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Typological, Phylogenetic, and Areal Properties of Conative Animal Calls in Ewe

Abstract

This article is dedicated to conative animal calls (CACs) in Ghanaian Ewe (Kwa). The study is couched within a 'radial-network-with-prototype-effects' approach to linguistic categorisation and examines the typological features of CACs (phonetics and morphology) as well as their phylogenetic (cognate) and areal (contact-induced) properties. Drawing on previous works on CACs, fieldwork activities involving seven speakers of Ewe, and the native-speaker competence of one of the authors, a set of 17 primary CACs is identified and complemented with an open class of (poorly lexicalised) secondary CACs. The analysis of the material collected demonstrates that Ewe CACs comply with the formal features associated with the prototype of a CAC and, when treated holistically, the CAC category fulfils its typological profile. The canonicity degree exhibited by Ewe CACs closely matches that reported for another Kwa language, Akan, with some CACs being (nearly) identical in both languages. The authors argue that this lexemic similarity most likely stems from crosslinguistic tendencies and thus instantiates the phenomenon of parallel development instead of having an areal or phylogenetic motivation.

Keywords: Ewe, Kwa, conative animal calls, typology, cognancy, language contact

1. Introduction

The present article is dedicated to Ghanaian Ewe (ISO639-3 [ewe] / Glottocode ewee1241). Ewe is one of the Gbe languages that form part of the Kwa linguistic branch, which in turn belongs to the Niger-Congo realm.[1] According to a 2021 census, Ewe is spoken by 3.8 million Ghanaians or 14% of the country's population.[2] Ewe is also widely used in Togo, where it is the most spoken indigenous language and one of the languages recognised at a national level.[3] In Ghana, the Ewe mainly reside in the east: in the Volta Region close to the Togolese border.

Our study concerns one of the most under-researched parts of Ewe grammar and lexicon – as well as the grammars and lexica of Gbe and Kwa languages, more generally – namely, conative animal calls or CACs. CACs are operationally defined as (a) lexemes and lexicalised constructions that (b) are used by human speakers to make non-human animals perform determined actions and that (c), in addition to the lexemic status of words, can be employed holophrastically as self-standing non-elliptical utterances.[4] In Ewe,

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[1] Kay Williamson and Roger Blench, 'Niger-Congo', in: *African Languages: An Introduction*, eds. Bernd Heine and Dereck Nurse, Cambridge 2000; James Essegbey, 'Ewe', in: *Concise encyclopedias of language and linguistics*, eds. Keith Brown and Sarah Ogilvie, Amsterdam 2006, pp. 408–409; Felix Ameka and Kropp Dakubu, 'Introduction' in: *Aspect and Modality in Kwa Languages*, eds. Felix Ameka and Mary E. Kropp Dakubu, Amsterdam 2008, pp. 1–7; Angela Kluge, *A sociolinguistic survey of the Gbe language communities of Benin and Togo: Gbe language family overview*, SIL Electronic Survey Reports 2011; Mary E. Kropp Dakubu, 'Kwa', in: *The Oxford handbook of African languages*, eds. Rainer Vossen and Gerrit J. Dimmendaal, Oxford 2020, pp. 184–190; The (extent of) inclusion of Ewe (and the Gbe branch) in the Kwa family is still debated; see: Mary E. Kropp Dakubu, 'Kwa languages', in: *Encyclopedia of language and linguistics*, ed. Keith Brown, Amsterdam 2005, pp. 272–274. Nevertheless, most scholars accept "Kwa hypothesis" even if it is not entirely conclusive; see: Mary E. Kropp Dakubu, 'Towards a phonology of Proto-Kwa: Onwards from Stewart's "Potou-Akanic-Bantu"' (paper presented at the International Congress Towards Proto-Niger-Congo: Comparison and Reconstruction, Paris, France, September 18–21, 2012). Indeed, Ewe is considered as one of the Kwa languages in Diedrich Westermann and Margaret Bryan, *Handbook of African languages. Part II: Languages of West Africa*, London 1952; John Stewart, 'Niger-Congo, Kwa', in: *Current trends in linguistics*. *Linguistics in sub-Saharan Africa*, ed. Thomas A. Sebeok, The Hague 1971, pp. 179–212; Kay Williamson and Roger Blench, 'Niger-Congo'; James Essegbey, 'Ewe'; Felix Ameka and Kropp Dakubu, 'Introduction'; Kirill Babaev, 'О реконструкции личных местоимений в праязыке ква [O rekonstrukcii ličnyx mestoimenij v prajazyke Kva = On reconstructing personal pronouns in Proto-Kwa]', in: *Вопросы языкознания* [Voprosy Jazykoznanija] 4, 2010, pp. 81–108; Angela Kluge, *Sociolinguistic survey of Gbe language communities*; Gbegble Nada and Jan Nuyts, 'The expression of epistemic modality in Ewe', *Africana Linguistica* 18 (2012), pp. 133–168; Mary E. Kropp Dakubu, 'Kwa'; Doreen Enyonam Esi Yegblemenawo and Stella Afi Makafui Yegblemenawo, 'Doc-umenting praise names ahanoŋkɔ among Ewes: A socio-semantic perspective', in: *Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics*, eds. Akinbiyi Akinlabi et al., Berlin 2021, pp. 331–347. It is also classified as Kwa Volta-Congo by Glottolog (see: 'Spoken L1 Language: Ewe', Viewed 5 June 2024, https://glottolog.org/resource/languoid/id/ewee1241), a linguistic family that, similar to the traditional Kwa group, includes Potou-Tano and Gbe branches, and thus Akan and Ewe – which is important for the present study (see further below).

[2] 'Ghana Statistical Service', Viewed 5 June 2024, www.statsghana.gov.gh.

[3] James Essegbey, 'Ewe'.

[4] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype', *Lodz Papers in Pragmatics* 37/1 (2021), pp. 3–40; Alexander Andrason and Admire Phiri, 'Talking

CACs have only been mentioned by Felix Ameka, who more than 30 years ago dedicated four pages of his PhD dissertation to these types of expressions.[5] To be exact, Ameka lists 8 CAC lexemes in total and explicates their meaning with the apparatus of Natural Semantic Metalanguage.[6] The description only includes summonses and dispersals and is mostly focused on primary CACs (referred to as "phonations").[7] Other manners of calling animals are also mentioned, especially the use of natural-kind labels and proper names in a summoning function, although it is unclear to what degree these are members of the CAC category or mere vocatives.

More recently, CACs have systemically been analysed in three closely related varieties (dialects) of another Kwa language, Akan: Asante, Bono, and Fante. Duah, Andrason, and Antwi tested more than a hundred Akan CACs – between 30 and 40 per variety – for their pragmatic, semantic, phonetic, and morphological compliance with a crosslinguistic prototype of CACs and examined the overall extent of their cognancy.[8] This study demonstrates that although the CAC category in each of the three Akan varieties closely matches the CAC prototype by complying with almost all features associated with it, the cognancy of CACs in Asante, Bono, and Fante and their heritability are low. While this seems to "corroborate […] the hypothesis according to which CACs tend to be different even in (closely) related languages,"[9] the authors conclude that many more comparative studies are needed. These should analyse CACs not only in the dialects of a language (as is the case of Asante, Bono, and Fante) but also in (more) distant members of a language family (as is the case of Akan and Ewe).

Although, as mentioned above, the category of CACs is under-researched, our typological knowledge has continually been increasing.[10] This advancement also pertains

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to animals in a moribund language: Pragma- semantics, phonetics, and morphology of conative animal calls in Tjwao', *Linguistic Variation* 23/2 (2023), pp. 318–342; Bernd Heine, *The grammar of interactives*, Oxford 2023. Strictly speaking, humans are part of the animal kingdom too. Hence the modifier 'non-human' in this sentence. However, for the sake of simplicity, we will omit the term 'animal' when referring to animals in the remaining portions of the article.

[5] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices' (PhD diss., Australian National University, 1991).

[6] The section discussing CACs (and interjections) was subsequently repeated verbatim in an article published a year later; see: Felix Ameka, 'The meaning of phatic and conative interjections', *Journal of Pragmatics* 18/2–3 (1992), pp. 245–271.

[7] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 489. The terms 'primary' and 'secondary' used with reference to CACs will be explained in section 3.

[8] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls: Asante, Bono, and Fante', Talk at the Semantics Colloquium, Institute für Linguistik, Goethe Universität Frankfurt, 4 May, 2023. The Akan data may be consulted in Alexander Andrason, Anna Luisa Daigneault, Maya Hendrix, Rebecca Pizzitola and Anusha Somu, *A living database of conative animal calls*, Salem 2024.

[9] Reginal Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls', p. 31.

[10] See, especially: James Bynon, 'Domestic animal calling in a Berber tribe', in: *Language and man: Anthropological issues*, eds. William McCormack and Stephen Wurm, The Hague 1976, pp. 39–66; Ewa Siatkowska, *Zachodniosłowiańskie zawołania na zwierzęta: stan obecny, funkcje historyczne, stosunek do systemu językowego* [*West-Slavonic animal calls: Present situation, historical functions, and relationship with the language system*],

to the phylogenetic behaviour of CACs mentioned above.[11] In contrast, very little is known about the areal properties of CACs. Current research suggests that CACs can be borrowed but their borrowability is overall a peripheral phenomenon, especially when compared to other sources of CACs (i.e., language-internal primary and secondary CACs). In other words, although in most languages analysed thus far, one finds CAC loanwords (with apparent preference for the transfer of secondary rather than primary CACs) and although some CACs may spread across adjacent areas, this seems to pertain to a highly limited set of lexemes and/or languages.[12]

Given the above-mentioned gaps in Ewe and CAC scholarship, the present article has the following objectives. First, we aim to expand our knowledge of CACs in Ewe. We will analyse a larger set of primary and secondary lexemes and constructions than has been done thus far (i.e., our study includes the so-called directionals and CACs unrelated to motion in addition to summonses and dispersals) and focus on the examination of the formal properties of CACs (i.e., we study the phonetics and morphology of CACs in addition to semantics).[13] Second, we aspire to contribute to the typology of CACs. We

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Warszawa 1976; Fernando Poyatos, *Paralanguage: A linguistic and interdisciplinary approach to interactive speech and sounds*, Amsterdam 1993; Fernando Poyatos, *Nonverbal communication across disciplines. Volume II: Paralanguage, kinesics, silence, personal and environmental interaction*, Amsterdam 2002; Anna Wierzbicka, *Cross-cultural pragmatics: The semantics of human interaction*, Berlin 2003; Alexandra Aikhenvald, *Imperatives and commands*, Oxford 2010; Azeb Amha, 'Directives to humans and to domestic animals: The imperative and some interjections in Zargulla', in: *Proceedings of the 5th International Conference on Cushitic and Omotic Languages*, *Paris, 16–18 April 2008*, eds. Marie-Claude Simeone-Senelle and Martine Vanhove, Köln 2013, pp. 211–229; T. Denisova and L. Sergeev, 'О некоторых особенностях верхового диалекта в говорах чувашской диаспоры Ульяновской области [On some dialectal features in the varieties spoken by the Chuvash diaspora of the Ulyanovsk region]', in: *Вестник ЧГПУ им. И. Я. Яковлева*, 2015, pp. 32–37; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Anni Jääskeläinen, 'Eläinten omat sanat: Eläimille suunnatut interjektiot ihmisen ja eläimen vuorovaikutuksen osina', in: *Kieli ja elain. Vuorovaikutusta ja kielioppia monilajisissa yhteisöissä*, eds. Rea Peltola, Anni Jääskeläinen and Katariina Harjunpää, Helsinki 2021, pp. 133–184; Alexander Andrason, 'Conative animal calls in Xhosa: Testing the prototype', *Africana Linguistica* 28 (2022), pp. 25–54; Alexander Andrason and Admire Phiri, 'Talking to animals in a moribund language: Pragma-semantics, phonetics, and morphology of conative animal calls in Tjwao', *Linguistic Variation* 23/2 (2023) pp. 318–342; Bernd Heine, *Grammar of interactives*. For a more detailed account of research on CACs, see: 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals', *Linguistica Silesiana* 44 (2023), pp. 73–103.

[11] Ewa Siatkowska, *West-Slavonic animal calls*; Sybilla Daković, *Interiekcje w języku polskim, serbskim, chorwackim i rosyjskim. Opis i konfrontacja* [*Interjections in Polish, Serbian, Croat, and Russian. Description and comparison*], Wrocław 2006; Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'; Alexander Andrason and Pius W. Akumbu, 'Towards a linguistic analysis of conative animal calls in Babanki and Bum (Grassfields languages of Cameroon)', *Kervan: International Journal of Afro-Asiatic Studies* 28/1 (2024), pp. 3–28.

[12] James Bynon, 'Domestic animal calling in a Berber tribe'; Daković, *Interiekcje w języku polskim, serbskim, chorwackim i rosyjskim*; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason, 'Conative animal calls in Xhosa'; Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[13] Due to the lack of sufficient corpora involving CACs, we do not study the syntax of Ewe CACs.

will compare Ewe data with what is known about CACs in Akan (a distantly related but geographically adjacent language with which Ewe has entertained an "intense […] contact" "over the past several hundred years")[14] and other languages of the world. In particular, by contrasting Ewe and Akan data, we seek to shed light on the phylogenetic status (cognancy) of CACs in the two languages (or language clusters) as well as their potential areal relationship.

To achieve these goals and following the recent wave of publications dedicated to CACs, we will couch our study within a 'radial-network-with-prototype-effects' approach to linguistic categorisation.[15] Accordingly, we respond to the following research question: What is the typological profile of CACs in Ewe. This enquiry warrants three more specific questions: (a) Do Ewe CACs comply with the formal (phonetic and morphological) features postulated as inherent to the crosslinguistic prototype of a CAC? (b) Does the extent of their canonicity coincide with that identified in Akan? (c) Do CACs in Ewe and Akan exhibit shared phylogenetic (cognate) and/or areal properties?

The article will be structured in the following manner: in section 2, we present our conceptual framework and data-collection method; in section 3, we introduce original Ewe evidence, embedding it within Akan and crosslinguistic evidence; in section 4, we evaluate our findings against the theoretical backdrop adopted by us, respond to the research question(s), and conclude the study.

2. Theoretical backdrop

As in the recent works on CACs in Kwa[16] and other languages,[17] we make use of a linguistic-categorisation framework referred to as a radial network with prototype effects.[18] This means that the category of CACs – in Ewe, Kwa, or other language systems – is understood as a network of real-world exemplars structured conceptually and topographically given the extent of their compliance with an ideal prototype. Exemplars that comply with the prototype fully are canonical and located in the centre of the category; exemplars that comply with the prototype partially are semi-canonical and located in the areas more distant from the categorial nucleus; exemplars that comply with the prototype

[14] Felix Ameka and Kropp Dakubu, 'Introduction', p. 3.

[15] See: Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Bernd Heine, *Grammar of interactives*.

[16] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[17] See especially: Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander 'Conative animal calls in Xhosa'; Alexander Andrason 'The non-arbitrariness of some conative calls used to chase animals'; Bernd Heine, *Grammar of interactives*.

[18] Eleanor Rosch and Carolyn B. Mervis, 'Family resemblances: Studies in the internal structure of categories', *Cognitive Psychology* 7 (1975), pp. 573–605; John Taylor, *Linguistic categorization*, Oxford 2003; William Croft and Alan Cruse, *Cognitive Linguistics*, Cambridge 2004; Vyyan Evans and Melanie Green, *Cognitive linguistics: An introduction*, Edinburgh 2006; Lara Janda, 'Cognitive linguistics in the year 2015', *Cognitive Semantics* 1 (2015), pp. 131–154.

minimally are non-canonical and located in the category's peripheries. The relation that connects all the exemplars to the prototype and to each other – whether fully, semi-, or non-canonical – is of a family-resemblance type. That is, instead of being related by a single (or a few) essential feature(s), exemplars are related through a (repeatable) sequence of partial similarities that, in principle, hold for some exemplars only. However, when this overlapping-similarity operation is reiterated *n* times, *all* exemplars become connected to each other and the category becomes coherent, yet internally diverse. As a result, belonging to the category becomes gradient and ranges from full to minimal. Moreover, the category becomes connected – conceptually, topographically, and dynamically – to many other categories;[19] and in the case of CACs, to other types of interactives.[20]

While all elements of the categorial network are relevant – this includes all the exemplars regardless of their canonicity degree as well as the rules guiding the radiation paths out of the centre to the periphery and thus violations and exceptions – the position of the prototype is 'privileged'. It is so because the prototype constitutes a 'meridional' in relation to which the conceptual and topographical distance of all the members is measured. The prototype itself is defined cumulatively as a set of properties. The prototypical features of CACs as well as the motivations for their association with the prototype can be consulted in several publications dedicated to CACs in the languages of Africa written by one of the authors of the present article.[21] Here we mention the prototypical features relevant for the present study, i.e., those that are related to the form of CACs. Regarding phonetics, CACs are mono-syllabic, exhibit extra-systematic sounds (IPA and non-IPA) and phonotactics, and are accompanied by marked modulations (e.g., volume, speed, pitch, and melody). They also draw on consonantal material to a greater extent than is the case of the lexical classes of so-called sentence grammar (i.e., lexical classes of nouns, verbs, adjectives, adverbs, pronouns, numerals, and adpositions).[22] Regarding morphology, CACs are mono-morphemic, do not contain morphemes (inflectional, derivational, or compounded) other than the root, and are often realised in replications (this is typical of summonses, whereas dispersals tend to be punctual).

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[19] Eleanor Rosch and Carolyn B. Mervis, 'Family resemblances'; John Taylor, *Linguistic categorization*; William Croft and Alan Cruse, *Cognitive Linguistics*; Vyvyan Evans and Melanie Green, *Cognitive linguistics: An introduction*; Lara Janda, 'Cognitive linguistics in 2015'.

[20] Cf. Bernd Heine, *Grammar of interactives.*

[21] See: Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason 'Conative animal calls in Xhosa'; Alexander Andrason 'The non-arbitrariness of some conative calls used to chase animals'; Alexander Andrason and Admire Phiri, 'Talking to animals in a moribund language'.

[22] Regarding the distinction between sentence grammar and interactive grammar, consult: Bernd Heine, *Grammar of interactives*; see also: Bernd Heine, Tania Kuteva and Gunther Kaltenböck, 'Discourse grammar, the dual-process model, and brain lateralization: Some correlations', *Language and Cognition* 6/1 (2014), pp. 146–180; Bernd Heine, Tania Kuteva and Haiping Long, 'Dual-process frameworks on reasoning and linguistic discourse: a comparison', in: *Grammar and cognition: Dualistic models of language structure and language processing*, eds. Alexander Haselow & Gunther Kaltenböck, Amsterdam 2020, pp. 59–89.

The evidence that we will discuss in this article has been gathered in a threefold manner: desk research, native-speaker competence, and fieldwork. We started our data collection by reviewing scholarly literature: Westermann, Capo, Aziaku, and, especially, Ameka.[23] Concurrently, we have consulted the database of Akan CACs compiled by Duah, Andrason, and Antwi.[24] Next, we drew on the native-speaker competence of one of the authors of this article, who had grown up in both the south (in the town of Aŋlɔga) and centre (in the capital Ho) of the Volta Region and is equally proficient in the Aŋlɔ and Ewedome varieties of Ghanaian Ewe.[25] Subsequently, we conducted semi-structured interviews with seven Ewe speakers. Most of them reside in the south of the Volta Region (in Keta and Aŋlɔga) and are Aŋlɔ speakers. Nevertheless, Ewe speakers residing in Ho were also consulted. Once our database was compiled and certain tendences as well as problems became evident, we conducted follow-up interviews to verify and/or refine our observations.[26] In total, 8 speakers have contributed to the dataset underlying this paper. Although our participants lived at least parts of their life in rural areas (where their exposure to animals was intense and varied), were both female and male, and their age ranged from young adulthood to elderly, the evidence collected certainly does not encapsule the entire richness of the Ewe language, nor does it reflect the repertoire of all Ewe speakers. To elicit CACs, we used the operationalised definition introduced in section 1 and the 4-page-long guidelines developed for our previous work on CACs in other languages, although carefully adjusted to the reality of the Ewe community. These guidelines included: the types of animals that were expected to be the addressees of CACs given the ecosystem in which the Ewe of Aŋlɔga and Ho live; the types of actions that were likely to be expressed by CACs or the situations in which one would expect CACs to appear; and the various types of encodings that could be exploited by CACs. This means that our data collection activities were preceded by a series of interviews in which the members of the Ewe community discussed the ways in which they (had) interacted with domestic and wild animal species. Most data were gathered over the period of three months in 2023. The study itself was developed within the Ki-Afrika research program funded by the Living Tongues Institute of Endangered Languages during the stay of the first author in Ghana in 2022–2023.

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[23] Diedrich Westermann, *Grammatik der Ewe-Sprache*, Berlin 1907; Diedrich Westermann, *Evefiala: Ewe-English Dictionary*, Berlin 1928; Diedrich Westermann, *Wörterbuch der Ewe-Sprache: Ewe-Deutsch*, Berlin 1954 [1905]; Hounkpati Capo, *A comparative phonology of Gbe*, Berlin 1991; Vincent Erskine Aziaku, *A linguistic analysis of Ewe animal names among the Ewe of Ghana*, Köln 2016; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'; Felix Ameka, 'Meaning of phatic and conative interjections'.

[24] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[25] Regarding the dialectology of Ewe (and Gbe), consult: George Nickerson Clements, 'The verbal syntax of Ewe' (PhD diss., University of London, 1991), pp. 16–18; Angela Kluge, *Sociolinguistic survey of Gbe language communities*, 2011; Jemima Sam and Cynthia Ablah Agbloe, 'Lexical variations in the Ewe language spoken in Ho in the Volta Region of Ghana', *Journal of Education* 7 (2015), pp. 69–87.

[26] A second range of such follow-up interviews concerned specifically (and exclusively) the lexeme *les* (see section 3.1.4). In some of our data collection activities we were kindly assisted by Ramada.

3. Evidence

In the present section, we introduce Ewe data by discussing primary (section 3.1) and secondary (section 3.2) CACs separately. We do so because, cross linguistically, these two types of CACs tend to exhibit quite distinct profiles with regard to their phonetics and morphology,[27] as well as heritability and, apparently, borrowability.[28] Within these two classes, each CAC or each cluster of similar CACs will be described independently, following alphabetical order. Whenever possible, we will locate our findings within the previous works on CACs in Ewe[29] and Akan,[30] showcasing the similarities and differences between our and other scholars' observations.

3.1. Primary CACs

Primary CACs are constructions that are employed in a directive-to-animal function either exclusively or, if they allow for some other uses, with notable regularity. In compliance with the definition provided in section 1, these types of CACs may also be used holophrastically as self-standing non-elliptical utterances. Cross linguistically, most primary CACs have entertained this holophrastic directive-to-animal function from the beginning of their grammatical life – they were coined as CACs. A smaller group of them arguably originates in non-CAC sources. However, due to the advancement along a CAC-isation path – a conversion of structures built around other lexical classes into CACs – a conceptual and formal link connecting such CACs to their non-CAC sources is irrecoverable and their association with a CAC status can be regarded as absolute.[31] Overall, we were able to identify 17 primary CACs in Ewe.

3.1.1. *Hai* and *hei*

The CACs *hai* [ɦáì] and *hei* [ɦéì], which are not mentioned in previous literature, are directed to small domestic species: goats and sheep, as well as dogs and cats. These lexemes are only employed in a dispersing function to chase away

[27] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason, 'Conative animal calls in Xhosa'; Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals'; Alexander Andrason and Admire Phiri, 'Talking to animals in a moribund language'; Bernd Heine, *Grammar of interactives*; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'; Felix Ameka, 'Meaning of phatic and conative interjections'.

[28] Ewa Siatkowska, *West-Slavonic animal calls*; Sybilla Daković, *Interjections in Polish, Serbian, Croat, and Russian*; Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'; Alexander Andrason and Pius Akumbu, 'Towards a linguistic analysis of conative animal calls in Babanki and Bum'.

[29] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'; Felix Ameka, 'Meaning of phatic and conative interjections'.

[30] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[31] See: Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason, 'Conative animal calls in Xhosa'.

an animal.[32] The consonant [ɦ] present in the onset is systematic and belongs to the standard Ewe inventory.[33] In contrast, the vocalic material is partly extra-systematic. While [a] and [i] are common vowels in the general word stock in Ewe,[34] "double nuclei" or vowel sequences found within a single syllable, including diphthongs and thus CVV̩ structures, are limited to ideophones and interjections.[35] In the vocabulary of sentence grammar (for example, nouns, verbs, adjectives, adverbs, pronouns, numerals, and adpositions), the allowed syllable types are V, CV, and CLV/CGV.[36] In the sentence-grammar lexicon, vowel sequences can be found but only appear at a morpheme boundary, where two morphemes coalesce into a word.[37] In such cases, the consecutive vocalic elements are hetero-syllabic: they form two independent syllables. In contrast, in *hai* and *hei*, the vowel sequence occurs in the root, which is mono-morphemic and indivisible into more elementary meaning-bearing units. Given this mono-morphemicity and the considerable articulatory speed (that is, *hai* and *hei* are pronounced very fast as is common of dispersals across languages) as well as in harmony with the analysis of vowel sequences in other interactives mentioned above,[38] the sequence [ai] in *hai* and *hei* can be viewed as homo-/mono-syllabic and a diphthong.[39] Within [ai] itself, the vowel [a] is given prominence – the diphthong is thus falling. The prominent vocalic element carries high tone, while the non-prominent one bears low tone.[40] In addition to the particular shortness mentioned

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[32] Contrast with *hé* which is used to draw a person's attention (cf. Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 484) and *hã́* expressing *refusal* (Diedrich Westermann, *Wörterbuch der Ewe-Sprache*, p. 233).

[33] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 1; Felix Ameka, 'Meaning of phatic and conative interjections', p. 262; Jacques Rongier, *Parlons éwé*, Paris 2004, p. 63.

[34] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 1; see also: F. K. Atakpa, 'The Ewe language', in: *A handbook of Eweland. Volume I. The Ewes of southeastern Ghana*, ed. Francis Agbodeka, Accra 1997, pp. 28–46; Gilbert Ansre, Ewe language, in: *A handbook of Eweland*. *Volume II. The northern Ewe in Ghana*, ed. Kodzo Gavua, Accra 2000, pp. 22–47.

[35] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 4; Felix Ameka, 'Ideophones and the nature of the adjectives word class in Ewe', in: *Ideophones*, eds. Ekhard Voeltz and Christa Kilian-Hatz, Amsterdam 2001, pp. 25–48; see also: Herbert Stahlke, *Topics in Ewe phonology*, Ann Arbor 1971; Vincent Erskine Aziaku, *Linguistic analysis of Ewe animal names*, p. 120.

[36] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 4.

[37] Ibidem.

[38] Ibidem; Felix Ameka, 'Ideophones and the nature of adjectives'.

[39] Indeed, in Akan, where each single tone-bearing mora forms its own syllable, this articulatory speed is one of the reasons why similar sequences of vowels are analysed homo-syllabically and regarded as diphthongs in CACs and several other interactives (Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'; see below in this section).

[40] Concerning the issue of tone in Ewe, consult: Gilbert Ansre, 'The tonal structure of Ewe', *Hartford Studies in Linguistics* 1 (1961); Gilbert Ansre, 'The grammatical units of Ewe: A study of their structure, classes and systems' (PhD diss., University of London, 1966), pp. 26–28; Neil Smith, 'Tone in Ewe', *Research Laboratory of Electronics Quarterly Progress Report* 88 (1968), pp. 290–304; Hounkpati Capo, *Comparative phonology of Gbe*, pp. 19–24; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 35; Alan Duthie, *Introducing Ewe linguistics patterns: A textbook of phonology, grammar and semantics*, Accra 1996; Jacques Rongier, *Parlons éwé*, pp. 61–62; Vincent Erskine Aziaku, *Linguistic analysis of Ewe animal names*, pp. 1–7.

above, *hai* and *hei* tend to be uttered with other modulations typical of dispersals: loud timbre and a harsh and aggressive voice.[41]

The CAC inventory of Akan includes lexemes that are highly similar to the Ewe *hai* and *hei* discussed above. Asante, Bono, and Fante all have CACs realised as [háì] and [héì]. In the three varieties, [háì] and [héì] may be used as dispersals to chase away mostly small animals: both domestic (dogs, goats, cats, goats, sheep, and poultry) and wild (e.g., birds). Additionally, [háì] and [héì] can be used in Akan as directionals (to turn back an animal, stop its motion, and incite it to chase prey) or in motion unrelated functions (to silence an animal).[42] Although the affinity with Akan seems evident – with the substitution of the Akan [h] with the Ewe [ɦ] as Ewe lacks a voiceless glottal fricative[43] – similar HAI/HEI forms are found in CACs in many other languages. Indeed, HAI/HEI dispersals are attested in Arusa Maasai (*hei*), Babanki (*hɔ́ɔ́í?*), Dogon (*hei*), and Tjwao (*hayi*), as well as, although, in non-dispersing functions, in Xhosa (*heyi*) and Macha Oromo (*haayi*). More generally, directional and attention getting interactives, whether addressed to animals or humans, make common use of HAI/HEI forms.[44]

3.1.2. *Kai*, *kpai* and *kaa*(*a*)*ii*(*i*)

Kai [k$^{(h)}$ái] is directed to domestic animals, specifically, small livestock: sheep and goats.[45] The lexeme is exclusively employed in a dispersing function to chase away animals. The occlusive velar consonant [k] is systematic.[46] In contrast, as in *hai* and *hei*, the vowel sequence in *kai* ([ai]) is homo-syllabic and forms a falling diphthong. As a result, it exhibits an extra-systematic syllable structure: CV$\underline{\text{V}}$. The more prominent vocalic element [a] bears high tone while the less prominent [i] bears low tone. As is true of the general phonetic inventory of Ewe,[47] the voiceless stop [k] can be aspirated and realised as [k^{h}]. *Kai* is mono-morphemic and usually pronounced quickly, loudly, and harshly as is typical of dispersals. *Kai* may also be realised as *kpai* [k͡pái] – a variant that is unmentioned in previous works on CACs in Ewe. That is, instead of the voiceless velar stop [k], a labial-velar variant [k͡p] is used. The semantic potential of *kpai* and all its remaining formal characteristics are identical to *kai*. Another lexeme related to *kai*

[41] Cf. James Bynon, 'Domestic animal calling in a Berber tribe'; Azeb Amha, 'Directives to humans and to domestic animals'; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason, 'Conative animal calls in Xhosa'; Alexander Andrason and Admire Phiri, 'Talking to animals in a moribund language'.

[42] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[43] Felix Ameka, 'Meaning of phatic and conative interjections'.

[44] Bernd Heine, *Grammar of interactives*, pp. 116–119.

[45] See: Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 490; Felix Ameka, 'Meaning of phatic and conative interjections', p. 267.

[46] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 1; Jacques Rongier, *Parlons éwé*, p. 63; Vincent Erskine Aziaku, *Linguistic analysis of Ewe animal names*, p. 4.

[47] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 2.

is *kaa*(*a*)*ii*(*i*) [k$^{(h)}$á:(:)ì:(:)]. From a phonetic perspective, this form may be regarded as a lengthened variant of *kai*.[48] It is, however, far more than a mere variant. Both with regard to the animal referent and the action requested, *kaa*(*a*)*ii*(*i*) substantially differs from *kai*. First, according to the interviewed speakers, *kaa*(*a*)*ii*(*i*) can be used with all animals, whether domestic or wild and whether small or big. Second, *kaa*(*a*)*ii*(*i*) entertains a directional function. It is used to make the animal move forward: to start its motion or sustain it. *Kaa*(*a*)*ii*(*i*) exhibits an extra-systematic behaviour with regard to vocalic length. Ewe does not allow for long vowels except in loanwords and interactives, for instance, interjections, ideophones, and phatic lexemes: *atúù* 'welcome', *dzáà* 'welcome' or *yoo* 'OK'.[49] *Kaa*(*a*)*ii*(*i*) tolerates not only long or bi-moraic vowels ([a:] and [i:]) but also extra-long or three-moraic vowels ([a::] and [i::]). According to our data, this exaggerated type of length is more common. In contrast to ideophones, where "vowel lengthening […] is used to indicate emphasis"[50] or serves "expressive purposes,"[51] this is not the case in *kaa*(*a*)*ii*(*i*). *Kaa*(*a*)*ii*(*i*) is not more "emphatic"/ "expressive" than *kai* nor is the variant [k$^{(h)}$á::ì::] more "emphatic"/ "expressive" than [k$^{(h)}$á:ì:].

In Akan, one finds a CAC that is identical to Ewe *kai*. Indeed, both Asante, Bono, and Fante contain the lexeme *kai* [kâi] that, as in Ewe, chases away animals. The typical animal referents in Akan are dogs, cats, goats, sheep, and cattle, as well as, although less regularly, all types of birds, monkeys, and small reptiles (e.g., snakes). Additionally, in Bono, *kai* assumes a directional function and makes dogs turn back. Similar to Ewe, the vowel sequence in the Akan *kai* is argued to form a diphthong given articulatory speed and certain other phonological properties pertinent to the Akan language. In further similarity to Ewe, *kai* is often uttered in Akan with an aggressive and harsh voice. The aspiration of [k] ([k^{h}âi]), commonly attested in Asante and Bono, is regarded as a manifestation of this aggressive/harsh pronunciation.[52] Since Akan lacks labial-velar plosives (both [k͡p] and [g͡b]), no equivalent of *kpai* is attested. Nor is there a direct equivalent of *kaa*(*a*)*ii*(*i*) in Akan. Certainly, in Asante, Bono, and Fante, *kai* can occasionally be lengthened. However, such lengthened *kai* forms are neither stabilised nor particularly common, and their semantic potential is identical to the unlengthened variant – and thus distinct from the Ewe *kaa*(*a*)*ii*(*i*). The available typological evidence does not reveal any marked tendencies to exploit KAI-type forms for dispersing purposes in CACs across languages, although [k] *is* the most common consonant in dispersals taking sibilants apart.[53] In contrast, the use of extra-systematic extra-long vowels in CACs is highly common cross

[48] Felix Ameka, 'Ideophones and the nature of adjectives', p. 30.

[49] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 4; Felix Ameka, 'Ideophones and the nature of adjectives', p. 30.

[50] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 7.

[51] Felix Ameka, 'Ideophones and the nature of adjectives', p. 30.

[52] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[53] Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals', pp. 95–96.

linguistically.[54] This phenomenon is attested in all languages which we have studied the CACs of thus far, e.g., Berber,[55] Omotic,[56] Nilotic,[57] Bantu,[58] Khoe,[59] Kwa,[60] Dogon,[61] and Cushitic.[62]

3.1.3. *Krii*(*i*) and *krr*(*r*))*u*

Krii(*i*) [kri:(:)] is only addressed to poultry, typically chickens. This CAC, which has thus far remained unacknowledged in scholarly literature, may be used in motion-unrelated functions: to draw the attention of an animal or encourage it to eat. In the latter cases, it often triggers a venitive action on part of the animal and functions as a summons as well. *Krii*(*i*) comprises of phones that are systematic in Ewe: consonants [k] and [r] and the vowel [i].[63] The onset cluster found in this CAC (generally) complies with the rules governing Ewe phonotactics and syllable structures. In Ewe, the syllable structure found in sentence-grammar lexicon is $(C_1)(C_2)V$. C_1 may be any consonant excluding [r] while C_2 can only be a liquid, [l] or [r].[64] In combination with [k], the lateral liquid [l] seems much more common and the cluster [kl] is found in a number of words both indigenous and borrowed. In contrast, [kr] is rare although it is not foreign to the Ewe language and Ewe speakers. It mostly features in loans (*Krismas* 'Christmas') and proper names (*Kratsi*),[65] as well as a few other words such as *adikra* 'dark red' and *kra* 'inform'. Similar to *kaa*(*a*)*ii*(*i*) discussed in section 3.1.2, *krii*(*i*) attests to extra-systematic length types with the nucleic vowel [i] lasting two or three morae: [i:] or [i::]. Both the bi- and tri-moraic realisations of the vowel count as a single syllable. The vowel, long or extra-long, bears high tone. The lexeme is mono-morphemic and consists of the root only. It does however often appear replicated in series.[66] *Krii*(*i*) is typically

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[54] James Bynon, 'Domestic animal calling in a Berber tribe'; Fernando Poyatos, *Nonverbal communication across disciplines*; Azeb Amha, 'Directives to humans and to domestic animals'; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'.

[55] James Bynon, 'Domestic animal calling in a Berber tribe'.

[56] Azeb Amha, 'Directives to humans and to domestic animals'.

[57] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'.

[58] Alexander Andrason, 'Conative animal calls in Xhosa'.

[59] Alexander Andrason and Phiri, Phiri, 'Talking to animals in a moribund language'.

[60] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[61] Alexander Andrason and Idrissa Sagara, 'The grammar of conative animal calls: The case of Togo-Teŋu Kan of Dourou (Dogon)', *Asian and African Studies* 33/1 (2024), pp. 48–96.

[62] Alexander Andrason, Mulugeta Onsho and Shimelis Mazengia, 'Conative animal calls in Macha Oromo: Function and form', *Linguistic Vanguard* 10 (2024), pp. 199–207.

[63] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 1; Hounkpati Capo, *Comparative phonology of Gbe*, p. 48.

[64] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 4.

[65] Cf. Diedrich Westermann, *Grammatik der Ewe-Sprache*, p. 143.

[66] Regarding re(du)plication in Ewe, consult, *inter alia*: Gilbert Ansre, 'Reduplication in Ewe', *Journal of African Languages* 2 (1963), pp. 128–132; Gilbert Ansre, 'The grammatical units of Ewe: A study of their structure, classes and systems', pp. 201–203, 214–215, 225–226, 231; Felix Ameka, 'Ewe: Its grammatical constructions

realised with mark phonation, in particular, an excessively high pitch. It is likely that *krii*(*i*) has an onomatopoeic foundation. This especially holds true of the consonants [k] and [r] (see below).

There is another CAC in Ewe that is functionally and formally similar to *krii*(*i*). This CAC is the summons *krr*(*r*)*u* [kr:(:)ú].[67] While similar in some respects, *kr*(*r*(*r*))*u* exhibits certain important differences when compared to *krii*(*i*). First, although *krr*(*r*)*u* can be used with all types of poultry, it is more commonly dedicated to roosters, turkeys, ducks, and fowl, rather than hens and chicks. Additionally, it can be directed to doves and any other bird species, both domestic and wild. Second, while *krii*(*i*) exhibits a long or extra-long vowel, *krr*(*r*)*u* makes use of a long or extra-long consonant and attests to the following onset and syllable structure: C_1C_2:V and C_1C_2::V. Consonantal length (and thus long and extra-long consonants) and the above onset types do not form part of the standard phonetic repertoire of Ewe, being limited to interactives (ideophones and interjections).[68] The other phonetic difference with *kriii* concerns the vowel – *krr*(*r*)*u* makes use of [u] instead of [i]. This may be motivated. Cross linguistically, back close vowels tend to be used with referents that are large, fat, adult/old, and masculine and imitate sounds that are duller, deeper, and lower. In contrast, front close vowels tend to suggest referents that are smaller, younger, and feminine and imitate sounds that are higher, more acute, and squeaking. *Krii*(*i*) and *krr*(*r*)*u* seem to conform to this tendency. While *kriii* is used with smaller poultry (chicks and hens), *krr*(*r*)*u* is particularly common with bigger poultry (roosters and turkeys). As in *krii*(*i*), the tone in *krr*(*r*)*u* is high, the lexeme is mono-morphemic, and has an onomatopoeic foundation (see below).

Akan does not have direct equivalents of *krii*(*i*) and *krr*(*r*)*u* in its CAC inventory. However, similar forms – or rather forms that exploit similar strategies – are attested. That is, forms with [k] and [r] (e.g., *krɔ̀krɔ̀*) are used in Asante and Fante to call poultry, especially its larger and noisier representative – turkeys. By contrast, forms without the consonant [r] are used with smaller poultry, in particular, chicks and hens: *kákákákáká*/ *kõnkõnkõn* in Asante, *kékékéké*(*ké*) in Bono, and *kúkú*(*kú*) in Fante. Crosslinguistically, the use of the consonant [k] in summonses addressed to poultry is highly common.[69] Usually, [k]-summonses to chickens also contain liquids, either [l] (see the segments *kul-* and/or *kul* found in Macha and Harar Oromo, Amharic Zargulla, and Gedeo)[70] or [r] (see *kírɨ́* in Babanki, *krrr*(*u*)-*krrru* and *kukru-kukru* in Kihunde, and *kúrukúru* in Maasai). All such summonses likely exploit onomatopoeic strategies since onomatopoeias imitating calls

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and illocutionary devices'; Felix Ameka, 'The typology and semantics of complex nominal duplication in Ewe', *Anthropological Linguistics* 41 (1999), pp. 75–106; Felix Ameka and Kropp Dakubu, 'Introduction'.

[67] See: Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 490; Felix Ameka, 'Meaning of phatic and conative interjections', p. 226.

[68] Felix Ameka, 'Ideophones and the nature of adjectives', p. 30.

[69] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'.

[70] Azeb Amha, 'Directives to humans and to domestic animals'; Alexander Andrason, Mulugeta Onsho and Shimelis Mazengia, 'Conative animal calls in Macha Oromo'.

made by poultry typically draw on [k], often accompanied by [l] or [r] (see *kokokoko* (hens and chicks) and *kukuryku* (roosters) in Polish). Indeed, in Ewe, chicken-noise onomatopoeia is *kruukruu* and the word for 'chicken' – *kokló*.

3.1.4. *Les*

Les [lés] is directed to dogs.[71] According to our informants, this form is rare in contemporary usage, even in Ho – although it may be more common in other parts of the Inland Ewe region. Among the Ewe speakers that we have consulted, only two persons were vaguely familiar with this CAC. Indeed, according to a native Ewe linguist who read our study, *les* (as well as its variant *lesh* with which our informants were unfamiliar) are "unpopular in contemporary usage". In that expert's view, the much common term used are *lee* and *lii* (see below). As far as we could determine, *les* only functions as a directional: it incites a dog to chase small animals (e.g., rodents), get them from their hiding places and eventually catch them. The consonantal and vocalic material exploited – [l], [s], and [e] – is systematic. However, the syllable structure [CVC] is extra-systematic. As explained above, the basic syllable structure in the Ewe sentence-grammar lexicon is $(C_1)(C_2)V$ – with the syllables being open. Syllables with codas are only attested in loanwords and interactives. Only nasal consonants ([n] or [ŋ]) are attested in such cases.[72] As in all the CACs described above, the nucleic vowel bears high tone.

The origin of *les* is partially problematic. Ameka relates *les* to the imperative of the verb *le* 'catch'.[73] In contrast, the coda element *-s* apparently comes from English and the whole expression originally meant 'catch it!'. Even if the form originates in non-CAC sources (see below), this connection is poorly recoverable and accessible to speakers. Indeed, the participants of our study, including those who were aware of this CAC, were unable to link *les* to any words or constructions. Therefore, we most likely deal with a highly lexicalised secondary CAC that is currently untransparent and thus primary.[74]

Following Ameka's proposal, we think that the verbal source of *les* is plausible.[75] First, as correctly observed by Ameka, *le* in *les* is likely related to the verb *le* [lé] 'catch'. The imperative of this verb – realised as *le* 'catch!' when accompanied by a noun (often lengthened to *lee*) and *li-i* 'catch it!' when followed by the 3rd person pronoun *-e*/*-i* – is commonly used by hunters to incite dogs to chase prey (see section 3.2.1). In fact, *le*(*e*) and *li-i* are much more common than *les* and all participants were familiar with the usage of the verb *le* in a directive-to-animal function. Second, considering the formal properties of this form, [l] is not a common consonant in primary CACs across languages.

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[71] Sometimes, *les* is realised as *lesh* [léʃ]. See: Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 490; Felix Ameka, 'Meaning of phatic and conative interjections', p. 227.

[72] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 4; Felix Ameka, 'Ideophones and the nature of adjectives', p. 30.

[73] Felix Ameka, 'Meaning of phatic and conative interjections', p. 490.

[74] This would be consistent with Ameka's inclusion of *lés* into his class of "phonation summonses for animals" on par with *kai*, *kru*, and *pus*; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 490.

[75] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'.

For instance, in dispersals, which are semantically related to some directionals, liquids especially of an L-type are the least common consonants used.[76] Since it is unlikely that the LV- segment found in *les*, would be primary from the beginning of the grammatical life of this CAC, a non-CAC source is more plausible. The above-mentioned use of imperative verbs with the meaning 'catch!' or 'take!' to generate secondary CACs is indeed highly frequent crosslinguistically.

However, contrary to Ameka's suggestion, we think that the presence of *-s* in *les* is not borrowed but analogical and more "catastrophic" or primary-like. According to crosslinguistic data, CACs tend to exhibit a "consonantal nature".[77] Although they often draw on both vowels and consonants, the consonantal material is more prominent. One of the exponents of this is the common presence of consonantal codas in CACs and the resultant CVC syllabic structure. The use of sibilants is also noticeable in CACs. First, CVS is the most common pattern exploited in dispersals, especially those directed to smaller animals.[78] The most common sibilants are [ʃ] and only slightly less so [s], as in Ewe, which lacks [ʃ] in its standard phonetic repertoire (see below). Second, CVC syllables and coda sibilants (and thus a CVS structure) are also commonly exploited in summonses, specifically those directed to dogs as *les*. Such forms are attested in Ayt Hadiddu (*kkiz*),[79] Kihunde (*kús-*), Arabic (*qawš*),[80] and Chuvash (*кuc-кuc*).[81] A CVS structure is even more pervasive in summonses directed to cats (see *bŭŭs* and *mŭŭs* in Babanki,[82] *кuc/кăc* in Chuvash,[83] and *puu*(*u*)*s* in Ewe itself analysed in section 3.1.6). It is also used with pigs (see *kès-kès* in Dza). Consequently, the emergence of *-s* may be attributed to "naturalness" or the crosslinguistic pressure of closing mono-syllabic CACs with consonantal codas and using sibilants for these purposes. The verbal root *le-* would in this manner receive a typical CAC formant *-s* and exhibit a common CAC shape.[84]

No CACs comparable to *les* are found in Akan. While, as mentioned above, some Akan CACs display a CVS syllabic structure, none of them makes simultaneous use of the consonant [l] and [s]. However, in Akan, several secondary CACs draw on the imperative of a semantically equivalent verb *kye* 'catch', which in its CAC usage may[85] contain pronominal objects: *kye-no* 'catch it'. As in Ewe, CACs built around *kye* typically incite

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[76] Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals', p. 96.

[77] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype', p. 15.

[78] Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals'.

[79] James Bynon, 'Domestic animal calling in a Berber tribe'.

[80] Alia Bader Abdullah and Zahraa Nasir Talib, 'The meanings of interjections in English and Arabic', *Journal of the College of Arts University of Basrah* 50 (2009), pp. 89–107.

[81] T. Denisova and L. Sergeev, 'Dialectal features in the varieties spoken by the Chuvash diaspora'.

[82] Alexander Andrason and Pius Akumbu, 'Towards a linguistic analysis of conative animal calls in Babanki and Bum'.

[83] T. Denisova and L. Sergeev, 'Dialectal features in the varieties spoken by the Chuvash diaspora'.

[84] Compare with the use of *š* [ʃ] in Lithuanian to form dispersals from (onomatopoeic) summonses; see: Vytautas Ambrazas et al., *Lithuanian grammar*, Vilnius 2006, p. 429.

[85] Cf. Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'.

dogs to chase prey (although they may also have other uses).[86] As mentioned above, the use of imperatives derived from semantically similar verbs ('catch', 'take', 'bring') for directional purposes is also highly common from a crosslinguistic perspective.[87]

3.1.5. *Mee(e)*

Mee(e) [meː(ː)] is directed to domestic species, specifically small livestock: goats and sheep (compare with *mbhe* in Ameka 1991). It is only used as a summons to call animals to come closer, often to be fed. The vocalic and consonantal material used – [m] and [e] – is systematic. However, the presence of two- or tri-moraic nucleic vowel is not, as explained in the sections above. *Mee(e)* has an onomatopoeic foundation. The speaker communicates with goats and sheep by imitating the sound that is perceived as made by these animals.[88] Indeed, a homophonous form is used as a genuine onomatopoeia mimicking goats and sheep's bleating. The CAC *mee(e)* is usually pronounced with modulation that in speakers' view approximate it to the sounds made by goats and sheep in the real world. This especially involves higher pitch and a vibrating pulse (without however separating the respective [e] morae), as well as pharyngealisation (some type of [meˤːː]). *Mee*(*e*) is mono-morphemic and consists solely of the root.

A similar CAC is found in one Akan variety, namely Fante, where [méɛ́] is employed to summon goats.[89] However, the use of *ME*-type forms to call small livestock, especially goats, and at the same time to imitate sound made by these animals is also highly pervasive crosslinguistically. It is, for example, attested in Konso (*meʔeʔeʔ*),[90] Polish (*mee*), Kihunde (*meee*), amd Dogon (*mɛmɛmɛ*).

3.1.6. *Puu*(*u*))*s*

Puu(*u*)*s* [púːː(ː)s] is directed to cats and invariably employed in a summoning function, ordering the animal to come closer to the speaker.[91] The consonant [s] is systematic. However, [p] present in the onset is, in Ewe, limited to borrowings[92] and ideophones.[93] The vocalic component [u], which bears high tone, is also systematic, although its two- and tri-moraic realisations – and thus the use of a long [uː] or extra-long [uːː] vowel – are not (see sections 3.1.2 and 3.1.3). *Puu*(*u*)*s* transgresses another phonotactic rule: it exhibits the syllable structure [CVS] and thus ends with a consonantal coda. As explained

[86] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[87] Alexandra Aikhenvald, *Imperatives and commands*; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; James Bynon, 'Domestic animal calling in a Berber tribe'; Azeb Amha, 'Directives to humans and to domestic animals'.

[88] Cf. Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 489; Felix Ameka, 'Meaning of phatic and conative interjections', p. 266.

[89] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[90] Oda Orkaydo Ongaye, *A grammar of Konso*, Utrecht 2013, p. 256.

[91] Cf. Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 489.

[92] Irene Wartburton, Prosper Kpotufe and Roland Glover, *Ewe basic course*, Bloomington 1968, p. viii; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 2.

[93] Felix Ameka, 'Ideophones and the nature of adjectives', p. 30.

in section 3.1.4, closed syllables with consonantal codas are limited to loanwords and interactives and only nasal consonants ([n] or [ŋ]) are found in such instances. *Puu*(*u*)*s* is mono-morphemic and indivisible into more elementary meaning-bearing units. It often forms sequences. In such cases, the vowel [u] tends to be shorter.

A similar, yet not identical form is attested in Bono. In this Akan variety, *bú*(*ú*)*s* and *mú*(*ú*)*s* are employed to summon kittens.[94] Both Ewe and Akan thus make use of the CVS pattern with the onset consonant being a labial. This pattern, namely, labial consonant + vowels + sibilant, is highly common in summonses directed to cats in the languages of the world. It is, for instance, attested in Arabic (*bis(h)*), Azeri (*pish*), Babanki (*bŭŭs* and *mŭŭs*), Danish (*mis*), Dutch (*poes*), Georgian (*pis*), German (*beez* and *miez*), Italian (*mush*) and Romanian (*pis*; see Section 3.1.4).

3.1.7. *Sã*, *sui*, and *shuu*(*u*)

Ewe contains a cluster of CACs that exhibit a sibilant onset and are used in non-summoning functions.

Sã [sə̀̃] is directed to two domestic species (dogs and cats) to chase them away.[95] The lexeme draws on systematic phones: the consonant [s] and the vowel [ã]. It is, however, the only CAC in Ewe that contains a nasal vowel. Interestingly, in Polish, a Slavonic language with oral and nasal vowels, nasal vowels are avoided in primary CACs.[96] The sparse presence of nasal vowels in Ewe CACs – a language in which each oral vowel has its nasal counterpart – would be consistent with the apparent avoidance of nasal vowels in other languages.[97] The phonotactics of *sã* and its CV syllabic type are also systematic. As in many other CACs, the vowel bears high tone. The CAC is often realised with an aggressive pronunciation: quickly, loudly, and with harsh voice, as is typical of dispersal across languages.[98] It is also mono-morphemic.

Another s-onset CACs is *sui*. *Sui* is directed to domestic birds, poultry, and fowl,[99] as well as insects. It is employed in a dispersing function to repel animals. The phones used in *sui* are systematic. This especially holds true of the consonant [s] and the more prominent vocalic element, that is, the nucleic vowel [i] carrying high tone. The other vocalic component noted orthographically as *u* is regularly pronounced in *sui* as a semi-vowel [u̯] or glide/approximant [w]: [su̯i] or [swi]. This stems from the articulatory speed typical of dispersals and the resultant mono-syllabic realisation of the vowel sequence [u] + [i] in *sui*. The phonotactics of *sui* comply with the syllabic structure found in the

[94] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[95] Cf. Irene Wartburton, Prosper Kpotufe and Roland Glover, *Ewe basic course*, Bloomington 1968, p. 490; Felix Ameka, 'Meaning of phatic and conative interjections', p. 267.

[96] See: Ewa Siatkowska, *West-Slavonic animal calls*; own data.

[97] See however: Azeb Amha, 'Directives to humans and to domestic animals', p. 223.

[98] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; James Bynon, 'Domestic animal calling in a Berber tribe'; Azeb Amha, 'Directives to humans and to domestic animals'.

[99] As observed in Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', pp. 490–491; Felix Ameka, 'Meaning of phatic and conative interjections', pp. 267–268.

general word stock in Ewe. As explained above, the typical syllable types is $(C_1(C_2))V$ in which C_2 is a liquid or a glide/approximant [w]/[j] as illustrated by *sue* [swe] 'small'.[100] Such a glide pronunciation of a non-prominent [u], often further realised as a palatal ([ɥ]) rather than a velar ([w]) labial(ised) approximant, is common in all Gbe varieties before oral vowels in "rapid speech".[101] *Sui* is mono-morphemic and does not contain meaning-bearing units other than the root itself.

The third sibilant-onset CAC, *shuu(u)* [ʃu:(:)] – to our knowledge, thus far unmentioned in literature – can be directed to all animal, whether domestic or wild, and whether big or small. The CAC *shuu(u)* is used in three functions. It is employed to silence an animal (e.g., to make a dog stop barking); repel/chase/drive away animals, scare them, or make wild animals move out of their habitats or hideouts; and incite dogs to chase their prey during hunting. The consonant [ʃ] is absent in the standard Ewe phonetic repertoire.[102] However, the sibilant [ʃ] occurs in the southern dialects and the two Vhe lects, Aveno and Aŋlɔ where [s] can be realised as [ʃ] before [i] and [j].[103] The vowel [u] is systematic but it exhibits an extra-systematic behaviour with regard to length, being bi-moraic/long [u:] or tri-moraic/extra-long [u::].

Akan contains CACs that are similar to *sã* – yet not identical. In Fante, [sá] is used to chase away dogs like in Ewe. In Asante, [s(:)áẁ.s(:)áẁ] is employed in a radically distinct function, namely, to summon poultry (esp. chickens). There are also CACs in Akan that formally approximate *sui*, especially [sᶣíɛ̀], [sᶣɛ̀], and [t͡ɕᶣí]. As in Ewe, these lexemes are used as dispersals and their principal referents are poultry and/or other small animals including insects. In contrast, Akan does not have direct equivalents of the CAC *shuu*(*u*) and the silencing of animals is achieved through other means (for example with [háì]/[héì] and secondary CACs). The presence of sibilants in dispersals is also highly pervasive from a cross-linguistic perspective. Among all sibilants, the two most common ones are [ʃ] (42% in the sample of 79 languages) and [s] (34%).[104] The syllable structure S(V)V – as in *sã*, *sui*, and *shuu*(*u*) – is the second most frequent typologically.[105] The vowels [u] and [i] present in *sui*, and *shuu*(*u*) are also the most common vowels used in dispersals.[106] Indeed, this sibilant-driven strategy to repel animals is widely used in Akan as well: apart from the CACs mentioned above, Asante, Bono, and/or Fante also include a cluster of dispersals of the type [(t͡)ɕ(ᶣ):(:)] (see also [ɕ(p)ɕ] in Bono). *Shoo*(*o*) is also present in English, including the English variety spoken in Ghana.

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[100] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 4.

[101] Hounkpati Capo, *Comparative phonology of Gbe*, p. 55.

[102] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 1; Jacques Rongier, *Parlons éwé*, pp. 62–64; Vincent Erskine Aziaku, *Linguistic analysis of Ewe animal names*, p. 4.

[103] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 6; Hounkpati Capo, *Comparative phonology of Gbe*, pp. 10, 47, 51.

[104] Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals', p. 92.

[105] Ibidem, pp. 93–94.

[106] Ibidem, p. 95.

3.1.8. The click ǁ

The alveolar lateral click ([ǁ]) is directed to small domestic animals: goats and sheep[107] as well as, according to our fieldwork, dogs and cats. The semantic potential of ǁ is broad ranging from a summoning function to directional and motion unrelated functions. To be exact, ǁ is employed not only to call an animal to come[108] but also to draw an animal's attention or to make it move (more) quickly. While the alveolar lateral production of this click is pervasive, other realisations, thus far unnoticed in scholarship, are possible as well, especially the palatal one: [ǂ]. In all such cases, the tongue's shape is laminal: apico-laminal in [ǁ] and fully laminal in [ǂ]. Clicks are extra-systematic consonants in Ewe and Ewe is not a click language.[109] However, there are click-lexemes in Ewe other than the CAC analysed in this section. All of these are interactives. For instance, an interjection of contempt is encoded with "a double articulated lateral and dental click",[110] some type of [ǁ|] – or, in Doke's notation used by Ameka, [ʖʇ].[111] Another click word expressing agreement exploits "a palatal click with nasal release",[112] that is, [ǂⁿ] (Ameka uses the symbol ᶝⁿ, which in Doke's notation, contrary to the description provided, refers to an alveolar click [!]).[113] As in all non-click languages, the click CAC constitutes the entire lexeme – the CAC is mono-morphemic.

Click CACs are attested in Akan. Specifically, Asante, Bono, and Fante have in their repertoires the CAC [ǂ.ǂ.ǂ.(ǂ)] that is used to call poultry and, especially in Fante, cats. As in Ewe, several variations of this click are attested: in addition to the more common palatal realisation, "the [so-called] second sealing closure made with the tongue […] may be more frontal such that the sound actually produced gradually approximates an alveolar (lateral) click [ǁ] or a dental click [|]".[114] This variation is attributed to the extra-systematicity of clicks in Akan and their distinctiveness from the other phones: "Whatever the exact second construction is […] any realisation is admissible. As long as the click is (semi)laminal and bright rather than "dark" and "hollow sounding" […] as in [!], there is no 'misunderstanding'".[115] Clicks are also the most common extra-systematic (from

[107] Cf. Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 489; Felix Ameka, 'Meaning of phatic and conative interjections', p. 266.

[108] See: Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'; Felix Ameka, 'Meaning of phatic and conative interjections'.

[109] Compare with: Bonny Sands, 'Click consonants: An introduction', in: *Click consonants*, ed. Bonny Sands, Leiden 2020, pp. 1–73.

[110] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 7.

[111] Clement Doke, *The phonetics of the Zulu language*, Johannesburg 1920; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'.

[112] Ibidem, pp. 7, 681.

[113] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', pp. 7, 681; Clement Doke, *Phonetics of Zulu*.

[114] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls', p. 16.

[115] Ibidem.

a language-internal perspective) IPA sounds used in CACs across languages.[116] Indeed, in all non-click languages studied by us thus far (for example, Babanki, Bum, Dogon, Kihunde, Maasai, and Macha Oromo), the category of CACs draws on clicks and contains click-lexemes. These are typically used as summonses, similar to Ewe and Akan.

3.1.9. {Kiss}, {whistle}, and *eeer*

The last class of primary CACs contains forms that are particularly extra-systematic from a phonetic perspective. These CACs, none of which has previously been discussed in scholarship, either exhibit sounds that are not considered by the International Phonetic Alphabet or their description with the IPA symbols can only be approximate.

The only {kiss} present in our database is directed to small domestic animals: goats and sheep as well as dogs. It is employed as a summons to call the animals to come closer, usually for food. This {kiss} is identical to the most common kiss sound exploited in CACs across languages, which has been represented in scholarship with the symbol [↓B'].[117] This sound is characterised by two clusters of traits related to the build-up of air-pressure tension and the manner of its release. The pressure is made by sealing the air pocket in the oral cavity with two simultaneous closures: a frontal (labial) one made with strongly protruded lips and the posterior (dorsal) one made with the tongue. The release occurs when the lips open and trigger the suction of air, which in turn results in an ingressive, high-pitched, squeaking sound. The {kiss} is highly extra-systematic in Ewe and, as far as we know, kiss sounds do not exist in the other parts of the language's lexicon. The {kiss} is undividable into more fragmentary meaning-bearing units. However, it often occurs in sequences ranging from one (usually longer) to many (usually realised as a series of short kiss sounds).

CACs that exploit kiss-like mechanisms are attested in Akan. The 'kiss' CAC that is the most similar to the {kiss} present in Ewe is the so-called {kiss-1} found in Asante, Bono, and Fante. It draws on the [↓B'] kiss sound and, as in Ewe, tends to occur in sequences. {Kiss-1} mostly functions as a summons addressed to small animals such as dogs, cats, poultry, goats, and sheep. It can however be used with cows and employed in directive and other functions.[118] As mentioned above, variants of the kiss [↓B'] are highly pervasive across languages. They are attested in almost all the languages in which CACs have been studied thus far (for instance, Arusa Maasai, Xhosa, Tjwao, Dogon, Babanki and Bum, Kihunde) and typically summon domestic species, especially dogs and smaller livestock.[119]

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[116] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; see also: James Bynon, 'Domestic animal calling in a Berber tribe'; Fernando Poyatos, *Nonverbal communication across disciplines*; Alexandra Aikhenvald, *Imperatives and commands*.

[117] See: Fernando Poyatos, *Paralanguage*; Fernando Poyatos, *Nonverbal communication across disciplines*; Alexander Andrason, 'Conative "kisses" in human-to-animal communication', *Lodz Papers in Pragmatics* 20 (2024), pp. 103–129.

[118] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[119] For detail see: Alexander Andrason, 'Conative "kisses" in human-to-animal communication'.

The CAC to which we refer as {whistle} is directed to fowl and insects and is invariably used to chase them away. It is not a genuine whistle, contrary to what is common across languages.[120] Rather, it is a "whistled" variant of the CAC *sui*, i.e., some type of [s̪ui̪] or [s̪ʷi̪]. That is, one protrudes their mouth to produce a whistle and simultaneously a *s*-type sound. Subsequently, the narrow opening made with the lips is widened and becomes more horizontal and whistling is coarticulated with a *ui*-type sound.

Akan has a relatively rich inventory of CAC whistles: 3 in Asante and Bono each and 4 in Fante. Contrary to Ewe, these are proper whistles rather than CAC lexemes that are realised in a whistled manner. In further contrast, whistles in Akan are typically used as summonses (also as directionals to start or stop motion, incite it to chase prey, or in a silencing function) and are mostly directed to dogs.[121] Whistles are also commonly exploited in CACs from a crosslinguistic perspective and virtually all languages of which the CACs have been studied thus far include whistles.[122] They are typically employed as summonses although directional, dispersal, and motion-unrelated functions are also attested. In contrast, to the best of our knowledge, whistled lexemes similar to the ones found in Ewe have not been reported in the inventories of CACs in other languages.[123]

The CAC which we represent with the grapheme *eeer* is directed to dogs and used as a dispersal to chase them away. It consists of a deep guttural, harsh, low vocalic sound, similar but not identical to [ɯ]. It may be more vibrating and sometimes ends with a weak offglide similar to a voiced alveolar/postalveolar approximant [ɹ]. This sound is acoustically similar to a noise made when feeling sick and needing to throw up and can be pronounced even more aggressively and intensely – hence, the IPA notation suggested above is only approximate. Duah, Andrason, and Antwi do not include a similar CAC in their inventory of CACs in Akan.[124] However, guttural non-IPA-sound CACs are attested in CACs in the languages of the world, for instance, in Dogon.[125] In Ewe, *eeer* may have some onomatopoeic foundation, imitating sounds made by dogs.

3.2. Secondary CACs

Secondary CACs are CACs that derive from non-CAC lexical classes, typically verbs, nouns, adjectives, adverbs, and pronouns, as well as phrases and clauses built around these types of lexemes. Put differently, secondary CACs are verbal, nominal, adjectival, adverbial, and pronominal constructions that entertain a directive-to-animal

[120] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'.

[121] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[122] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype', p. 34.

[123] However, judging impressionistically from the data collected in the course of our 5-year-long research on CACs in Africa and on other continents, such realisations do seem to exist.

[124] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[125] Alexander Andrason and Idrissa Sagara, 'The grammar of conative animal calls: The case of Togo-Teŋu Kan of Dourou'.

function and this usage has been stabilised as part of their semantic potential; nevertheless, despite this stabilisation and association with a CAC role, the functional (semantic) and formal (phonetic, morphological, and syntactic) relationship with their non-CAC sources remains evident. Therefore, across languages, secondary CACs exhibit many properties that are typical of non-CAC lexical classes from which they derive. Certainly, a distinction between secondary and primary CACs is gradient and therefore fuzzy; the same applies to the distinction between secondary CACs and the non-stabilised (ad-hoc and idiolectal) use of non-CAC expressions in a directive-to-animal function.[126]

All secondary CACs originate in situations where human speakers use standard linguistic repertoires to communicate orders to animals. This reflects a common aspect of human-to-animal communication, namely, the fact that animals can, and as crosslinguistic data clearly indicate it, often are addressed with conventional human language. In Ewe, the most typical animals with which humans can "converse" are dogs because, according to the interviewed speakers, these animals are (perceived as) more intelligent and receptive than any other species. The class of secondary CACs in Ewe is open and comprises of a large number of lexemes drawing on imperatives, natural-kind labels, proper names, and other sources.

3.2.1. Imperatives

Ewe speakers often address animals by means of imperatives. While some of these expressions can be regarded as secondary CACs, none of them is restricted to animal referents; rather, all are compatible with human addresses as well. The most common imperative-driven CACs and the most profoundly associated with animals according to our data, are the following forms: *zɔ* 'walk!', *dzudzɔ* 'stop!', *tɔ* 'halt / stand still!', *le(e)* 'catch', and *li-i* 'catch it'.[127] Equally frequent are more complex constructions built around imperatives and other elements: two imperative verbs (*va ɖu nu* 'come [and] eat!'), imperative and an internal object (*ɸu du* 'run (a race)!'), and an imperative verb and a "satellite" (*kplɔ-e ɖo* 'follow him/her/it!' and *ɖo to* 'stop talking/making noise; quiet!').[128] These types of CACs tend to entertain directional functions (start/sustain

[126] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason and Admire Phiri, 'Talking to animals in a moribund language'. The tripartite distinction between primary CACs, secondary CACs, and non-stabilised/ad-hoc CACs matches the tripartite division of interjections (cf. Felix Ameka, 'Interjections: The universal yet neglected part of speech', *Journal of Pragmatics* 18/2–3 (1992), pp. 101–118; Damaris Nübling, 'Von oh mein Jesus! zu oje! – Der Interjektionalisierungspfad von der sekundären zur primären Interjektion', *Deutsche Sprache* 29/1 (2001), pp. 20–45; Ulrike Stange, *Emotive interjections in British English. A corpus-based study on variation in acquisition, function and usage*, Amsterdam 2016; Alexander Andrason and Mawande Dlali, 'The (crucial yet neglected) category of interjections in Xhosa', *STUF – Language Typology and Universals* 73/2 (2020), pp. 159–217; Bernd Heine, *Grammar of interactives*).

[127] As we explained above, *li-i*, which is a variant of *le*, results from the presence of the pronoun *-e*/*-i* (compare with *se* 'hear' and *si-i* 'hear it' in Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 6; Hounkpati Capo, 'Determining the third person singular object pronoun in Gbe', in: *West African languages in education*, ed. Kay Williaamson, Wien 1985, pp. 106–131; cf. section 3.1.4).

[128] See: Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 42.

motion – *zɔ* and *ɸu du*; terminate motion – *dzudzɔ* and *tɔ*) or refer to actions that expand beyond the idea of motion (eat – *ɖu nu*; be silent – *ɖo to*). Imperative-driven CACs may be directed to a single animal (as in the forms quoted above) or a group of animals. In the latter cases, the source verb is usually inflected in a plural form, which is marked with the "subject pronoun" morpheme *mi*:[129] *mi va ɖu nu* 'come and eat (pl.)!' and *mi ɸu du* (run (pl.). Additionally, one may use 1st-person imperatives or (co)hortative forms: *ma se nu* 'let me hear (it), quiet!'.[130] All such imperative-driven CACs are originally small clauses composed of the verb (which constitutes the predicative nucleus) and verbal complements or modifiers: pronominal affix (*-e* 'him/her/it'), nominal object (*nu* 'thing/it/something'), satellite marker (*ɖo*). These CACs may therefore be pluri-morphemic. They can consist of a verbal root inflected in the imperative – which in the second person singular is "the verb stem alone" although with certain tonal regularities[131] – and other pronominal, nominal, and satellite elements, as well as additional verbs (yielding serializing constructions).[132]

The CAC-isation of the above-mentioned imperatives is low. The fact that most of these imperative forms can be used with human addresses, mentioned above, is a clear manifestation of this. The only (partial) exception is *le*. First, the imperative *le* features in *les* which can be considered a primary CAC limited to animal addresses and no longer derivationally/diachronically transparent. Second, in its usage with animal referents, the imperative *le* is often realised in an extended manner, i.e., with the long or even extra-long vowel *e* (see 3.1.4).

Imperatives are common sources of secondary CACs in Akan. Indeed, several Akan CACs are homophonous with the corresponding imperative forms: *kye* 'catch', *bra* 'come!', *gyae* 'stop!', *sane* 'return!', or *firi* 'leave!'. Other secondary CACs draw on more complex small-clause structures built around imperatives and complements, as well as sequences of imperatives or serializing verbs. As in Ewe, the semantic potential of these types of secondary CACs pertains to a directional domain or, less frequently, expands beyond a motion idea (e.g., silencing). The use of imperatives as sources of secondary CACs is also common crosslinguistically.[133] This is motivated by both the functional and

[129] George Nickerson Clements, 'The verbal syntax of Ewe', p. 163.

[130] See: Gilbert Ansre, 'The grammatical units of Ewe: A study of their structures, classes and systems', pp. 181–182; George Nickerson Clements, 'The verbal syntax of Ewe', p. 163; Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 52.

[131] George Nickerson Clements, 'The verbal syntax of Ewe', p. 162.

[132] Regarding multiverb and serial verb constructions in Ewe consult Christopher Thad Collins, 'Topics in Ewe syntax' (PhD diss. MIT, 1993); and Felix Ameka, 'Ewe serial verb constructions in their grammatical context', in: *Serial verb constructions: A crosslinguistic typology*, eds. Alexandra Y. Aikhenvald and Robert M.W. Dixon, Oxford 2006, pp. 124–143.

[133] Alexandra Aikhenvald, *Imperatives and commands*; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Bernd Heine, *Grammar of interactives*; see also: James Bynon, 'Domestic animal calling in a Berber tribe'; Ewa Siatkowska, *West-Slavonic animal calls*; Azeb Amha, 'Directives to humans and to domestic animals'.

formal properties of imperatives and CACs. Functionally, both CACs and imperatives are inherently directive. Formally, imperatives tend to be the simplest verbal forms. Like CACs, they can be mono-morphemic and identical or highly similar to roots.[134]

3.2.2. Natural-kind labels

Another source of secondary CACs in Ewe, mentioned previously in literature are natural-kind labels or nouns that refer to specific species.[135] Indeed, in Ewe, it is always possible to address animals by using the noun that denotes the phylogenetic class to which they belong: *koklo!* 'chicken!', *gbɔ!* 'goat!', *alẽ!* 'sheep!', *avu!* 'dog!', *dadi!* 'cat!'. Similar to imperatives, these nouns are not limited to a CAC function (directive) but can also be used in other functions as subjects, objects, and complements, entertaining the semantic roles of agent, experiencer, theme, patient, beneficiary, source, and others. They may also be employed as vocatives to draw the attention of the addressee. In such cases, they can precede imperative verbs that specify the type of action that is ordered. The most evident examples of the recruitment of natural-kind labels for directive-to-animal purposes (and thus the usage of these types of nouns as CACs) are attested in holophrastic contexts. In such instances, natural-kind labels are employed to summon animals. In contrast, according to our data, natural-kind-label CACs are not used as dispersals and directionals. In a summoning function, these CACs are usually repeated and pronounced quickly, often with a higher pitch and an "inviting" friendly melody: *koklo koklo koklo!* 'chicken, chicken, chicken!'.

The above-mentioned natural-kind labels may also be used in their diminutive forms when functioning as CACs.[136] In such cases, the respective noun is marked by the suffix *-vi* [ví]: *koklo-vi* 'chicken-DIM; chick', *gbɔ-vi* 'goat-DIM; kid', *alẽ-vi* 'sheep-DIM; lamb', *avu-vi* 'dog-DIM; puppy' and *dadi-vi* 'cat-DIM; kitten'.[137] According to Ameka, when used as CACs, the natural-kind labels of turkeys and ducks are not marked with a diminutive suffix.[138] Instead, the bare forms are preferred: *dɔku!* 'turkey!' and *kpakpa*(*xe*)*!* 'duck!'. According to our data, the forms *dɔku-vi* 'turkey-DIM!' and *kpakpa-vi* 'duck-DIM' are fully grammatical and/or felicitous in their CAC usage. Again, all diminutive-driven CACs are typically employed as summonses. While their usage in a directive-to-animal function is stabilised, all such diminutive forms may also assume non-CAC roles and appear as subjects, objects, adjuncts, and vocatives (*Avuvi la ɖu nu* 'The puppy has eaten').

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[134] Cf. Bernd Heine, Grammar *of interactives*; Alexandra Aikhenvald, *Imperatives and commands*.

[135] See: Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 488; Felix Ameka, 'Meaning of phatic and conative interjections', p. 265.

[136] Cf. Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 488; Felix Ameka, 'Meaning of phatic and conative interjections', p. 265.

[137] Cf. Bernd Heine and Friederike Hünnemeyer, 'On the fate of Ewe *ví* 'child' – the development of a diminutive marker', *Afrikanistische Arbeitspapiere* 16 (1988), pp. 97–121; Tania Kuteva et al., *World lexicon of grammaticalization*, Cambridge 2019, p. 890.

[138] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices'.

Natural-kind labels can be used to summon animals in Akan. None of such forms seem, however, to have been lexicalised into a stabilised secondary CAC.[139] Cross-linguistically, the use of natural-kind labels as fully stabilised secondary CACs is attested, being attributed to the original vocative usage of these forms.[140] However, such lexicalisations are not particularly frequent (they are indeed much less common than de-imperative CACs) and, thus far, the most evident examples of this process are found in Xhosa[141].

3.2.3. Proper names

Another strategy of interacting with animals through the standard linguistic repertoire of Ewe involves the use of proper names. As observed by Ameka, "animals that have 'personal' names may [always] be summoned by their names".[142] Similar to natural-kind labels, proper-name CACs are not used as dispersals and directionals, nor are they employed for motion unrelated purposes. As vocatives, they may however accompany constructions (primary CACs or secondary imperative-driven CACs) that are used in such dispersing, directional, and motion-unrelated functions. In Ewe, the animals that are given proper names are dogs and "less frequently" cats.[143] Other animals do not receive proper names. In fact, during our fieldwork, we were not able to collect cat names, and only dog names are represented in our database. Apart from *Nyasɔ̃* 'Wisdom' and *Dodzi* 'Perseverance', the two names mentioned by Ameka,[144] the common dog names are *Elikem* (= He/God has sustained/supported me), *Sedinam* (God has answered my prayers), *Woelinam* (You/God are/is there for me), *Mawulinam* (God is there for me), *Ewoenam* (He/God has done it for me), *Ɖutifafa* 'Peace', and *Dzidzɔ* 'Happy'. All these names are Ewe names given to people and are (more or less) widely used with human referents as well. Their usage with animal is thus secondary. According to our informants, the most common dog name is *Jack*, which is borrowed from English. Other common English-based dog names are *Scoobie*, *Blackie*, *Max*, and *Snow*. Most of these borrowed names cannot be used with humans in Ewe.[145] According to our data, it is more common

[139] See: Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[140] Fernando Poyatos, *Nonverbal communication across disciplines*; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype', pp. 23, 34; Bernd Heine, *Grammar of interactives*.

[141] Alexander Andrason, 'Conative animal calls in Xhosa', p. 42.

[142] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 489; Felix Ameka, 'Meaning of phatic and conative interjections', p. 266.

[143] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 489.

[144] Ibidem.

[145] Regarding the naming system of the Ewe consult F. K. Atakpa, 'The naming system of the Eʋe', in: *A handbook of Eweland. Volume I. The Ewes of southeastern Ghana*, ed. Francis Agbodeka, Accra 1997, pp. 177–192. Concerning English-to-Ewe borrowing, see Mawuli Adjei and Edzordzi G. Agbozo, 'Contemporary English loan-words in Ewe: A sociolinguistic appraisal', *The International Journal of Humanities & Social Studies* 2 (2014), pp. 111–118; and Albert Agbesi Wornyo, 'English loanwords in Ewe: A phonological analysis', *Journal of Literature, Languages and Linguistics* 22 (2016), pp. 42–51. Concerning English-Ewe code-switching see Evershed Kwasi Amuzu, 'Ewe-English codeswitching: A composite rather than classic codeswitching' (PhD diss. Australian National University, 2005); and Evershed Kwasi Amuzu, 'Double plurality in codeswitching', *Legon Journal of the Humanities* 20 (2009),

to hear dogs being called in English than using Ewe names. This is related to the fact that according to the speakers, they often speak English with their dogs.

Proper names are also used in interactions with animals in Akan. However, there are no precise data revealing the types of names used and their semantic functions.[146] In many languages, animals can be addressed with the names given to them (see Maasai, Xhosa, Kihunde, Dogon, Bum and Babanki) and proper names-vocative constitute one of the crosslinguistic sources of CACs.[147] However, the lexicalisation of such constructions into genuine secondary CACs is not particularly common. As in Ewe, secondary CACs derived from proper names that are attested in other languages tend to be used in a summoning function.

3.2.4. Other sources of secondary CACs

Across languages, one can recruit other lexical classes and constructions to demand the performance of an action from an animal. One such form is the category of adverbials.[148] Indeed, secondary CACs derived from adverbials are attested in Macha Oromo[149] and Dogon,[150] as well as residually in Tjwao[151] and Xhosa.[152] In Ewe, however, adverbials such as *afísía* 'here', *afímá* 'there', or *fifía* 'right now' have not been sufficiently entrenched and/or stabilised in a directive-to-animal function to view them as secondary CACs. In Akan, locative adverbials only feature as parts of secondary CACs that are built around imperatives.[153]

4. Discussion and conclusion

The evidence provided in the previous section allows us to answer the research question and establish that, from a formal perspective, the CAC category in Ewe fulfils the typological profile of CACs.[154] Primary CACs comply with the features associated

pp. 151–180. Lastly, concerning the use of English among the Ewe, see Lena Awoonor Aziaku, 'The effect of Englishisation on language use among the Ewe of Southern Volta in Ghana', *International Journal of English Language and Literature Studies* 4 (2015), pp. 192–202.

[146] Compare: reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[147] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; see also: Fernando Poyatos, *Nonverbal communication across disciplines*.

[148] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype', p. 23; see also: David Fleck, 'A grammar of Matses' (PhD diss. Rice University, 2003); Alexandra Aikhenvald, *Imperatives and commands*; Bernd Heine, *Grammar of interactives*.

[149] Alexander Andrason, Mulugeta Onsho and Shimelis Mazengia, 'Conative animal calls in Macha Oromo'.

[150] Alexander Andrason and Idrissa Sagara, 'The grammar of conative animal calls: The case of Togo-Teŋu Kan of Dourou'.

[151] Alexander Andrason and Admire Phiri, 'Talking to animals in a moribund language'.

[152] Alexander Andrason, 'Conative animal calls in Xhosa'.

[153] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls'.

[154] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Alexander Andrason, 'The non-arbitrariness of some conative calls used to chase animals'.

with the crosslinguistic prototype of a CAC and are both phonetically and morphologically extra-systematic if compared to the general word stock of Ewe. Regarding phonetics, primary CACs are invariably mono-syllabic. Although they may draw on vowels and consonants, the contribution of consonantal material is greater in CACs than in sentence-grammar lexical classes: (a) there are primary CACs that only consist of consonants but, in contrast, primary CACs built only around vowels are unattested – in the general word stock the opposite takes place; (b) most primary CACs exhibit syllables with consonantal onsets, while no onset-less primary CACs are attested – contrary to the general word stock where this latter structure is common; (c) contrary to other lexical classes, primary CACs tolerate consonantal codas. Primary CACs may host extra-systematic sounds: IPA phones that are otherwise absent in Ewe or limited to other interactives, as well as non-IPA sounds. Primary CACs exhibit extra-systematic phonotactics: complex clusters in onsets, the above-mentioned consonantal codas, and falling diphthongs, as well as long and extra-long consonants and vowels. Primary CACs are also commonly accompanied by modulations: excessive volume and articulatory speed, unusual pitch, melodic patterns, and pharyngealisation. Regarding morphology, primary CACs are mono-morphemic. Contrary to the transitory isolating-agglutinating profile of Ewe[155] and the commonness of words formed by "a concatenation of individual morphemes,"[156] primary CACs do not contain morphemes (inflectional, derivational, or compounded) other than the root itself. Primary summonses are often realised in replications, while primary dispersals tend to be punctual.[157]

In contrast to primary CACs, secondary CACs do not exhibit the above-mentioned extra-systematic properties with the exception of modulations by which they are commonly complemented. The typical sources of secondary CACs are imperatives, vocatively used natural-kind labels (often in their diminutive forms), and proper names. This behaviour of secondary CACs in Ewe matches what characterises secondary CACs across languages.[158] In Ewe, overall, the CAC-isation of these non-CAC lexemes/constructions is relatively low and none of them have been fully lexicalised into a genuine CAC (except for *les* which may be regarded as (nearly) primary).

The canonicity degree exhibited by Ewe CACs matches the canonicity extent observed in Akan, where "primary and secondary CACs exhibit distinct [phonetic and morphological] profiles" and where "the category of [primary] CACs […] coincides virtually with all prototypical features and thus instantiates the prototype of CACs to a large extent".[159] The typological profiles of the CAC categories in Akan and Ewe – with regard to both primary and secondary CACs – are thus analogous.

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[155] Felix Ameka, 'Ewe: Its grammatical constructions and illocutionary devices', p. 7; Felix Ameka, 'Ewe serial verb constructions in their grammatical context'.

[156] James Essegbey, *Ewe*, p. 408.

[157] Compare with: James Bynon, 'Domestic animal calling in a Berber tribe'; Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'.

[158] Alexander Andrason and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype'; Bernd Heine, *Grammar of interactives*.

[159] Reginald Duah, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls', p. 27.

It is not only the typological profiles of the Ewe and Akan CAC categories that are equal; some CACs are similar or even identical in both languages too. All such coinciding CACs are primary. The CACs *hai*, *hei*, and *kai* as well as the kiss CAC are identical in Ewe and Akan. A few other Ewe CACs, i.e., *mee*(*e*) *puu*(*u*)*s sã* and ǁ, have their close equivalents in Akan: *mɛɛ*, *bu*(*u*)*s*, *s*(*s*)*aw*, and ǂ.ǂ.ǂ.(ǂ)/ǁ.ǁ.(ǁ)). Given the nature of the phonological evolution of Kwa languages from Proto-Kwa to Proto-Potou-Tanu and Proto-Gbe and next to Akan and Ewe, respectively, with a number of shifts and changes separating the two linguistic lineages[160] – all of which is the manifestation of the considerable remoteness of Akan and Ewe within the Kwa linguistic branch[161] – and in light of the facts that will be discussed below, the striking similarities between some CACs in Ewe and Akan are unlikely to reflect an uninterrupted phylogenetic trajectory and be inherited. In our opinion, the CACs that coincide in Ewe and Akan are (paradoxically) not true cognates.

A more plausible scenario is that the above-mentioned similarities are due to areal phenomena. Indeed, as "Akan and […] the Gbe group (particularly Ewe) […] have been in close contact with each other for less than a millennium,"[162] (nearly) identical CACs might have resulted from borrowing from one language to another. If this was the case, the available data do not allow us to determine the direction or the origin of the transfer. However, it is noteworthy that no secondary CACs have been borrowed from Akan to Ewe or vice-versa. Since the transfer of secondary CACs seem crosslinguistically more common rather than that of primary CACs (this is especially evident in Gorwaa – a language spoken in the Rif valley where a number of secondary CACs have been borrowed from Swahili),[163] the absence of secondary CAC loanwords renders the hypothesis of areal convergence quite problematic. If borrowing had been a force explaining the coinciding CACs in Ewe and Akan, one would expect it to operate in secondary CACs as well and in fact more intensely than in primary CACs – which is not the case according to our data.

Therefore, while areal spreading remains a possible explanation (certainly to a greater extent than any phylogenetic legacy), the most probable reason of the synchronic similarity exhibited by some CACs in Ewe and Akan is the exploitation of shared cross-linguistic strategies. In other words, instead of being borrowed or inherited, identical/similar CACs

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[160] Mary E. Kropp Dakubu, 'The Potou lenis stops and Western Kwa', *Anthropological Linguistics* 19 (1977), pp. 431–435; Mary E. Kropp Dakubu, 'Towards a phonology of Proto-Kwa'; Hounkpati Capo, *Comparative phonology of Gbe*; John Stewart, 'The second Tano consonant shift and its likeness to Grimm's law', *Journal of West African Languages* 23 (1993), pp. 3–39; John Stewart, 'The comparative phonology of Gbe and its significance for that of Kwa and Volta-Congo', *Journal of African Languages and Linguistics* 15 (1994), pp. 175–193; John Stewart, 'The potential of Proto-Potou-Akanic-Bantu as a pilot Proto-Niger-Congo, and the reconstructions updated', *Journal of African Languages and Linguistics* 23 (2002), pp. 197–224; Kirill Babaev, 'Reconstructing personal pronouns in Proto-Kwa'.

[161] Kirill Babaev, 'Reconstructing personal pronouns in Proto-Kwa'; Mary E. Kropp Dakubu, 'Kwa languages', p. 273; Mary E. Kropp Dakubu, 'Towards a phonology of Proto-Kwa'.

[162] Mary E. Kropp Dakubu, 'Towards a phonology of Proto-Kwa', p. 3; see also: Felix Ameka and Kropp Dakubu, 'Introduction', p. 3.

[163] Alexander Andrason and Andrew Harvey, 'Consonantality of conative animal calls | Vocalicity of interjections. Accidental or motivated? The case of Gorwaa', under review.

have most likely emerged (or have been reemerging) in Ewe/Gbe and Akan/Potuo-Tanu independently and constitute examples of parallel developments motivated by typological "rules" or tendencies. Indeed, each of the pairs of CACs that coincide in Ewe and Akan – perhaps except *kai* – has a close equivalent in many other languages that are neither related nor geographically adjacent and, overall, complies with the typological behaviour of CACs. We think that such semi-universal typological strategies have operated in CACs in Ewe and Akan and ultimately led to the formal and functional convergence of some lexemes in these two languages. This conclusion is consistent with the analysis of CACs in Babanki and Bum – two Grassfields languages spoken in Cameroon.[164] According to that study, "most CACs that coincide formally and functionally [in Babanki and Bum] may owe their similarity not to cognancy, but rather to iconic and universal strategies exploited in the two languages separately".[165]

While three sources of the lexemic similarity of Ewe and Akan CACs form a hierarchy of plausibility – parallel development (the most likely) > areal spreading (less likely) > phylogenetic legacy (unlikely) – all of them remain possible. This confirms the difficulty of analysing synchronic data related to CACs and interactives in African languages.[166] Most varieties lack written texts that would attest to historical developments and, at the same time, experience (intense) language contact. Additionally, interactives tend to draw on motivated strategies: embodied, imitative, and/or iconic. Consequently, determining which of the three possibilities of language evolution – i.e., shared ancestry, areal convergence, or parallel development – is the case, becomes (highly) difficult.[167] As we explained above, in Ewe, the latter scenario (i.e., parallel development) is, in our view, the most plausible.

While the above conclusions demonstrate that our study has achieved its objective, the present paper and the research from which it emerged have had much wider ramifications for us than a mere scholarly publication. When we initially met during the first author's work with hunters in a rural area north from Kumasi, we envisioned this paper as an academic project. The subsequent fieldwork, data analysis, and work on the manuscript have, however, transformed this collaboration from purely scholarly into a most beautiful friendship. We gradually learned about each other's lives, understood our respective family histories and generational struggles, and disclosed our dreams, ambitions, and fears. We shared our knowledge with each other and allowed ourselves to benefit from the other person's experience and expertise. Above all, we supported each other on the days where our worlds seemed to be falling apart and celebrated together our successes, whether shared or individual. And while we continue to do research and write jointly, we have built a relationship that transcends linguistics, academy, and scholarship. We deeply care about each other: about our cultures, languages, and people.

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[164] Alexander Andrason and Pius Akumbu, 'Towards a linguistic analysis of conative animal calls in Babanki and Bum'.

[165] Ibidem, p. 22.

[166] See: James Bynon, 'Domestic animal calling in a Berber tribe'.

[167] Compare: Tom Güldemann (ed.), 'Historical linguistics and genealogical language classification in Africa', in: *The languages and linguistics of Africa*, ed. Tom Güldemann, Berlin 2018, pp. 58–444.

References

Abdulla Alia Bader and Zahraa Nasir Talib, 'The meanings of interjections in English and Arabic', *Journal of the College of Arts University of Basrah* 50 (2009), pp. 89–107.

Adjei Mawuli and Edzordzi G. Agbozo, 'Contemporary English loan-words in Ewe: A sociolinguistic appraisal', *The International Journal of Humanities & Social Studies* 2 (2014), pp. 111–118.

Aikhenvald Alexandra, *Imperatives and commands*, Oxford University Press, Oxford 2010.

Ambrazas Vytautas, Emma Geniušienė, Aleksas Girdenis, Nijolė Sližienė, Dalija Tekorienė, Adelė Valeckienė and Elena Valiulytė, *Lithuanian grammar*, Baltos Lankos, Vilnius 2006.

Ameka Felix, 'Ewe: Its grammatical constructions and illocutionary devices' (PhD diss., Australian National University, 1991).

Ameka Felix, 'The meaning of phatic and conative interjections', *Journal of Pragmatics* 18/2–3 (1992), pp. 245–227.

Ameka Felix, 'Interjections: The universal yet neglected part of speech', *Journal of Pragmatics* 18/2–3 (1992), pp. 101–118.

Ameka Felix, 'The typology and semantics of complex nominal duplication in Ewe', *Anthropological Linguistics* 41 (1999), pp. 75–106.

Ameka Felix, 'Ideophones and the nature of the adjectives word class in Ewe', in: *Ideophones*, eds. F.K. Ekhard Voeltz and Christa Kilian-Hatz, Amsterdam 2001, pp. 25–48.

Ameka Felix, 'Ewe serial verb constructions in their grammatical context', in: *Serial verb constructions: A crosslinguistic typology*, Alexandra Y. Aikhenvald and Robert M.W. Dixon (eds.), Oxford University Press, Oxford 2006, pp. 124–143.

Ameka Felix and Kropp Dakubu, 'Introduction', in: *Aspect and Modality in Kwa Languages*, Felix Ameka and Mary E. Kropp Dakubu (eds.), John Benjamins, Amsterdam 2008, pp. 1–7.

Amha Azeb, 'Directives to humans and to domestic animals: The imperative and some interjections in Zargulla', in: *Proceedings of the 5th International Conference on Cushitic and Omotic Languages, Paris, 16–18 April 2008*, Marie-Claude Simeone-Senelle and Martine Vanhove (eds.), Rüdiger Köppe, Köln 2013, pp. 211–229.

Amuzu Evershed Kwasi, 'Ewe-English codeswitching: A composite rather than classic codeswitching' (PhD diss. Australian National University, 2005).

Amuzu Evershed Kwasi, 'Double plurality in codeswitching', *Legon Journal of the Humanities* 20 (2009), pp. 151–180.

Andrason Alexander, 'Conative animal calls in Xhosa: Testing the prototype', *Africana Linguistica* 28 (2022), pp. 25–54.

Andrason Alexander, 'The non-arbitrariness of some conative calls used to chase animals', *Linguistica Silesiana* 44 (2023), pp. 73–103.

Andrason Alexander, 'Conative "kisses" in human-to-animal communication', *Lodz Papers in Pragmatics* 20/1 (2024), pp. 103–129.

Andrason Alexander and Pius W. Akumbu, 'Towards a linguistic analysis of conative animal calls in Babanki and Bum (Grassfields languages of Cameroon)', *Kervan: International Journal of Afro-Asiatic Studies* 28/1 (2024), pp. 3–28.

Andrason Alexaner, Anna Luisa Daigneault, Maya Hendrix, Rebecca Pizzitola and Ausha Somu, *A living database of conative animal calls*, Living Tongues Institute for Endangered Languages, Salem 2024.

Andrason Alexander and Mawande Dlali, 'The (crucial yet neglected) category of interjections in Xhosa', *STUF – Language Typology and Universals* 73/2 (2020), pp. 159–217.

Andrason Alexander and Andrew Harvey, 'Consonantality of conative animal calls | Vocalicity of interjections. Accidental or motivated? The case of Gorwaa', under review.

Andrason Alexander and Michael Karani, 'Conative calls to animals: From Arusa Maasai to a cross-linguistic prototype', *Lodz Papers in Pragmatics* 37/1 (2021), pp. 3–40.

Andrason Alexander, Mulugeta Onsho and Shimelis Mazengia, 'Conative animal calls in Macha Oromo: Function and form', *Linguistic Vanguard* 10 (2024), pp. 199–207.

Andrason Alexander and Admire Phiri, 'Talking to animals in a moribund language: Pragma-semantics, phonetics, and morphology of conative animal calls in Tjwao', *Linguistic Variation* 23/2 (2023), pp. 318–342.

Andrason Alexander and Idrissa Sagara, 'The grammar of conative animal calls: The case of Togo-Teŋu Kan of Dourou (Dogon)', *Asian and African Studies* 33/1 (2024), pp. 48–96.

Ansre Gilbert, 'The tonal structure of Ewe', *Hartford Studies in Linguistics* 1 (1961).

Ansre Gilbert, 'Reduplication in Ewe', *Journal of African Languages* 2 (1963), pp. 128–132.

Ansre, Gilbert, 'The grammatical units of Ewe: A study of their structure, classes and systems.' (PhD diss. University of London, 1966).

Ansre Gilbert, 'Ewe language', in: *A handbook of Eweland. Volume II. The northern Ewe in Ghana*, Kodzo Gavua (ed.), Woeli Publishing Services, Accra 2000, pp. 22–47.

Atakpa F.K., 'The Ewe language', in: *A handbook of Eweland. Volume I. The Ewes of southeastern Ghana*, Francis Agbodeka (ed.), Woeli Publishing Services, Accra 1997, pp. 28–46.

Atakpa F.K., 'The naming system of the Eʋe', in: *A handbook of Eweland. Volume I. The Ewes of southeastern Ghana*, Francis Agbodeka (ed.), Woeli Publishing Services, Accra 1997, pp. 177–192.

Aziaku Lena Awoonor, 'The effect of Englishisation on language use among the Ewe of Southern Volta in Ghana', *International Journal of English Language and Literature Studies* 4 (2015), pp. 192–202.

Aziaku Vincent Erskine, *A linguistic analysis of Ewe animal names among the Ewe of Ghana*, Rüdiger Köppe, Köln 2016.

Babaev Kirill, 'О реконструкции личных местоимений в праязыке ква [O rekonstrukcii ličnyx mestoimenij v prajazyke Kva = On reconstructing personal pronouns in Proto-Kwa]', in: *Вопросы языкознания* [Voprosy Jazykoznanija] 4 (2010), pp. 81–108.

Bynon James, 'Domestic animal calling in a Berber tribe', in: *Language and man: Anthropological issues*, William McCormack and Stephen Wurm (eds.), De Gruyter, The Hague 1976, pp. 39–66.

Capo Hounkpati B.C., 'Determining the third person singular object pronoun in Gbe', in: *West African languages in education*, Kay Williaamson (ed.), AFRO-PUB, Wien, 1985, pp. 106–131.

Capo Hounkpati, *A comparative phonology of Gbe*, De Gruyter, Berlin 1991.

Clements George Nickerson, 'The verbal syntax of Ewe' (PhD diss, University of London, 1972).

Collins Christopher Thad, 'Topics in Ewe syntax' (PhD diss. MIT, 1993).

Croft William and Alan Cruse, *Cognitive Linguistics*, Cambridge University Press, Cambridge 2004.

Daković Sybilla, *Interiekcje w języku polskim, serbskim, chorwackim i rosyjskim. Opis i konfrontacja* [*Interjections in Polish, Serbian, Croat, and Russian. Description and comparison*], Ossolineum, Wrocław 2006.

Denisova T. and L. Sergeev, 'О некоторых особенностях верхового диалекта в говорах чувашской диаспоры Ульяновской области [O nekotoryx osobennostjax verxovogo dialekta v govorax čuvašskoj diaspory Ul'janovskoj oblasti = On some dialectal features in the varieties spoken by the Chuvash diaspora of the Ulyanovsk region]', in: *Вестник ЧГПУ им. И. Я. Яковлева* [Vestnik ČGPU im. I.Ja. Jakovleva = Herald of Jakovlev Chechen State Pedagogical University], pp. 32–37.

Doke Clement, *The phonetics of the Zulu language*, University of the Witwatersrand, Johannesburg 1920.

Duah Reginald, Alexander Andrason and Mike Ofori Antwi, 'Phylogenetics of conative animal calls: Asante, Bono, and Fante' (paper presented at the Semantics Colloquium, Institute für Linguistik, Goethe Universität Frankfurt, May 4, 2023).

Duthie Alan, *Introducing Ewe linguistics patterns: A textbook of phonology, grammar and semantics*, Ghana Universities Press, Accra 1996.

Essegbey James, 'Ewe', in: *Concise encyclopedias of language and linguistics*, Keith Brown and Sarah Ogilvie (eds.), Elsevier, Amsterdam 2006, pp. 408–409.

Evans Vyyan and Melanie Green, *Cognitive linguistics: An introduction*, Edinburgh University Press, Edinburgh 2006.

Fleck David, 'A grammar of Matses' (PhD diss. Rice University, 2003).
Güldemann Tom, 'Historical linguistics and genealogical language classification in Africa', in: *The languages and linguistics of Africa*, Tom Güldemann (ed.), De Gryuter, Berlin 2018, pp. 58–444.
Glottolog, 'Spoken L1 Language: Ewe', Viewed 5 June 2024, https://glottolog.org/resource/languoid/id/ewee1241.
Heine Bernd, *The grammar of interactives*, Oxford University Press, Oxford 2023.
Heine Bernd and Friederike Hünnemeyer, 'On the fate of Ewe *vi* 'child' – the development of a diminutive marker', *Afrikanistische Arbeitspapiere* 16 (1988), pp. 97–121.
Heine Bernd, Tania Kuteva and Gunther Kaltenböck, 'Discourse grammar, the dual-process model, and brain lateralization: Some correlations', *Language and Cognition* 6/1 (2014), pp. 146–180.
Heine Bernd, Tania Kuteva and Haiping Long, 'Dual-process frameworks on reasoning and linguistic discourse: a comparison', in: *Grammar and cognition: Dualistic models of language structure and language processing*, Alexander Haselow and Gunther Kaltenböck (eds.), John Benjamins, Amsterdam 2020, pp. 59–89.
Janda Lara, 'Cognitive linguistics in the year 2015', *Cognitive Semantics* 1 (2015), pp. 131–154.
Jääskeläinen Anni, 'Eläinten omat sanat: Eläimille suunnatut interjektiot ihmisen ja eläimen vuorovaikutuksen osina', in: *Kieli ja elain. Vuorovaikutusta ja kielioppia monilajisissa yhteisöissä*, Rea Peltola, Anni Jääskeläinen and Katariina Harjunpää (eds.), Suomalaisen Kirjallisuuden Seura, Helsinki 2021, pp. 133–184.
Kluge Angela, *A sociolinguistic survey of the Gbe language communities of Benin and Togo: Gbe language family overview*, SIL International, 2011.
Kropp Dakubu Mary E., 'The Potou lenis stops and Western Kwa', *Anthropological Linguistics* 19 (1977), pp. 431–435.
Kropp Dakubu, Mary E., 'Kwa languages', in: *Encyclopedia of language and linguistics*, Keith Brown (ed.), Elsevier, Amsterdam 2005, pp. 272–274.
Kropp Dakubu Mary E., 'Towards a phonology of Proto-Kwa: Onwards from Stewart's "Potou-Akanic-Bantu"' (paper presented at the International Congress Towards Proto-Niger-Congo: Comparison and Reconstruction, Paris, France, September 18–21, 2012).
Kropp Dakubu, Mary E., 'Kwa', in: *The Oxford handbook of African languages*, Rainer Vossen and Gerrit J. Dimmendaal (eds.), Oxford University Press, Oxford 2020, pp. 184–190.
Kuteva, Tania, Bernd Heine, Bo Hong, Haiping Long, Heiko Narrog and Seongha Rhee, *World lexicon of grammaticalization*, Cambridge University Press, Cambridge 2019.
Ongaye Oda Orkaydo, *A grammar of Konso*, LOT, Utrecht 2013.
Nada Gbegble and Jan Nuyts, 'The expression of epistemic modality in Ewe', *Africana Linguistica* 18 (2012), pp. 133–168.
Nübling Damaris, 'Von oh mein Jesus! zu oje! – Der Interjektionalisierungspfad von der sekundären zur primären Interjektion', *Deutsche Sprache* 29/1 (2001), pp. 20–45.
Poyatos Fernando, *Paralanguage: A linguistic and interdisciplinary approach to interactive speech and sounds*, John Benjamins, Amsterdam 1993.
Poyatos Fernando, *Nonverbal communication across disciplines. Volume II: Paralanguage, kinesics, silence, personal and environmental interaction*, John Benjamins, Amsterdam 2002.
Rongier Jacques, *Parlons éwé*, L'Harmattan, Paris 2004.
Rosch Eleanor and Carolyn Mervis, 'Family resemblances: Studies in the internal structure of categories', *Cognitive Psychology* 7 (1975), pp. 573–605.
Sam Jemima and Cynthia Ablah Agbloe, 'Lexical variations in the Ewe language spoken in Ho in the Volta Region of Ghana', *Journal of Education* 7 (2015), pp. 69–87.
Sands Bonny, 'Click consonants: An introduction', in: *Click consonants*, Bonny Sands (ed.), Brill, Leiden 2020, pp. 1–73.

Siatkowska Ewa, *Zachodniosłowiańskie zawołania na zwierzęta: stan obecny, funkcje historyczne, stosunek do systemu językowego* [*West-Slavonic animal calls: Present situation, historical functions, and relationship with the language system*], Wydawnictwa Uniwersytetu Warszawskiego, Warszawa 1976.

Smith Neil, 'Tone in Ewe', *Research Laboratory of Electronics Quarterly Progress Report* 88 (1968), pp. 290–304.

Stahlke Herbert, *Topics in Ewe phonology*, University Microfilms, Ann Arbor 1971.

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

Stewart John, 'Niger-Congo, Kwa', in: *Current trends in linguistics*. *Linguistics in sub-Saharan Africa*, Thomas A. Sebeok (ed.), Mouton, The Hague 1971, pp. 179–212.

Stewart John, 'The second Tano consonant shift and its likeness to Grimm's law', *Journal of West African Languages* 23 (1993), pp. 3–39.

Stewart John, 'The comparative phonology of Gbe and its significance for that of Kwa and Volta-Congo', *Journal of African Languages and Linguistics* 15 (1994), pp. 175–193.

Stewart John, 'The potential of Proto-Potou-Akanic-Bantu as a pilot Proto-Niger-Congo, and the reconstructions updated', *Journal of African Languages and Linguistics* 23 (2002), pp. 197–224.

Taylor John R., *Linguistic categorization*, Oxford University Press, Oxford 2003.

Wartburton Irene, Prosper Kpotufe and Roland Glover, *Ewe basic course*, Indiana University, Bloomington 1968.

Westermann Diedrich, *Grammatik der Ewe-Sprache*, Dietrich Reimer, Berlin 1907.

Westermann Diedrich, *Evefiala: Ewe-English Dictionary*, Dietrich Reimer, Berlin 1928.

Westermann Diedrich, *Wörterbuch der Ewe-Sprache: Ewe-Deutsch*, Dietrich Reimer, Berlin 1954 [1905].

Westermann Diedrich and Margaret Bryan, *Handbook of African languages. Part II: Languages of West Africa*, International African Institute, London 1952.

Wierzbicka Anna, *Cross-cultural pragmatics: The semantics of human interaction*, De Gruyter, Berlin 2003.

Williamson Kay and Roger Blench, 'Niger-Congo', in *African Languages: An Introduction*, Bernd Heine and Dereck Nurse (eds.), Cambridge University Press, Cambridge 2000.

Wornyo Albert Agbesi, 'English loanwords in Ewe: A phonological analysis', *Journal of Literature, Languages and Linguistics* 22 (2016), pp. 42–51.

Yegblemenawo Doreen Enyonam Esi and Stella Afi Makafui Yegblemenawo, 'Documenting praise names ahanoŋkɔ among Ewes: A socio-semantic perspective', in: *Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics*, Akinbiyi Akinlabi et al. (eds), Language Science Press, Berlin 2021, pp. 331–347.