (e.g. *Bona* 1983/5: 195, 1989/11: 211), the disbelief of someone's words, and a general lack of appreciation towards an interlocutor. In (1c), extracted from *Bona* (1992/8: 186), a group of young men mock a boy who wants one shoe by pretending to be able to wear it. To express their mockery and disdain, the young men employ a sequence of *ha* L-INTJs at the end of their speech. In (1d), a boy is asking a girl out. Unfortunately, she dislikes him and has no intention of being in his company. She uses a *ha* L-INTJ to express her aversion or even repugnance to the idea of spending time together. Overall, although the use of *ha* L-INTJs to convey negative emotions prevails in my corpus, their role as expressions of positive feelings is also well attested in the analyzed comics and cartoons; according to my informants, it is, in fact, equally common in colloquial speech. Additionally, *ha* L-INTJs may be employed as a response to the sensorial experience of being tickled. Although genuinely interjective – since emotive interjections express both feelings and sensations – this usage is also related to the imitative function of *ha* L-INTJs. Apart from the emotive-sensorial senses described above, *ha* L-INTJs can be employed as communicative devices similar to phatic interjections. In such cases, *ha* L-INTJs serve to express agreement or disagreement – thus controlling which information enters and which does not enter in the conversation – as well as to maintain a communicative channel. For example, in (1e), speaker B refuses an invitation to smoke weed by saying *ha ha ha* – equivalent to the negative response word *hayi* 'no'. Overall, the above-mentioned meanings (i.e. imitative, emotive, sensorial, and phatic) need not be mutually exclusive, but may instead co-occur in a single usage. Especially pervasive is the combination of one of the interjective

[10] I use the term 'negative' referring to mocking, ridiculing, laughing at others' expense, and mischievously enjoying someone else's misfortune, bad luck, or (perceived) ignorance. The term relates to a general disbelief of the interlocutor's words and a disregard or even disdain towards the other participants, characteristic of sarcasm.

nuances with an imitative function. Indeed, in most cases, an *ha*-type lexeme is used as a true L-INTJ – it simultaneously performs an onomatopoeic and an interjective role. Non-interjective uses (i.e. those purely onomatopoeic) are also common. In contrast, even though possible, purely interjective uses (i.e. those in which any connation of laughter is not available) are, according to all informants, extremely rare. To disambiguate the various senses that the *ha* L-INTJ may express and/or to profile one of the possible components of its semantic potential, knowledge of linguistic and extra-linguistic context is required. This disambiguation (or profiling) is often assisted by special phonation and intonation (see below), as well as gestures.

(1) a. **Ha ha ha**. Ndi-win-ile. Ndi-yincutshe[11].
L-INTJ SA.1st-win-PERF SA.1st- COP.9.champion
'*Ha ha ha*, I've won it! I am the best.'

b. **Ha ha ha**, enkosi, Sipho! U-ya-bukeka kakhulu nawe.
L-INTJ thank.you PN SA.2nd-PRES-look well you.too
'*Ha ha ha*, thank you, Sipho! You are very cute, too.'

c. Kodwa siso kuphela – u-nge-nza ntoni nge-sihlangu esinye!
but COP.7 only – SA.2nd- POT-do what with-7.shoe 6.one
HA! **HA**! **HA**![12]
L-INTJ
'But it is the only one – what can you do with one shoe! *Ha*! *Ha*! *Ha*!'

d. **Ha ha ha**! Thina sobabini?! U-nga-yi-cinga njani lonto?
L-INTJ we us.two SA.2nd- POT-OA.9-think how that.thing
Awu-bahla-nga **Ha ha ha**!
NEG.SA.2nd-be.well-PERF.NEG L-INTJ
'Ha ha ha! Us together?! How can you think that? You are not well! *Ha ha ha*!'

e. A: U-funa intsango?
SA.2nd-want 9.weed
'Do you want some weed?'

---

[11] Xhosa exhibits a highly complex agglutinative-fusional type of morphology. Much of this complexity will be omitted in the glosses, which only provide the most relevant morphological information.

[12] The original typesetting/formatting of the interjections extracted from the magazine *Bona* and the newspaper I'solezwe, in particular the use of lower/upper case and line division will be preserved. (The sign "/" indicates that in the actual frame, the text is written in a separate line). In contrast, I will not discuss other conventions governing the presentation of texts in comics, such as types of balloons, different font types, and specific topographical arrangements.

B: **Ha ha ha**!
L-INTJ
'*Ha ha ha*!'

As for the pragmatic properties of L-INTJs the following should be noted. First, the imitative uses of *ha* L-INTJs, as well as those that constitute responses to bodily physical stimuli (e.g. tickling), are generally semi-automatic and instinctive. Nonetheless, the usage of *ha* L-INTJs may also be more deliberate, purposeful, and controlled. This is especially evident in cases where *ha* L-INTJs express negative emotions such as sarcasm, mockery, derision, disdain, and disregard (see 2c-d). Second, *ha* L-INTJs are typically non-referential – one cannot use them to talk about participants different from the speaker themselves (see 1a-e). Third, although *ha* L-INTJs may be monologic in expressing the speaker's own feelings or mimicking their laughter without the necessity of constituting turns in a dialogue, they are often dialogic. In such instances, *ha* L-INTJs play an important communicative role, informing the interlocutor(s) of the mental state and attitude of the speaker. This dialogic component is particularly patent – in fact, compulsory – when *ha* L-INTJs perform a phatic function (see 1e above).

With regard to phonetics, the basic segment of *ha* L-INTJs, i.e. the element *ha*, attests to one of the simplest possible structures in the Xhosa language – an open monosyllable. The segment consists of the consonant [h] in the onset and an *a*-type vowel in the nucleus, the entire structure being represented as [CV]. Since the consonant [h] can also be analyzed as a voiceless counterpart of an adjacent genuine vowel, in this case [a] (see Blevins 2018: 31) – both types of sounds sharing several features – *ha* may alternatively be represented as [ḁa]. This clearly demonstrates the vocalic nature of the *ha* INTJ[13]. Significantly, the realization of the vowel in the nucleus may transgress the rules of the Xhosa sound system. In Xhosa, an *a*-type vowel habitually surfaces as [a]. In contrast, in the L-INTJs, the actual realization of *a* varies from a more front type of *a* (i.e. [a], as in all the other lexical classes) to a more back type (i.e. [ɑ]). This [ɑ] vowel is not a standard feature of Xhosa. Often, a *ha* L-INTJ is accompanied by a particular phonation mode. This includes a louder speech volume and articulatory intensity or, on the contrary, a more subtle pronunciation and even whispering. Similarly, the pitch accompanying a *ha* L-INTJ may be higher and more acute (typical of an [a] realization), or lower and deeper (typical of an [ɑ] realization).

[13] See the discussion of a similar phenomenon in Hebrew by Andrason, Hornea & Joubert (2020).

In general, the more laughter-mimicking a *ha* L-INTJ is, the more articulatorily odd it is, thus exhibiting the above-mentioned suprasegmental accompaniments (loudness, intensity, whispering, and higher/lower pitch).

The interpretation of morphological properties of the *ha* INTJ is complex. To begin with, as far as its form is concerned, the *ha* L-INTJ is lexically opaque and aberrant. That is, it does not contain any element that could structurally suggest membership in any word class, including the interjective one; nor does it allow for agglutinating processes. This contrasts with other lexical classes (especially, nouns, verbs, adverbs, adjectives, participles, and pronouns) which can all be largely identified by their morphological structure and an extensive use of some types of agglutinations. The *ha* L-INTJ also fails to exhibit any types of inflections and derivations, being entirely unsusceptible to inflectional and derivational mechanisms. In contrast, the evidence concerning mono-morphemicity and access to compounding is ambiguous and suggests a gradient or fuzzy interpretation of those phenomena. To begin with, the use of *ha* singletons is avoided. In the analyzed corpus, a singleton *ha* occurs twice. It occurs only in two similar cases: (a) the *ha* singleton forms an interjective sequence with other L-INTJs in an utterance (see the segment *ha* in *HO! HO! HO! HA! HEE! HEE! HEE!*; *Bona* 1985/5: 155), and (b) the *ha* singleton appears in a frame that contains other, loosely connected and dispersed L-INTJs (e.g. *Bona* 1983/2: 139). Indeed, according to my informants, a *ha* singleton cannot convey laughter-related or laughter-based nuances when used on its own and/or isolated. This may be related to the fact that Xhosa contains in its inventory a non-laughter-based interjective singleton of a *ha*-type, namely *haa* [ha:] which expresses a range of emotive senses, especially exultation and admiration (Tshabe 2006: 703, Andrason & Dlali 2020)[14]. While singletons are rare, the replication of *ha* segments is prevalent, and a variety of replicative structures are possible. Reduplication is attested 4 times in the corpus. Triplication is by far the most common, appearing 17 times. Larger sequences are also occasionally found, e.g. series of five (twice) or six segments (once). Sequences of *ha* segments can be written as disconnected units, which is typical (e.g. *ha ha ha!*), or separated by punctuation signs, especially the exclamation

[14] There are two other non-laughter-based interjective singletons spelled in a similar manner to the *ha* L-INTJ, i.e. *ha* and *haa*. The former is used for a number of conative (attention getter) and emotive (admiration, exultation) senses. The latter (graphically undistinguishable from the *haa* interjection mentioned above) expresses emotive senses of surprise and shock. It should, however, be noted that, contrary to the *ha* L-INTJ which contains the unvoiced consonant [h], these two lexemes are pronounced with the voiced approximant [ɦ], i.e. slack or breathy voice transition.

mark (e.g. *Ha! Ha! Ha!*). However, their writing as a single word – i.e. contiguous sequences (*hahaha*) rather than disconnected or semi-connected hyphenated singletons (e.g. *ha-ha-ha-ha-ha*) – is also attested (3 times). In the corpus, this word-like writing of *ha* L-INTJs is only attested for triplets.

The replicative patterns presented above reveal the morphological and morpho--syntactic complexity of *ha* L-INTJs. The first problematic issue is whether a *ha* segment is a true morpheme. The fact that singletons are attested, and that any *ha* L-INTJ may always be extended by an additional segment, suggests that the segment *ha* functions as a morphological unit. However, since singletons can only be used if co-occurring with other L-INTJs, along with the notion that the meaning of a *ha* L-INTJ does not change whether it surfaces as a singleton or whether it is reduplicated, triplicated, and multiplicated, equally suggests that a *ha* segment is not a meaning-bearing unit – contrary to what is typical of canonical morphemes. That the meaning does not (radically) change may be seen in two phenomena. First, while one could argue that the sequence of ten *ha* segments implies a more intense type of laughter than the sequence of two *he* segments, the relationship between the length of a sequence and the intensity of laughter it communicates is much less straightforward and universal. It certainly does not univocally imply loudness, high or low pitch, or any other suprasegmental property. For similar pairs of segments (e.g. 2 versus 3 and 4 versus 5), such a relationship is even less evident: longer variants do not necessarily imply "more laughter" than shorter variants. Second – and much more importantly – contrary to many ideophones in Xhosa (see *wambu-wambu* 'walk like a stork' versus *wambu* 'cover'; Andrason 2020: 155), the multiplication of a *ha* segment does not add new senses to the semantic domain of this L-INTJ. That is, the semantic potential of all *he* segments is identical and their non-imitative values do not change irrespective of the number of segments present. As a result, the replication of *ha* would be a phonetic/phonological device rather than a morphological one.

Another problematic matter is whether the segment *ha* should be analyzed as either a bound or free morpheme (or 'quasi-morphemic' element; see above) – and thus the entire structure as a morphological (synthetic) or a syntactic (analytic) phenomenon, respectively. As explained above, the evidence attests to a variety of strategies – separated (e.g. *ha ha*), hyphenated (e.g. *ha-ha-ha-ha-ha*), unitary (e.g. *hahaha*) – which impede a neat morpho-syntactic classification of *ha* L-INTJs. Such strategies can however be arranged into a cline that reflects an increase in morphologization whereby an analytic syntactic pattern is gradually transformed into a synthetic morphological one. The examples of *ha* triplets match that cline

to the fullest extent. The highest degree of analyticity is attested by the sequence *Ha! Ha! Ha!* (*Bona* 2007/10: 115) in which the three units are represented as independent words separated by punctuation, each bearing its own accent and providing similar articulatory expressiveness. A slightly lesser extent of analyticity is attested by the sequence *Ha ha ha!* (*Bona* 1984/5: 155) which is pronounced as single intonational units, marked by a single exclamation sign at the end. Hyphenated sequences such as *he-he-he* reveal an intermediate semi-analytic and semi-synthetic status. The writing of *HaHaHa* attests to a more synthetic pattern (*Bona* 1005/8: 103) whereby the triplication of a *ha* L-INTJ is represented as a single word, although a capital letter graphically differentiates each segment. Lastly, *Hahaha* (*I'solezwe* 2017/8: 8, 2018/8: 8) represents a fully synthetic structure – a single word composed of three identical syllables. Overall, *ha* INTJs attest to a mixed syntactic and morphological structure, in some cases a fuzzy and transitory one, located between syntax and morphology.

As far as syntax is concerned, *ha* L-INTJs can function holophrastically, i.e. they may form non-elliptical utterances equivalent to full sentences. In the analyzed corpus, this is by far the most prevalent usage of *ha* L-INTJs. Nevertheless, non-holophrastic uses are also grammatical and attested in the corpus (2a; see also 1a-b). In such cases, a *ha* L-INTJ occurs in a larger sentence, featuring as one of its elements. In all such non-holophrastic uses, *ha* regularly fails to be integrated in – or simply does not belong to – core-clause grammar. That is, it is not governed by the predicate, arguments and adjuncts, nor does it modify such structural elements. The only exception is the usage of *ha* with the quotative base *-thi* 'say, do', which is also regularly employed with ideophones, including the onomatopoeic ones. See, for instance, *wathi hahaha* 'he said *hahaha'* (i.e. he mocked the idea of going to the movies) in (2b). Accordingly, the L-INTJ *ha* may form a complex predicate with *-thi* that carries inflection and derivation (see Du Plessis 1978, 2010, Andrason 2020). However, in contrast to ideophones, where the omission of *-thi* is grammatical (Andrason 2020), sentences such as *USihpho hahaha izolo*, where the base *-thi* is not expressed overtly, are problematic. In both holophrastic and non-holophrastic uses, *ha* L-INTJs are incompatible with syntactic operations of negation, interrogation, and passivization. That is, *ha* L-INTJs do not have negative, interrogative, or passive variants. This property is also related to the following phenomenon: When accompanying a negative, interrogative, or passive clause, the interpretation of a *ha* L-INTJ is never negative, interrogative, or passive. Instead, the *ha* L-INTJ maintains its usual illocutionary force, typical of emotive, phatic, and imitative functions. For instance, in (2c) the presence of the negative clause *andizokuyenza lonto* 'I'm not going to do that'

has no bearing on the syntactic interpretation of the *ha* L-INTJ. The position of *ha* L-INTJs in a sentence is regularly peripheral – usually initial (see examples 1a-b above) albeit also final (2a). *Ha* L-INTJs tend to be used at the beginning (2d) or the end of a turn in a dialogue (2e), thus signalling the change of interlocutor. In instances of non-holophrasticity, *ha* L-INTJs are phonetically isolated from the remaining parts of the sentence. This is regularly achieved by a pause and contouring – often indicated in writing by a comma. Lastly, *ha* L-INTJs do not enter into constructions with other elements, especially other lexical classes. The only – but highly common – exceptions are interjections themselves, whether laughter--based or unrelated to laughter, as well as the quotative verb *-thi* mentioned above. That is, any *ha* L-INTJ can be accompanied by or appear in a chain with other L-INTJs, e.g. *ho*- and *he*-types (2f) (see subsections 3.2 and 3.3 below), as well as with interjections that are not laughter-based, e.g. *yo* (2g), *oh* (2h), and *o* (2i). It may also be headed by the verb *-thi*, forming with it a complex predicate (see again 2b).

(2) a. Hayi ke apho u-mchan-ile, **ha ha ha ha ha ha!** (*Bona* 1987/6: 139)
no PART there SA.2nd-hit-PERF L-INTJ
'No, here, you got it right (lit. hit it), *ha ha ha ha ha ha*!'

b. USipho wa-thi **hahaha** izolo
1a.PN 1a.SA.PAST-say L-INTJ yesterday
'Sipho said *hahaha* yesterday.'

c. **Ha ha ha**, a-ndi-zoku-y-enza lonto
L-INTJ NEG-SA.1st-FUT[15]-OA.9-do that.thing
'*Ha ha ha*, I'm not going to do it!'

d. **HA**! **HA**! Ku-hleka bani ngoku?
L-INTJ SA.15-laugh who now
'*Ha*! *Ha*! Who's laughing now?'

e. Ngoku ndi-zi-fumen-e yaye ekugqibeleni ndi-za ku-yi-zuza
now SA.1st-OA.10-find-PERF and finally SA.1st-come INF-OA.9-get
imbasa yam / **Ha**! **Ha**! (*Bona* 1981/12: 191)
9.price 9.my L-INTJ
'Now I've found them and finally I will get my price / *Ha*! *Ha*!'

f. HO HO HO HEE HEE **HA HA HA** HEE HEE HEE (Bona 1988/10: 203)

g. YO! **HA**! **HA**! **HA**! HEE HEE! HA! (*Bona* 1983/5: 195)

---

[15] This type of a future-tense marker results from the agglutination of the verbal base *-za* 'come' and the infinitive (class 15) prefix *uku-*.

h. OH **HA HA HA** HO HO HO HO! TEE HEE! (*Bona* 1985/5: 155)

i. O, **ha**! **ha**! **ha**! (*Bona* 1986/10: 211)

3.2. *He*-type

Another class of L-INTJs is built around the segment *he*. In the analyzed corpus, *he* L-INTJs are less common than the *ha*-type, however, they are still well attested. They appear 29 times (≈ 18%) spread across 10 frames (≈ 38%).

As was the case of the *ha*-type, the semantic potential of *he* L-INTJs is broad. In general, *he* L-INTJs can be used in all functions that are available for the *ha*-type, thus covering imitative, emotive-sensorial, and phatic domains. Nevertheless, the relevance of each of these functions in the semantics of *he* L-INTJs – or rather the relevance of the particular sub-senses contained in each of those three major domains – is different from what typifies *ha* L-INTJs. First, *he* L-INTJs can be used to imitate a mere act of laughing irrespective of its reasons and intentions. In that function, a *he* L-INTJ is synonymous to the *ha* L-INTJ with which it often co-occurs (e.g. *Bona* 1983/5: 195, 1985/5: 155, 1987/2: 139, 1989/11: 211, 1992/8: 186). However, when mimicking laughter, *he* L-INTJs more often communicate its restraint, i.e. a laughter that is hidden, discreet, less loud, and softer. An exemplary case is found in *Bona* (1994/4: 163). In that comic frame, while uttering a sequence of *he* L-INTJs, the speaker covers his mouth with his hand to hide and restrain his laughter. Similarly, even though *he* L-INTJs are occasionally compatible with positive emotions, e.g. euphoria (3a), by far the most typical usage of these lexemes emerges in situations involving negative feelings (3b-c). The most common are mockery, derision, and sarcasm – in general, enjoyment caused by someone else's bad luck, misfortune, or trouble. Examples (3b-c) illustrate this. In (3b), a pupil sees another boy's final mark in mathematics. As the two are sworn enemies, he is delighted with the news that his classmate failed the subject and must repeat the year. To express his malicious joy, he employs an L-INTJ built around *he*. In other words, instead of merely imitating laughter, the sequence *hee hee hee* means 'I am happy of your misfortune'. Similarly, in (3c), a teenager hides some biscuits from his siblings. He rejoices knowing that the other children will not be able to find the sweet treats. This malicious satisfaction is encoded by a sequence of *he* segments. The close relationship which *he* L-INTJs have with negative emotions is fully patent in the analyzed corpus. In all their uses in the magazine *Bona*, *he* L-INTJs are invariably employed to mock an interlocutor and emerge as responses to another person's accident (e.g. falling) or ludicrous expression (e.g. trying in vain to threaten the speaker(s)). In the only case attested in the newspaper *I'solezwe*, the *he* L-INTJ is also employed sar-

castically at the end of a monologue. When using *he* L-INTJs to mock someone, speakers typically conceal their feelings from the other participants. This is related to the above-mentioned restrained type of laughter that *he* imitates. *He* L-INTJs are also employed in a sensorial function as a response to extra-linguistic stimuli, e.g. being tickled. As is common of the imitative and emotive functions, their usage within a sensorial domain regularly implies that a person tries to contain their bodily reflexes instead of laughing out loud. Lastly, *he* L-INTJs may perform a phatic function. Within the phatic domain, the negative idea of disagreement seems to be more pervasive than agreement. For instance, when being offered some money and asked *Uyayifuna* 'Do you want it?', the speaker uses a *he* L-INTJ to express his disapproval of the offer since in his view the quantity is far too low. This usage often carries additional nuances of mockery and derision that are typically associated with *he*. As was the case of *ha*, *he* tends to be used as a true L-INTJ, simultaneously combining its onomatopoeic and interjective profiles. Purely onomatopoeic uses of *he* are also fully grammatical. However, according to my informants, contrary to *ha*, a purely interjective usage of *he* is problematic.

(3) a. **Hee hee hee**, ndi-ya e-Thekwini!
L-INTJ SA.1st-go LOC-Durban
'*Hee hee*, I'm going to Durban!'

b. U-tshon-ile, u-za ku-phinda ibanga leshumi
SA.1-fail-PERF SA.1-come INF[16]-repeat 5.standard 5.ten
kwakhona, **hee hee!**
again L-INTJ
'He has failed, he will repeat standard ten again, *hee hee*!'

c. **He he he**, a-ba-zi ku-zi-fumana iibiskiti. Ndi-zi-fihl-e
L-INTJ NEG-SA.2-come INF-OA.10-find 10.biscuit SA.1st-OA.10-hide-PERF
phezu kwe-wodrop
on.top of-9.wardrobe
'*He he he*, they won't find the biscuits. I've hidden them on top of the wardrobe.'

The pragmatic properties of *he* L-INTJs virtually mirror those exhibited by the *ha*-type described in subsection 3.1. The uses of *he* L-INTJs that are imitative and bodily-conditioned (e.g. tickling) tend to be automatic and instinctive. In contrast, emotive and phatic uses are largely uttered deliberately, for specific purposes. Given the tendency to use *he* L-INTJs as expressions of sarcasm, mockery, and

[16] This is a "basic" (Oosthuysen 2016: 202) shorter form of the infinitive *uku-* (class 15) (see Du Plessis 1978: 131).

derision, such deliberate uses predominate. In a further similarity to the *ha*-type, *he* L-INTJs are non-referential and disallow discourses about other participants and third parties. They can be employed in both monologues and dialogues. In the latter case, they perform an important role in conversations (e.g. by marking a turn in dialogue and/or communicating agreement or disagreement)[17]. This dialogic component is compulsory when *he* L-INTJs are employed in phatic functions.

The phonetics of *he* L-INTJs is also similar to that of the *ha*-type. The basic unit of *he* L-INTJs is an open mono-syllable that consists of the consonant [h] in the onset and the vowel [e] in the nucleus. Given the double duty of [h] as a consonant and unvoiced vowel, the sequence [CV] may alternatively be represented as [V̥V]. However, while the nucleic vowel is typically short in the *ha*-type, it tends to be long in the *he*-type. This length is overtly indicated by doubling in written texts. Indeed, in the analyzed corpus, the grapheme *he*, which implies the short vowel [e], is only attested four times, all occurring in a single frame (*I'solezwe* 2018/1: 8). In contrast, the grapheme *ee* suggesting the pronunciation with a long vowel, i.e. *hee* [he:], is found 23 times spread across 9 frames. An exaggerated extra-long realization is also attested, i.e. *heee* [he::] (*Bona* 1994/4: 163). It should be noted that this trimoraic vocalic length, i.e. [e::] found in *heee*, is not a standard feature in the phonetics/phonology of Xhosa. Trimoraic vowels are only attested in ideophones (Andrason 2020) and interjections (Andrason & Dlali 2020). As was the case of the *ha*-type, *he* L-INTJs can be accompanied by particular phonation modes. Although louder speech volume and articulatory intensity are possible, whispering and more quiet realization are particularly common given the restrictive type of laughter typically associated with *he* L-INTJs. *He* L-INTJs are also often pronounced with a higher pitch.

As far as their morphology is concerned, *he* L-INTJs – like the *ha*-type – are lexically opaque. They fail to contain structural elements that would associate them with a particular word class. They are incompatible with inflectional and derivational morphemes. In a further similarity to *ha*, *he* L-INTJs are however segmentable into, or extendable by, more basic units – not necessarily morphological – i.e. *he* singletons. To begin with, a singleton *he* – in my corpus always surfacing as *hee* – occurs only twice and uniquely in a combination with *tee* (e.g. *tee hee*; see below in this section). This means that true solitary *he(e)* segments are unattested. In fact, as corroborated by my informants, such solitary *he* segments cannot function as laughter-based interjections at all. This may be

[17] Compare with a similar property of *he he* in English (Schenkein 1972).

related to the fact that Xhosa contains an interjective singleton of a *he* form, i.e. *he-e*, that is not laughter-based. It is used in emotive (praise and satisfaction, including in a negative sense, e.g. at someone's humiliation) and phatic functions (filler that sustains communication and agreement) (Tshabe 2006: 719, Andrason & Dlali 2020)[18]. While true singletons are ungrammatical, reduplication is the most common variant, being attested 5 times. The reduplicated *hee* may appear either on its own (i.e. *HEE HEE* in *Bona* 1983/5: 195, 1988/10: 203) or in a sequence preceded by *tee* (i.e. *TEE HEE HEE*; *Bona* 1987/2: 139, 1989/11: 211, 1992/8: 186). Triplications are also common, occurring 3 times in the corpus (*HEE HEE HEE* in *Bona* 1998/5: 155, 1986/1: 111, 1988/10: 203). Lastly, sequences of four *he* segments are attested twice – again, without (*he he he he he* in *I'solezwe* 2018/1: 8) or with the introductory *tee* (*TEE HEE HEE HEE HEEE* in Bona 1984/4: 163). Contrary to *ha* L-INTJs, *he* segments are invariably written as separated units. They are never combined by hyphens nor do they form unitary bound word-like structures. As a result, the repetition of a single *he* segment should be analyzed as a more syntactic (analytic) than morphological (synthetic) strategy – the *he* construction being overall less morphologized than chains built around the *ha* segment.

As far as syntax is concerned, the corpus only attests to holophrastic uses of *he* L-INTJs. Nevertheless, non-holophrastic uses, in which a *he* L-INTJ is located within the sentence boundaries, are also fully grammatical. In the cases of non-holophrasticity, a *he* L-INTJ never belongs to the core-clause grammar. It is not governed by the predicate, arguments and adjuncts, nor does it modify any structural elements of the clause. As was the case of *ha*, the exception is the use of *he* as part of a complex predicate built around the base *-thi*. *He* L-INTJs are incompatible with syntactic operations, e.g. negation, interrogation, and passivization. Therefore, their syntactic reading is not affected by being accompanied by negative, interrogative, and passive clauses. In all such instances, *he* L-INTJs maintain their own usual polarity value and illocutionary force, which may be distinct from those exhibited by the adjacent clause. The sentential position of *he* L-INTJs is always peripheral. They tend to appear in the left edge of the sentence, although a position in the right edge is also grammatical. In the corpus, in the only case where a *he* L-INTJ occurs in a larger fragment of text composed of other sentences rather than featuring in a mere sequence of interjections, it

[18] Xhosa contains another non-laughter-based interjective singleton that is spelled in a similar manner to the *he* L-INTJ, namely *he*. This lexeme is, however, pronounced with [ɦ] and is used in conative (attention getter) and phatic (agreement) functions.

signals the end of a monologue (*l'solezwe* 2018/1: 8). In instances where *he* L-INTJs are used as parts of sentences, they tend to be phonetically isolated from the other sentential components by means of a pause and contouring. This is regularly indicated by a comma. Such separation is nevertheless absent between *he* segments and the preceding element *tee* (see below). It is, in contrast, common if a *he* L-INTJ is preceded or followed by other L-INTJs (e.g. *ha*- and *ho*-types). *He* L-INTJs do not enter into constructions with other lexical classes, especially nouns and verbs – except for quotative constructions with *-thi*. Like *ha* L-INTJs, they also co-occur with other L-INTJs (see examples 2f-h discussed in subsection 3.1) and interjections that are not laughter-based, e.g. *yo* and *oh* (see 2g-h).

What radically differentiates the *he* L-INTJs' syntax from that of the *ha*-type and most other types that will be discussed below (except *hi* L-INTJs), is their close connection to the element *te* (see the discussion above). The element *te* never occurs alone (even if replicated), i.e. without an accompanying *he* segment. Therefore, it cannot be analyzed as an independent L-INTJ on a par with all the other L-INTJs, such as *he*, but rather as *he*'s satellite. The element *te* is always written in the analyzed corpus with a doubling of the vowel, which implies a long vocalic nucleus and the realization of the entire *te* segment as [t'e:]. Given the bimoraic pronunciation of *he* and the use of the same vowel in the nucleus, the sequence creates a rhyme and can be understood as a harmonious pattern – a type of partial reduplication. Such *tee hee* sequences are highly common. More than 40% of *he* L-INTJs appear in company of a *te* element, from which they are never separated phonetically by a pause or contouring. This gives rise to a well-entrenched constructional template *te he* with the element *he* being further replicable, e.g. *TEE HEE* (Bona 1987/2: 139) and *TEE HEE HEE HEE HEEE* (Bona 1984/4: 163). I view this template as one of the patterns available to *he* L-INTJs and therefore analyze it as a sub-variant of the *he* L-INTJ itself, fully equivalent to the *he* L-INTJ from a semantic and pragmatic perspective. That is: the semantic potential and pragmatic properties of *te he* are identical to those exhibited by the *he* L-INTJ and the various patterns in which the *he* L-INTJ occurs, whether singletons or replications. To be exact, *te he* primarily conveys negative emotions and a constrained type of laughter. The example *TEE HEE HEE* (Bona 1987/2: 139) is used in the situation where young men mock a boy who says he is going to a party with some celebrities. In example *TEE HEE HEE HEE HEEE* (Bona 1984/4: 163), the speaker conceals his amusement, laughing at a friend whose advice turned out to be detrimental to himself. This hidden manner with which the *te he* pattern is produced is overtly indicated in the comic by the speaker covering his face with his hand.

3.3. *Ho*-type

The third type of L-INTJs is built around the segment *ho*. In the analyzed corpus, this segment is found 29 times (≈18%), being spread across 8 different frames (≈31%). Thus, the prevalence of *ho* L-INTJs is nearly identical to that of the *he* L-INTJs discussed in the previous section.

Similar to the *ha*- and *he*-types, the semantic potential of *ho* L-INTJs is wide-ranging. First, *ho* L-INTJs can imitate events of laughter. Although in many contexts, *ho* L-INTJs are interchangeable with *ha* L-INTJs, they tend to indicate laughter that is loud, unconstrained, and authoritative, as well as characterized by a lower pitch as is typical of bigger, fatter, and/or older persons. These characteristics clearly distinguish *ho* L-INTJs from the *he*-type. *Ho* L-INTJs may also express emotions, whether positive or negative. Exemplary positive emotions conveyed by *ho* L-INTJs are joy, happiness, and amusement such as that when winning a competition (see example 4a). Typical negative emotions are sarcasm, mockery, and derision – in general, mischievous enjoyments of someone's misfortune or ignorance similar to that in (4b). Overall, the use of *ho* L-INTJs to laugh at someone else's expense is more common than other emotive uses. *Ho* L-INTJs may also be employed as responses to bodily stimuli such as being tickled, especially if the person involved is big, fat, and/or old, thus possibly producing a type of laughter characterized by a lower pitch as is typical of this interjection. A phatic usage of *ho* L-INTJs as expressions of agreement and disagreement is also possible (4c) although significantly less common. Similar to *ha* and *he*, simultaneous combination of imitative and interjective functions is typical. Purely onomatopoeic uses are grammatical, while those that would lack any onomatopoeic foundation seem highly problematic.

(4) a. **Ho ho ho** ndi-ba-fumen-e! Ndi-phumelel-e!
L-INTJ SA.1st-OA.2-get-PERF SA.1st-win-PERF
'*Ho ho ho*, I got them! I won!'

b. **Ho ho ho ho**, u-muncu lowo u-sisonka samanzi
L-INTJ SA.1-sour DEM.1 SA.1-COP.7.bread 7.POS.6.water
'*Ho ho ho*, he is as dumb as steam bread (= he is very stupid).'

c. Sa-hlala ilanga lonke silindile, **ho-ho**! (Tshabe 2006: 791)
SA.1stPL.PAST-sit 5.day 5.all waiting L-INTJ
'We waited for him the whole day, but *ho-ho* (i.e. in vain).' (Tshabe 2006: 791)

d. A: Ndi-cela uku-ya phandle
SA.1st-ask INF-go out(side)
'Please, can I go out?'

B: **Ho ho ho**!
L-INTJ
'*Ho ho ho*'

The pragmatic properties of *ho* L-INTJs are fully analogous to those typifying *ha* and *he* L-INTJs. Imitative and sensorial uses of *ho* L-INTJs are automatic and spontaneous. In contrast, emotive uses, especially those expressing sarcasm, mockery, and derision, as well as phatic uses, are usually deliberate and controlled. *Ho* L-INTJs are non-referential and cannot be used to talk about the third parties. They are employed both in monologues and dialogues – with the latter usage clearly prevailing in the analyzed corpus. When used in dialogues, they serve communicative functions, constituting important components in a conversation.

The phonetics of *ho* L-INTJs is also comparable to that of the *ha*- and *he*-types. The fundamental element of *ho* L-INTJs, i.e. the segment *ho*, exhibits an open mono-syllabic structure. The consonant [h] appears in the onset and the vowel [o] in the nucleus. As was the case of *ha* and *he*, this [CV] structure may alternatively be represented as [V̥V], specifically [o̥o]. The vowel *o* is typically short, i.e. mono-moraic, except for singletons where a long *o* – bimoraic [o:] or trimoraic [o::] – prevails. Note that the only singleton that is attested in *Bona* (1987/2: 139) is written *hooo* apparently attesting to an extra-long pronunciation [ho::]. As mentioned in subsection 3.2, a trimoraic vocalic length is not a standard feature in the phonetics/phonology of Xhosa. As the other L-INTJs, the *ho*-type can be accompanied by distinctive phonation modes. In agreement with the particular type of laughter they represent, *ho* L-INTJs are usually pronounced with a louder speech volume, greater articulatory intensity, and a lower pitch. According to native speakers, *ho* L-INTJs constitute the loudest and the lowest (as far as their pitch is concerned) types of L-INTJs.

With regard to morphology, the lexical form of *ho* L-INTJs is equally opaque as was the case with *ha* and *he* L-INTJs. In further similarity to those two types, *ho* L-INTJs fail to exhibit inflectional and derivational morphemes. Like *ha*- and *he*-types, *ho* L-INTJs can be segmented into more basic units, i.e. *ho* singletons, or extended by such units. Contrary to *ha* and *he* L-INTJs and despite being fully grammatical, reduplication is unattested in the corpus. Only cases of triplication (e.g. *HO HO HO*; Bona 1986/1: 111) and quadruplication (e.g. *HO HO HO HO*; Bona 1987/2: 139) are found – both with an equal frequency, i.e. 4 times each[19]. There is also one

[19] Examples of triplication are: Bona 1985/5: 155, 1986/1: 111, 1988/10: 203, 2004/2: 111. Examples of quadruplication are: Bona 1985/5: 155, 1987/2: 139, 1989/11: 211, 1992/8: 186.

case of a singleton, which, as explained above, contains an extra-long vowel (*HOOO*; Bona 1987/2: 139). The presence and grammaticality of such singletons may be enabled by the following fact: although Xhosa contains the interjection *ho* that is typically attested as a singleton, this lexeme is pronounced with [ɦ] and, crucially, it is only employed in a conative sense to stop oxen. Accordingly, there would rarely be (if ever) any ambiguity with the *ho* L-INTJ, which is pronounced with [h] and exhibits radically different semantical potential. Contrary to the *ha*-type but similarly to the *he*-type, the sequences composed of *ho* segments are always written as separated units. In one instance in the corpus, *ho* segments are separated by punctuation signs, specifically, exclamation marks (*HO! HO! HO!*; Bona 1985/5: 155). Twice, an exclamation mark is placed after the sequence of three *ho* elements, which suggests their joint exclamatory treatment (*HO HO HO!*; Bona 1986/1: 111, 2004/2: 111). Overall, following the analysis of *ha* and *he* L-INTJs, repetitions of the *ho* segment may be analyzed as the semi-advanced morphologization and synthetization of an analytic syntactic pattern – a stage towards development into a fully unitary bound construction, thus, a word.

The syntactic properties of *ho* L-INTJs also largely coincide with those of the *ha*- and *he*-types. The analyzed corpus only attests to holophrastic uses of *ho* L-INTJs. Nevertheless, non-holophrastic uses are grammatical too. In such cases, *ho* L-INTJs are not integrated in the grammar of a core clause and do not constitute its structural elements. They are never governed by nor do they modify the predicate, arguments, and adjuncts – except the quotative use after the verb *-thi* 'say'. *Ho* L-INTJs do not participate in syntactic operations, whether it is negation, interrogation, or passivization. Their position in the sentence is peripheral, typically initial[20]. In their non-holophrastic uses, *ho* L-INTJs tend to be phonetically isolated from the remaining parts of the sentence, being separated by a pause and contouring. The exceptions are the other *ho* segments. *Ho* L-INTJs do not form constructions with lexical classes other than the verb *-thi*. They do, however, combine with other L-INTJs as well as interjections that are not laughter-based, e.g. *yo* and *oh* (see 2f-g in subsection 3.1).

3.4. *Hi*-type

L-INTJs built around the segment *hi* are unattested in the corpus. However, they may occasionally be heard in colloquial Xhosa and, according to my informants,

---

[20] In the corpus, examples that could show the position of *ho* in turns of dialogues are unattested.

constitute the fourth productive type of L-INTJs that draw on a [hV] pattern.

The non-formal properties of *hi* L-INTJs are nearly identical to those that characterize the *he*-type. Semantically, *hi* L-INTJs can both perform an imitative function and express a set of emotive, sensorial, and phatic senses. As the *he*-type, *hi* L-INTJs tend to mimic a constrained and higher-pitch laughter, often being associated with younger age, feminine gender, and slimmer body. According to my informants, out of all L-INTJs, *hi* imitates laughter that is the highest in pitch. In further similarity to the *he*-type, *hi* L-INTJs are more commonly used to express negative emotion, e.g. sarcasm, irony, derision, mockery (5a-b), rather than positive feelings. In (5a), despite being warned by his mother, the son sat close to an anthill. As a result, the child was bitten by the insect. The mother sarcastically comments on this, considering the whole event to be a good lesson for the boy. The phatic senses conveyed by *hi* may be positive (agreement) and negative (disagreement). Example (5b) illustrates the usage of a sequence of *hi* to communicate agreement. As was the case of *he*, the onomatopoeic and interjective functions are combined in most uses. In contrast, purely interjective uses, in which any imitative nuances would be absent, seem ungrammatical. The pragmatic properties of *hi* L-INTJs – in particular automaticity and deliberateness, monologicity and dialogicity, as well as non-referentiality – are also fully analogous to those typifying *he* (see subsection 3.2 above).

(5) a. **Hi hi hi**, zi-ba-fundis-e isifundo iimbovane
L-INTJ SA.10-OA.2-teach-PERF 7.lesson 10.ant
'*Hi hi hi*, the ants have taught them a lesson!'

b. A: Mfundisi ndi-nga-ku-pha esinye isilayisi sekeyiki?
1.reverend SA.1st-POT-OA.2nd-give 7.one 7.slice 7.POS.9.cake
'Reverend, can I give you a slice of cake?'

B: **Hi hi hi** ndi-nga-si-thanda.
L-INTJ SA.1st-POT-OA.7-love
'*Hi hi hi*, I would love it.'

Formally, *hi* L-INTJs are equivalent to the other [hV] L-INTJs. The phonetic properties of *hi* L-INTJs generally coincide with those typing *he*. That is, the segment *hi* constitutes a single open syllable ([CV] or [V̥V]) and is usually accompanied by special phonation modes, e.g. a high pitch – often higher than that of *he* – and restrained, or even whispered articulation. However, contrary to *he*, the vowel [i] of *hi* L-INTJs is usually short. Morphologically, *hi* L-INTJs behave like the other [hV] types, being opaque and incompatible with inflections and derivations.

Usually, *hi* L-INTJs combine in sequences of three segments: *hi hi hi*, although other combinations, e.g. reduplication and quadruplications, are also grammatical. The use of singletons is considered highly problematic by native speakers, unless it is complemented by other L-INTJs. This incompatibility with true singletons may be related to the fact that Xhosa contains a non-laughter-based interjective singleton *hi* [hi]. This lexeme communicates emotive nuances of exultation and admiration and is also used as a conative attention getter and a phatic answer to calls (Tshabe 2006: 724, Oosthuysen 2016: 358, Andrason & Dlali 2020). Syntactic properties are also comparable to those exhibited by the [hV] types, in particular the *he* L-INTJ. Crucially, like *he*, *hi* may co-occur with a harmonious *tV* element, in this case, *ti*, thus yielding the sequence *ti hi*. As is true of *te he*, the element *ti* cannot appear on its own but must be accompanied by *hi*. The vowel in the *ti hi* pattern is either short or long – the length always being identical in both segments. Contrary to *te he*, a mono-moraic nucleus is more common than a bimoraic one. Semantically and pragmatically, such *ti hi* patterns are fully analogous to the *hi* L-INTJ. Therefore, instead of treating them as alternative L-INTJs, I view them as a constructional variant of the *hi* L-INTJ – a type of a partial (or imprecise) reduplication.

3.5. *Yha*-type

Apart from the four types of L-INTJs that draw on the pattern [hV], there is another form compatible with the act of laughing in Xhosa. This type is built around the segment *yha*. In contrast to the other L-INTJs discussed above, such laughter-related uses of *yha* are secondary, both synchronically and diachronically.

From a synchronic perspective, within all 28 instances of *yha* in the corpus of comics that have been published in the magazine *Bona*, only one (*Bona* 1991/5: 171) is related to laughter. This equals less than 4% of all the uses of *yha*. Indeed, *yha* is used – both in the *Bona* corpus and in Xhosa in general – in a wide range of emotive, cognitive, and phatic senses that need not imply laughter and are not necessarily concurrent with events of laughter. Whether single or replicated, *yha* usually expresses non-laughter-related emotional and cognitive states of the speaker, especially surprise, shock, disbelief, and doubt (Pahl 1989: 630, Andrason & Dlali 2020). *Yha* may also be used in a phatic function, communicating agreement[21]. Furthermore, the one laughter-related case of *yha* in my corpus

[21] This phatic usage seems to draw directly on *ja* 'yes' in Afrikaans – the diachronic source of the Xhosa lexeme (see further below in this section). When used as an agreement marker 'yes', *yha* lacks any nuance of laughter.

constitutes 0,6% of all the L-INTJs attested. These two facts suggest the peripherality of a laughter domain in the semantic potential of *yha* and the equal peripherality of *yha* in the class of L-INTJs. From a diachronic perspective, the element *yha* is probably a loanword borrowed in Xhosa from Afrikaans, where it is found under the form *ja*. In Afrikaans, *ja* 'yes' is an interjection expressing emotive, cognitive, and especially phatic nuances, failing to have any evident relationship with laughter. Therefore, the laughter-related usage of *yha* is a likely extension of its original non-laughter senses, inherited from the Afrikaans donor lexeme, to new domains. In other words, instead of deriving from a laughter--based construction, *yha* is a general interjection whose semantic potential has been expanded to events of laughter. Such laughter-related uses of *yha* will be described in this section.

When employed in contexts involving laughter, the semantic potential of *yha* L-INTJs is similar to that of the *ha*-type. It consists of two main domains: imitative (a general act of laughing) and emotive. In a mimicking function, a *yha* L-INTJ is compatible with any type of laughter – as is the case of the *ha*-type (see subsection 3.1). In an emotive function, *yha* L-INTJs may convey both positive (6a) and negative (6b) feelings. In (6a) the speaker is relieved and glad to learn that his interlocutor, a young man, did not break the glass. In (6b), the speaker mocks a girl because she has stumbled and fallen. The ability to express positive emotions distinguishes *yha* L-INTJs from the general interjection *yha* and may have arisen as a result of the association of *yha* with the idea of laughter. The pragmatic properties of *yha* L-INTJs are also identical to those typifying *ha*. *Yha* L-INTJs can be semi-automatic/instinctive and deliberate/controlled, as well as monologic and dialogic. Like all the other L-INTJs, they are invariably non-referential.

(6) a. **Yha**! **Yha**! U-nyanis-ile (Bona 1991/5: 171)
L-INTJ SA.2nd-be.right-PERF
'*Yha*! *Yha*! You are right.'

b. **Yha yha yha**, u-wi-le
L-INTJ SA.1-fall-PERF
'*Yha yha yha*, she fell!'

The formal properties of *yha* INTJs are similar to the features exhibited by the *ha*-, *he*-, *ho*-, and *hi*-types. Phonetically, the segment *yha* is simple. It builds around an open monosyllable with a [CV] structure. It contains a voiced aspirated onset [jʱ] and a monomoraic nucleus [a]. Since the onset may be analyzed as an approximant or a semi-vowel accompanied by a breathy voiced glottal tran-

sition [ɦ] (itself, a type of approximant), the entire structure of *yha* may be alternatively represented as [V̰V]. This renders the vocalic nature of the *yha* L-INTJ clear. When related to laughter, *yha* tends to be accompanied by particular phonation modes and melody, more or less imitating the action of laughing. Morphologically, the *yha* L-INTJ tends to be used in replicated sequences. The only case attested in the corpus involves reduplication, although more complex sequences composed of three, four, or more *yha* segments are also grammatical (see example 6b). In contrast, singletons are generally incompatible with a laughter--related function, being rather associated with the other uses of *yha* (see above). The remaining morphological properties of the *yha* L-INTJ are analogous to those exhibited by the other L-INTJs. That is, the *yha* L-INTJ is lexically opaque and incompatible with inflectional and derivational morphemes. With regard to syntax, *yha* also coincides with the other L-INTJs. Although holophrasticity is prevalent, non-holophrastic uses are grammatical. In such non-holophrastic examples, *yha* L-INTJs are never integrated in the core-clause grammar with the exception of quotative uses with the verb *-thi* 'say'; they are unaffected by negation, interrogation, or passivization operating in a sentence (and thus these three processes have no bearing on the syntactic interpretation of a *yha* L-INTJ and its illocution); they occupy peripheral – typically initial – positions, being separated from the other components of the sentence by a pause, intonation, and/or contouring. Lastly, *yha* L-INTJs fail to enter into constructions with other grammatical elements with the exception of other interjections, whether related or unrelated to laughter, and the above-mentioned verb *-thi*.

4. Discussion

The evidence presented in section 3 yields the following formal and non-formal generalizations regarding the class of L-INTJs in Xhosa:

(a) Semantically, all L-INTJs are compatible with three major domains: imitative, emotive (feelings and sensations), and phatic. The imitative domain is typical of onomatopoeic uses, while the other two domains are properly interjective. Although the ranges of the semantic potential of all L-INTJs are virtually identical, each specializes in a different field within a particular domain. The *ha* and *yha* are the most general in referring to all types of imitative, emotive, and phatic domains available to L-INTJs in Xhosa, in a relatively equal manner (however, for *yha*, a phatic usage is the property of the *yha* interjection rather than its laughter--based extension); *he* mainly refers to a constrained high-pitch laughter, negative emotions, and disagreement; *ho* mainly refers to a free and loud laughter,

and tends to express negative, especially authoritative feelings; and *hi* exhibits a semantic profile analogous to *he*, albeit implying a laughter that is even higher in pitch. Onomatopoeic and interjective functions are not mutually exclusive but typically coincide in any given usage. With the exception of *yha*, non-onomatopoeic interjective uses are scarce. In [hV] L-INTJs, they are attested only with *ha* and, even then, are extremely rare.

(b) Pragmatically, the five L-INTJs can be (semi-)automatic (when used in an imitative and a sensorial function) and deliberate (when communicating complex feelings, especially negative ones)[22]. They can also appear in both monologues and dialogues. All of them, however, are invariably non-referential. L-INTJs may also play a communicative role in conversation[23].

(c) Phonetically, all L-INTJs are built around segments that constitute open monosyllables. These segments are composed of a single consonant in the onset and a monophthong in the nucleus, thus exhibiting a [CV] structure. The possible consonants are the approximants [h] and [j$^{\text{ñ}}$], while the attested vowels are [a/ɑ], [e], [o], and [i]. Given that [h] can be analyzed as a voiceless vocalic element, while [j$^{\text{ñ}}$] is a semi-vowel, the structure of the L-INTJ-ective segments can be interpreted as [V̥V] and [V̬V], respectively. This demonstrates the vocalic nature of L-INTJs. Nucleic vowels are usually short, although longer vowels (long and extra-long) are also attested. For *he*, long vowels prevail. The satellite elements are also open monosyllables. They contain the simplex [t'] in the onset and the vowels [e] and [i] in the nucleus. Both short and long vocalic nuclei are attested. L-INTJs generally lack aberrant sounds and aberrant sound combinations. The exception is the vowel [ɑ] in *ha* and trimoraic extra-long vowels [e::] and [o::] in *he* and *ho*. All L-INTJs tend to be accompanied by special phonation modes: increased volume or whispering, and lower or higher pitch.

(d) Morphologically, all L-INTJs are opaque and lack inflectional and derivational elements. They typically constitute sequences of more elementary segments. However, such segments cannot be analyzed as fully-fledged morphemes: no radical change in meaning can be observed between (if grammatical) singletons

---

[22] This corroborates the results of Borchmann's (2019) study. Borchmann observes that, in Danish, (emotive) interjections may not only be spontaneous and non-intentional but also non-spontaneous and intentional.

[23] Consult Borchmann (2019) who notes that interjections may be both communicative and non-communicative (see also Norrick 2014).

and sequences composed of two, three, or more segments[24]. Overall, the replication of L-INTJ-ective segments is a mixed syntactic/analytic and morphological/synthetic phenomenon – the morphologization being the most advanced in the case of *ha*. Although singletons are attested, their presence is only usual in larger sequences containing other L-INTJs. Only *he* and *ho* can be used as true singletons. In such cases, the nucleic vowel is long or extra-long, i.e. [he:/::] and [ho:/::]. The presence (or absence) of such true singletons is correlated with the absence (or presence) of non-laughter-based interjective singletons that exhibit a similar (or identical) form. Overall, triplication constitutes the most common pattern used by L-INTJs. Only in the case of *he* (and the *tV hV* pattern) is it matched by reduplication.

(e) Syntactically, L-INTJs may have a status of utterances (holophrasticity) as well as parts of utterances (non-holophrasticity). In non-holophrastic uses, L-INTJs are never integrated into the grammar of a core clause as that clause's structural elements. The exception is their clausal use as part of a complex predicate with the quotative verb *-thi* (also characteristic of ideophones). The position of L-INTJs in a sentence is typically peripheral. The initial position is the most common; the final position is less common; the medial position is rare. L-INTJs tend to be separated from the other parts of the sentence by a pause and contouring. They do not enter into constructions with other grammatical elements, especially other lexical classes. Regular exceptions are other interjections – whether laughter--based or unrelated to laughter – and the above-mentioned verb *-thi*. Additionally, the L-INTJs *he* and *hi* combine with the satellite elements *te* and *ti*, respectively. All this information, related to the semantics, pragmatics, phonetics, morphology, and syntax of L-INTJs in Xhosa is summarized in Table 1 below:[25]

---

[24] The relationship between the length of a sequence and the intensity of the laughter this sequence communicates is neither straightforward nor universal. It does not imply any suprasegmental property, nor does it correlate longer variants with "more laughter" or shorter variants with "less laughter". Critically, the multiplication of a segment does alter the structure of the semantic potential of the L-INTJs, e.g. by adding and/or subtracting non-imitative senses.

[25] The grey color in the table indicates that a particular property is more relevant for a L-INTJ than the other, similar or contrary, properties. The use of *yha* in phatic functions is not the property of its L-INTJ-ective extension but the yha interjection itself.

TABLE 1. The profiles of L-INTJs in Xhosa

			ha	*he*	*ho*	*hi*	*yha*
semantics	imitative	high	+	+	+	+	+
		low	+	+	+	+	+
		loud	+	+	+	+	+
		constrained	+	+	+	+	+
	emotive	positive	+	+	+	+	+
		negative	+	+	+	+	+
	phatic	agreement	+	+	(+)	+	-
		disagreement	+	+	(+)	+	-
pragmatics	control	automatic	+	+	+	+	+
		non-automatic	+	+	+	+	+
	referent	referential	-	-	-	-	-
		non-referential	+	+	+	+	+
	text-type	monologic	+	+	+	+	+
		dialogic	+	+	+	+	+
phonetics	mono-syllabicity		+ [CV]	+ [CV]	+ [CV]	+ [CV]	+ [CV]
	vocalic nature		+ [V̥V]	+ [V̥V]	+ [V̥V]	+ [V̥V]	+ [V̥V]
	vowel	short	+	+	+	+	+
		long	+	+	+	+	+
	aberrant sounds		-/+ [ɑ]	-/+ [e::]	-/+ [o::]	-	-
	special phonation		+	+	+	+	+
morphology	lexical opacity		+	+	+	+	+
	lack of inflections/derivations		+	+	+	+	+
	combinations	singleton	-	-/+ [he:/::]	-/+ [ho:/::]	-	-
		reduplication	+	+	+	+	+
		triplication	+	+	+	+	+
		higher	+	+	+	+	+
syntax	utterance-status	holophrastic	+	+	+	+	+
		non-holophrastic	+	+	+	+	+
	non-integration in clause grammar		+	+	+	+	+
	position in sentence	initial	+	+	+	+	+
		final	+	+	+	+	+
		medial	+	+	+	+	+
	phonological separation		+	+	+	+	+
	constructions	non-INTJ	-	-	-	-	-
		(L-)INTJ	+	+	+	+	+
		satellites	-	+	-	+	-

Among all patterns associated with L-INTJs, the most productive one is built around the segment *hV*. Four of the five vowels available in the Xhosa sound system exploit this pattern, i.e. [a] (with an additional extra-systematic realization as [ɑ]), [e], [i], and [o][26]. The vowel is preferably short and the typical morpho-syntactic configuration is a harmonious triplication of a segment and less so its reduplication, i.e. $hV_1\ hV_1\ (hV_1)$ (analytic) or $hV_1hV_1(hV_1)$ (synthetic). The other productive and equally harmonious pattern – although more constrained – draws on two segments: *tV* and *hV*. It is only instantiated by two vowels: [e] and [i], which can be short or long. The preferred morpho-syntactic configuration is $tV_1\ hV_1$ (analytic) which can be interpreted as a partial (or quasi) reduplication.

The above demonstrates that L-INTJs largely comply with the properties associated with the prototype of an interjection (see section 2), both with regard to its meaning (semantics and pragmatics) and form (phonetics, morphology, and syntax). If compared with other interjections in Xhosa, in most aspects, the non-formal and formal profile exhibited by L-INTJs coincides with the profiles characterizing the canonical members of the interjective category (see Andrason & Dlali 2020: 208-210). Therefore, L-INTJs may be located in the central position in the categorial network of Xhosa interjections.

Although L-INTJs can be understood as canonical and central members in the interjective category, a few differences between L-INTJs and the other interjections should also be noted. The principal semantic dissimilarity concerns the apparent incompatibility of L-INTJs with a cognitive (except for *yha*) and especially conative domain, as well as (tautologically) their close relation to an imitative laughter-related function. Phonetically, L-INTJs distinguish themselves by regularly exploiting sound symbolism, patent in imitative and sensorial uses. This contrasts with most interjections in Xhosa, which are not onomatopoeic (Andrason & Dlali 2020: 194). The vocalic nature of L-INTJs is also more evident than in other interjections. Furthermore, L-INTJs have a more direct relationship with *h*-type onsets. Although this relationship is visible with the majority of all types of mono-syllabic interjections (Andrason & Dlali 2020: 192), there are no exceptions for L-INTJs as all of them contain a guttural element: [h] or [ɦ]. Morphologically, repetitive patterns are by far more pervasive in L-INTJs than in other interjections (Andrason & Dlali 2020: 196-197). The presence of two bound

[26] In contrast, the use of the remaining vocalic phoneme, i.e. *u*, is ungrammatical. L-INTJs built around this segment are unattested in the corpus and have not emerged in the fieldwork with native speakers. Note that Xhosa contains the interjection *hu-u*, which is not laughter-based and expresses surprise and astonishment (Tshabe 2006: 797).

morphemes that are often found with interjections (i.e. the pluralizer *-ni* and the diminutive *-ana*; Andrason & Dlali 2020: 195-196) is disallowed with L-INTJs. Syntactically, L-INTJs cannot be combined with clitics that otherwise accompany interjections, i.e. *ke*, *nje*, and *bo* (Andrason & Dlali 2020: 204-205). They also resist combinations with pronouns and vocatives – two common elements forming constructions with interjections in Xhosa (Andrason & Dlali 2020: 205).

As far as the diachrony of L-INTJs is concerned, their current L-INTJ-ective usage can, in most cases, be explained as the interjectionalization of initial onomatopoeic forms that imitate laughter. Because laughter is a complex phenomenon often exploited to channel sensations (e.g. experienced when being tickled), communicate emotions – whether positive (e.g. happiness and excitement) or negative (e.g. malice and displeasure) – or even control information flow in conversations (O'Connell & Kowal 2008), its linguistic imitations (i.e. laughter onomatopoeias) may be used in emotive and sensorial functions to express the mental state of the speaker (both prototypical uses of interjections), as well as in a phatic function expressing the speaker's attitude towards discourse (which, albeit less prototypical, also characterizes interjections; see section 2). As such interjective uses, that tend to accompany episodes of laughter, become stabilized and entrenched, an onomatopoeic input develops into an L-INTJ, i.e. an element that simultaneously expresses the mental state of the speaker or their attitude towards the conversation and imitates laughter – in other words, a laughter-based onomatopoeia that performs an interjective function. As the interjectionalization continues, the relationship with laughter and the imitative function of the input forms may be entirely lost – original onomatopoeias being employed as non-onomatopoeic interjections (see Fig. 1a). I propose that, in Xhosa, the L-INTJs built around the segments *ha*, *he*, *ho*, and *hi* derive from such original onomatopoeias. Although their use as canonical onomatopoeias with no interjective nuances is attested, it is the blended onomatopoeic-interjective usage that prevails. That is, their interjective uses are stabilized, entrenched, and easily recognizable by speakers – still preserving an imitative link with the event of laughter. According to my informants, purely interjective uses in which any connation of laughter would be lost are only possible with *ha* – however, even there, they are extremely rare. Consequently, if treated jointly, the forms built around the segments *ha*, *he*, *ho*, and *hi* reveal and attest to the three stages available along the cline of interjectionalization: onomatopoeias, L-INTJs, and non-laughter-related interjections. For *ha*, *he*, *ho*, and *hi*, L-INTJ-ective uses are the most prototypical – therefore these lexemes are simultaneously associated with both laughter and emotions by native speakers (see Fig. 1b).

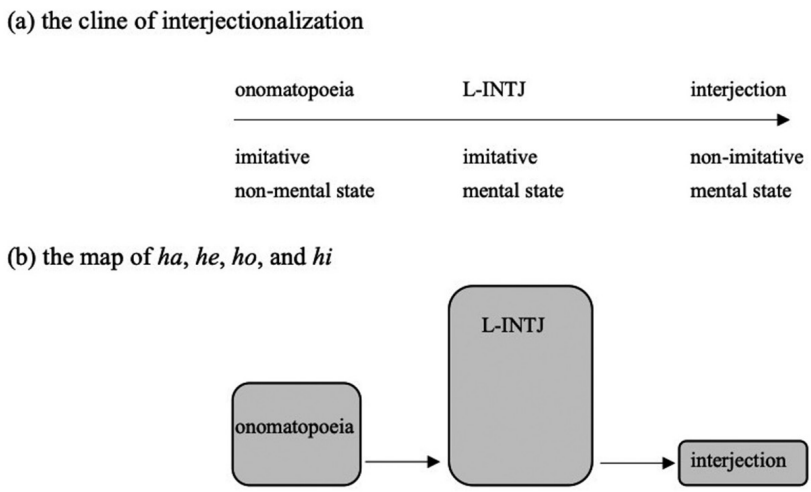

Fig. 1. Interjectionalization and the map of the lexemes *ha*, *he*, *ho*, *hi*[27]

The case of *yha* is different. The laughter related usage of this interjection is not a product of interjectionalization, but rather constitutes a further extension of its original emotive and phatic domains (interjection) to laughter-related contexts where, due to its morphological and phonetic compatibility with episodes of laughter (see the repetitive structure built around an open monosyllable with an evident vocalic nature and a guttural coarticulation), it has acquired a certain imitative character. This suggests that L-INTJs may develop from non-laughter related canonical interjections by being gradually associated with events of laughter. Arguably, if such onomatopoeization continues, the process may lead to purely imitative uses with no interjective functions associated – an L-INTJ turning into an onomatopoeia (see Fig. 2a). The different uses of *yha* attest to two stages of the cline of onomatopoeization: interjections unrelated to laughter and L-INTJs (described in detail in subsection 3.5). The non-laughter-related interjective function is far more relevant in the semantics of *yha* than its use as an L-INTJ. Therefore, this form is not associated with an L-INTJ-ective domain by native speakers. Genuine onomatopoeic uses of *yha* are unattested.

[27] The vertical extent of the semantic domain in the map indicates the (approximate) relevance of that semantic component in the overall meaning of a lexeme. The purely interjective usage is only instantiated by *ha*.

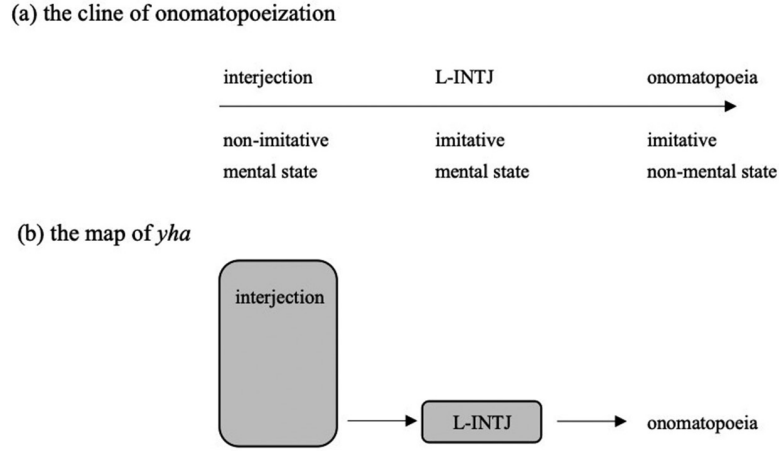

Fig. 2. Onomatopoeization and the map of the lexeme *yha*

Overall, I propose a radial, both gradient and dynamic, model of L-INTJs, which is fully compatible with the non-essentialist prototype-driven approach to interjections adopted in this paper. The category of L-INTJs is organized around a prototype – an element that simultaneously performs two functions: interjective (i.e. expression of mental states) and mimicking (i.e. imitation of laughter). It thus blends – ideally, in equal proportions – a property of being an interjection and onomatopoeia. The lexemes or uses of a lexeme that match this prototype can be regarded as canonical instantiations of an L-INTJ. The intensification of the imitative function and onomatopoeic properties, and the concurrent weakening of emotive, cognitive, and phatic functions and interjective properties; or inversely, the intensification of emotive, cognitive, and phatic functions and interjective properties, in addition to the concurrent weakening of an imitative function and onomatopoeic properties, generate a cloud of increasingly less canonical instantiations. If either of the two functions and sets of properties inherent to the L-INTJ-ective prototype is absent, the form or usage instantiates a different category, namely, that of onomatopoeias or non-laughter-related interjections – the categories whose prototypes establish the boundaries of the category of L-INTJs itself. This radial network is thus structured along two continua: from onomatopoeias to interjections via L-INTJs and from interjections to onomatopoeias via L-INTJs. Both continua are diachronic in nature but can be used to encompass and represent the synchronic semantic potential of a lexeme in terms

of a semantic map. In general, forms, that, in one of their uses, function as canonical L-INTJs, attest to a gamut of less canonical uses where either an onomatopoeic or interjective facet gains in relevance. Some – like *ha* – may even span the entire length of one of the clines.

My research corroborates many hypotheses formulated by Levisen (2019). Crucially, both Levisen's (2019: 111) definition of L-INTJs and the main diachronic path that generates them, i.e. interjectionalization (pp. 111-112), are fully validated in the present study. Similarly, I concur with Levisen (2019: 111-113) that L-INTJs must be treated as distinct from onomatopoeias imitating laughter. However, I argue that both the proposed definition of L-INTJs and the distinction from laughter-onomatopoeias, primarily concerns the prototype of L-INTJs – rather than the entire L-INTJ-ective category. The category is a radial network with a cloud of more canonical (closer to the prototype of an L-INTJ) and less canonical members (more remote from the L-INTJ-ective prototype and thus closer to the prototypes of other types and categories, in particular onomatopoeias and non-laughter-based interjections). Given this continuum (gradient and dynamic) model, the borderline separating L-INTJs from onomatopoeias and non-laughter-based interjections is fuzzy. Significantly, lexemes attested in specific languages that are used as L-INTJs (may) exhibit both more canonical and less canonical L-INTJ-ective uses. Furthermore, even though L-INTJs certainly should be distinguished as a particular sub-type within the interjective category, they may not be regarded as its sub-type on a par with the emotive, cognitive, conative, and phatic types (cf. Levisen 2019: 125)[28]. Instead, L-INTJs constitute an onomatopoeic sub-type of the four interjective types. This stems from the definition of L-INTJs as interjections that have an imitative relationship to laughter, and thus the fact that all L-INTJs are also necessarily emotive, cognitive, conative, or phatic in nature[29]. Lastly, as both token and type frequency (Hopper & Traugott 2003: 127) of Xhosa L-INTJs are very low, their importance for language at large may be lesser than suggested by Levisen (2019: 110)[30].

---

[28] Although conative L-INTJs are unattested in my study, they are theoretically possible. Therefore, it is plausible that they may be encountered in other languages.

[29] Levisen seems to concur with this view. That is, being an L-INTJ does not exclude containing an emotive, cognitive, or conative component (*p.c.*). Indeed, in his description of L-INTJs, Levisen (2019) makes consistent use of semantic domains related to feelings, wanting, and/or thinking.

[30] In that regard, my evidence coincides with the results of the study on L-INTJs in Classical Greek, where the category of L-INTJs consists of three members (or four, if *ἃ ἃ* is included), overall attested in a very few cases (Kidd 2011: 457, 459).

From a cross-linguistic perspective, the system of L-INTJs in Xhosa also reveals striking similarities with the system of L-INTJs described by Levisen (2019: 118) for Danish. As in Xhosa, the class of Danish L-INTJs is well-identifiable and structured systematically – each L-INTJ "is associated with a conceptual semantics of its own, distinguishable from the other options in the paradigm" (Levisen 2019: 118). In further similarity to Xhosa, Danish L-INTJs avoid singletons and, instead, mainly exploit replicated patterns (Levisen 2019: 118). However, while triplication prevails in Xhosa, reduplication constitutes a default strategy in Danish. As in Xhosa, the basic segment used in Danish L-INTJs exhibits an *hV* structure. Most vowels – all of them monophthongs – can feature in the segment's nucleus: *a*, *e*, *i*, *o*, *æ*, *ø*, and *å*. The two disallowed vowels are *y* and, as in Xhosa, *u*. Similar to Xhosa, there is an additional pattern in Danish, i.e. tV_1hV_1. As expected, this template is much less productive and only *i* and *ø* (both being front vowels exactly as in Xhosa) are allowed. Since Danish and Xhosa are neither related – each belonging to radically distant language phyla – nor experience any type of contact with each other, it is likely that the two structures grammaticalized in these two language systems as productive L-INTJ-ective patterns (i.e. *hVhV(hV)* and *tVhV*), as well as (most of) their formal and non-formal properties, are universal[31]. One may therefore expect the presence of those two structures (and their properties) in all or most languages of the world, with the pattern *hVhV(hV)* likely being more widespread and productive than *tVhV*.

Some of the typical patterns of L-INTJs described above and their hypothetical universality, may stem from the well-know and extensively researched anatomical and physiological properties characterizing human laughter (see Bachorowski, Smoski & Owren 2001, Trouvain 2001, 2003, Chafe 2007: 19-23, O'Connell & Kowal 2008: 170, Kohler 2008, Jefferson 2010, Szameitat et al. 2009, 2011,

---

[31] The cross-linguistic pervasiveness of *HV* replicative patterns to imitate laughter is well known and has already been noted by Schwentner (1924: 18-20). This pattern seems equally common for L-INTJs, being attested in English (e.g. *he he*; Schenkein 1972), Latin (Kidd 2011: 449), Greek (Kidd 2011: 445), and many other languages from diverse language phyla (own data; see also Kidd 2011: 446). However, as suggested to me by Levisen (*p.c.*), it is not impossible that (at least some) patterns exhibited by L-INTJs in Xhosa constitute a contact feature. Levisen (2019) hypothesizes that the presence of L-INTJs is related to the rise of literacy in general and the development of "interjection-friendly" genres such as cartoons. Did L-INTJs emerge in Xhosa due to increased literacy and the introduction of genres such as comics? Did this spread of "interjection-friendly" genres – of which many are typical of colonial cultures – enable a transfer of some L-INTJ-ective paradigms from Afrikaans and English? More diachronic research on L-INTJs in African languages of South Africa is needed to answer such questions.

Glen & Holdt 2013b, Alter & Wildgruber 2019), which are reflected in L-INTJs due to their imitative function. This would, for instance, explain the pervasive use of sequential patterns in L-INTJs (contrary to other interjections where singletons are a default strategy) and the equally pervasive presence of a guttural component (far more common than elsewhere in the interjective category). The study of such links connecting the grammatical properties of L-INTJs to the physiology of laughter, and thus the explanation of how the biological phenomenon of laughter is reflected (or distorted) in language, will constitute one of my research projects in near future.

5. Conclusion

The present paper analyzed the system of L-INTJs in Xhosa. The evidence presented demonstrates that L-INTJs constitute a minor, albeit fully systematic, part of the Xhosa language. The L-INTJ-ective system consists of five main types of constructions built around the segments *ha*, *he*, *ho*, *hi*, and *yha* and generative templates involving total or partial multiplications, as well as, for some segments, the satellite elements *te* and *ti*. Among all the patterns, the total triplication of an *hVhVhV* type with a short nucleic vowel is the most productive. The reduplicative patterns, patterns involving (extra-)long vowels, and the harmonious pattern *tVhV* are less productive. By complying with the properties associated with the prototype of an interjection, L-INTJs constitute the canonical members of the interjective category and occupy the central position in the categorial network of interjections. The presence of L-INTJs in Xhosa and the range of their uses result from the interjectionalization of initial onomatopoeias that imitated laughter (*ha*, *he*, *ho*, *hi*) or the onomatopoeization of initial non-laughter-related interjections (*yha*) – with the interjectionalization being a dominant evolutionary scenario. Although principally diachronic, both clines can be used as matrices for representing the synchronic semantic potential of forms used as L-INTJs, thus yielding a dynamic prototype-driven model of the L-INTJ-ective category.

Abbreviations

COP – copulative; DEM – demonstrative; FUT – future; INF – infinitive; INTJ – interjection; L-INTJ – laughter interjection; NEG – negative/negator; OA – object agreement; PART – particle; PAST – past (the A-tense); PERF – perfect (the ILE-tense); PN – proper noun; POS – possessive; POT – potential; PRES – present; SA – subject agreement; 1, 2, 3… – (noun) classes; 1st, 2nd – 1st and 2nd person.

References

Alter, K. & D. Wildgruber. 2019. "Laughing out loud! Investigations on different types of laughter". *The Oxford handbook of voice perception*, ed. by S. Frühholz & P. Belin. Oxford: Oxford University Press. 495-511.

Ameka, F. 1992a. "Interjections: The universal yet neglected part of speech". *Journal of Pragmatics* 18(2-3). 101-118.

Ameka, F. 1992b. "The meaning of phatic and conative interjections". *Journal of Pragmatics* 18(2-3). 245-271.

Ameka, F. 2006. "Interjections". *Encyclopedia of language & linguistics*, ed. by K. Brown. Oxford: Elsevier. 743-746.

Ameka, F. & D. Wilkins. 2006. "Interjections". *Handbook of pragmatics*, ed. by J.-O. Östman & J. Verschuren. Amsterdam: John Benjamins. 1-19.

Andrason, A. 2016. "From vectors to waves and streams: An alternative approach to semantic maps". *Stellenbosch Papers in Linguistics* 45. 1-29.

Andrason, A. 2020. "Ideophones as linguistic 'rebels'. The extra-systematicity of ideophones in Xhosa. Part 1". *Asian and African Studies* 29(2). 119-165.

Andrason, A. & H. Matutu. 2019. "The syntax of interjections in isiXhosa: A corpus-driven study". *Stellenbosch Papers in Linguistics PLUS* 58. 1-16.

Andrason, A. & M. Dlali. 2020. "The (crucial yet neglected) category of interjections in Xhosa". *STUF – Language Typology and Universals* 73(2). 159-217.

Andrason, A. & M. Durán Mañas. 2021. "The syntax of interjections: Evidence from New Testament Greek". *Scripta Classica Israelica* 40. 57-93.

Andrason, A., A.-M. Fehn & A. Phiri. 2020. "Interjections in Tjwao". *Bulletin of the School of Oriental and African Studies* 83(2). 293-319.

Andrason, A., I. Hornea & M. Joubert. 2020. "The structure of interjections in Biblical Hebrew: Phonetics, morphology, and syntax". *Journal of Hebrew Scriptures* 20(1). 1-43.

Andrason, A. & D. Hutchison. 2020. "Interjections in Biblical Aramaic: A radial model". *Aramaic Studies* 38(1). 1-45.

Bachorowski, J.-A., M.J. Smolski & M.J. Owren. 2001. "The acoustic features of human laughter". *The Journal of the Acoustical Society of America* 110. 1581-1597.

Bańko, M. 2008. *Współczesny polski onomatopeikon. Ikoniczność w języku* [A contemporary Polish dictionary of onomatopoeias. Iconicity in language]. Warszawa: PWN.

Blevins, J. 2018. *Advances in Proto-Basque reconstruction with evidence for the Proto--European-Euskarian hypothesis.* London: Routledge.

Borchmann, S. 2019. "Non-spontaneous and communicative emotive interjections: Ecological pragmatic observations". *Scandinavian Studies in Language* 10(1). 7-40.

Chafe, W. 2007. *The importance of not being earnest. The feeling behind laughter and humor.* Amsterdam: John Benjamins.

De la Cruz Cabanillas, I. & C. Tejedor Martínez. 2009. "La influencia de las formas inarticuladas, interjecciones y onomatopeyas inglesas en los tebeos españoles" [The influence of English unarticulated forms, interjections, and onomatopoeias on Spanish comics]. *Revista de Lingüística y Lenguas Aplicadas* 4. 47-58.

Diccionario de la Lengua Española. 23rd edn. Real Academia Española. Online: https://dle.rae.es [6.08.21].

Du Plessis, J.A. 1978. *IsiXhosa 4*. Goodwood: Oudiovista.

Du Plessis, J.A. 2010. *Comparative syntax: The structure of the verb phrase in the African languages of South Africa (Bantu languages)*. Stellenbosch: Stellenbosch University. Online: http://scholar.sun.ac.za/handle/10019.1/3156 [15.12.2020].

Dynel, M. (ed.). 2013. *Developments in linguistic humour theory.* Amsterdam: John Benjamins.

Forster, I., S. Borgwaldt & M. Neef. 2012. "Form follows function: Interjections and onomatopoetica in comics". *Writing Systems Research* 4(2). 122-139.

Georgakopoulos, T. & S. Polis. 2018. "The semantic map model: State of the art and future avenues for linguistic research". *Language and Linguistic Compass* 12(2). 1-33.

Glenn, P. 2003. *Laughter in interaction.* Cambridge: Cambridge University Press.

Glenn, P. & E. Holt. (eds.). 2013a. *Studies of laughter in interaction.* London: Bloomsbury.

Glenn, P. & E. Holt. 2013b. "Introduction". *Studies of laughter in interaction*, ed. by P. Glenn & E. Holt. London: Bloomsbury. 1-22.

Haspelmath, M. 2003. "The geometry of grammatical meaning semantic maps and cross-linguistic comparison". *The new psychology of language*, ed. by M. Tomasello. Mahwah: Lawrence Erlbaum Associates. 211-242.

Hopper, P. & E. Traugott. 2003. *Grammaticalization*. Cambridge: Cambridge University Press.

Janda, L. 2015. "Cognitive linguistics in the year 2015". *Cognitive Semantics* 1. 131-154.

Jefferson, G. 2004. "A note on laughter in 'male-female' interaction". *Discourse Studies* 6(1). 117-133.

Jefferson, G. 2010. "Sometimes a frog in your throat is just a frog in your throat: Gutturals as (sometimes) laughter-implicative". *Journal of Pragmatics* 42. 1476-1484.

Kidd, S. 2011. "Laughter interjections in Greek comedy". *The Classical Quarterly* 61(2). 445-459.

Kohler, K.J. 2008. "'Speech-smile', 'speech-laugh', 'laughter', and their sequencing in dialogic interaction". *Phonetica* 65. 1-18.

Levisen, C. 2019. "Laughter interjections. Contributions to a lexical anthropology of humour (with special reference to Danish)". *Scandinavian Studies in Language* 10(1). 110-130.

Meinard, M. 2015. “Distinguishing onomatopoeias from interjections”. *Journal of Pragmatics* 76. 150-168.

Nordgren, L. 2015. *Greek interjections*. Berlin & Boston: De Gruyter Mouton.

Norrick, N.R. 2014. “Interjections”. *Corpus pragmatics*, ed. by K. Aijmer & C. Rühlemann. Cambridge: Cambridge University Press. 249-275.

Nübling, D. 2001. “Von oh mein Jesus! zu oje!: Der Interjektionalisierungspfad von der sekundären zur primären Interjektion”. *Deutsche Sprache* 29(1). 20-45.

Nübling, D. 2004. “Die prototypische Interjektion: Ein Definitionsvorschlag”. *Zeitschrift für Semiotik* 26(1-2). 11-46.

O’Connell, D.C. & S. Kowal. 2008. *Communicating with one another. Toward a psychology of spontaneous spoken discourse*. New York: Springer.

Oosthuysen, J. 2016. *The grammar of isiXhosa*. Stellenbosch: Sun Press.

Pahl, H. (ed.). 1989. *The greater dictionary of isiXhosa*. Vol. 3. Fort Hare: University of Fort Hare.

Schenkein, J. 1972. “Towards an analysis of natural conversation and the sense of ‘hehe’”. *Semiotica* 6. 344-377.

Schwentner, E. 1924. *Die primären Interjektionen in den indogermanischen Sprachen*. Heidelberg: C. Winter.

Stange, U. 2016. *Emotive interjections in British English. A corpus-based study on variation in acquisition, function, and usage*. Amsterdam: John Benjamins.

Stange, U. & D. Nübling. 2014. “Interjections”. *Body – language – communication*, ed. by C. Müller, A. Cienki, E. Fricke, S. Ladewig, D. Mcneill & S. Tessendorf. Berlin: Mouton de Gruyter. 1982-1989.

Szameitat, D., L. Alter, A. Szameitat, D. Wildgruber, A. Sterr & C. Darwin. 2009. “Acoustic profiles of distinct emotional expressions in laughter”. *The Journal of the Acoustical Society of America* 126. 354-366.

Szameitat, D., C. Darwin, A. Szameitat, D. Wildgruber, & L. Alter. 2011. “Formant characteristics of human laughter”. *Journal of Voice* 25(1). 32-37.

Trouvain, J. 2001. “Phonetic aspects of ‘speech-laughs’”. *Oralité et gestualité*, ed. by C. Cavé, I. Guaïttella & S. Santi. Paris: L’Harmattan. 634-639.

Trouvain, J. 2003. “Segmenting phonetic units in laughter”. *Proceedings of the 15th International Conference of the Phonetic Sciences*, ed. by M.J. Solé, D. Recasens & J. Romero. Barcelona. 2793-2796.

Trouvain, J. & K. Truong. 2017. “Laughter”. *The Routledge handbook of language and humor*, ed. by S. Attardo. New York: Routledge. 341-355.

Tshabe, S. (ed.). 2006. *The greater dictionary of isiXhosa*. Vol. 1. Fort Hare: University of Fort Hare.

Velupillai, V. 2012. *An introduction to linguistic typology*. Amsterdam: John Benjamins.

Wierzbicka, A. 1992. "The semantics of interjections". *Journal of Pragmatics* 18. 159-192.

Wierzbicka, A. 2003. *Cross-cultural pragmatics: The semantics of human interaction*. Berlin & New York: De Gruyter.

Wielki słownik języka polskiego. Kraków: Instytut Języka Polskiego PAN. Online: https://wsjp.pl/ [6.08.21].

Texts cited

Bona. 1981-1998. Sydney Chama. *Abafana* [Young men]. Durban: Mobeni.

Bona. 2000. X. Shezi & Wilson Mgobhozi. *Dennis the Goat*. Durban: Mobeni.

Bona. 2002-2009. Themba Siwela. *Majimbos* [Homies]. Durban: Mobeni.