Chapter 17

Verbal gestures in Cameroon

Betsy Pillion
University of Chicago

Lenore A. Grenoble University of Chicago

Emmanuel Ngué Um University of Yaoundé

Sarah Kopper
Michigan State University

This paper details the nature of a set of extra-grammatical units that we call *verbal gestures*, found in several communities in the Central, Littoral, and Southern regions of Cameroon. We lay out the verbal gestures found in these communities, explain their usage and distribution within the context of the community and the language of the user, and situate the system of verbal gestures found in Cameroon in the larger linguistic context of Cameroonian multilingualism. Furthermore, we make preliminary proposals for a system of sounds that exists outside of that of the primary phonemic system, which interacts with the system of verbal gestures.

1 Introduction

We use the term *verbal gestures* to refer to a set of linguistic elements that are extra-grammatical, in the sense that they are not used in a morphosyntactic frame, and thus are not lexical words per se, but may serve the same functional purpose. Verbal gestures often include sounds or segments that stand outside a language's phonemic inventory; in many of the documented instances of verbal gestures that we illustrate here, they consist only of non-phonemic segments.



Nonetheless, verbal gestures are a core part of the communicative system of the language. Verbal gestures are readily recognized by speakers as having semantic and pragmatic meaning, but are not words. Examples in English include the use of the glottal stop in some pronunciations of *uh-oh* or in the dental click in *tsk-tsk*. These sounds, despite not being used in recombinable units within the phonemic system, are consistent in their articulatory execution and acoustic result. We propose that these systematic articulations are governed by a secondary sound system. The level of interaction that this system seems to have with the primary phonemic system, and the extent to which these sounds can differ in their articulation, are still open questions. We present a preliminary analysis in §5. The present contribution is a part of a larger project investigating the category of verbal gestures cross-linguistically; here we present one small subset resulting from a pilot study conducted by the authors in Cameroon in 2015.

This work builds on previous research on verbal gestures in Senegal Grenoble et al. (2015), focusing instead on verbal gestures in Cameroon, and expands the theoretical groundwork of the earlier work. Verbal gestures have much in common with what (Gil 2013) has identified as *paralinguistic clicks*, but the category of verbal gestures is larger and includes sounds that are not clicks, and includes items that are not paralinguistic but linguistic.¹ Gil notes that "paralinguistic clicks resemble other linguistic signs in that they are arbitrary and conventionalized." Since they are vocal, it is unclear what distinguishes them from other linguistic items, such as interjections, except that they contain non-phonemic clicks. It has long been recognized that certain categories – exclamations, interjections, animal calls, baby talk, foreign words – often contain sounds not found elsewhere in the sound system, as noted by (Harris 1951: 71); see also (Fries & Pike 1949).

The phenomena under investigation here are not discourse markers, defined as "sequentially dependent elements which bracket units of talk" (Schiffrin 1987: 31) or as signaling a relationship between the upcoming message and prior discourse (Fraser 1990; 1996; 1999) and have a "core meaning that is procedural, not conceptual" (Fraser 1999: 950). With reference to manual gestures, these have been called

¹The term *paralinguistic* has been used to refer to a host of categories over the years. While Gil's use of *paralinguistic* selects these clicks as being objects in some way alongside language but not within it, many researchers use *paralinguistic* to refer to aspects of speech that are not strictly contrastive or linguistic but indicate other aspects of a person's voice such as confidence (Scherer et al. 1973), or suprasegmental attributes of the speech signal that signal emotion (Fujisaki & Hirose 1993). It is for this reason that we avoid the term in categorizing verbal gestures. See also Ameka (1992: 112) who discusses the characterization of interjections as paralinguistic and thus peripheral.

discourse unit markers, "labels for segments or units within a discourse, thereby indicating the part these units play within the discourse structure" (Kendon 1995: 248). We add to a growing body of research on phenomena that have been historically considered to be on the margins of language, but have increasingly been analyzed as integral to the overall communicative situation. Examples include phenomena with unusual sounds, such whistle speech (Meyer 2015; Sicoli 2016), hesitation markers (Dingemanse et al. 2013; Schegloff 1982), ideophones (Childs 1994), and theticals (Kaltenböck et al. 2011), which are prosodically distinct and syntactically independent.

Verbal gestures are perhaps best viewed as a subset of the larger category of interjections, a class generally defined as including both word types and an utterance type (Ameka 1992: 102). The word types constitute a special subset because of their particular phonetic and morphosyntactic properties: they are often phonologically distinctive, and may contain sounds not in the phonemic inventory, a characteristic of the category of interjections as a whole (Schachter 1985). This category has been referred to as *non-words*. These are primary interjections and "do not normally enter into construction with other word classes" (Ameka 1992: 105); they are phonologically and morphologically anomalous. The class of verbal gestures as we define it is sufficiently broad to include phenomena that are similar to *quotable* gestures or *emblems* which include *lexical* gestures that can be translated into lexical words (Brookes 2004; Poggi 1983; Poggi & Zomparelli 1987). In these respects verbal gestures are very much like quotable gestures, but they are vocal, not manual or facial. They differ from lexical words in each of the languages examined in our fieldwork in that they not only do not take morphology, but also cannot be embedded. (For more detailed discussion, see Grenoble et al. 2015.)

Verbal gestures do not enter into a morphosyntactic frame: they do not combine with the grammar, or inflectional or derivational morphology. They have conventional content and form: they are readily understood and used by multiple speakers across the speech community. They can constitute an utterance. Like other utterances, they may overlap with another speaker's utterance, or they may stand alone, for example as a second-pair part of an adjacency pair. Verbal gestures are readily borrowable cross-linguistically, precisely because they do not enter into a morphosyntactic frame and are attractive because they make use of sounds that are highly salient to outside speakers.

The verbal gestures we have documented in Cameroon are very similar across different languages, with some differences in production. For example, the gesture for negative affect is similar in all tested regions of Cameroon and across

speakers of different mother tongues, but varies in terms of the duration of the gesture and head movement.

In contrast to verbal gestures in Cameroon, Wolof speakers in Senegal use a *highly* conventionalized system of verbal gestures, whose meanings and articulations vary minimally. Included in this system are verbal gestures that have the same function as the words 'no' and 'yes' (Grenoble et al. 2015). The systems of verbal gestures we have observed in certain areas of Cameroon differ from those of Senegalese Wolof in their level of conventionalization, and there are major differences in the delineation of these systems with respect to how the phonemic system and the verbal gestural system interact.

Conventionalization involves diachronic patterns of change and is "typically in a state of flux" (Ferguson 1994: 27); note that Ameka (1992: 106) defines interiections as "relatively conventionalized vocal gestures," suggesting a continuum. Conventionalization is thus an ongoing process, and we take level of conventionalization as a rough reflection of both the consistency of the gesture's pragmatic use within the linguistic system and the consistency of articulatory production. Verbal gestures that are unconventionalized, or lowest on the scale of conventionalization, include nonce gestures, that are uttered once and may have clear contextual meaning, but are not reproduced by other speakers. More conventionalized verbal gestures have propagated and are found in the wider speech community, but are very contextually dependent for pragmatic interpretation, or do not have a consistent meaning across the speech community but are more widely used than one-off verbal gestures. Finally, conventionalized verbal gestures are consistent in pragmatic interpretation across the speech community, and although each verbal gesture may serve multiple functions, its interpretation within a given context is predictable and transparent to interlocutors.

Our work is similar in spirit to Eastman & Omar (1985), which identifies a special category of co-speech gestures in Swahili, placing it on a continuum of verbal–non-verbal communication. Their work focuses on manual co-speech (or, in their terms, verbally-dependent) gestures, while we are concerned with gestures that are vocalizations, although they may be accompanied by some physical body movement (manual gesture, facial expression, head movement, or body movement). The inventory of Swahili interjections includes at least one "non-linguistic vocalization," hng?ng, described as a bisyllabic item, consisting of "breathy syllabic velar nasal followed by a glottal catch and another syllabic velar nasal" (Eastman 1992: 281; Eastman & Omar 1985: 328); this sound is accompanied by a distinctive manual gesture to indicate a bad smell. Eastman's study of Swahili interjections provides a list of 28 items, many of which are clearly words

by any definition, such as *harambee!* 'let's all pull/work together'. The gesture *hng'*? *ng'* is distinct in this regard: it is not a word form, but a verbal gesture as defined here.

It should also be noted that in our discussion of verbal gestural systems, we are only able to offer a snapshot of what is assuredly a varied and multifaceted group of verbal gestures, as of yet undocumented. The scales given here are intended only to serve as a reference for the possibilities of groupings that may exist throughout languages,² and reflect only the gestures that we have documented and are well attested in our field recordings.

Wolof verbal gestures are highly conventionalized. The sounds that these gestures are composed of vary minimally, with the exception of the *waaw* 'yes' gesture, which can be produced as an alveolar, palatal, or lateral click, apparently in free variation. Many Wolof verbal gestures use a secondary set of sounds, while also making some use of the primary phonemic system. This is illustrated in Figure 1.

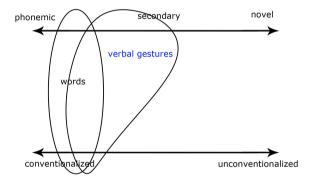


Figure 1: Senegalese Wolof

Figure 1 illustrates the relationship of verbal gestures to words along the two continua of the sound system and conventionalization. The lines in the figure indicate that these items exist over a wider range of levels of conventionalization

²While it is theoretically possible that a language does not use any primary phonemes in its verbal gestures, that seems highly unlikely and we know of no such system.

and phonemic statuses and not the total inventory. That is, the figure should not be interpreted as claiming that the inventory of verbal gestures is larger than that of lexical words, but simply that there is more variety with respect to these parameters within that category.

Wolof also has a rich system of ideophones, which function like conventional words in that they take morphology and syntax, and use only phonemic sounds. They do not use clicks, unlike many Wolof verbal gestures. In contrast, in the Cameroonian languages studied here, verbal gestures are less conventionalized than words, as illustrated in Figure 2.

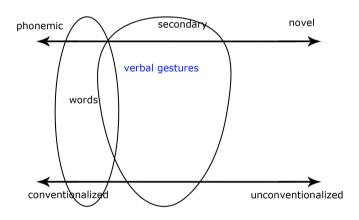


Figure 2: Cameroonian verbal gestures

Cameroonian verbal gestures are varied across languages and areas, but across these systems, we note that even within languages and communities there is less conventionalization of the meaning of these gestures in Cameroon. They are not as readily recognized as they are in Wolof communities by speakers, and they have a wider range of possible interpretations (although there are some verbal gestures that are extremely similar between Senegal and Cameroon, see §4.1 and §4.3). The extent to which this lesser level of conventionalization might be related to the multilingualism of the communities in question is not known. This level of conventionalization also may vary from community to community, but in our

glimpse of these systems, we note that these gestures do not seem to take the place of words such as in the system in Senegal.

Despite the differences in the levels of conventionalization between Wolof and Cameroonian verbal gestures, there are striking similarities between them in meaning and articulation, as illustrated in §4.

2 Methodology

Our analysis is based on fieldwork conducted in Cameroon in 2015 in three urban centers (Buea, Edéa, Yaoundé), and on the palm oil plantation Apouh A Ngok (Littoral region, to the south of Edéa), and casual observations in Douala. Several methods were employed to elicit and understand verbal gestures: focused elicitation sessions, participant observation, and casual observations while walking around town, including some recordings in the marketplace. Elicitations were conducted in Basaá, English, and French. Since Ngué Um is a native speaker of Basaá, we were able to document approximately 90 minutes of spontaneous, unplanned conversation in Basaá, in two different settings, once with the authors, and once without any of the authors present. In addition, we conducted language surveys in Apouh A Ngok to judge levels of multilingualism. Similar to Brookes (2004: 191), we identify conventional gestures by one of the following criteria: (1) the gesture was attested on more than one occasion in spontaneous speech, signaling a similar meaning; (2) the gesture was observed in spontaneous speech and its usage and meaning were confirmed by a native speaker other than the interlocutor who originally produced it; and (3) it was elicited from multiple native speakers of the same language. Gestures which were claimed to be used by only one native speaker and not otherwise attested in spontaneous speech are given in Table 4, §4.6.

Previous work on Wolof verbal gestures in Senegal showed them to be very easy to elicit: Wolof speakers quickly recognize the phenomenon and readily produce gestures from a description of the semantic/pragmatic content once they understand the question. For example, if asked how to say 'yes' (or oui) using a sound on the lips, they produce one of three possible click variants for this gesture, and easily offer additional verbal gestures. This was not the case in Cameroon, where speakers responded with mhmm or mmm, starting out with a mid-level pitch and rising at the end, but critically not a click (reflecting in part the absence of YES/NO gestures in the Cameroonian languages under investigation). The exception is the production of the negative affect click, which is readily elicitable and is referred to in Basaá as $\widehat{t} \int amla$.

3 Linguistic situation in Cameroon

Cameroon is notable for high levels of multilingualism, both in terms of the overall numbers of languages spoken as well as on an individual basis: Cameroonians are likely to have at least some functional knowledge of multiple codes, with varying levels of proficiency. 273 languages are spoken throughout the country, and many Cameroonians are speakers of several indigenous languages in addition to the official government and educational languages French and English. Interviews at the palm oil plantation in Apouh A Ngok give some sense of what we mean by claiming high levels of multilingualism. A total of 24 languages were spoken by 14 respondents; one respondent, who claimed to speak 17 different language, is excluded from this count.

Despite the multilingualism of these speakers, none of the languages found in these communities makes use of click consonants in its phonological system. The speakers who participated in our study are all multilingual, and are privy to multiple linguistic communities. In addition, all speakers interviewed have spent significant time in cities other than those where their mother tongue is spoken. We briefly outline the position of each language represented in this study, and the phonologies of these languages. Speaker data here is taken from Lewis et al. (2016) and should be taken as only an estimate of approximate speaker population size.

3.1 Basaá

Basaá (A43) is a language spoken in the Littoral region of Cameroon by approximately 300,000 people. Its speakers are located in the Francophone region of Cameroon. Basaá is a tonal language, which makes use of phonemic high, low, and mid tones. Importantly, its phonology and phonotactics do not make use of click consonants. Our Basaá consultants come from the Sanaga-Maritime Department of the Littoral region, near Édéa. Additionally, Ngué Um, the third author of this paper, is a native speaker of Basaá. We have considerably more data for Basaá than any other Cameroonian language, with multiple speakers.

3.2 Bakoko

Bakoko (A43) is spoken in the Littoral region of Cameroon by approximately 50,000 people. It is closely related to Basaá and is considered to be mutually intelligible with Basaá by some speakers of the languages. The Bakoko consultants who we worked with during this study were from Édéa and the nearby palm oil

plantation Apouh A Ngok, in the Littoral region. It is also a tonal language, much like Basaá. Importantly, the phonemic system of the language does not make use of clicks.

3.3 Bulu

Bulu (A74) is spoken in the Southern region of Cameroon by approximately 858,000 people as an L1, and an additional 800,000 as an L2. It is also a tonal language with three phonemic tones. Its phonemic inventory does not make use of click consonants either. The language is spoken in both urban and rural areas over a large part of the country, and thus further research is required to determine the range of verbal gestures used by Bulu speakers.

3.4 Ngoshie

Ngoshie is a Grassfields Bantu language spoken in Momo Division, Cameroon, by approximately 9,200 people, although this number comes from an SIL survey from 2001 (Lewis et al. 2016) so it is unclear how many speakers exist now. Our consultant DM was raised in a Ngoshie-speaking household, but also speaks French and English with her parents and family. Additionally, she was not raised in Momo Division, which limits our ability to use her verbal gestures as a reflection of Ngoshie speakers in general.

3.5 CPE, official languages

Cameroonian Pidgin English (CPE) is spoken in many areas of Cameroon, particularly in Anglophone areas. We did not speak to anyone who was a native speaker of CPE, and there are some questions as to the status of those who might be "native" CPE speakers. However, we did speak to some Cameroonians who were competent in CPE or had passive knowledge of the language. Multiple interviewees in Apouh A Ngok stated that the lingua franca in the community was CPE and some parents claim to raise their children in CPE.

Besides CPE, English and French were used widely in the areas we visited. French and English are the only official languages of Cameroon, and the country is officially "bilingual" in both languages in its education and government. However, in practice, areas of the country tend towards association with French or English exclusively. The capital and areas of economic power are located in French-speaking regions, leading to a linguistic power dynamic that tends to favor French speakers. French is the prestige language of the country in many

circles. Most people we encountered had knowledge of either French or English. In at least one Basaá household we visited, the majority of young speakers used a variety of French to speak amongst each other.

With respect to verbal gestures, it is important to note that these languages may serve as a means of transference for verbal gestures across linguistic boundaries that might have otherwise impeded their adoption. The extent to which these gestures are used in rural settings is not fully known. Speakers of Bulu and Basaá indicate that certain gestures are more associated with urban settings, and that village-dwelling speakers or older speakers might be unfamiliar with the attention-getting gesture specifically. Clearly, considerably more fieldwork is required to understand the full range and distribution of verbal gestures in Cameroon. That said, the multilingual nature of the country's urban centers presents a contact situation where speakers may rely on verbal gestures that can be understood across multiple languages to achieve communicative goals.

4 Verbal gestures in Cameroon

The verbal gestures analyzed are conventionalized, as determined by their widespread and regular (predictable) usage. They were mentioned by speakers of these languages in elicitation sessions, and were also observed in marketplace interactions on the street.

Function	Form	Manner	Used by speakers of
Attention get	(stop-)sibilant	elongated	BKH, BAS, BUM, NSH
Distance call	whistle	LHLH contour	BKH, BAS
Negative affect	bilabial click	elongated	BKH, BAS, BUM, NSH
Back channel	velar click	repeated	BAS, NSH
Cat-calling	bilabial click	repeated	BKH, BAS, BUM, NSH
Yes	mm	LH melody	BKH, BAS, BUM
No	m?m?	HL melody	BKH, BAS, BUM

Table 1: Verbal gestures in Cameroon

Language names given in Iso 639-3 codes: Bakoko = вкн; Basaá = ваs; Bulu = вим; and Ngoshie = мsн

In the next sections we discuss the acoustic and articulatory parameters of these gestures, follow with examples of their usage, and give details of their pragmatic usages and cultural connotations. Several of these gestures vary slightly among different users; each example is thus attributed to a specific speaker and should be associated with that speaker's particular linguistic community. Note that although we identify the mother tongue, or first language, of the speakers, all people interviewed are multilingual and live in highly multilingual communities, where different languages are heard on the street on a daily basis. Thus it is impossible to identify a single linguistic source for any particular gesture. Rather, it may be more accurate to posit regional (and possibly language-independent) variation than variation from language to language. This question requires further research but suggests that there may be a category of speech elements used cross-linguistically, in a multilingual community, without being tied to a specific language.

4.1 Attention-getting

This gesture is used to attract the attention of another party, and has several attested phonetic forms. This variation cannot yet be attributed to a particular aspect of a speaker's background;³ however, all attested forms of this gesture involve a sibilant consonant.

Variant	Speaker of	
ps:p	Bulu	
s:	Ngoshie	
ks:	Basaá	
sı, psı, dsı	Bakoko	

Table 2: Attention-getting gesture variants

This verbal gesture is realized through the articulation of a sibilant consonant, similar to a very elongated [s]. Preceding or following the sibilant may be a voiceless stop of some kind. Speakers across languages vary in the place of articulation of the consonant, but from our preliminary questioning all forms are recognized as versions of the gesture achieving the same pragmatic goal.

PM, a speaker of Bulu, states that there is a generational difference between speakers, and those who have lived in urban environments. When asked about the usage of this gesture to get the attention of a woman, he states, "For the young generation...she will understand that I'm calling her. Because she has ever been

³It is unknown whether or not speakers of the same linguistic community use the same stopsibilant sequence, or whether speakers have idiosyncrasies even within language communities.

in the town and she knows what is happening when we say *pssp* when we do it, yes. But if she is an old woman she will never turn."

The attention-getting gesture has been noted by our Bulu consultant to be associated with younger speakers and urban environments. However, we have noticed this gesture throughout smaller cities as well. There are indications that this gesture may be gendered, in that its usage by men towards women is considered by several of our speakers to be marked and rude. At the same time, little mention is made of the rudeness of using the gesture between men, and both genders have been observed using it with members of the same sex who are familiar to one another. Additionally, this gesture has been observed to be in use outside in marketplaces in Yaoundé and Édéa to attract the attention of potential customers, by both men and women vendors. There are doubtless restrictions and nuances to its use that are not captured here, but there is no doubt that this gesture is widespread among all urban communities we encountered.

4.2 Distance call

This whistling gesture is used to call to a listener at a significant distance. There are distinct call and response whistling contours used. The call contour involves a low-high-low-high sequence, whereas the response contour is strictly a low to high rise. These whistles appear to be employed in both Basaá speaking and Bakoko speaking areas. These contours can also be employed with an elongated *uuu* vowel instead of a whistle. If the speaker has successfully gotten the attention of the other interlocutor, a response to this gesture is another whistle. The response whistle is an LH contour that can be elongated after reaching the high level tone at the end of the whistle.

VariantFunctionLHLH Contour WhistleCalling distant speakerLHLH Elongated u VowelCalling distant speakerLH Contour WhistleResponding to distant speaker

Table 3: Whistle gesture variants

During an interview, the head of the village of Apouh A Ngok noted that in order to call to someone who is a kilometer away, you can whistle to call them, and thus avoid calling them by their name. This is a simple form of whistle speech,

with a two-part pair of call and response. The whistle carries over a greater distance than speech might. The whistle gesture is highly salient and audible.

As this gesture is not found widely in Cameroon – although its existence in other linguistic communities has not been ruled out – its range of pragmatic uses is not fully known. It overlaps in its usage with the attention-getting gesture, as it also shares the function of getting the attention of another speaker. However, this whistle appears to be used more often when speakers are out of sight of one another, at a further distance. Bakoko speakers report that these whistles are used when hunting, to call to another person in your party. The vowel counterpart which uses the same prosodic contour might be similarly limited to shorter distances as the attention-getting gesture.

4.3 Negative affect

The negative affect gesture is by far the most ubiquitous of all the verbal gestures listed here. It was recognized and repeated by speakers from every community we interacted with, and is analogous to verbal gestures found in Wolof communities in Senegal (Grenoble et al. 2015), and potentially to the "suck-teeth" gesture found in AAVE communities in the United States (Rickford & Rickford 1976). It is articulated through the release of suction in between the teeth and lips through the opening of the lips. Certain instances of the gesture have included a slow release of the lips across the mouth, elongating the sound and by extension enhancing and reinforcing the strength of the gesture's meaning. The articulatory mechanisms that implement this sound are complex and currently under investigation, but it is likely that the movement and position of the tongue is also crucial to the creation of a patch of rarefied air behind the teeth. The gesture is similar to the cat-calling gesture described below, but instead of short, repeated instances of a bilabial click, this gesture is associated with oftentimes a slow release across the mouth. Bulu consultant PM notes that the sentence maa ji gik means literally 'I don't want,' but can also be interpreted as 'I don't like.' However, he notes that he can say: [ELONGATED BILABIAL CLICK] to express 'I don't like'.

The negative affect gesture was used commonly in everyday life by speakers of all languages we encountered. The label here is purposefully intended to evoke a wide range of possible pragmatic functions. Speakers use it during their own speech turns to indicate a negative attitude toward the referent or the propositional content of their own utterances (such as distaste and displeasure with events, people, or things being described). It can be used when another interlocutor is speaking to convey disagreement with that speaker, or to agree with their negative assessment of the situation. It has even been noted to be sympa-

thetic in particular instances, and to reinforce another speaker's assessment of a bad situation.

4.4 Back channel

The back channel gesture is made with a post-alveolar release in the oral cavity, typically with a closed mouth. The two points of closure in the click are still not positively identified, but in at least one speaker the anterior release is velar, making this click highly unusual. This back channel is articulated as a click that is repeated a minimum of two times, but can be repeated for an unspecified amount of time to emphasize the speaker's point of view.

This is one of the less common and less attested verbal gestures in Cameroon (although frequent in Senegalese Wolof), with confirmation of usage only from Basaá and Ngoshie speakers, and attested in our recordings of spontaneous Basaá conversation. Its use as a backchannel – where the hearer signals agreement, reinforces the sentiment of another speaker, or simply indicates that he or she is listening – was recorded in spontaneous Basaá speech and also described for Ngoshie.

This verbal gesture can serve several functions depending on the accompanying facial expressions. Ngoshie speaker DM states that the click can signal incredulity when accompanied by raised eyebrows and opened eyes. Additionally, this click can serve the function of providing sympathy to another interlocutor when accompanied by a side-to-side head shake. These types of alternations show the extent to which these verbal gestures interact with the non-verbal gestural system.

4.5 Cat-calling

This verbal gesture is used as a type of gendered calling, prototypically done by men on the street to passing women. It is articulated through a short bilabial click, and can be likened to a "kissing noise." In most instances of its use, this bilabial click is articulated several times in quick succession, but it does appear to be able to be used once to signify a similar meaning. This gesture is also widely used to call dogs or other animals. Women speakers, when asked about its use, were adamant that it was extremely rude and confirmed that it was used for animals.

4.6 Less widespread verbal gestures

While there are many consistently used verbal gestures found throughout these diverse communities, within each of our interactions with consultants we found that speakers had unique verbal gestures that may or may not be propagated throughout their entire speech communities. Many of them are difficult to attribute to a particular pragmatic function, and could have multiple meanings depending on their context.

Function(s)	Form	Manner	Language
Positive affect	alveolar click	repeated	Ngoshie
Summoning, amusement	palatal click	repeated	Ngoshie
Shooing animal	∫:	elongated	Ngoshie
Reprimand	àháāá	elongated	Bakoko

Table 4: Less widespread verbal gestures

This is just a small sample of the examples volunteered during elicitation sessions, and are each attested by only one speaker. Nonetheless, they were readily volunteered and we consider it likely that more verbal gestures exist in other languages of Cameroon, and that the inventory for each of the languages discussed here could be increased. DM (Ngoshie) offered the positive affect click as a means of indicating pleasure or surprise at a passing man who is very attractive; the palatal click to call to her child, and when paired with pointing at the face and smiling, is used to encourage the child to smile. The reprimand volunteered by the head of the village of Apouh A Ngok (Bakoko) is used to reprimand a child, and is similar to a verbal gesture given by our Bulu consultant PM of *ha*: for 'no' and may have a similar origin.

The conventionalization of these verbal gestures across speakers of several languages suggests that they are not language dependent; however, the extent to which there exists inter- and intra-linguistic variation in their execution is still an open question. Notes on variation herein are based on a very small sample size, and as a result cannot necessarily be attributed to differing language background, or to idiosyncratic pronunciation on the part of the speaker.

5 Discussion

Fries & Pike (1949) propose the notion of a coexistent, or secondary, sound system that comprises sounds frequently used in a language that are not part of its phonemic inventory (see also Harris 1951). These verbal gestures are heavily reliant on a system of secondary sounds. This system of secondary sounds has been identified by numerous researchers in some capacity, particularly with reference to verbal gestures. This system, by definition, is accessible only by verbal gestures and other marginal lexical groups like ideophones, mimetic, or sound symbolic words. The accessibility of this system may vary somewhat from language to language, as we might expect considering the wide array of different ways that languages deal with sound symbolism. Ideophones provide a clear case of the use of sound symbolism and are known to have unusual phonologies; some have segments or different phonemic inventories (Childs 1994: 181-185). Thus we predict that ideophones and verbal gestures alike make use of secondary sounds. The Bantu language Yeyi has two click consonants in the primary phonemic system but an additional click that only appears in an interjection, which we might classify as belonging to the subclass of verbal gestures (Bostoen & Sands 2012: 130).

A noteworthy aspect of the verbal gestures found in Cameroon is that although they make use of both the primary and secondary sound system, there are no instances of them appearing adjacently within a gesture. The attention-getting gesture, composed of an optional stop and an obligatory sibilant, is completely made up of items found in the phonemic systems of these languages. The negative affect gesture, which is simply a bilabial click, makes use only of the secondary sound system. Languages that have click consonants as part of their phonemic systems do not make use of singular clicks as phonotactically licit syllables or words. These consonants combine with vowels: they behave like consonants in other languages. However, the clicks associated with the verbal gestural system are not attested in adjacent positions to other segments. Although only a small number of languages have been surveyed with respect to this phenomenon, this does not appear to be idiosyncratic but systematic. While click consonants occur in a very small percentage of the world's languages (only 9 out of a sample of 567, see Maddieson 2013), there is evidence that clicks with pragmatic interpretation such as verbal gestures exist in a wide array of languages (Gil 2013).

The secondary sound system described here is *systematic*, can be accessed by marginal elements of the language, and accepts new sounds more easily than the primary phonemic system of a language. Support for this claim also comes from

Nuckolls et al. (2016), which document systematic differences between the sound inventories of Pastaza Quichua ideophones and the regular lexicon. It is systematic in that it has a limited range of phonetic and articulatory representations that correspond to a singular abstract mental representation for these sounds. These relations between acoustic realization and mental unit are not claimed to be identical to those that occur within the primary phonemic system. They differ in that the range of acceptable realizations for these units is claimed to be wider, but is nonetheless confined. Secondary sounds can be repeated, lengthened or shortened, but other than these processes related to duration and repetition, they are limited in their behavior. They do not combine with sounds in the primary phonemic inventory, or with one another. One notable exception is the use of the glottal stop in American English [?m?m] and in some pronunciations of *uh-oh*.

We do not claim to understand the means by which these new sounds are incorporated into the secondary system. The sound symbolic nature of certain vocabulary has been pointed out by Bostoen & Sands (2012) to be an anchor for the infusion of click consonants into Bantu languages. Similarly, Bostoen & Donzo (2013) propose that labial-velar stops diffused into Lingombe by means of association through sound symbolic categories. These marginal phonemes with low functional load likely existed somewhere on the spectrum between secondary and primary phonemes before being incorporated into more vocabulary and moving closer to primary. In the cases presented here, novel sounds encountered in the speech environment are likely associated with pragmatic meaning and then systematically repeated and reinforced to the point that their articulation and acoustic realization is made consistent. Whatever the means of dadoption, there is no doubt that these sounds exist, and that they must be governed by some kind of a system with respect to their perception, as they are found in numerous linguistic systems and recognized as having designated pragmatic and semantic meanings. In the multilingual speech communities of Cameroon, verbal gestures are widely used and available to speakers of different mother tongues. They serve as a form of ready cross-linguistic communicative devices, and it is difficult to trace their initial source. Considerable further research is needed into their distribution and uses.

⁴There is a potential confound, in that these sounds are difficult to separate from the pragmatic and semantic role that they are assigned. As such, claims about their range of acceptable pronunciations might be better suited to those comparable to the acceptable range of pronunciation of a word rather than of a phoneme.

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