IDEOPHONES AS LINGUISTIC "REBELS": THE EXTRA-SYSTEMATICITY OF IDEOPHONES IN XHOSA (PART 1)

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This paper contributes to the study of structural distinctiveness of the category of ideophony. The author analyzes the extent to which Xhosa ideophones exhibit the so-called extra-systematic properties, which cross-linguistically tend to distinguish ideophones from other lexical classes. The analysis demonstrates that ideophones are relatively extra-systematic in Xhosa, although their extra-systematicity is not unitary. It is the largest in morphology, slightly less visible in phonology, and only residual in syntax. It is proposed that the distinct degrees of extra-systematicity are related to differences in grammaticalization and a gradual integration of ideophones into the Xhosa grammar – with the adjustment in syntax occurring faster than the morphological adaptation. In this paper – the first in a series of two articles – the author deals with methodological issues and introduces evidence related to the phonology and morphology of ideophones in Xhosa.

Keywords: Ideophones, extra-systematicity, Xhosa, Bantu, (canonical) typology, cognitive linguistics

1. Introduction

Ideophones arguably form an independent and universal lexical class.[1] They are distinguishable from all other lexical classes[2] and exist in most grammatical

[1] AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 25–48; VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.).

systems.[3] Ideophones are especially pervasive in African languages, including the Bantu family and its Nguni sub-branch,[4] to which Xhosa (S 41) – the language of the present study – belongs.[5] Albeit a recognizable lexical class, ideophones convey different functions and entertain distinct grammatical status in individual languages. They may act as predicates (or their parts), verbal or clausal modifiers, and adnominal modifiers, sometimes being even classified as subtypes of verbs,[6] adverbs,[7] and adjectives, respectively.[8]

Ideophones, p. 2; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672.

[2] AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 25–48; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672.

[3] DIFFLOTH, G. Notes on Expressive Meaning. In *Chicago Linguistic Society*, 1972, Vol. 8, pp. 440–447; CHILDS, T. *A Kisi grammar*; VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 2; KILIAN-HATZ, C. Universality and Diversity: Ideophones from Baka and Kxoe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 155–164; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, p. 160. See, however, GABAS, N., VAN DER AUWERA, J. Ideophones in Karo. In ACHARD, M., KEMMER, S. (eds.). *Language, Culture and Mind*, p. 400. GABAS and VAN DER AUWERA reject AMEKA (2001) and VOELTZ & KILIAN-HATZ' (2001a) idea that ideophones are found in all languages the world.

[4] SAMARIN, W. Survey of Bantu Ideophones. In *African Language* Studies, 1971, Vol. 12, pp. 130–168; MARIVATE, C.T.D. The Ideophone as a Syntactic Category in the Southern Bantu Languages. In *Studies in African Linguistics Supplement*, 1985, Vol. 9, pp. 210–214; CHILDS, T. African Ideophones. In HINTON, L., NICHOLS, J., OHALA, J. J. (eds.). *Sound Symbolism*, pp. 178–204; CHILDS, T. *An Introduction to African Languages*; SCHADEBERG, T. Derivation. In NURSE, D., PHILIPPSON, G. (eds.). *The Bantu Languages*, pp. 71–89; SCHADEBERG, T. Historical Linguistics. In NURSE, D., PHILIPPSON, G. (eds.). *The Bantu Languages*, pp. 143–163.

[5] GUTHRIE, M. *Comparative Bantu: An Introduction to the Comparative Linguistics and Prehistory of the Bantu Languages. Vols. 1–4*; BASTIN, Y., COUPEZ, A., MANN, M. *Continuity and Divergence in the Bantu Languages*.

[6] MARIVATE, C.T.D. The Ideophone as a Syntactic Category in the Southern Bantu Languages. In *Studies in African Linguistics Supplement*, 1985, Vol. 9, pp. 210–214; NUCKOLLS, J. Ideophones in Pastaza Quechua. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 271–286.

[7] CHILDS, T. *A Kisi Grammar*; SCHAEFER, R.P. Ideophonic Adverbs and Manner Gaps in Emai. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 339–354; BECK, D. Ideophones, Adverbs, and Predicate Qualification in Upper Necaxa Totonac. In *International Journal of American Linguistics*, 2008, Vol. 74(1), pp. 1–46.

Regardless of their grammatical status in specific languages, ideophones tend to exhibit features that differentiate them from forms belonging to other lexical classes. Features associated with ideophones cross-linguistically are: depictive-ness (ideophones depict in an expressive manner rather than describe), iconicity (the meaning of ideophones is reinforced by their form), sensory and perceptuomotor semantics (ideophones are confined to the domains of sounds, motions, temporal unfolding, visual perceptions, non-visual sensations, and psychological-cognitive states), orality and use in informal, expressive, dramatized genres of the written language (e.g. personal communications, narratives, comics, and poetry), performative character, and, lastly, correlation with gestures.[9]

Another pervasive set of characteristics concerns the structure of ideophones, i.e. their phonology, morphology, and syntax. In general terms, ideophones are often viewed as, at least to a certain degree, extra-systematic.[10] They tend to be (somewhat) "marked",[11] "aberrant",[12] "peculiar",[13] "differ-

[8] AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 25–48.

[9] For details consult VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 1–9; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672; LAHTI, K., BARRETT. R., WEBSTER, A. Introduction. In *Pragmatics and Society*, 2014, Vol. 5(3), pp. 335–340.

[10] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 2; LAHTI, K., BARRETT. R., WEBSTER, A. Introduction. In *Pragmatics and Society*, 2014, Vol. 5(3), p. 335. I use the term 'extra-systematic(ity)' as an umbrella for adjectives such as odd, peculiar, marked, aberrant, different and unfit that are found in scholarly literature dedicated to ideophones. In the present article, this term does not mean 'extra/para-linguistic' or 'extra/para-grammatical', and thus does not imply a systemic isolation or an external position in a particular linguistic system'. NEWMAN (2001) – from whom I borrowed the adjective 'extra-systematic' – employs this term in the latter sense and rather critically (See NEWMAN, P. Are Ideophones Really as Weird and Extra-systematic as Linguists Make Them out to Be? In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 251–258; see footnote 19 below).

[11] KLAMER, M. Semantically Motivated Lexical Patterns: A Study of Dutch and Kambera Expressives. In *Language*, 2002, Vol. 78(2), pp. 263. See also DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656.

[12] CHILDS, T. *An Introduction to African Languages*, pp. 118–119; KRUSPE, N. *A Grammar of Semelai*, p. 102.

[13] NEWMAN, P. Ideophones from a Syntactic Point of View. In *Journal of West African Languages*, 1968, Vol. 5, p. 107; AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 26.

rent",[14] "exotic",[15] "unusual", and "special",[16] generally behaving as elements that "do not fit" the phonological, morphological, and/or syntactic standards of a language system.[17] They are "linguistic rebel[s]" more or less divergent from the other components of the language.[18] This rebellious character of ideophones derives from their very nature – ideophones being "the closest linguistic substitute for a non-verbal, physical act".[19]

[14] DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, p. 54.

[15] ANDRASON, A. The "Exotic" Nature of Ideophones – From Khoekhoe to Xhosa. In *Stellenbosch Papers in Linguistics*, 2017, Vol. 48, pp. 139–150.

[16] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 2; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), pp. 196–220.

[17] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 2. See a discussion in DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 655.

[18] KUNENE, D. Speaking the Act: The ideophone as a Linguistic Rebel. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 183; VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 1–9; CHILDS, T. *An Introduction to African Languages*.

[19] KUNENE, D. Speaking the Act: The ideophone as a Linguistic Rebel. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 183. The extent of ideophones' extra-systematicity – or their divergence from the behavior exhibited by other lexical classes – is such that ideophones have sometimes been considered para- or quasi-lexemes. Accordingly, ideophones would not constitute part of the genuine grammar of a language. Instead, they would belong to a different semiotic system available to speakers – an extra-linguistic one. This view is generally abandoned in current scholarship. For instance, NEWMAN (2001) demonstrates that ideophones are rarely truly extra-systematic in the sense of being isolated from and/or external to a language system (See NEWMAN, P. Are Ideophones Really as Weird and Extra-systematic as Linguists Make Them out to Be? In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 251–258). On this topic see AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 25–48; CHILDS, T. *An Introduction to African Languages*; CHILDS, T. Constraints on Violating Constraints: How Languages Reconcile the Twin Dicta of "Be different" and "Be recognizably language". In *Pragmatics and Society*, 2014, Vol. 5(3), pp. 341–354. DINGEMANSE, M. Expressiveness and System Integration. On the Typology of Ideophones, with Special Reference to Siwu. In *STUF – Language Typology and Universals*, 2017, Vol. 70(2), pp. 363–384; DINGEMANSE, M., AKITA, K. An Inverse Relation between Expressiveness and Grammatical Integration: On the Morphosyntactic Typology of Ideophones, with Special Reference to Japanese. In *Journal of Linguistics*, 2017, Vol. 53(3), pp. 501–532.

The present article contributes to the study of the structural distinctiveness of ideophones – whether at the level of phonology, morphology, or syntax – taking as an example the category of ideophony in Xhosa. Specifically, (a) I examine whether Xhosa ideophones exhibit extra-systematic properties that are associated with ideophones cross-linguistically and (b) determine the precise extent of their potential extra-systematicity. This examination is developed within a canonical approach to typology[20] and a cognitive approach to categorization,[21] whereby a linguistic category is viewed as a radial network organized around an idealized, yet typologically driven and cognitively salient prototype.

Although my research is not the first that has been dedicated to Xhosa ideophones,[22] it distinguishes itself from those previous studies by three important characteristics. First, it is the only study that provides a comprehensive analysis of *all* ideophonic tokens attested in the Xhosa language, drawing on exhaustive corpus research. Second, it is the only study that examines the structure of the category of ideophones in all its aspects, simultaneously taking into account phonology, morphology, and syntax. Third, it is the only study that focuses on the structural extra-systematicity of ideophones and, even more importantly, conducts the analysis in a principled manner, making use of the most recent and advanced theoretical apparatus.

Given its complexity and length, the original manuscript has been divided into two articles. In the present paper, I familiarize the reader with the theoretical framework underlying my research (Section 2) and introduce Xhosa evidence related to phonology (Section 3) and morphology (Section 4). At the end, I summarize the paper and announce its second part (Section 5).

[20] BROWN, D., CHUMAKINA, M. What There Might Be and What There Is: An Introduction to Canonical Typology. In BROWN, D., CHUMAKINA, M., CORBETT, G. (eds.). In *Canonical Morphology and Syntax*, pp. 1–19.

[21] EVANS, V., GREEN, M. *Cognitive Linguistics: An Introduction*; JANDA, L. Cognitive Linguistics in the Year 2015. In *Cognitive Semantics*, 2015, Vol. 1, pp. 131–154.

[22] See JORDAN, A.C. *A Phonological and Literary Study of Literary Xhosa*; NEETHLING, S.J. *De Ideophoon in Xhosa* [The Ideophone in Xhosa]; WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*; DU PLESSIS, J.A. *IsiXhosa 4*; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*; GXOWA, N.C. *Ideophones in Xhosa*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*; DU PLESSIS, J.A., VISSER, M. *Isintaksi yesixhosa* [Xhosa Syntax].

2. Theoretical consideration – The structural prototype of ideophones and its extra-systematicity

The present study of the extra-systematicity of Xhosa ideophones will be developed within a composite approach that merges canonical typology[23] and cognitive linguistics.[24] According to this approach, a category – in my case, ideophones or, more specifically, their structure – is viewed as a radial network organized around a prototype.

The structural prototype of an ideophone – the central component of the network – is defined cumulatively as a set of phonological, morphological, and syntactic properties (see Lists 1, 2, and 3 below). These properties are, on the one hand, driven typologically; on the other hand, they are cognitively salient. That is, the proposed prototypical features tend to be associated with ideophones attested across languages and additionally distinguish the category of ideophony more radically from all the other lexical classes (or, at least, most of them). Therefore, even though the prototype is a construct proposed by linguists (see further below), it has an empirical and psychological foundation.[25] Overall, the properties characterizing the prototype of an ideophone are jointly responsible for its structural extra-systematicity.[26]

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[23] BROWN, D., CHUMAKINA, M. What There Might Be and What There Is: An Introduction to Canonical Typology. In BROWN, D., CHUMAKINA, M., CORBETT, G. (eds.). In *Canonical Morphology and Syntax*, pp. 1–19. Accordingly, my article continues the line of research that applies the framework of canonical typology to the study of ideophones, e.g. KWON, N., ROUND, E.R. Phonaesthemes in Morphological Theory. In *Morphology*, 2014, Vol. 25(1), pp. 1–27; KWON, N. Total Reduplication in Japanese Ideophones: An Exercise in Localized Canonical Typology. In *Glossa: A Journal of General Linguistics*, 2017, Vol. 2(1), Art. 40, pp. 1–31; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), pp. 196–220.

[24] EVANS, V., GREEN, M. *Cognitive Linguistics: An Introduction*; JANDA, L. Cognitive Linguistics in the Year 2015. In *Cognitive Semantics*, 2015, Vol. 1, pp. 131–154.

BROWN, D., CHUMAKINA, M. What There Might Be and What There Is: An Introduction to Canonical Typology. In BROWN, D., CHUMAKINA, M., CORBETT, G. (eds.). In *Canonical Morphology and Syntax*, pp. 1–19; JANDA, L. Cognitive Linguistics in the Year 2015. In *Cognitive Semantics*, 2015, Vol. 1, pp. 131–154.

[26] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 2; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 655–656; LAHTI, K., BARRETT. R., WEBSTER, A. Introduction. In *Pragmatics and Society*, 2014, Vol. 5(3), pp. 335–336.

As far as phonology is concerned, a prototypical ideophone differs from the other elements of language by exhibiting, at least, six extra-systematic features (see List 1 below).[27] These features – which can be encompassed by the notion of "skewed" phonetics and phonotactics – result from the expressiveness that underlies the prosody of ideophones.[28]

(P-1) Ideophones involve sounds (vowels or consonants) that are aberrant in the language in which they (i.e. these ideophones) occur;[29]

[27] Lists 1, 2, and 3 have been composed by reviewing the recent scholarly literature dedicated to ideophones. See especially: CHILDS, T. African Ideophones. In HINTON, L., NICHOLS, J., OHALA, J.J. (eds.). *Sound Symbolism*, pp. 178–204; CHILDS, T. *An Introduction to African Languages*; VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672; DINGEMANSE, M. Making New Ideophones in Siwu: Creative Depiction in Conversation. In *Pragmatics and Society*, 2014, Vol. 5(3), pp. 355–383; LAHTI, K., BARRETT. R., WEBSTER, A. (eds.). *Pragmatics and Society*, 2014, Vol. 5(3); DINGEMANSE, M., AKITA, K. An Inverse Relation Between Expressiveness and Grammatical Integration: On the Morphosyntactic Typology of Ideophones, with Special Reference to Japanese. In *Journal of Linguistics*, 2017, Vol. 53(3) pp. 501–532; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), pp. 196–220. I have complemented the abovementioned literature with my own research on ideophones in Nguni, Khoe, Semitic, and Slavonic languages. The three lists do not aspire to be exhaustive. They do, however, capture the most relevant formal characteristics of ideophones discussed in the scholarship. Consider, for instance, the various convergence points between my lists and lists formulated by IBARRETXE-ANTUÑANO (2017), who has used a similar framework in her comprehensive study of Basque ideophones (see IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), pp. 196–220).

[28] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 1–9; CHILDS, T. *An Introduction to African Languages*, pp. 118–119; BLENCH, R. The sensory World: Ideophones in Africa and Elsewhere. In STROCH, A. (ed.). *Perception of the Invisible: Religion, Historical Semantics and the Role of Perceptive Verbs*, pp. 275–296; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 655–656.

[29] CHILDS, T. *An Introduction to African Languages*, pp. 118–119; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, p. 134; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656.

(P-2) Ideophones contain configurations of sounds that are aberrant in the language, e.g. unusual consonant clusters, vowel-consonant combinations, or syllable structure.[30] With regards to (P-1) and (P-2), the extra-systematicity may also result from skewed distributions, i.e. differences in the frequency of occurrence of particular sounds and their combinations;

(P-3) Ideophones make extensive use of vocalic and consonantal length. Crucially, even in languages in which long vowels are absent and/or non-phonemic, vocalic length tends to appear in ideophones, potentially playing a phonemic role;[31]

(P-5) Tone plays a relevant role in ideophones, including in languages in which tone is not a distinctive phonological feature;[32]

(P-4) Ideophones make extensive use of vocalic and consonantal harmony, including rhymes.[33] They also exhibit restricted, well-determined tonal patterns,[34] including tonal harmony;[35]

[30] DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp. 135–136, 158; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 211.

[31] CHILDS, T. *An Introduction to African Languages*, p. 119; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp.136, 158; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656.

[32] ANDRASON, A. The "Exotic" Nature of Ideophones – From Khoekhoe to Xhosa. In *Stellenbosch Papers in Linguistics*, 2017, Vol. 48, p. 146; ANDRASON, A. Ideophones in Polish. In progress.

[33] DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp. 135–136; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656; AKITA, K., IM AI, M., SAJI, N., KANTARTZIS, K., KITA, S. Mimetic Vowel Harmony. In FRELLESVIG, B., SELLS, P. (eds.). *Japanese/Korean Linguistics*, 2013, Vol. 20, 115–129; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 211.

[34] DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp. 135–136; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656.

[35] IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 211.

(P-6) Ideophones are accompanied by characteristic phonation and other prosodic phenomena such as breathy and/or creaky voice, whispering, intense airstream, and/or characteristic melody (pitch).[36]

List 1: Phonological features of a prototypical ideophone

Morphologically, the prototype of an ideophone shows more creative and expressive manners of word formation or derivation, related to and prompted by their inherent iconicity.[37] This entails the following extra-systematic features:

(M-1) Ideophones are less susceptible to inflections;[38]
(M-2) Ideophones are rarely accompanied by derivational suffixes that are otherwise productive in other lexical classes;[39]

[36] CHILDS, T. *An Introduction to African Languages*, p. 119; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 211.

[37] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 2; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656; LAHTI, K., BARRETT. R., WEBSTER, A. Introduction. In *Pragmatics and Society*, 2014, Vol. 5(3), p. 335.

[38] SCHULTZE-BERDNT, E. Ideophone-like characteristics of 'co-verbs' in Jaminjung (Australian). In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 360; CREISSELS, D. Setswana Ideophones as Uninflected Predicative Lexemes. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 75–85; BECK, D. Ideophones, Adverbs, and Predicate Qualification in Upper Necaxa Totonac. In *International Journal of American Linguistics*, 2008, Vol. 74(1), p. 16; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 212.

[39] MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 235–250; BECK, D. Ideophones, Adverbs, and Predicate Qualification in Upper Necaxa Totonac. In *International Journal of American Linguistics*, 2008, Vol. 74(1), pp. 4–5, 16; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672.

(M-3) Ideophones fail to be derived from other lexical classes, but rather constitute primary roots themselves;[40]

(M-4) Ideophones make common use of expressive morphological patterns,[41] particularly repetition (e.g. reduplication and multiplication);[42]

[40] MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 235–250; RUBINO, C. Iconic Morphology and Word Formation in Ilocano. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 303–320; BECK, D. Ideophones, Adverbs, and Predicate Qualification in Upper Necaxa Totonac. In *International Journal of American Linguistics*, 2008, Vol. 74(1), p. 5. In certain languages, ideophones can be derived from other lexical classes (e.g. verbs) by means of the so-called ideophonizers (see TASSA, O-L. La formation des radicaux déidéophonique et des idéophones déverbatifs en tɛtɛla (dialecte ewango). In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 375–384). Of course, other lexical classes may be derived from ideophones by using de-ideophonizing affixes, e.g. productive verbal morphemes.

[41] DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp. 139–142, 158.

[42] CHILDS, T. *An Introduction to African Languages*, p. 12; BECK, D. Ideophones, Adverbs, and Predicate Qualification in Upper Necaxa Totonac. In *International Journal of American Linguistics*, 2008, Vol. 74(1), p. 8; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, p. 138; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656; LAHTI, K., BARRETT. R., WEBSTER, A. Introduction. In *Pragmatics and Society*, 2014, Vol. 5(3), p. 335; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 212. See also ZWICKY, A.M., PULLUM, G.K. Plain Morphology and Expressive Morphology. In ASKE J., BEERY, N., MICHAELIS, L., FILIP, H. (eds.). *Proceedings of the Thirteenth Annual Meeting of the Berkeley Linguistics Society*. *VII*, pp. 330–340. Regarding the distinction between repetition and reduplication in ideophones, consult DINGEMANSE, M. Ideophones and Reduplication: Depiction, Description, and the Interpretation of Repeated Talk in Discourse. In *Studies in Language*, 2015, Vol. 39(4), pp. 946–970.

(M-5) Ideophones constitute an open and productive category.[43] The productivity of ideophones is spontaneous and idiolectal.[44]

List 2: Morphological features of a prototypical ideophone

The prototype of an ideophone is also marked syntactically and exhibits five extra-systematic features, collected in List 3 below.[45] This syntactic extra-systematicity stems from the radical origin of ideophones (i.e. they are roots) and their relation to non-verbal communicative acts.[46]

[43] Apart from drawing on roots or, much less typically, being derived from other lexical classes through various derivational mechanisms, ideophones can also be borrowed from other languages. See CHILDS, T. Where Do Ideophones Come from? In *Studies in the Linguistic Sciences*, 1989, Vol. 19(2), pp. 55–78; CHILDS, T. *An Introduction to African Languages*; BOSTOEN, K., SANDS, B. Clicks in South-western Bantu Languages: Contact-induced vs. Language-internal Lexical Change. In BRENZINGER, M., FEHN, A-M. (eds.). *Proceedings of the 6th World Congress of African Linguistics, Cologne, 17-21 August 2009*, pp. 121–132; ANDRASON, A. The "Exotic" Nature of Ideophones – From Khoekhoe to Xhosa. In *Stellenbosch Papers in Linguistics*, 2017, Vol. 48, pp. 139–150. This behavior is not extra-systemic *per se*. It rather links ideophones to other, fully systematic lexical classes such as verbs, nouns, and adjectives (which are also open and borrowable classes). However, it does differentiate ideophones from pronouns, adpositions, conjunctions, connectives, and complementizers (which are close and less borrowable (or non-borrowable) classes).

[44] CHILDS, T. African Ideophones. In HINTON, L., NICHOLS, J., OHALA, J.J. (eds.). *Sound Symbolism*, pp. 178–204; CHILDS, T. Where Do Ideophones Come from? In *Studies in the Linguistic Sciences*, 1989, Vol. 19(2), p. 56; AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 29; DINGEMANSE, M. Making New Ideophones in Siwu: Creative Depiction in Conversation. In *Pragmatics and Society*, 2014, Vol. 5(3), pp. 355–383.

[45] CHILDS, T. *An Introduction to African Languages*, pp. 122–124; VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 1–9; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672; LAHTI, K., BARRETT. R., WEBSTER, A. Introduction. In *Pragmatics and Society*, 2014, Vol. 5(3), pp. 335, 338; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 212.

[46] KUNENE, D. Speaking the Act: The ideophone as a Linguistic Rebel. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 183–192.

(S-1) Ideophones are extra-clausal – they appear at sentence boundaries, often being separated from the clause by a pause and/or contouring;[47]
(S-2) Ideophones may function as complete, autonomous utterances;[48]
(S-3) Ideophones are asyntagmatic – they fail to enter into syntactic relationships with the other elements of the clause or sentence;[49]
(S-4) When integrated into the clause or sentence syntax, ideophones tend to be headed by "quotative markers", "dummy verbs",[50] or *verba dicendi* and/or *facendi*;[51]

[47] DIFFLOTH, G. Notes on Expressive Meaning. In *Chicago Linguistic Society*, 1972, Vol. 8, pp. 440–447; CHILDS, T. African Ideophones. In HINTON, L., NICHOLS, J., OHALA, J.J. (eds.). *Sound Symbolism*, pp. 122–123; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp. 147–148, 158; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 656.

[48] KILIAN-HATZ, C. Universality and diversity: Ideophones from Baka and Kxoe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 157, 162; BECK, D. Ideophones, Adverbs, and Predicate Qualification in Upper Necaxa Totonac. In *International Journal of American Linguistics*, 2008, Vol. 74(1), p. 38; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, p. 145; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 656–657.

[49] CHILDS, T. *An Introduction to African Languages*; DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*, pp. 145, 147–148; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 656–657.

[50] CHILDS, T. Where Have All the Ideophones Gone? The Death of a Word Category in Zulu. In *Toronto Working Papers in Linguistics*, 1996, Vol. 15, p. 84.

[51] VOELTZ, E., KILIAN-HATZ, C. Introduction. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 3; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 238–239; AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 25–48; CHILDS, T. *An Introduction to African Languages*, p. 123; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, p. 657; IBARRETXE-ANTUÑANO, I. Basque Ideophones from a Typological Perspective. In *Canadian Journal of Linguistics*, 2017. Vol. 62(2), p. 212. This feature is related to the oral and performative nature of ideophones.

(S-5) Ideophones can be accumulated or juxtaposed – individual ideophones or ideophones that are semantically related may be freely added to one another, delivering a series[52].

List 3: Syntactic features of a prototypical ideophone

The crucial fact about any categorial prototype is that, as explained above, it constitutes an idealized conceptual construct. This means that, in its totality, the prototype need not be attested in actual languages. What is attested are crosslinguistic instantiations of the prototype that approximate it to a greater or lesser extent. These instantiations populate the category, radiating from its center to the periphery. The center contains canonical instantiations that fully comply with the prototype. The periphery contains non-canonical instantiations whose compliance is marginal. Between the center and the periphery, there is a vast transitionary space containing semi-canonical instantiations that comply with a number of properties but not with all of them.[53]

If the radial prototype-driven model described above is applied to the category to ideophones, one may expect that ideophones attested in specific languages should exhibit varying degrees of structural extra-systematicity. In some languages, ideophones may be highly canonical and, thus, deeply extra-systematic – they comply with all or most features postulated for the structural prototype. In other languages, however, ideophones may be non-canonical and, thus, less extra-systematic – they exhibit few extra-systematic properties, inversely being more similar to fully systematic lexical classes, e.g. verbs or adverbs.[54] Overall, the less canonical and less extra-systematic ideophones are,

[52] REITER, S. *Ideophones in Awetí*, pp. 298, 340–346, 396; BOBUAFOR, M. *A Grammar of Tafi*, pp. 353–354. Usually, the longer the series is, the greater its expressive character is.

[53] TAYLOR, J. *Linguistic Categorization*; EVANS, V., GREEN, M. *Cognitive Linguistics: An Introduction*; BROWN, D., CHUMAKINA, M. What There Might Be and What There Is: An Introduction to Canonical Typology. In BROWN, D., CHUMAKINA, M., CORBETT, G. (eds.). In *Canonical Morphology and Syntax*, pp. 1–19; JANDA, L. Cognitive Linguistics in the Year 2015. In *Cognitive Semantics*, 2015, Vol. 1, pp. 131–154; HAMAWAAND, Z. *Semantics. A Cognitive Account of Linguistic Meaning*.

[54] AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 25–48; Newman 2001, DINGEMANSE, M. *The Meaning and Use of Ideophones in Siwu*; DINGEMANSE, M. Advances in the Cross-linguistic Study of Ideophones. In *Language and Linguistics Compass*, 2012, Vol. 6, pp. 654–672.

the more integrated into the grammar of a language and the more diffused into other lexical classes they should be.[55]

In light of the theoretical principles introduced in this section, my research strategy will consist of testing Xhosa ideophones for the sixteen features that differentiate a prototypical ideophone from other lexical classes at the level of phonology, morphology, and syntax. This empirical study will enable me to determine the extent to which Xhosa ideophones comply with the prototype of an ideophone and its structural extra-systematicity.

My evidence draws on a database of 1989 tokens that I have compiled by conducting field research among Xhosa speakers living in the Western Cape (Stellenbosch and Kayamandi) and by reviewing Xhosa dictionaries,[56] as well as earlier studies devoted to ideophones in Xhosa.[57] This database can be viewed as a fully comprehensive set – it comprises all ideophones found in the Xhosa language with the exclusion of ideophonic lexemes that are spontaneous idiolectal innovations. This large and exhaustive inventory of ideophones – the first of its type in Xhosa scholarship – allows me to formulate important qualitative and quantitative generalizations regarding phonology (Section 3), morphology (Section 4), and syntax (see the second part of this study).[58]

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[55] MOSHI, L. Ideophones in KiVunjo-Chaga. *Journal of Linguistic Anthropology*, 1993, Vol. 3(2), p. 190; AMEKA, F. Ideophones and the Nature of the Adjective Word Class in Ewe. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 29; CHILDS, T. *An Introduction to African Languages*, p. 123.

[56] MCLAREN, J. *A New Concise Xhosa-English Dictionary*; TSHABE, S. *The Greater Dictionary of isiXhosa*. Vol. 1; MINI, B. M. *The Greater Dictionary of IsiXhosa*, Vol. 2; PAHL, H. W. *The Greater Dictionary of isiXhosa*, Vol. 3.

[57] JORDAN, A.C. *A Phonological and Literary Study of Literary Xhosa*; NEETHLING, S.J. *De Ideophoon in Xhosa* [The Ideophone in Xhosa]; WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*; DU PLESSIS, J.A. *IsiXhosa 4*; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*; GXOWA, N.C. *Ideophones in Xhosa*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*; DU PLESSIS, J.A., VISSER, M. *Isintaksi yesixhosa* [Xhosa Syntax].

[58] Whenever possible, I will compare the properties of ideophones in Xhosa with those found in a closely related language – Zulu – for which research on ideophones is significantly more advanced. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*; VOELTZ, E. Toward the Syntax of the Ideophone in Zulu. In CHIN-WU, K., STAHLKE, H. (eds.). *Papers in African Linguistics*, pp. 141–152; VON STADEN, P. *Die ideofoon in Zulu*; VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224; CHILDS, T. Where Have All the Ideophones Gone? The Death of a Word Category in Zulu. In *Toronto Working Papers in Linguistics*, 1996, Vol. 15, p. 81–103; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In

3. Ideophones in Xhosa – Phonology

3.1. Aberrant sounds (P-1)

Xhosa ideophones contain sounds that, in other languages, may be perceived as marked, rare, and even para-linguistic. This particularly holds true for the various click sounds that do not enter into the phonemic inventory of Indo-European languages and many other language families.[59] However, from a language-internal perspective, clicks are a common and regular feature of Xhosa, being extensively used across its lexicon. Therefore, the presence of clicks in ideophones cannot be regarded as a sign of their (i.e. ideophones') extra-systematicity.

Although the presence of clicks in ideophones is not extra-systematic per se, their frequency is unusual. As far as the general vocabulary of Xhosa is concerned, 15% of lexemes contain a click.[60] For ideophones, the frequency of clicks ascends to 30%.[61] All click types (or influxes) found in Xhosa are attested in ideophones, namely, the central dental (alveolar) click *c* /ǀ/, the alveo-lateral click *x* /ǁ/, and the postalveolar click *q* /ǃ/. For each click type, the usual accompaniments (or effluxes) are present: voiceless ejective, voiceless aspirated, breathy-voice, and nasal. The variants of the central dental click /ǀ/ are illustrated by **cum** 'crush', **chapha** 'lightly touch upon', **gca** 'explain clearly', and **ncu** 'adhere when sucking blood'.[62] The variants of the alveo-lateral click [ǁ] are illustrated by **xafa** 'pound to soften', **xhu** 'be drenched with perspiration', **gxada** 'pay a hasty visit', and **nxu** 'do something persistently'. The variants of the post-alveolar click [ǃ] are illustrated by **qum** 'pierce – of something pointed and/or

VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 235–250; DE SCHRYVER, G-M. The lexicographic treatment of ideophones in Zulu. In *Lexikos*, 2009, Vol. 19, p. 34–54.

[59] Cf. HERBERT, R. The Sociohistory of Clicks in Southern Bantu. In *Anthropological Linguistics*, 1990, Vol. 32(3/4), p. 299; HERBERT, R. The Relative Markedness of Click Sounds: Evidence from Language Change, Acquisition, and Avoidance. *Anthropological Linguistics* 32(1/2), pp. 120–138.

[60] HERBERT, R. The Sociohistory of Clicks in Southern Bantu. In *Anthropological Linguistics*, 1990, Vol. 32(3/4), p. 296.

[61] Note that in Zulu, ideophones make use of clicks less often. Clicks appear in 22% of monosyllabic ideophones, and even less frequently in disyllabic ideophones. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 1.

[62] In all the examples provided in this paper, I follow the standard Xhosa orthography. In certain instances, where it is necessary, the standard spelling will be accompanied by diacritics indicating tone: high (ˊ), low (ˋ) or circumflex (^).

sharp', **qhu** 'break with something brittle producing a muffled sound', **gqu** 'fall or break with a crushing sound', and **nqu** 'be done completely'.

Other types of sounds found in Xhosa that are heavily marked from a typological perspective are alveolar lateral fricatives and affricates. As in the Xhosa language in general, in ideophones, such consonants may be voiceless, i.e. [ɬ] (e.g. **hlaka** 'be in full view, known') and [tɬ] (e.g. **ntla** 'come across something unexpectedly'); or voiced, i.e. [ɮ] (e.g. **dlavu** 'tear with teeth') and [dɮ] (e.g. **dlandlu** 'give a sudden leap sideward or backward').[63] More than 6% of ideophones contain alveolar lateral fricatives and affricates. This phenomenon is, however, not extra-systematic from a language-internal perspective, as alveolar lateral fricatives and affricates appear in approximately 6% of the general Xhosa lexicon, as well.[64]

Ideophones also exhibit the trill consonant [r], which, at least etymologically, is foreign to the sound system of Xhosa and other Nguni languages.[65] Only recently has [r] been introduced into the Xhosa phonetic inventory due to contact with English and, albeit to a lesser extent, Afrikaans.[66] In ideophones, however, **r** [r] seems to have been original and etymological, as illustrated by **r-r**, **rru**, **re**, **rre**, **r-re** 'be mad; go fast', **rru-u** 'go steadily', or **fórnyúphù** 'worry someone'.[67]

[63] Voiced laterals are accompanied by a characteristic breathy voice.

[64] I am not aware of any study that offers the absolute frequencies of alveolar lateral consonants in the Xhosa vocabulary. The above frequency is tentative and should be taken approximately. It has been inferred from a short vocabulary list in a beginner Xhosa manual containing 1150 entries.

[65] Cf. LOUW, J.A. The Influence of Khoi on the Xhosa Language. In *Limi*, 1974, Vol. 2(2), pp. 45–62; LOUW, J.A. The Influence of Khoi on Xhosa Morphology. In DE KLERK, W., PONELIS, F.A. (eds.). *Gedenkbundel H. J. J. M. van der Merwe*, 87–95; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 246.

[66] Therefore, original loanwords containing **r** used to exhibit **l** or **d** when introduced and adapted to Xhosa. See LOUW, J.A. The Influence of Khoi on the Xhosa Language. In *Limi*, 1974, Vol. 2(2), pp. 45–62; LOUW, J.A. The Influence of Khoi on Xhosa Morphology. In DE KLERK, W., PONELIS, F.A. (eds.). *Gedenkbundel H. J. J. M. van der Merwe*, 87–95; ANDRASON, A. The "Exotic" Nature of Ideophones – From Khoekhoe to Xhosa. In *Stellenbosch Papers in Linguistics*, 2017, Vol. 48, pp. 139–150.

[67] Similarly, [r] is found in ideophones in Zulu, even though it is "foreign" to the sound system of that language. See CHILDS, T. Where Have All the Ideophones Gone? The Death of a Word Category in Zulu. In *Toronto Working Papers in Linguistics*, 1996, Vol. 15, p. 94; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 246; see also FIVAZ, D. *Some Aspects of the Ideophone in*

Lastly, a few ideophones contain sounds that cannot be represented with the standard phonetic alphabet. Such sounds generally have an onomatopoeic foundation, imitating extra-linguistic reality. One of the most characteristic examples is the ideophone depicting sucking-in and extracting something. During its production, the air is breathed in, rather than being breathed out, which is the rule in Xhosa.[68]

3.2. Aberrant sound configurations (P-2)

Xhosa ideophones do not usually contain configurations of sounds that are aberrant. An immense majority of consonant clusters or vowel-consonant combinations found in ideophones are also present in other lexical classes. Nevertheless, certain anomalies can be discerned.

First, at least forty ideophones (i.e. more than 2%) end with a consonant. This contrasts with nouns, verbs, adverbs, and adjectives – as well as most members of other lexical classes – which do not exhibit consonants as their final elements.[69] The most common final consonantal element is **-m** [m].[70] This consonant appears in the final position of thirty-seven ideophones, e.g. **cum** 'crush', **dyum** 'strike', **gram** 'do continuously', **hum** 'of a crowd making a humming sound', **ncam** 'fit exactly', **nqam** 'cut off; cut short', **nywam** 'eat up everything', **qam** 'make an explosive sound', **rham** 'of an odor – smell', **tam** 'walk pleasantly on a soft surface', **tyum** 'fall into a deep sleep', **wum** 'become quiet', **xum** 'fall silent suddenly', **yem** 'cut through something soft', **zum** 'sink'. All such ideophones are mono-syllabic, a few exhibiting reduplication (**dum-dum** 'mumble', **grum-grum** 'eat', **tam-tam** 'walk pleasantly on a soft surface') or multiplication (**gam-gam-gam** 'to make a dull sound when walking'). A few ideophones end in a stop, specifically **kh** [k^h] or **ph** [p^h], e.g.

Zulu, pp. 8, 9, 11, 22. Zulu ideophones contain other rare sounds, e.g. [ts], which is also the case of Xhosa (see **tsé** 'be straight' and **tsákú** 'go and return quickly'). See MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 246.

[68] Of course, individual consonants in Xhosa can be implosive and ejective. However, vowels, which constitute the nuclei of Xhosa words, are always pronounced with air being breathed out. In Zulu, onomatopoeic ideophones may also exhibit highly peripheral sounds (VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224).

[69] The exceptions are pronouns in which the final consonantal element is historically a pronominal agreement clitic or suffix, e.g. **yam** 'my'.

[70] See a similar situation in Zulu, where a few ideophones end in **m** (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 8).

hekh ‘start working with oxen’ and **thiph** ‘poke with something sharp and pointed’ (see also **thiph-thiph** ‘ibid.’). No other words in Xhosa – with the exception of interjections – exhibit such consonants as their final elements.

Second, two ideophones, namely **r-r** [r:] and **r-r-r** (with an extra-long pronunciation of [r]), only consist of consonants. They inversely fail to contain one of the five genuine vowels that are available in the Xhosa language, i.e. /i, e, a, o, u/. This violates the rule governing the structure of Xhosa words, according to which words must contain a genuine vocalic element, i.e. one of the above-mentioned vowels. Indeed, there are no nouns, adjectives, verbs, or adverbs that would solely be formed of consonants, including syllabic sonorants. Again, interjections are exceptional and, like ideophones, allow for a non-vocalic lexical structure.[71]

3.3. Length (P-3)

In the Xhosa language, length – be it vocalic or consonantal – is generally exploited to a limited extent. Although long vowels distinguish certain pairs of pronouns (**la** versus **laa**, **lo** versus **loo**, and **aba** versus **abaa**) and differentiate the noun class prefix **i-** (class 5 and 9) from another prefix **ii-** (class 10), vocalic length does not play a phonemic role in the vast majority of lexemes.[72] Rather, the vowel of the penultimate syllable, which also bears the accent, is regularly lengthened.[73] Long consonants are typically absent, although they may arise as a result of adding affixes or clitics to the hosting bases (e.g. **ummelwana** ‘neighbor’). This treatment of vocalic and consonantal length in the general Xhosa lexicon contrasts with its extensive use in ideophones.

Various (monosyllabic) ideophones contain a long vowel. This bi-moraic vowel is spelled by doubling the corresponding short vowel, e.g. **bhee**

[71] ANDRASON, A., DLALI, M. The (Crucial yet Neglected) Category of Interjections in Xhosa. In STUF – *Language Typology and Universals*, 2020, Vol. 73, pp. 159–217. In clitics, a vowel is absent because the clitic consonant is “hosted” by an adjacent entity that contains a vowel. Of course, words in Xhosa can involve syllabic sonorants, especially [m]. Zulu attest to other ideophones composed of a single consonant, namely **s’** ‘hissing of water’ and **hl’** ‘hissing’ (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 9). In Zulu, there is also a larger set of monosyllabic ideophones, in which the sonorant [r] constitutes the nucleus, e.g. **bhrr** and **drr** ‘birds flying’, **phrr** ‘horse blowing’, and **trr** ‘fly, go away’. FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 9; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 246.

[72] PAHL, H.W., *The Greater Dictionary of isiXhosa*, p. xxxv.

[73] OOSTHUYSEN, J.C. *The Grammar of isiXhosa*.

'completely deserted', **choo** 'pick up from the ground', **cwaa** 'aim towards an object', **dii** 'pour a copious quantity of something with force', **duu** 'disappear, be dispersed', **dwii** 'draw a line on something', **jaa** 'of a hair – bristle', **juu** 'go straight towards', **naa** 'spread out', **quu** 'pour', **waa** 'be at loss', **xii** 'keep on falling, dripping', **zoo** 'choke'. In some cases, the vowel is extra-long, being approximately equivalent to three morae.[74] This is indicated in writing by a hyphen linking the two vocalic sings, e.g. **bhu-u** 'of insects – buzz', **chu-u** 'walk slowly', **du-u** 'scatter, disperse', **dywi-i** 'snatch', **grwi-i** 'be long and straight', **ncu-u** 'of a bug – adhere when sucking blood', **ngqe-e** 'run fast', **tshwi-i** 'fling, hurl'. In a few instances, length is particularly exaggerated giving rise to an extra-extra-long four-mora pronunciation, e.g. **mhu-u-u** 'of a cow – low', **hu-u-u** 'make a humming, droning, soughing sound', **phe-e-e** 'run at full speed' or **tswi-i-i** 'squeak, wheeze'.

In several cases, length plays a phonemic role, distinguishing ideophones that convey different meanings. Such contrasts may involve a short vowel and a long vowel, e.g. **hà** 'destroy utterly, finish completely' – **hàà** 'open wide'; **jù** 'finish up' – **jùù** 'go straight towards'; **nqà** 'be surprised' – **nqàà** 'reach as far as'; **ntí** 'touch lightly, hit slightly' – **ntíí** 'fly up, soar'; **nzí** 'strike; run fast' – **nzíí** 'of a high-pitched sound – sound shrilly; of a sun – be very hot; of an insect – bite'; **qwè** 'be completely empty; pause' – **qwèè** 'sit in an orderly manner'; **wù** 'empty' – **wùù** 'glide silently'; or **xhì** 'exude a liquid' – **xhìì** 'be drenched dripping wet from perspiration or rain'.[75] In all these pairs, the respective ideophones are differentiated only by length, while all the other features, including tone, are identical. Sometimes, apart from tone, length is an additional factor that differentiates two ideophones, e.g. **bhé** 'completely deserted' – **bhéè** 'baa – the sound of a goat or sheep'; **cwâ** 'sit on top' – **cwàà** 'aim towards'; or **nwè** 'spread' – **nwée** 'of a child – cry'. The phonemic contrast may also involve short vowels and extra-long vowels, e.g. **chù** 'catch hold' – **chù-ù** 'walk slowly'; **rrù** 'travel steadily without deviating' – **rrù-ù** 'be insane, be madly in love'; **hô** 'give up hope, be completely dry' – **hô-ô** 'of a herd, swarm – move, gush'; and **ncù** 'trust something thin; stab or prick with something sharp' – **ncù-ù** 'of a bug – adhere when sucking blood; stick to'. Again, in some

[74] Three quantities of length are also attested in Zulu (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 14). That is, apart from mono- and bi-moraic vowels, Zulu ideophones contain vowels with "more than two morae" (MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 244–245).

[75] A similar phenomenon is found in Zulu, e.g. **bhu** 'beat' versus **bhuu** 'buzz; rush out'. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 14; VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224.

instances, it is both length and tone that jointly distinguish two ideophones: **ntó** ‘of an artery – pulsate’ – **ntò-ò** ‘be perfectly straight, walk straight’. Even the higher degrees of length may be phonemic. For instance, an ideophone that contains an extra-extra-long vowel may be distinct from an ideophone that contains a long vowel: **phè-è-è** ‘run at full speed’ – **phéé** ‘be excessively attracted or attached’. A phonemic contrast may also be visible across three degrees of length, i.e. between short, long, and extra-long vowels, e.g. **dù** ‘move hurriedly’ – **dùù** / **dù-ù** ‘be dispersed, disappear’. In such cases, however, length often differentiates ideophones together with tone, e.g. **tyà** ‘be flat, plain’ – **tyáà** ‘throw, cast’ (also **tyá-à**) – **tyá-à** ‘wink’; and **tsì** ‘be wet’ – **tsíì** ‘leap, jump’ – **tsí-ì** ‘run fast’. Such a three-degree contrast may also involve short, extra-long, and extra-extra-long vowels, e.g. **hù** ‘finish off; pour’ – **hù-ù** ‘move as a procession, gush; bellowing of a bull’ – **hù-ù-ù** ‘keep on doing something; hooting of an owl; a humming, droning sound’. Exceptionally, the contrast in length involves four degrees: **tswí** ‘utter short, high-pitched squeaks as insects or mice’ – **tswíì** ‘be straight, stretch out’ – **tswí-ì** / **tswí-í-ì** ‘wheeze’.

The position of long, extra-long, and extra-extra-long vowels in ideophones may itself transgress the rules that operate in general Xhosa vocabulary. That is, while in most Xhosa lexemes, long vowels are found in a penultimate syllable, in ideophones, they may also appear in the first or the last syllable. This may be illustrated by **vra-vra-vra-phaa(a-a)** where the long (or extra-long) vowel appears in the final syllable. This also means that in ideophones, the initial or the final syllable may bear the stress – not only the penultimate syllable, which is the rule in the Xhosa language.[76]

Length is exploited less extensively in consonants. Nevertheless, one finds ideophonic lexemes containing long consonants, otherwise absent in Xhosa. For example, the consonant **r** [r] is pronounced as long (i.e. with a prolonged vibration) in the ideophones **rre** ‘be mad’ and **rru** ‘travel without deviating; run fast; be mad’. The same ideophones may also be produced with an extra-long [r], i.e. as **r-re** and **r-ru**, respectively.[77]

[76] This is consistent with Zulu, where “vowel length is realized on the first or last syllable” of an ideophone (MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 244–245). The last syllable of ideophones may also carry stress, contrary to the penultimate-stress rule operating in Zulu (CHILDS, T. Where Have All the Ideophones Gone? The Death of a Word Category in Zulu. In *Toronto Working Papers in Linguistics*, 1996, Vol. 15, p. 95).

[77] The long and extra-long **r** can in fact constitute the sole element of an ideophone as illustrated by **r-r** and **r-r-r** ‘(be) completely insane’ (see Section 3.1).

3.4. Tone (P-4)

As is evident from the discussion in Section 3.3 above, ideophones regularly utilize the category of tone. Certainly, tone is a common and systematic feature of Xhosa, as is generally the case for other Bantu languages. Tone is found in all lexical classes, where it may play a phonemic function, distinguishing lexemes with distinct meanings. However, certain tonal behaviors of ideophones are remarkable.

Ideophones exhibit a preference for using a low tone. To be exact, low-tone ideophones constitute more than 71% of all the ideophones. Inversely, the use of high tone (approx. 10%) and, especially, circumflex tone (approximately 3%) is much less common.[78] Even for monosyllabic ideophones, the low tone is prevalent (approx. 50%), the high tone being less frequent (20%), and the circumflex being the least common (17%).[79]

In ideophones, tone often plays a phonemic role, distinguishing lexemes that are otherwise identical. This can be illustrated by the following pairs: **bhó** 'be burnt out' versus **bhô** 'bellow distressfully'; **bhú** 'pass wind audibly' versus **bhû** 'cover a person with a blanket; flatter deceivably'; **cwè** 'cut off a thin piece of skin' versus **cwé** 'fill to the brim'; **dlù** 'become exposed' versus **dlú** 'plunge into water'; **dúntsù** 'bump a person with one's buttocks' versus **dùntsù** 'press in constipation'; **fé** 'be filled with sympathy' versus **fè** 'sprinkle, drizzle'; **fòngqó** 'arch the body' versus **fòngqò** 'be dented'; **krô** 'of a hungry stomach – rumble' versus **krò** 'be satisfied, pleased'; **nweè** 'spread' versus **nwée** 'cry'; **qhò** 'do continuously' versus **qhô** 'seize, grasp by throat'; **shwácá** 'have a worried look' versus **shwàcà** 'have a sullen expression'; **thà** 'shine brightly' versus **thâ** 'leap, jump'; **tswí** 'utter a short, high-pitched squeak as insects or mice' versus **tswî** 'wheeze'; **wâ** 'hit with the open hand' versus **wà** 'be at loss'; **xhù** 'be wet' versus **xhû** 'jump, leap up'; **zàthù** 'apply oneself with zeal' versus **záthù** 'of something long – snap, break easily'. Of course, in Xhosa, the use of tone for phonemic purposes is not limited to ideophones. As already mentioned, tone plays a phonemic role throughout grammar. Nevertheless, in other lexical classes, the phonemic role of tone is mainly exploited in derivations and inflections. At a lexemic level – i.e. differentiating roots – the phonemic status

[78] In the remaining cases, patterns with mixed tones appear.

[79] In a similar vein, low-tone ideophones are the most common in Zulu (See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, pp. 28, 42, 57–58; VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224; See footnote 82 below). This is also true of monosyllabic ideophones, in which a low tone is more frequent than any other tonal pattern, constituting 42% of all the occurrences. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 28.

of tone seems to be less crucial. In contrast, the use of tone to differentiate otherwise identical ideophones is relatively evident, appearing in 1% of all the tokens. Therefore, it seems that tone plays a more relevant role in ideophones than elsewhere in the Xhosa language.

3.5. Harmony (P-5)

Xhosa ideophones make extensive use of vocalic harmony. To be exact, more than 52% of all ideophonic tokens exhibit full vowel harmony. If one considers only those ideophones in which such harmony is possible – i.e. all non-mono-syllabic ideophones – the prevalence of vocalic harmony ascends to 63%. Vocalic harmony may involve two syllables (e.g. **waxa** 'splash', **bhexe** 'stir food', **bhixi** 'of something soft and wet – fall off', **bhuxu** 'be exposed as a result of the peeling of the skin' and **woxo** 'lose weight'), three syllables (e.g. **bhakada** 'spread out; galloping of a horse', **bhintshintshi** 'change suddenly or unexpectedly', **bholodlo** 'come crushing down', **bhududu** 'stumble', **chekence** 'sit down heavily'), four syllables (e.g. **bhilikityi** 'of a situation – change suddenly', **folokohlo** 'collapse', **galakangqa** 'enter quickly or unexpectedly', **bhulukudu** 'stumble and fall', **cebelele** 'lie flat'), and five syllables (e.g. **vumbulukuhlu** 'appear suddenly, spring out from hiding', unearth). Vocalic harmony is also evident in the so-called recurrent partials[80] which are often found in ideophones. The vowels used in such elements tend to depend on the preceding vowel(s) found in a particular lexeme, as illustrated by the following examples involving the partial **-lVlV**: **chwishilili** 'tear, rip', **cushululu** 'slip out of a house without being noticed', **dambalala** 'lie stretched out', **dedelele** 'of anger, pain, wind – abate, calm down', **bozololo** 'diminish, wane'.[81]

Vocalic harmony may also be partial. In such cases, all vowels are identical save for one. For instance, initial vowels harmonize, while the final vowel exhibits a different quality, e.g. **bhelekequ** 'overturn, come to rest upside down', **galakandi** 'grip each other as when wrestling', **bhonxothi** 'stand

[80] FIVAZ, D. *Some Aspects of the Ideophone in Zulu*; CHILDS, T. Where Do Ideophones Come from? In *Studies in the Linguistic Sciences*, 1989, Vol. 19(2), pp. 55–78.

[81] The situation in Zulu is comparable: 55% of disyllabic ideophones exhibit total vocalic harmony, while, in polysyllabic ideophones, this number ascends to 68% (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, pp. 19–20; cf. MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 246). Overall, Zulu ideophones are characterized by vowel assonance (VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224).

upright', **cebetshu** 'have a narrow escape, be in danger', **dedengu** 'do something carelessly, clumsily', and **dukumba** 'remain silent, pretend not to hear'. Alternatively, all the vowels of an ideophone harmonize in quality except for the initial one, which is different, e.g. **balulu** 'open the eyes', **buthatha** 'fall down, collapse because of fatigue' or **fulatya** 'sit or lie down in an awkward manner'. The most evident examples of this type of vocalic harmony appear in instances in which the vowels of a recurrent partial (e.g. **-lVlV**) harmonize with the precedent vowel that is, however, distinct from the first vowel of the ideophone, e.g. **bebululu** 'of a skin – peel off', **combululu** 'become unraveled', **butyalala** 'collapse, crumple under pressure', **cuthalala** 'contract muscles; sit listlessly', or **dukalala** 'disappear unexpectedly'.

Xhosa ideophones also make use of consonantal harmony although the extent of this phenomenon is somewhat lesser than is the case with vocalic harmony. Nevertheless, the use of identical (or similar) consonants in adjacent syllables is relatively common, and typically appears in total and partial reduplicative patterns, e.g. **dlundlu** 'reach a fair size as a child; outgrow childishness', **bhabhalala** 'be very wide; fall suddenly', **bebululu** 'peel off, strip', or **bozololo** 'abate, calm' (see Section 4.4 below). The use of similar consonants in non-adjacent syllables is also highly frequent and, as stated, constitutes the typical effect of reduplication, e.g. **krumpu-krumpu** 'tear off' or **nqwakaqhwa** 'meet unexpectedly'.

Another type of harmony extensively exploited by ideophones is tonal harmony. At least 72% of all ideophones exhibit full tonal harmony – all the vowels carry the same tone, either high (**címí** 'of fire – go extinguished', **gábángxá** 'strike with the middle of a stick', **bhúlúkúqú** 'fall down suddenly') or low (**àlà** 'taste a small portion', **bàkàthà** 'come upon suddenly; attack', **bhàbhàlàlà** 'be very wide', **vùmbùlùkùhlù** 'appear suddenly'). In a few cases, due to reduplication, all syllables exhibit a circumflex tone, e.g. **dywî-dywî** 'work fast; tear in pieces'. If one counts only those ideophones that can exhibit harmonious patterns, the prevalence of tonal harmony is even more visible, equaling 82%. Harmonious patterns built around a low tone are by far the most common, ascending to more than 90% of all cases of tonal agreement. The most frequent harmony patterns is [L-L] which appears in almost 54% of all ideophones where full tonal harmony is utilized. The pattern [L-L-L-L] is second most frequent amounting to circa 27%. The commonness of this pattern is mostly due to the reduplication of the first element that exhibits an [L-L] pattern, or to the presence of a recurrent partial, especially the element **-lVlV**. The third most frequent pattern of tonal harmony is [L-L-L] which appears in

circa 9% of tokens.[82] This strong preference for tonal harmony in ideophones contrasts with the tonal structures typical of the general Xhosa vocabulary, where tone alternation is preferred, whereas harmonious tones are avoided.[83]

Tonal harmony may sometimes be partial. In such instances, the ideophone does not exhibit the same tone throughout its entire form, but rather repeats certain harmonious tonal patterns in all the syllables but one. As was the case with vocalic harmony, the most common instances involve recurrent partials, especially **-lVlV**. That is, the tone of a recurrent partial concords with the tone of the preceding vowel, while the tone of the first vowel is different, e.g. **hlázùlùlù** 'scatter' and **ngcúcàlàlà** 'move restlessly'.

Given the extensive use of vocalic, consonantal, and tonal harmony, as well as reduplicative patterns in general (see Section 4.4), various ideophones create rhythmic effects. This can be illustrated by **nyhònyhòshòlò** 'be dejected, depressed, anxious', **phìlìkìthì-phìthì** 'happen suddenly', **phòlòkòhlò** 'fall to pieces, collapse', **fòlòkòhlò** 'fall lifelessly; throw oneself down in grass', **tywàlàkàbà-tywàba** 'crash', **wàlàkàhlà** 'fall with a crush', and **wòlòkòhlò** 'collapse'.

3.6. Special phonation (P-6)

Although most ideophones are pronounced with phonation similar to other lexical classes, some tend to be accompanied by, or even require, a special type of phonation. This may involve intense airstream (e.g. **qum** and **gqum** 'pierce, hit', or **vra-vra-vra-pha** 'sound of a Volkswagen car' often pronounced with an exaggerated aspiration of the slot **pha**), whisper (e.g. **rhwatsha rhwatsha** 'make a rustling, soft sound'), and particular modulation of voice (e.g. **tshu tshu tshu tshu** 'sound of a train' or **tsi-i-i gxada** 'take a giant leap and land like a bunny', both pronounced with a distinctive melody).[84]

[82] The situation in Zulu is highly similar, with tonal harmony being pervasive in ideophones. In disyllabic ideophones, tones are harmonious in 82%; in three-syllabic ideophones – in 76%; and in four-syllabic ideophones – in 94%. As in Xhosa, harmony patterns built around low tones (LL, LLL, and LLL) are the most common: they appear in 81% of disyllabic ideophones, 72% of three-syllabic ideophones, and 93% of four-syllabic ideophones. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, pp. 42, 57–58.

[83] JORDAN, A.C. *A Practical Course in Xhosa*.

[84] Compare with the special "voice quality" of many ideophones in Zulu, which requires their audio presentation in dictionaries (DE SCHRYVER, G-M. The lexicographic treatment of ideophones in Zulu. In *Lexikos*, 2009, Vol. 19, p. 51).

4. Ideophones in Xhosa – Morphology

4.1. Hosting inflectional categories (M-1)[85]

Ideophones may be used in Xhosa as (parts of) predicates.[86] However, contrary to all the other predicates – be they verbal, nominal (e.g. the copulative), or semi-verbal (cf. the associative base **-na**) – predicative ideophones cannot be inflected. In other words, ideophones do not bear any inflectional markers that are available in Xhosa and indicate (a) the person/number/noun-class of subject and object; (b) the tense, aspect, and mood (TAM) of the verb; and (c) the positive or negative polarity of the event.[87]

If an ideophone is the sole element of a predicate, the information concerning person/number/class and TAM semantics must be inferred from syntax or context.[88] For instance, the overt nominal (or pronominal) subject is compulsory (see **iigusha** 'sheep' in 1.a), being regularly placed in transitive constructions in the preverbal position, by which it is differentiated from objects (see **ingca** 'grass' in 1.a). Similarly, the past, present, or future reading of an ideophone is conditioned by the presence of temporal expressions, or the general context of the sentence (see **pheselele** 'disappeared quickly' in 1.b; see a further discussion in the section dedicated to syntax in the second part of this study). The polarity of such examples can only have a positive value (1.a-b).

[85] As often noted in scholarship (e.g. BYBEE, J. *Morphology: A Study of the Relation between Meaning and Form*; HOPPER, P., TRAUGOTT, E.C. *Grammaticalization*), the distinction between derivation and inflection is not straightforward. In this paper, I will treat person/number/noun-class and TAM (as well as their negative counterparts) as inflectional categories, while applicative, reciprocal, neuter-passive, passive, and reflexive will be regarded as derivational categories.

[86] Ideophones may also function as adverbs (see Section 4.2; also consult the second part of this study).

[87] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*; DU PLESSIS, J.A. *IsiXhosa 4*; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, p. 43; OOSTHUYSEN, J.C. *The Grammar of isiXhosa*.

[88] GXOWA, N.C. *Ideophones in Xhosa*, pp. 104–111; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 200–203.

(1)	a.	**Iigusha**	***grum-grum***[89]	**ingca**
		10.sheep	graze	9.grass
		Sheep graze / are grazing (lit. eat grass)		
	b.	***Pheselele***	**indoda**	**izolo**
		disappear.quickly	9.man	yesterday
		The man quickly disappeared yesterday		

If inflectional categories are to be overtly realized, they must be encoded on "introductory" verbs such as **thi** or (much less commonly and to a significantly more limited extent) **tsho** that introduce the ideophone and, together with it, form a complex predicate.[90]

The inflectional information encoded on the verb **thi** may concern the person, number and noun class of the subject or the object. Accordingly, **thi** may host 1st and 2nd person affixes (see **ndi-** in 2.a) and all types of class agreement markers (see **-(ya)lu-** in 2.a, as well as **-ba-** and **-yi-** in 2.b). Such morphemes may indicate or be co-indexed with the subject (see **ndi-** in 1.a and **ba-** in 2.b) and the object (see **-(ya)lu-** in 1.a and **-yi-** in 2.b).[91]

(2)	a.	**Ndi-yalu-thi**		***genge***	
		1stSG.SA-11.OA-THI		open.widely	
		I open it widely (it = *ucango* 'door', class 11)			
	b.	**Abafundi**	**ba-yi-thi**	***xhamfu***	**indoda**
		2.student	2.SA-9.OA-THI	seize	9.man
		The students seize that man			

[89] In all the numbered examples, ideophones will be marked in italics. The verbs **thi** and **tsho** will be glossed as THI and TSHO respectively.

[90] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 20; DU PLESSIS, J.A. *IsiXhosa 4*; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, p. 43; OOSTHUYSEN, J.C. *The Grammar of isiXhosa*. The behavior of ideophones in Zulu is analogous. That is, in Zulu, ideophones do not bear person/number/noun-class agreement markers (whether these refer to subject or object) nor do they contain TAM affixes. As in Xhosa, inflections are hosted by the verb **thi**. See VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 248.

[91] For the examples of the agreement markers of all noun classes consult NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 62–76.

The inflectional information encoded on the verb **thi** may also concern TAM categories. All TAM markers available in Xhosa can appear on **thi**. For example, **thi** introducing an ideophone may be inflected in the present tense (**uthi** in 3.a), the "remote" past tense – the so-called A tense (**yathi** in 3.b), and the future tense (**iza kuthi** in 3.c).[92]

(3) a. **Umfazi** **u-thi** ***chu***
1.wife 1.SA-THI walk.slowly
The wife is walking slowly

b. **Inkwenkwe** **ya-thi** ***shwaka***
9.boy 9.SA.PAST-THI disappear
The boy disappeared

c. **Indoda** **i-za** **ku-thi** ***qhwi***
9.man 9.SA-come INF[93]-THI die.suddenly
The man will die suddenly

The verb **thi** can also be inflected in the perfect-perfective ILE tense (**uthe** in 4.a), as well as in a set of aspectual constructions, e.g. the SA tense (equivalent to 'still'; **usathi** in 4.b) and the KA tense (equivalent to 'not yet'; **alikathi** in 4.c).[94]

(4) a. **U-th-e** ***tywaba*** **iglasi**
1.SA-THI-PERF break 9.glass
He broke a glass with a crackling sound

b. **USipho** **u-sa-thi** ***ngxingxilili*** **xa** **e-bona**
1a.Sipho 1a.SA-still-THI stop.instantly when 1a.REL-see
amantombazana
6.girl
Sipho still stops instantly when he sees girls

c. **Ilanga** **a-li-ka-thi** ***shwaka***
5.sun NEG-5.SA-not.yet-THI disappear
The sun hasn't disappeared yet

Similarly, the verb **thi** allows for ideophones to be used with a range of modal categories, apart from the indicative tenses mentioned in examples (2.a-b) and (3.a-c) above. These include the situative (**lithe** in 5.a), subjunctive (**athi**

[92] Cf. NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 49–55.
[93] The sequence **-za** + infinitive of the base yields one of the future tenses in Xhosa.
[94] Cf. GXOWA, N.C. *Ideophones in Xhosa*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 55–57.

in 5.b), temporal (**wakuthi** in 5.c), imperative (**yithi** in 5.d), relative (**ethe** in 5.e), and consecutive (**wathi** in 5.f).[95]

(5) a. **Ba-fik-e** **ilanga** **li-th-e**
2.SA-arrive-PERF 5.sun 5.SA.SIT-THI-PERF
futhu
be.very.hot
They arrived while it was very hot

b. **Ba-funa** **ukuba** **uSigpho** **a-thi**
2.SA-want that 1a.Sipho 1a.SA.SUBJ-THI
tu
be.silent
They want Sipho to be silent

c. **Si-za** **ku-phumla** **wa-ku-thi** ***cwaka***
1st PL.SA.come INF-rest 3.SA-TEMP-THI
umoya
be.calm 3.air
We will rest when the wind calms down

d. **Yi-thi** ***vu***!
IMP-THI sit.down
Sit down!

e. **Lenkwenkwe** **e-th-e** ***cwaka***
DEM.9.boy 9.SA.REL-THI-PERF be.quiet
ngu-mdakwethu
1.COP-1.my.brother
This boy that is quiet is my brother

f. **USipho** **wa-fika** **wa-thi**
1a.Sipho 1a.SA.PAST-arrive 1a.SA.CONS-THI
ngqwa **umntu**
hit 1.person
Sipho arrived and hit a person (with the palm of the hand)

It should be noted that the so-called "long" forms of certain verbal tenses are disallowed in cases where the verb **thi** is accompanied by an ideophone, contrary to their common presence with other verbs, if such verbs are not followed by certain types of arguments and adjuncts.[96] First, in the present

[95] For a review of such constructions consult GXOWA, N.C. *Ideophones in Xhosa*, pp. 27–42; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 43–48.

[96] Cf. GÜLDEMANN, T. When 'Say' Is Not Say: The Functional Versatility of the Bantu Quotative Marker ti with Special Reference to Shona. In GÜLDEMANN, T.,

tense, the use of the long form **-ya-** is ungrammatical (**uthi chu** 'he is walking slowly' in 6.a). In ideophones, the infix **-ya-** is employed only in cases of object agreement.[97] Second, the long form of the perfect-perfective ILE tense (i.e. **-ile**) is disallowed in a complex predicate composed of **thi** and an ideophone. Inversely, the "short" variant in **-e** is the only grammatical one (**ndithe chu** 'I have walked slowly' in 6.b).[98] Third, in the relative, the morpheme **-yo** cannot be suffixed to **thi** in its uses with ideophones (**othi gqi** 'who arrives suddenly' in 6.c).[99] This suggests that ideophones influence the morphology of the inflected verb in a manner similar to certain arguments and adjuncts. According to an alternative explanation, ideophones exert a focusing force. That is, they prevent the verb from appearing in the long form typical of predicate/predication focus.[100]

(6) a. **USipho** **u(*-ya-)thi** ***chu***
1a.Sipho 1a.SA(-PRES-)THI walk.slowly
Sipho is walking slowly

b. **Ndi-th-e** **(*ndi-th-ile)**
1st SG.SA-THI-PERF (1st SG.SA-THI-PERF.LONG)
chu
walk.slowly
I have walked slowly

c. **Umfana** **o-thi(-*yo)** ***gqi***
1.young.man 1.SA.REL-THI(-REL) arrive.suddenly
um-hle
1.SA-beautiful
The young man who arrives suddenly is beautiful

In the "remote" past tense (the A past), the verb **thi** exhibits an alternative variant, in addition to the regular forms mentioned above. This variant is a

VON RONCADOR, M. (eds.). *Reported Discourse: A Meeting Ground for Different Linguistic Domains*, 275.

[97] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 21; GXOWA, N.C. *Ideophones in Xhosa*, pp. 20–22.

[98] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 21. Note a similar phenomenon in Zulu. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu,* p. 140.

[99] GXOWA, N.C. *Ideophones in Xhosa*, pp. 37, 54.

[100] GÜLDEMANN, T. When 'Say' Is Not Say: The Functional Versatility of the Bantu Quotative Marker ti with Special Reference to Shona. In GÜLDEMANN, T., VON RONCADOR, M. (eds.). *Reported Discourse: A Meeting Ground for Different Linguistic Domains*, p. 275.

coalesced or contracted form, in which the radical exponent **th-** of the verb **thi** is absent (in diachronic terms, it is lost) and a subject agreement morpheme merges with the final stem vowel **-i** of the verb. For instance, in (7), the A past tense of **thi**, i.e. **wathi**, yields the form **wee**.[101] Such forms may be understood as a more advanced stage of grammaticalization, in which the original agglutinative structure has evolved into a fused one, and the original segmentability of the morphemes has been compromised. As a result, the ideophone appears "as if it were" immediately preceded by a TAM marker, thus giving the impression of being inflected, since in Xhosa, the person/number/class inflection of the verb is expressed by prefixes with a (C)V structure.[102]

(7)	**Wee**	***shwaka***	**umtwana**
	1.SA.PAST(THI)	disappear	1.child
	The child disappeared		

The presence of **thi** also warrants the use of ideophones in negative counterparts of all the TAM categories mentioned above.[103] That is, as was the case of verbal inflections, **thi** is the bearer of the idea of polarity (**awathanga** 'they did not disappear' in 8.a). The main difference between the negative uses of the [**thi** + ideophone] structure and the other negative verbal constructions pertains to the form of the nominal objects. In Xhosa, the object typically loses its class pre-prefix if the verb appears in the negative (compare **amanzi** in **Intombi ibilisa amanzi** 'The girl boils water' with **manzi** in **Intombi ayibilisi manzi** 'The girl boils no water').[104] Contrary to this rule, if the [**thi** + ideophone] configuration is negated, the class pre-prefix of the object is preserved (see **iibothile** 'bottles' in 8.b).[105] Accordingly, the presence of the ideophone impedes the negative form of the verb **thi** to exert an effect on the object that is otherwise typical in Xhosa, i.e. the loss of a class pre-prefix.

[101] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 19; DU PLESSIS, J.A., VISSER, M. *Isintaksi yesixhosa* [Xhosa Syntax], p. 36; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*, p. 13.
[102] The prefix of the 1st person singular **ndi-** exceptionally exhibits the form CCV.
[103] For a comprehensive review consult NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 57–62.
[104] RIORDAN, J. et al. *Lumko Xhosa Self-Instruction Course*, p. 126.
[105] Cf. GXOWA, N.C. *Ideophones in Xhosa*, p. 44.

(8) a. **Amaqabane** **awa-th-anga**
6.comrade NEG.6.SA-THI-NEG.PAST
Tshabalala **akufika** **amapolisa**
Disappear arriving 6.police
The comrades did not disappear when the police arrived

b. **Unoshibini** **aka-thi** ***qhiwu***
1a.shebeen.owner NEG.1a.SA-THI hold
iibothile **zotywala**
10.bottle of.alcohol
The shebeen owner does not hold bottles of alcohol

In contrast to **thi**, the verb **tsho** only hosts subject prefixes of the remote A past (see example 9 below). According to my informants, if object suffixes and/or TAM affixes other than those of the A past need to be overtly expressed, the verb **thi** must be used. Similarly, the negative equivalents of [**tsho** + ideophone] sequences must be reformulated and employ the verb **thi**.[106]

(9) **Inkwenkwe** **ya-tsho** **dyumpu**
9.boy 9.SA.PAST-TSHO plunge
e-manzi-ni
LOC-6.water-LOC
'The boy plunged into the water'

4.2. Hosting derivational categories (M-2)

Given their predicative and adverbial use (see Section 4.1 above; consult also the sections dedicated to syntax in the second part of the study), ideophones could be marked by two types of derivational affixes: verbal affixes and adverbial affixes. The subsequent discussion will demonstrate that Xhosa ideophones are unable to, by themselves, host derivational affixes that are otherwise productive in verbs and adverbs in the Xhosa language.[107]

In predicative uses of ideophones, derivational affixes can only appear in the morphology of the verb **thi**, as was the case of inflections and polarity discussed in the previous section. Accordingly, **thi** – not the ideophone itself – is the bearer of derivational categories such as the applicative EL (**bawathele** in 10.a),

[106] Cf. WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 20.
[107] The same holds true for Zulu. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*; VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224.

reciprocal AN (**athana** in 10.b), neuter-passive EK (**zitheka** in 10.c), passive W (**luthiwe** in 10.d), and reflexive ZI (**sizithe** in 10.e).[108]

(10) a. **Abafana** **ba-wa-th-el-e** ***khucu***
2.young.man 2.SA-6.OA-THI-APPL-PERF clear.away
onke **amagwinya**
6.all 6.fat.cakes
The young men cleared away all the fat cakes

b. **Amakhwenkwe** **a-th-ana** ***gadla-gadla***
6.boy 6.SA-THI-REC wrestle
ekupheleni **komdlalo**
after of.3.game
The boys wrestled each other after the game

c. **Zi-th-eka** ***qwatha***
8.SA-THI-NEUT be.broken
They are broken down

d. **Usana** **lu-th-iw-e**
11.child 11.SA-THI-PASS-PERF
mfixi **yi-ngqele**
stuff 9.COP-9.cold
The child is stuffed up with a cold

e. **Isigulana** **si-zi-th-e** ***ntla***
7.patient 7.SA-REFL-THI-PERF glance
e-sipili-ni
LOC-7.mirror-LOC
The patient glanced at himself in the mirror

In contrast to other predicates, the [**thi** + ideophone] structure cannot host the causative derivational affix IS. Rather, the presence of an overt object distinguishes a transitive, causative use (**-thi phili iglasi** 'smash a glass' in 11.a) from an intransitive use (**-thi phili** 'be smashed' in 11.b; see the section dedicated to syntax in the second part of this study).[109]

[108] Cf. WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 17-18; GXOWA, N.C. *Ideophones in Xhosa*, pp. 68–85; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 131–134, 158–165, 169–174, 178–181, 185–187.
[109] Cf. NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 152–156; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*.

(11)	a.	**Nda-yi-thi**	***phili***	**iglasi**
		1st SG.SA.PAST-9.OA-THI	smash	9.glass
		I smashed a glass		
	b.	**Iglasi ya-thi**	***phili***	
		9.glass 9.SA.PAST-THI	be.smashed	
		The glass (got) smashed		

Similarly, in their adverbial uses, ideophones are never accompanied by the adverbializer **ka-** (e.g. (***ka)dyumpu** 'in a splashing manner' in 11),[110] which derives various adverbs of manner in Xhosa.[111] This means that, when used as an adverb, the "bare" ideophone must be employed (i.e. **dyumpu** in 12).

(12)	**Ndi-w-e**	**(*ka)*dyumpu***	**e-manzi-ni**
	1st SG.SA-fall-PERF	splash	LOC-6.water-LOC
	I have fallen in a splashing manner in the water		

Although ideophones do not host derivational affixes that are typical of and productive in verbs and adverbs, they may contain segmentable parts (e.g. recurrent partials and the ideophonizing suffix **-iyani**) or resort to morphological processes (e.g. reduplication) – these other classes of derivational phenomena will be dealt with in the next two sections.

4.3. Ideophones as roots – the derivation of ideophones from other word classes (M-3)

In Xhosa, various ideophones constitute primary roots – or stems functioning as roots – e.g. **bha** 'place a flat object', **bhe** 'completely deserted', **ca** 'mention disrespectfully the name of a senior', **cwe** 'cut off a thin piece of skin; be full to the brim', **dlu** 'become exposed, reveal', **go** 'of a sparrow – snatch quickly an insect', **ju** 'stub; finish upa liquid', **lom** 'be equal', **nqu** 'be done completely', **qa** 'address by name whom one should', **xhi** 'exude a liquid', **za** 'be scattered all over', **zum** 'of a structure – collapse when drenched with rain', and many others.[112]

[110] GXOWA, N.C. *Ideophones in Xhosa*, p. 116.

[111] Cf. DU PLESSIS, J.A. *IsiXhosa 4*; DU PLESSIS, J.A., VISSER, M. *Isintaksi yesixhosa* [Xhosa Syntax].

[112] Cf. JORDAN, A.C. *A Phonological and Literary Study of Literary Xhosa*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, p. 207. Zulu ideophones are analyzed in the same manner, i.e. as roots or as primary stems (MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In

This is related to the fact that ideophones do not exhibit the derivational morphemes discussed in the previous section. However, as already mentioned, ideophones may be morphologically segmentable. Probably, the most evident cases of segmentability involve recurrent partials, e.g. **-bhV**, **-phV**, **-dlV**, **-hlV**, **-kV**, **-nyV**, **-thV**, **-tyV**, **-xV**, **-shVntshV**, **-hlVhlV**, **-bVbV**, **-phVphV**, and especially **-lVlV**. Although such elements appear to be "added" to what could be viewed as a root, they do not have a genuine morphemic status, at a synchronic level, for instance creating new meanings or functions. This holds true even for **-lVlV** (used otherwise as a reversive suffix in Xhosa), which is by far the most common among all the partials.[113]

For most ideophonic lexemes, their derivation from verbs, nouns, and other lexical classes, cannot convincingly be demonstrated.[114] It is, inversely, verbs and nouns that are, more likely, drawn from ideophones through a range of derivational processes available to Xhosa speakers. For example, verbs seem to be derived from ideophones by inserting morphemes such as **-ka** (e.g. **xum** 'of a noise – fall suddenly' > **xumka** 'stop'),[115] **-la** (e.g. **bathu** and **bathu-bathu** 'take handfuls from something' > **bathubathula** 'kiss'), **-za** (e.g. **pheku** 'feint, make a feint against someone, hit' > **phekuza** 'ibid.'), **-luka**, **-lula** and **-luza** (**thapu** 'appear suddenly' > **thaphulula** 'unearth something hidden'), **-mba** (**thu** 'of pain – crop up; come into view' > **thuthumba** 'throb with pains'), **-tha**, and **-m**.[116] All such derived verbs behave as ordinary verbs with regard to

VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 241–242). Overall, the vast majority of ideophones contain "a single morpheme" in Zulu (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 68).

[113] Cf. WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*. In Zulu, recurrent partials (like **-lVlV**) also lack a genuine morphemic status, although they may serve to derive ideophones from other ideophones (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, pp. 68, 70). Regarding the partials in other African languages, consult CHILDS, T. Where Do Ideophones Come from? In *Studies in the Linguistic Sciences*, 1989, Vol. 19(2), p. 65.

[114] See a similar opinion in JORDAN, A.C. *A Phonological and Literary Study of Literary Xhosa*; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 207–208; and WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 44–53.

[115] The final vowel **a** is a verbal terminative ending.

[116] See WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 44-48; GXOWA, N.C. *Ideophones in Xhosa*, pp. 123–127; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 211–214; OOSTHUYSEN, J.C. *The Grammar of isiXhosa*, pp. 283–284, 353. In my analysis of the related forms of ideophones and other lexical classes, especially verbs, I follow MSIMANG and POULOS (2001). That is, forms with more elements are regarded as derived from those that exhibit fewer elements, since in Nguni "the tendency is to add elements (such as prefixes and/or

their use, inflections, and derivations. Similarly, nouns of all classes can be derived from ideophones by adding prefixes associated with respective noun classes. This may be illustrated by the following examples: **um-xhimfi** 'boxer' (from **xhimfi** 'hit, strike'), **isi-fotho** '**‹**dent, dimple' (from **fotho** 'be dented; dent'), **ama-ndumndum** 'baritones' (from **ndum-ndum** 'make dull, humming, low-tone sound') or **u-krwecekrwece** 'irritating noise' (from **krwece-krwece** 'irritate').[117]

A sub-group of ideophones exhibits a form that is nearly undistinguishable from verbs with the distinction that the corresponding verb shows the ending **-a** instead of the ending found in the ideophone, e.g. **-u** (see **qubudu** versus **qubuda** 'turn upside-down' or **nwabululu** versus **nwabulula** 'stretch something elastic'),[118] **-e** (see **tyeke** versus **tyeka** 'of something straight – bend out of its original position'; **rhoxe** versus **rhoxa** 'move back'; **qwele** versus **qwela** 'finish completely'; **qhale** versus **qhala** 'spread out'; **shwaqe** versus **shwaqa** 'break something hard'), or **-i** (see **vithi** versus **vitha** 'break into small pieces').[119] Although, in such cases, the primary form may be the ideophone – verbs being thus derived by substituting the final vowel exhibited in the

suffixes) to the original form — rather than delete" (See MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 243).

[117] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 52; GXOWA, N.C. *Ideophones in Xhosa*, pp. 117–122; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 208–211. Similarly, in Zulu, ideophones "do not show any derivation from any other form or word category" with two exceptions (MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 242). They are however often derived from other ideophones (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*; see Sections 4.5 and 4.6 below). For an opposite view, see VON STADEN (1977), who claims that Zulu ideophones are overwhelmingly derived from verbs, and that they may host derivational morphemes (VON STADEN, P. Some Remarks on Ideophones in Zulu. In *African Studies*, 1977, Vol. 36(2), pp. 195–224; see also CHILDS, T. Where Do Ideophones Come from? In *Studies in the Linguistic Sciences*, 1989, Vol. 19(2), pp. 55–78). Similar to Xhosa, there are also various mechanisms that enable the derivation of other word classes from ideophones in Zulu (cf. CHILDS, T. Where Have All the Ideophones Gone? The Death of a Word Category in Zulu. In *Toronto Working Papers in Linguistics*, 1996, Vol. 15, p. 95).

[118] This contrast applies to various ideophones in **-lulu**: **swabululu** versus **swabulula** 'open and stretch'; **bebululu** versus **bebulula** 'peel off''; **nyobululu** versus **nyobulula** 'loosen, untie'; **wululu** versus **wulula** 'unravel'.

[119] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 49-50; DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*.

ideophone by the typical verbal terminative ending **-a** – the precise derivational mechanism and especially its direction is uncertain.[120] Equally possible, at least theoretically, is derivation from verbs to ideophones with the final vowel being assimilated to the previous one(s) in ideophones.[121] The same applies to certain ideophones that end in **-a**. Such ideophones display a form that is identical to a respective verb, e.g. **sinalala** 'be helpless, unable to move' or **tyambalala** 'be spread out flat on the ground'. It is impossible to determine whether the verb is secondary to the ideophone, or, on the contrary, whether it is the ideophone that is derived from the verb. In any case, the derivation of ideophones from verbs through the replacement of the final vowel or by using the verbal base "ideophonically" is presently unproductive in Xhosa.[122]

The important exception to the radical and non-derivational nature of ideophones in Xhosa are forms ending in **-iyani**, which draw on verbal bases.[123] For instance, by adding the suffix **-iyani**, the verbal root **bona** 'see' may be ideophonized yielding the form **boniyani**.[124]

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[120] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 50-51; NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 207–208.

[121] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 49. Zulu has a number of ideophones that are highly similar to verbal bases. For instance, ideophones ending in **-zi** differ from a verb by exhibiting the final vowel **-i** instead of **-a**: **dindilizi** versus **-dindiliz-** 'lie naked/ exposed'. As in Xhosa, the derivational mechanism of such forms is debatable. Some scholars derive ideophones from verbs, while others propose an opposite direction. See MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 242–243.

[122] WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 49, 51. As in Xhosa, this manner of the formation of ideophones is not productive in Zulu. See MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, p. 241.

[123] NOKELE, A. *The Syntax of the Ideophone in Xhosa*, pp. 107–113, 208.

[124] The suffixation of **-iyane** (or its cognates) also constitutes the (virtually only) productive means of deriving ideophones from verbal roots in Zulu (MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 242–243) and other Nguni and/or Southern Bantu languages, e.g. Ndebele (ZONDO, J. Some Aspects of the Ideophone in Ndebele. In *Zambezia*, 1982, Vol. 10(2), pp. 111–126) and Tsonga (DU PLESSIS, J.A. *Comparative Syntax: The Structure of the Verb Phrase in the African Languages of South Africa (Bantu Languages)*, p. 14). Overall, the derivative relationship of ideophones and verbs is complex in Xhosa and Zulu. In some cases, ideophonic roots seem to be primary; in other cases, ideophones are derived from verbs; in yet other instances, derivational processes are uncertain. Moreover, derivational

Another morphological process that enables speakers to generate new ideophones can be encompassed under a broad term of repetition. This usually involves reduplication, multiplication, or their partial and/or imprecise variants. By using various repetitive patterns, it is possible to derive new ideophones from ideophones that already exist, or to create entirely new ideophones that onomatopoeically mimic extra-linguistic reality.[125] In the next section, I will describe such repetitive patterns exhibited by ideophones in more detail.

4.4. Reduplication and multiplication (M-4)

Ideophones make extensive use of repetition. By far, the most common is reduplication. In many cases, reduplication allows the derivation of ideophones from non-repetitive ideophonic roots/bases, e.g. **bafu-bafu** 'eat greedily' from **bafu** 'take a large mouthful of food', **bathu-bathu** 'take several handfuls of something; draw a number of puffs from a pipe' from **bathu** 'take a handful of something', **benge-benge** 'flash, glitter' from **benge** 'give a sudden flash', **gximfi-gximfi** 'strike with fists, pound' from **gximfi** 'strike or stamp on something soft', **lwabi-lwabi** 'eat greedily; waste, spend lavishly' from **lwabi** 'throw food into the mouth', **nqakra-nqakra** 'make a clicking sound' from **nqakra** 'ibid.', **qumfu-qumfu** 'crush with an explosive sound' from **qumfu** 'crush between the nails', and **wambu-wambu** 'walk like a stork' from **wambu** 'cover'. A single syllable can also be repeated, yielding the following bi-syllabic reduplicative ideophones: **fefe** 'drizzle, sprinkle' **gaga** 'come suddenly', **gogo** 'walk with difficulty', **jiji** 'turn suddenly', etc. Approximately 14% of the ideophones exhibit the above-mentioned type of a full and precise reduplication. Another repetitive mechanism often found in ideophones is multiplication, i.e. a multifold repetition of a segment. Often, the repetition is threefold, e.g. **bha-bha-bha** 'flap the wings', **bhukulu-bhukulu-bhukulu**

mechanisms may be different when viewed from a synchronic or diachronic perspective. As explained above, ideophones cannot currently be derived from verbs by substituting the verbal endings **-a** by **-u**, **-i**, or **-e**, or by using the verb ideophonically. The only manner of forming ideophones from verbs is through the suffix **-iyani**. Furthermore, the fact that "not a single ideophone can be set up in its phonologic form" for Proto-Bantu (MEEUSSEN, A.E. Bantu Grammatical Reconstructions. In *Africana Linguistica*, 1967, Vol. 3. p. 115) – while many corresponding verbs can – may suggest the secondary nature of ideophones with regard to verbs. However, the absence of shared Bantu ideophones may also be related to their inherent expressiveness and greater mutability. At this stage of my research, the radical or derivative character of a considerable part of ideophones in Xhosa cannot be determined with certainty.

[125] In contrast, repetitive patterns are not generally used to derive ideophones from verbs or nouns.

'roll', **chwe-chwe-chwe** 'move quickly'. Sometimes, a segment is repeated four times, e.g. **du-du-du-du** 'make a bubbling sound' and, even, five times **fa-fa-fa-fa-fa** 'of rain – fall, drizzle'. Multiplicative patterns are found in nearly 2% of all ideophones.[126]

A different repetitive mechanism is the so-called "bi-reduplication", or a simultaneous presence of two reduplicative patterns, of which the latter is often a recurrent partial, especially, **-lVlV**, e.g. **bhabhalala** 'be very wide', **bubululu** 'sidle, slip', **dwadwalala** 'of a dress – be spread when the wearer sits down', and **dedelele** 'abate, calm down'. This appears in 1% of the ideophones.[127]

Another common repetitive pattern involves partial reduplication, i.e. the presence of two identical syllables at the end or at the beginning of the ideophone. At least 11% of ideophones exhibit the repetition of two final syllables. In most cases, this type of reduplication concerns recurrent partials, such as **-lVlV**, e.g. **bhedululu** 'turn up the eyes to the point the white is shown', **bimbilili** 'gulp down', **fadalala** 'sit down limply'.[128] Other recurrent partials can be illustrated by the following examples: **bhintshintshi** 'change suddenly or unexpectedly', **bohlohlo** 'go down, diminish', **finini** 'draw the body together', **fithithi** 'have small beads of perspiration on one's nose', and **gababa** 'move back a little', **gqotsotso** 'run fast', **gqwididi** 'stumble', **guqaqa** 'kneel down', **khuphuphu** 'expose', **krwintsintsi** 'make a gurgling sound before death, death rattle', **phuncuncu** 'slip off, loose', **pòyòyò** 'stand up straight'.[129] Instances where two initial syllables are identical – contrasting with the following syllables of the word – are much less frequent. Exemplary cases are **hlohlolozi** 'push', **lolotya** 'disappear quickly into something', **nyhonyhosholo**

[126] As is already evident from the above examples, a basic (i.e. unsegmentable) ideophone and its reduplicated variant often have the same meaning (see WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 54). Repetitive mechanisms are also characteristic of ideophones in Zulu. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*; MSIMANG, C.T., POULOS, G. The ideophone in Zulu: A Re-examination of Conceptual and Descriptive Notions. In VOELTZ, E., KILIAN-HATZ, C. (eds.). *Ideophones*, pp. 243–244.

[127] All examples of these types involve the recurrent partial **-lVlV**. In such cases, a new ideophone seems to have been derived from the basic form by means of **lVlV**, e.g. **guqa** 'stop, bend' > **guqulala** 'stop, bend upon knees' (see WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, p. 62).

[128] Again, ideophones which contain recurrent partials seem to have been derived from basic ideophones (WEAKLEY, A.J. *An Introduction to Xhosa Ideophone Derivation and Syntax*, pp. 62-64). Compare with a similar phenomenon in Zulu (FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, pp. 70–78).

[129] A similar repetitive mechanism is found in ideophones in Zulu. See FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, pp. 80–82.

'be(come) anxious, depressed', **qaqampu** 'swim and splash', or **xhonkxosholo** 'stand frighten or excited'.

Apart from being exact, as in the examples provided above, all repetitive patterns may also be imprecise. In such cases, the repetition of a segment is approximate, e.g. **bembe** 'abate, calm down', **bhubhe** 'perish', **buba** 'be squashed, flatten', **cace** 'be clear', **cangce** 'tidy, put in order', **dindi** 'fall with a thud', **dladlu** 'jump back, away', **dlandlu** 'make a leap sidewards or backwards', **dlondlo** 'be higher', **dlundlu** 'reach a fair size as a child; outgrow childishness', **dundululu** 'lie prostrate'.

Certainly, both reduplication and multiplication exist in various lexical classes in Xhosa.[130] However, their derivational productivity is rather limited. It is ideophones that exhibit repetitive patterns productively and to a large extent. That is, nearly 30% of ideophones exhibit some type of reduplication or multiplication; for many ideophones, two variants exist – one simple and the other reduplicated or multiplicated; and repetitive patterns can be used to form new ideophonic lexemes from those that already exist (see the next section).

4.5. Openness (M-5)

Ideophones constitute a relatively open and productive category in Xhosa. This can already be inferred from the large number of ideophones found in the language. As mentioned at the end of Section 2, the number of fully or relatively stabilized ideophones – i.e. those that are shared by a number of speakers and are recognized in dictionaries, grammar books or teaching materials, thus expanding beyond idiolectal usage – ascends to circa two thousand. This means that, as far as the size is concerned, ideophones are the third most prolific lexical class in Xhosa, being only outnumbered by nouns and verbs.[131]

[130] See CASSIMJE, F. *Isixhosa Tonology: An Optimal Domains Theory Analysis*; DOWNING, L., STIEBELS, B. Iconicity. In TROMMER, J. (ed.). *The Morphology and Phonology of Exponence*, pp. 379–426; DOWNING, L. Linear Disorder in Bantu Reduplication. Talk at Workshop on the Division of Labor between Morphology and Phonology & Fourth Network Meeting, January 16–17 2009, Meertens Instituut Amsterdam.

[131] Ideophones are also numerous in Zulu. Zulu contains at least 2,600 ideophones (DOKE, C.M., VILAKAZI, B.W. *Zulu–English Dictionary*; FIVAZ, D. *Some Aspects of the Ideophone in Zulu*, p. 5), which constitutes "a massive 8.67%" of all the lexemes (DE SCHRYVER, G-M. The lexicographic treatment of ideophones in Zulu. In *Lexikos*, 2009, Vol. 19, p. 38).

Crucially, the size of the category of ideophones can always be increased and new ideophones may constantly be created. This holds especially true for onomatopoeic ideophones. When speakers are exposed to new acoustic phenomena or to new objects the sound of which they would like to imitate, innovative onomatopoeic ideophones are routinely developed. The production of new ideophones typically originates in individual speakers who wish to dramatize their speech and depict their experiences to the listeners in an expressive manner.[132] Accordingly, the ideophones that depict the sound of a computer mouse (**klik-klik**), an airplane (**phiyúú** pronounced with a rising tone and a long vowel **u**), or a Volkswagen car (**vra-vra-vra pha**) have been recently coined.

There are three formal manners with which new ideophonic lexemes may be introduced to Xhosa. First, by analogy to the ideophones that already exist in the language, speakers may exploit the many types of expressive derivational mechanisms, e.g. vowel lengthening, repetition, and tonal patterns. Given the pervasiveness of vocalic and tonal harmony, low tone, and reduplication in ideophones in Xhosa, it is not surprising that most ideophonic novelties coined idiolectally exhibit the form $C_aV_b(C_c)$-$C_aV_b(C_c)$ (e.g. **pùf-pùf** 'be depressed, down') and especially $C_aV_bC_aV_b$-$C_aV_bC_aV_b$ (e.g. **fùtshù-fùtshù** 'have sex'). Second, speakers may apply ideophones that are already available in the language to imitate new, albeit similar, phenomena through various meaning-extension mechanisms, e.g. metaphor or metonymy. For instance, **gqum** which expresses the idea of exploding is metaphorically extended to depict farting in idiolectal uses. Third, the class of ideophones may also be expanded through borrowing. Indeed, several ideophones have been transferred to Xhosa from Khoekhoe languages, e.g. **cilikithi** 'rush out unexpectedly, rise up suddenly' from **|khiri** and **cithi** 'coming out, rising suddenly into sight' from **|khī**.[133]

[132] Cf. GXOWA, N.C. *Ideophones in Xhosa*, p. 143.

[133] LOUW, J.A. The Influence of Khoi on the Xhosa Language. In *Limi*, 1974, Vol. 2(2), pp. 45–62; LOUW, J.A. The Influence of Khoi on Xhosa Morphology. In DE KLERK, W., PONELIS, F.A. (eds.). *Gedenkbundel H. J. J. M. van der Merwe*, 87–95; ANDRASON, A. The "Exotic" Nature of Ideophones – From Khoekhoe to Xhosa. In *Stellenbosch Papers in Linguistics*, 2017, Vol. 48, pp. 139–150; cf. CHILDS, T. Where Do Ideophones Come from? In *Studies in the Linguistic Sciences*, 1989, Vol. 19(2), pp. 68–69.

5. Summary and prelude to Part 2

The present study examines the compliance of Xhosa ideophones with the extra-systematic properties that structurally distinguish the prototype of an ideophone from other lexical classes across languages. In this article – the first in a series of two – I familiarized the reader with the methodological issues of my research and described the evidence related to the phonology and morphology of ideophones in Xhosa. In the next article, I will describe the syntactic properties of Xhosa ideophones and evaluate all the evidence that has been introduced in the two papers within the adopted framework. Ultimately, I will answer the research question and explain the contributions of this research to the general theory of ideophony.

Abbreviations

APPL – applicative; C – consonant; CONS – consecutive; COP – copulative; DEM – demonstrative; L / $_{L}$ – low tone; LOC – locative; NEG – negative; NEUT – neuter-stative; OA – object agreement; PASS – passive; PAST – (remote) A past; PERF – perfect-perfective; PRES – present; REC – reciprocal; REFL – reflexive; REL – relative; SA – subject agreement; SIT – situative; SUBJ – subjunctive; TEMP – temporal; V – vowel. Numbers refer to noun classes.

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