Lexicography in-your-face: The active semantics of Pastaza Quichua ideophones

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Abstract

We argue that a multimodal approach to defining a depictive class of words called 'ideophones' by linguists is essential for grasping their meanings. Our argument for this approach is based on the formal properties of Pastaza Quichua ideophones, which set them apart from the non-ideophonic lexicon, and on the cultural assumptions brought by speakers to their use. We analyze deficiencies in past attempts to define this language's ideophones, which have used only audio data. We offer, instead, an audiovisual corpus which we call an 'antidictionary', because it defines words not with other words, but with clips featuring actual contexts of use. The major discovery revealed by studying these clips is that ideophones' meanings can be clarified by means of a distinction found in modality and American Sign Language studies. This distinction between speaker-internal and speaker-external perspective is evident in the intonational and gestural details of ideophones' use.

Résumé

Nous soutenons que pour définir une classe de mots descriptifs appelés « idéophones », il est essentiel d'adopter une approche multimodale, si l'on veut saisir toutes les nuances de leur signification. Notre argument en faveur de cette approche se base d'une part sur les propriétés formelles des idéophones Pastaza Quichua, propriétés qui les distinguent du lexique non idéophonique, et d'autre part sur les hypothèses culturelles que les locuteurs contribuent à leur utilisation. Nous analysons les lacunes des efforts antérieurs cherchant à définir les idéophones de cette langue, qui n'ont fait appel qu'à des données audio. Nous proposons plutôt un corpus audiovisuel, que nous appelons « anti-dictionnaire » parce qu'il définit des mots non pas à l'aide d'autres mots, mais avec des vidéoclips qui mettent en scène d'authentiques contextes d'utilisation. La principale révélation de ces clips est que les significations des idéophones peuvent être clarifiées à l'aide d'une distinction que l'on trouve dans les études sur la modalité, et sur l'ASL (la langue des signes américaine); cette distinction entre les perspectives interne et externe au locuteur se manifeste dans des détails d'intonation et de gestuelle qui caractérisent l'usage des idéophones.

Mots-clés: idéophones, gestes, lexicographie, Quechua, pragmatique

1. INTRODUCTION

Ideophones are a class of expressions found throughout the world's languages.[1] They are of interest to linguists because of their fascinating structural features, their complex semantics, and their discourse properties, which draw interlocutors into a shared experience of simulated perceptions and evoked memories. As Dingemanse has stated: "they show rather than tell, depict rather than describe, enact rather than simply refer" (Dingemanse 2014: 387). Since the discovery of ideophones a lot of attention has been given to analyzing them in ways that do justice to their language-specific characteristics, while also attempting to grapple with them as a cross-linguistic phenomenon. More recently, with the help of much valuable new knowledge about ideophones in different languages, linguists have taken important steps toward understanding theoretical issues raised by their semantics (Dingemanse 2014), phonology (Nuckolls et al. 2016), and syntax (Déchaine and Mudzingwa 2014, Akita, this issue).

With this article, we step back from the typological arena in order to delve into the lexicographic representation of ideophones used by speakers of Pastaza Quichua (PQ), a language spoken in Amazonian Ecuador.[2] Although ideophones are now an

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[1]Abbreviations used are: 1/2/3: first/second/third person; ACC: accusative; AG: agentive; ASL: American Sign Language; COR: coreference; DAT: dative; DUR: durative; EV: evidential; IDPH: ideophone; INCH: inchoative; INCL: inclusive; INST: instrumental; INT: interrogative; LOC: locative; PL: plural; PAST: past tense; POSS: possessive; PQ: Pastaza Quichua; PURP: purposive; SG: singular; TOP: topic

[2]Ecuadorian Quichua (ISO code: 639-3) is now officially written as *Kichwa* in materials produced by the Ecuadorian Ministry of Education. In that context the term *Kichwa* generally

established topic for crosslinguistic research, there is not yet a consensus on how to adequately represent them in dictionaries. An early characterization of ideophones as "picture words" (Westermann 1930: 187) alludes to our problem. There have been no successful efforts to define ideophones within a traditional dictionary format. Nuckolls (1996) attempted to bypass this problem by conceptualizing many Pastaza Quichua ideophones that depict path and manner of motion with simple line drawings. Although some of the drawings are helpful, they were originally conceived with only audio-recorded data.

One problem that presents itself for any attempt to define ideophones in a traditional print dictionary is that they tend to be uttered with an active and energetic investment by speakers, who use intonational resources to communicate ideophonic meaning (Childs 2014: 343, Nuckolls 2014: 369). This expressively communicated meaning, termed 'performative foregrounding', makes ideophones louder, softer, lower-pitched, higher-pitched, slower or faster than their surrounding utterances (Nuckolls 1996; Nuckolls et al. 2016). An informal classroom experiment conducted by Nuckolls revealed that students who know almost nothing about this language are usually quite accurate in judging when a foregrounded ideophone has occurred.

Performative foregrounding is so important for ideophones that it has even been identified as a crucial ingredient for coining new ideophones (Dingemanse 2014). Performative foregrounding is also evident in PQ speakers' active use of gestures while articulating ideophones. There is a growing body of research (Dingemanse 2014, Kita 1997, Klassen 1999, Mihas 2013) delving into the role played by gestures in the active semantics of ideophonic expression. This body of research on ideophones and gestures complements an established line of inquiry on language and gesture begun by Kendon (1977), McNeill (1985, 1992), and others, which continues to be robust in work such as that of Haviland (2000), Enfield (2009), and Streeck, Goodwin, and LeBaron (2011).

Although the performativity of ideophones poses problems for representing meaning on a two-dimensional printed page, it is extremely well suited for representing meaning by means of media resources that are now widely available. This brings us to the central contribution of this article. We argue that audiovisual recordings of ideophonic performances can be studied to discern the logical-semantic structure of ideophones, in a way that is not accessible through sound recordings alone. In fact, taking our argument a step further, we show that scrutinizing audiovisual materials from PQ ideophonic expressions can help to resolve certain semantic puzzles which are clarified by reference to a distinction basic to the study of subjectivity in language (van der Auwera and Plungian 1998), which has also been employed in sign-language research (Wilcox and Shaffer 2006), as well as in studies of gesture more generally (de Ruiter 2000: 294).

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refers to the standardized *Kichwa Unificado*, which is heavily influenced by Highland varieties. We retain the older spelling Quichua both because of its long history of use and because materials written in lowland Amazonian dialects, of which this is one, have traditionally used this spelling.

In section 2 we provide a short description of morpho-syntactic and phonological features of PQ ideophones. In section 3 we describe the concrete cultural orientation of PQ speakers, which helps to make sense of their use of ideophones. Section 4 presents three ideophones, two of which were defined in an earlier publication without the benefit of audiovisual data. We supply links to audiovisual clips of their use and discuss how these clips clarify semantic perplexities, by illuminating their perspectival logic, which is then incorporated into revised definitions. Section 5 contains our discussion and conclusions, which point to the need for what we are calling an online 'anti-dictionary' or corpus that will document the full range of ideophonic variability and usage.

2. THE FORMAL PROPERTIES OF PASTAZA QUICHUA IDEOPHONES

In Pastaza Quichua, ideophones usually occur in an adverbial slot immediately preceding or following a verb. They occur with a variety of verbs, including cognitive verbs, semantically 'light' verbs like *go, do, make* or *be*, verbs of state, process, activity, physical configuration, and quite often, motion verbs (Nuckolls 2012). Ideophones may, however, replace a verb altogether and bear the main communicative burden of a predicate. Regarding their morphology, they can be up to four syllables long in canonical form, though most are no longer than two or three syllables. As for their sound structure, Pastaza Quichua ideophones display interesting patterns that are somewhat different from the non-ideophonic phonological system.

Table 1 gives the PQ consonant and vowel phonemes used both in ordinary words and in ideophones.

Table 1 includes six sounds that are marked with an asterisk: p^j, t^j, k^j, ts, dz ~ z, and o. These are statistically uncommon, marginal sounds in PQ. Of interest is the fact that half of these uncommon sounds are palatalized obstruents.

We turn now to Table 2, which gives the augmented ideophonic system.

In the ideophonically expanded consonantal system of Table 2, sounds in boldface are particular to ideophones, and are not found in prosaic words. Of interest is the striking pattern of palatalization. Table 1 had only three palatalized sounds. Table 2, however, features six other palatalized sounds among the ideophones. Speakers seem to be constructing ideophones by exploiting one of the least common types of sounds in the prosaic lexicon, to wit palatalized consonants. Expressively aspirated sounds are also noteworthy, as are the accidental gaps filled by the velar fricative [x] and the labialized [b^w] sound.

Table 2 also reveals a striking general pattern when comparing obstruents and sonorants. Among ideophones there is an almost perfect correspondence between obstruence and an increase in sound inventory on the one hand, and sonorance and a decrease in sound inventory, on the other. It is worth noting that in all cases, these increases or decreases in the sound inventory are statistically significant (Nuckolls et al. 2016). We do not know why the sonorant sounds are used significantly less often in ideophones. It is possible that their diminution is a compensatory adjustment for the increase in obstruent sounds.

Consonants

	Bilabial	Dental	Alveolar	Alveolo-palatal	Palatal	Velar	Glottal
Stops	p b	t d				k g	
Labialized Stops						kʷ	
Palatalized Stops	*pʲ	*tʲ				*kʲ	
Fricatives			s *z~dz	ç			h~ʔ
Affricates			*ts	tɕ [dʑ]			
Nasals	m [m̥]		n [ŋ] [n̩]		ɲ		
Laterals			ɬ		ʎ		
Taps			ɾ				
Glides	w [β]				j		

Vowels

	Front	Mid	Back
High	i [ɪ]		u [ʊ]
Mid			*o
Low		a [ə]	

[ ]: Allophone   ~: Free variant   *: Marginal sound

Table 1: PQ consonants and vowels

	Bilabial		Dental		Alveolar		Alveolo-palatal		Palatal	Velar		Glottal
Stops	**pʰ**	**bʰ**	**tʰ**							**kʰ**		
	p	b	t	d						k	g	
Palatalized	*pʲ	**bʲ**	*tʲ							*kʲ	**gʲ**	
Labialized		**bʷ**								kʷ		
Fricatives					sʰ		çʰ					
					s	*z~ʥ	ç			**x**		h~ʔ
Palatalized						*zʲ~ʥʲ*	*çʲ*					**hʲ**
Affricates					*ʦ		ʨ	[ʥ]				
Palatalized					**ʦʲ**		**ʨʲ**					
Nasals	m				ₙ	[ŋ]			ɲ			
Laterals					ɬ				ʎ			
Taps					ɾ							
Glides	w								j			

Notes: Sounds in **boldface** occur only in ideophones.

Sounds in enlarged font occur with greater frequency in ideophones.

Sounds in smaller font occur with less frequency in ideophones.

Table 2: PQ ideophonic system

Our findings on the phonology of ideophones are also of typological interest in light of Lindblom and Maddieson's (1988) proposed continuum of increasing complexity underlying the development of consonantal inventories. Many of the new sounds and structures in PQ's expanded inventory occupy their level 2 elaborated tier. In other words, the new sounds and structures contributed by ideophones are more complex than the sounds ordinarily found in the non-ideophonic lexicon. The use of more complex sounds in PQ ideophones is not by itself a major impediment for their adequate definition within a standard dictionary format. However, the employment of a unique system of sounds for ideophones points to the marked status of ideophonic communication. The actual sounds of these words seem to be critically important indicators of their special status. We turn now to the cultural framework of speakers of PQ, a framework that challenges the best practices of standard, printed dictionaries.

3.   PASTAZA QUICHUA IDEOPHONES IN CULTURAL CONTEXT

We have identified what we call an 'earthy concreteness' in the orientation of PQ speakers, which privileges the contextualization of utterances, thoughts, and ideas to such an extent that statements about typical behaviors and generalizations are perceived to be both morally and aesthetically objectionable (Nuckolls and Swanson 2014). We are not the first to have noticed this earthy concreteness. It has been noted in native Amazonian discourse generally, and has frustrated various visitors who have encountered speakers of the Shuar, Quichua, and Zapara languages of Amazonian Ecuador at least since the 19th century (Drown and Drown 1961, Pierre 1983).

An example of PQ speakers' concrete orientation to language may be found in the following brief explanation that was elicited by Nuckolls during fieldwork. We provide a transcription from a recorded interaction, involving an attempt to elicit a definition for the verb *astana* 'to load'. Rather than stating a concise definition, the speaker provides a short but detailed narrative. {astana.wav}

JN: Ima-ta   "astana"?
      what-INT   to load
      'What does "*astana*" mean?'

LC: Ñawpa kanoa-wan ri-k   a-ra-nchi   Piwi yaku-ma, ñukanchi tambu-gama.
      before canoe-INST go-AG be-PAST-1PL Piwi pond-DAT we   shelter-until
      'At an earlier time we used to go by canoe to *Piwi* pond, as far as our shelter'

LC: Chay-ma puri-ngaw, ñukanchi asta-k   a-ra-nchi   aswa-ta puñuna-ta;
      there-DAT walk-PURP we   load-AG be-PAST-1PL aswa-ACC bedding-ACC
      chi-guna-wan polannng ri-k   a-ra-nchi
      those-PL-INST IDPH   go-AG be-PAST-1PL
      'In order to travel there, we would load *aswa*, and bedding; and with those (things) we would go *polannng* (gliding across the water)'

LC: Chi-manda, Piwi yaku-ma pakta-nchi. palanda-ta   piti-nchi; Sara-ta
      that-from   Piwi pond-DAT arrive-1PL plaintain-ACC cut-1PL   corn-ACC

         piti-nchi
         cut-1PL
         'Then we arrive at *Piwi* pond. We cut plantains, we cut corn'

LC: ashanga-ma, ashanga-ma chura-nchi; yand-ta   tsali-nchi
         basket-DAT   basket-DAT   put-1PL   wood-ACC split-1PL
         'In baskets, in baskets, we put them; (then) we split wood'

LC: chi-ta   shuk wangu-ta   tsali-nchi. Tukwi-ta kanoa-ma asta-nchi.
         that-ACC one   bundle-ACC split-1PL   every-ACC canoe-DAT load-1PL
         'We split a bundle of it; (and) we load everything into the canoe'

LC: Chi ma-n 'astana'.
         that be-3 astana.
         'That's what loading is'

Our consultant, LC, gives a vivid portrayal of the actions, the details, and the setting involved in describing how the verb *astana* is understood. Although this description is most likely a distillation of more than one past experience of loading things into a canoe, it is still very concrete, as it is situated within personal experiences and memories, as well as within a specific place. Also of interest is the speaker's use of the ideophone *polang*, which is used for the purpose of simulating the gliding motion of a canoe across the surface of water (Nuckolls 1996: 155–158).

This gliding motion has no direct relevance to the action of loading the canoe. Yet, it simulates a vivid image that is part of the explanation. This very concrete and personal way of defining a word could easily function as an object lesson for a lexicographer trying to teach students what *not* to do when writing a dictionary entry according to scientific lexicographic norms. The speaker's account has too much 'encyclopedic information', or 'information about the world' and is not strictly focused on the sense of the word *astana*. Nevertheless, it communicates effectively from the speaker's cultural vantage point. This example of an approach to defining words is not an isolated instance. It represents a recurrent pattern that was observed in attempts to elicit over two hundred definitions of verbs. Having discussed the special sound patterning of PQ ideophones and the cultural orientation of PQ speakers, we turn now to our own attempt to analyze three ideophones' meanings, through the scrutiny of audiovisual data.

4. DEFINING THREE IDEOPHONES

Our major problem in defining ideophones is that dictionaries are designed to communicate abstract, decontextualized meanings, and although ideophones *can* communicate fairly abstract meanings, but they seem designed not to do that. When speakers use them, it is as if they are trying to draw their interlocutors into the experiences that they are simulating. Paradoxically, however, we might actually be able to better understand the abstract meanings of ideophones by paying more careful attention to the details of their performances. We discuss three ideophones used by two different speakers in a variety of contexts. We argue that it is necessary to consider a

distinction articulated by van der Auwera and Plungian (1998) which has also been useful for descriptions of modality in ASL (Wilcox and Shaffer 2006). van der Auwera and Plungian map the semantic landscape of modality in order to account for the development, grammaticalization, and degrammaticalization of modal meanings and their related senses.

Critical to their framework is the distinction between possibility and necessity, which they consider cross-linguistically fundamental for modality. Another distinction they employ, which is used to frame their inquiry into possibility and necessity, will be critical for our own investigation: the distinction between something internal or external to a participant involved in a proposition. For examples of internal motivation of possibility and necessity, Van der Auwera and Plungian (1998: 80–81) discuss the contrast between 'need' and 'get by'. Consider, for example, the case of an individual described as needing to do something, such as sleep for a certain number of hours per night. Such a need is both a *necessity*, as well as something arising from that participant's own internal requirements. Alternatively, an individual may be able to *get by* with only five hours of sleep. This is also a statement motivated by the participant's internal capacities, but it states something about a possibility, rather than a necessity.

We may, then, contrast the foregoing scenarios with a set of situations arising from factors external to a participant. Consider, as van der Auwera and Plungian do, the contrast between 'can' and 'have to' in English. A participant 'can' get to a definite location by taking a certain bus, or, alternatively, a participant may 'have to' take that particular bus in order to get to that location. In the first case, we have the possibility of arriving somewhere by taking a certain bus. In the second case, we have the necessity of taking that bus in order to arrive at that same location.

We will take and adapt from this framework what is relevant for our own analysis, namely, the distinction between participant-internal and participant-external perspectives, since concepts of possibility and necessity are not relevant to ideophonic performances. The distinction between participant-internal and participant-external will be used to clarify the interrelated senses of ideophones. For our purposes, 'participant-internal' and 'participant-external' are the same as 'speaker-internal' and 'speaker-external' applied to the main predicate of an utterance. The usefulness of this distinction will become apparent when examining ideophonic performances for the purpose of defining the meanings of ideophones.

An earlier attempt to grapple with the special semiotic properties of ideophones used a combination of verbal definitions accompanied by simple line drawings that were supposed to communicate their imageic properties (Nuckolls 1996). After carefully studying audio-visual recordings of ideophonic performances, we now have a better understanding of why these definitions and drawings are inadequate. The use of ideophones by Quichua speakers often involves a shift in cognitive style difficult to represent on a two-dimensional page. It is not only a matter of gesture use, but rather involves a whole different way of defining the nature of oneself in relation to what is being imitated. When using one's own body to depict, one can become what one is communicating about. In such

instances, we describe depiction as a speaker-internal matter. Alternatively, one can be a more detached observer, depicting events external to oneself. This type of depiction is described here as making use of a speaker-external depiction. The examples that follow illustrate the contrasts between speaker-internal and speaker-external perspectives.

4.1   Defining *polang*

To illustrate the difference between these two perspectives and how distinguishing between them may help us construct better definitions of ideophones, we return to the ideophone *polang*, which occurred in the earlier narrative in section 3 about the meaning of *astana* 'to load'. In our earlier discussion, we described the meaning of *polan* as imitating a gliding movement across the surface of water. This is not the whole story, however. There is another very common sense of this ideophone which has been defined as "the moment of emerging from underwater to the surface" (Nuckolls 1996: 155). This more common definition was accompanied by the schematic in Figure 1, with a line pointing up and out of two wavy lines representing water.

This simple image attempted to capture something basic and precise to accompany the verbal definition. There is a problem with this definition and the diagram that illustrates it, however: both attempt to convey an objective, disinterested portrayal of something going from one place to another. This objective, disinterested portrayal is inadequate, because when speakers use ideophones they may be inhabiting the identity of what they depict. The verbal definition of *polang* as "the moment of emerging from underwater to the surface" also fails to capture this insight which is best understood by watching an actual performance of this ideophone found in example (1) below.

Example (1), which can be viewed at <quechuarealwords.byu.edu/?ideophone= polang>, illustrates the use of this ideophone from a speaker-internal perspective by showing how a speaker becomes what she depicts. The example can be found at this site by going to the first video for *polang*'s entry.

Our consultant is simulating the way a manatee's excrement may travel from underwater to the surface, where it becomes visible to observant people. This is probably one of the most unusual images that *polang* is used for. Most of what is described with *polang* involves fish or other animals rising to the surface. In this
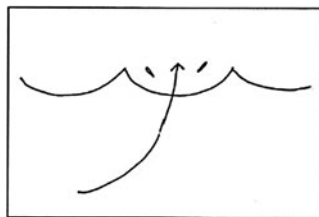

Figure 1: polang.

example, our consultant relates how someone told her to look at a manatee and when she looked she noticed its excrement break to the surface of the water:

(1) Baka maɾina ɾiku-ngi ni-ɾa   tçi kucha-y; tçi-ga wagɾa   çina polang
     cow sea   look-2   say-PAST that pond-LOC that-TOP manatee like IDPH
     isma-ra!   na wagra isma!
     poop-PAST   now manatee poop
     'Look at the manatee' he said, 'in the pond'; and then it was like *polang* it pooped. Now it was manatee poop!'

While watching the audiovisual recording of this example, we notice immediately that our speaker is not just using her gestures in a detached way to imitate something moving up and out of the water. She is, in a sense, becoming what she describes. She uses both arms to gesture upward. All of her body is involved. Even her eye gaze is focused above her, as if she *is* what she's describing. This is a clear example of depiction from a speaker-internal perspective.

Consider by contrast another speaker's use of *polang*, found in the second video for the ideophone *polang*, transcribed in (2). Our consultant ED describes the way fish can be seen rising to the surface when the sun comes out. This seven-second clip is taken from a slightly longer description of how people, animals, and even fish are happy when the sun comes out.

(2) Jakʷ-i   tiya-k   ajtça-was kuçi-ja-ça   kasna   polaannng polaannng
     water-LOC be.located-AG meat-INCL happy-INCH-COR like.this IDPH   IDPH
     'And even the in-the-water-dwelling fish become happy like this (going) *polaannng polaannng*.'

There is a difference in perspective between these two instances of *polang*. In example (1), the speaker is very involved in becoming what she describes. In example (2), however, the speaker is more detached, but still involved in the performance of *polang*, which is uttered more slowly than the surrounding utterance. The speaker enacts the movements of emerging out of water by her gestures, but in a more detached way. She is moving only one hand and her gaze looks outward at what she depicts. This is an example of depiction from a speaker-external perspective.

Although these two examples of *polang* align very nicely with the contrast that we've established between speaker-internal and speaker-external perspectives, it will not always be easy to see this distinction so clearly in every example. We probably need to consider the difference between these two perspectives as a matter of gradience. Nevertheless, taking speaker perspective into account will help us formulate better definitions of ideophones. To explain how this works, we return to our very first sample of *polang*, which appeared in the narrative that attempted to define the verb *astana* 'to load'. We reproduce it here as example (3):

(3) Chay-ma puri-ngaw, ñukanchi asta-k   a-ra-nchi   aswa-ta   puñuna-ta;
     there-DAT walk-PURP we   load-AG be-PAST-1PL aswa-ACC bedding-ACC
     chi-guna-wan   polannng ri-k   a-ra-nchi
     those-PL-INST IDPH   go-AG be-PAST-1PL
     'In order to travel there, we would load *aswa*, and bedding; and with those (things) we would go *polannng* (gliding across the water)'

This use of *polang* to depict a gliding across water is different from the way it is used to depict the way something breaks through to the water's surface (videos 1 and 2). Yet it is attested in multiple examples, such as in the following example (4), in which a speaker imaginatively depicts how boats floating across water might appear to an anaconda watching them from below:

(4) Paj tɕasna-shi kanoa-ta-s ɾiku-k a-n: polaannng riuuuuu
    he like that-EV canoe-ACC-INCL watch-AG be-3 IDPH go-DUR
    ima wajta-w-n. Tukwi-ta-shi ɾiku-n
    what swim- DUR-3 every-ACC-EV see-3
    'Like that he watches canoes that are *polaannng* going byyy, whatever is swimming. He sees everything'

In examples (3) and (4), *polang* simulates a gliding movement across water rather than a movement from underwater to the surface. The difference between these two *polang*s would be lexicalized by means of two different verb-satellite constructions in English, namely, 'glide up' and 'glide across'. *Polang* in examples (3) and (4) would be translated, therefore, as 'glide across' and could be represented as in Figure 2.

Although we do not have a video example of a speaker using this *polang*, it is not difficult to imagine how a hand moving horizontally across the speaker's gesture space could easily depict this movement. Despite the lack of audiovisual recordings for these examples of *polang*, the audio evidence of the extended lengthening of *polang*'s second syllable, which in example (4) is mimicked in the immediately following verb form *riuuuuu* 'it is going', communicates the ongoingness of the gliding movement, almost as if the speaker is *in* the experience herself.

Whether *polang* depicts a gliding movement across water or from under water to the surface, its performative foregrounding by intonational elaboration and/or gestures communicates various degrees of a speaker-internal perspective. Understanding this perspective helps us to formulate a more coherent definition of *polang*, which allows us to see the logical relation between Figure 1 and Figure 2 for this ideophone.

As stated earlier, the difference between these two versions of *polang* could be lexicalized as two different verb-satellite constructions in English, namely, 'glide up' and 'glide across', each with its own visual diagram. We can, however, more clearly
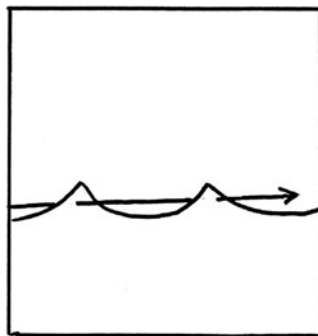

Figure 2: polang.

see the connection between them if we recall the fundamental grounding of ideo-phones in a speaker's perspective. If a speaker *is* the object rising to the surface, there is relatively little difference between gliding and floating upwards and gliding or floating across the surface of water. Both involve movements that are done with relative ease, a minimum of effort, and an absence of thrashing. We there-fore formulated a revised definition and image for *polang* which collapses the distinction between 'glide up' and 'glide across'. Our revised definition follows: Simulates a gliding movement from underwater to the surface or across water. Repetitions simulate bobbing movements.[3] We have also conceived a revised image, shown in Figure 3.

The revised image and definition have the advantage of unifying what was only apparently different.

4.2 Defining *lin*

We turn now to a discussion of the semantics of the ideophone *ling*. It was defined in Nuckolls (1996: 196) as 'to enter into, or insert an object into an enclosed space', and is illustrated in Figure 4, showing a line of movement into a container.

Our first example of *ling* is found in the first video for *ling*, which can be viewed at <quechuarealwords.byu.edu/?ideophone=ling>. In this video, our speaker ED is telling about the discovery of nests of oriole hatchlings which she inserted her hands into so that she could take the hatchlings and raise them as pets.

(5) Tçawa   mangu-guna-ta riku-ra-ni   karaŋ chi paj-ba tazim-bi
     newborn oriole-PL-ACC   see-PAST-1SG   each   that it-POSS nest-LOC
     ling ling ling   maska-ɾa-ni
     IDPH IDPH IDPH   search-PAST-1SG
     'I saw those hatchlings and into each of those nests I searched (for them, going) *ling ling ling*'

Our speaker doesn't simply refer to what she did. She enacts the very actions she reports herself as doing, recreating the series of insertion gestures that she used when searching the nests for hatchlings.

We consider next another example of *ling*, this time involving a single insertion gesture of a stick being poked into a hole to search for an animal. The intonational lengthening of *ling* simulates the insertion process, drawing it out for the purpose of drawing interlocutors into this hunting story's dramatic unfolding:

(6) Tçi-ga   tçi kaspi-ta liinnnng. tçi   satiɾi-ɾa
     that-TOP that stick   IDPH   there remain-PAST
     'Then that stick (was inserted) *liinnnn* (and) there it stopped'

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[3]Although space does not permit discussion here, a complete definition of *polang* will also include mention of ideophones that are semantically related, such as *tsupu,* which is an antonym for *polang*, because it depicts the sound and movement of something dropping down into water; *bhux,* a synonym for *polang* depicting not a smooth gliding from underwater to the surface, but a forceful bursting out of water, and *dziɾ*, a frictional movement across a firm (not watery) surface.
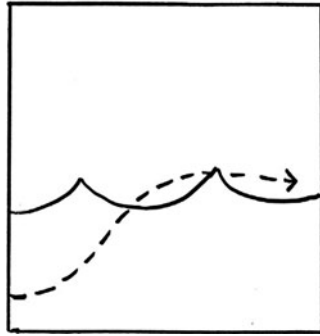
Figure 3: polang.

Examples (5) and (6) both involve speakers' use of ideophones to simulate the act of inserting something into an enclosed space. Although Figure 4 above is somewhat helpful in conceptualizing *ling*, it fails to communicate the simulative, processual dimensions of its meaning, which is evident in example (6). Figure 4 focuses too much on the end result of *ling*, which is that something navigates from one place (outside) to another place (inside). Borrowing a term from developmental psychology, it reflects a very 'geometric-technical' concern for neatly and unproblematically assigning something to one space or another. The problem with this image, then, is that it does not necessarily reflect what is most salient for speakers themselves.

An additional problem with Figure 4 becomes apparent when considering (7). This example seems to provide another sense of *ling*, which we will define for now as 'to move outside of and back into an enclosed space.' Our audiovisual clip of this example may be viewed at video 2 for *ling* at <quechuarealwords.byu.edu>, and is transcribed below. It depicts the rapid in-and-out movements of a snake's tongue.

(7) Amaɾun   ruku   çamu-ɾa   kaʎu   ling ling   ling ling ling   ling ling
    Anaconda big   come-PAST tongue   IDPH IDPH   IDPH IDPH IDPH   IDPH IDPH
    ling ling ling ling ling.
    IDPH IDPH IDPH IDPH IDPH
    'A big anaconda came, its tongue (going) *ling ling ling ling ling ling ling ling ling ling ling ling*'.
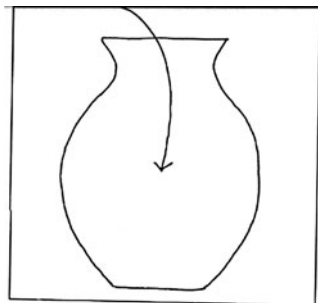
Figure 4: ling.

There is a great deal of speaker involvement in this depiction of a snake's tongue flicking in and out rapidly. In fact, the speaker seems to become that snake, as is evident by her very rapid repetitions of *ling*, which are much more rapid than the surrounding utterance. She is depicting the snake's flicking tongue as if she is the snake, making this a clear example of a speaker-internal perspectival performance.

On the other hand, in watching the video clip carefully, it is obvious that the speaker is also depicting the overall movement of the snake's body with gestures of her arms and hands. This part of her depiction is not aligned with the ideophone *ling*, but is, rather, a gestural depiction of the verb *çamura* 'it came' and is based on a bystander-like perspective which situates her as a participant-external observer of the snake. This example, then, demonstrates that speaker-internal and speaker-external perspectives are not restricted to ideophonic expression, but may underlie the gestures used with ordinary words as well.

Our example of the snake's flicking tongue makes our original drawing, Figure 4, and definition for *ling*'s meaning, 'to enter into, or insert an object into an enclosed space' problematic, however, because it depicts a snake's tongue going outside of an enclosed space, rather than going into an enclosed space. If, however, we take into account a speaker-internal perspective, we can reconcile their seemingly opposed senses. If we adopt the perspective of whatever is moving, whether it is a hand moving into a nest or a stick being manipulated into a hole, or a snake's tongue moving outside of its mouth, we realize that in each of these examples, something is crossing some kind of boundary. We can therefore formulate a revised definition of *ling* which combines the ideas of moving into as well as out of an enclosed space: 'Simulates a movement of limited translocation into or out of an enclosed space or across a boundary. Very rapid repetitions may simulate flicking tongue of a snake or trembling movements of a body.'

This definition is complemented by a revised image of *ling* in figure 5, which more succinctly captures its essence:[4]

4.3   Defining hʲaw

The final ideophone we discuss, *hʲaw*, is a sound-imitative ideophone with a surprisingly complex sense, not analyzed in any previously published work. As it is a sound-imitative ideophone, it cannot be defined with the help of a diagram. An initial and reasonable assumption would be that all sound-imitative ideophones, when performatively foregrounded intonationally, would have a built in speaker-internal perspective, since they can only be articulated when a speaker becomes, through his or her own voice, the entity emitting a sound. Yet, matters are a bit more complex with this ideophone because *hʲaw* has a double speaker-internal perspective embedded within it. This ideophone is a human's simulation of the sound made by a snake who is said to be imitating the sound of a rodent, possibly in

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[4]Semantically related ideophones include *tsak*, which depicts an act of insertion which pierces or punctures an object, and *polo*, which depicts an insertion that pierces an object all the way through, and comes out.
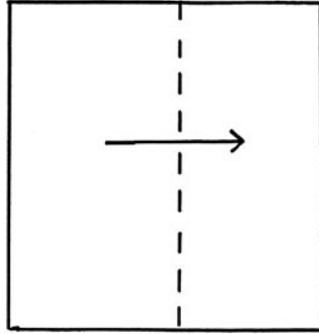
Figure 5: ling.

order to attract it to himself so that he can pounce on it and have it as his next meal. This is the explanation of its meaning that was provided by two different consultants who told Swanson about their experiences observing this snake.

Our first example of $h^j aw$ can be viewed at <quechuarealwords.byu.edu/?ideo-phone=hyaw>, at the first video for $h^j aw$. It is drawn from the same narrative from which example (5) was drawn, about discovering the nest of oriole hatchlings. The speaker describes how she heard and saw a snake making the sound $h^j aw$ while she was searching for the nest of orioles:

(8) ɲa   h^jaw h^jaw h^jaw h^jaw ni-ra   punʤhana   çina.
     then IDPH   IDPH   DPH   IDPH   say-PAST agouti   like
     'Then *h^j aw h^j aw h^j aw h^j aw* it said, like an agouti.'

It is not difficult to hear the speaker's performative involvement in her simulation of the snake's sound. There is a qualitatively different sound in her voice, especially at the beginning of the repetitions which are high pitched at first, but become progressively lower, as she comes to the end of the repeated sequence. At the end of this sequence she reverts back to the pitch of her non-performative speaking voice.

As she is questioned about this encounter by Swanson, she elaborates a bit on what it was like to not only hear the snake but to see it as well. She describes how it lifted its head from the rest of its body which was in a coiled position. She does this by becoming the snake's body and straightening herself up noticeably as well. This can be viewed at the second video for $h^j aw$:

(9) kasna   ɬukçitçi-ça-ga   h^jaw h^jaw h^jaw h^jaw.
     like.this emerging-COR-TOP IDPH   IDPH   IDPH   IDPH
     'Emerging like this (he went) *h^j aw h^j aw h^j aw h^j aw*.'

In this example also, one can hear the clear difference in voice quality between her non-performative speaking voice at the beginning of the clip, and what it becomes when she simulates the snake's cry. We can also see, by her body posture, that she is indeed becoming the snake while imitating its sound.

To fully grasp the doubly embedded speaker-internal perspective built into this example, it is useful to remember that this performance of $h^j aw$ is a person's imitation

of a snake's imitation of the sound of a rodent. It is, therefore, as is true of all sound-imitative ideophones, a highly mediated representation, filtered through the lens of sounds available from Quichua. Interestingly, we have evidence from another speaker, who, as a hunter, is acutely aware of the actual sounds made by such rodents, of a meta-awareness of the mediated quality of this sound. Our hunter, who is interviewed by Swanson, supplies his own whistled version of what he considers a more accurate representation of the rodent's actual call. This can be heard in the third video for $h^j aw$. He supplies the ideophone, $h^j aw$ for the mediated version of the rodent's sound and then whistles a more accurate representation of the snake's sound.

5. CONCLUSION

Putting aside the possible associations of aggressiveness and stridency evoked by our title "Lexicography in your face", we have argued for a holistic, multimodal approach to ideophonic lexicography. Our observations of the unique communicative properties of ideophones have compelled us to seek innovative ways of defining, representing, and conceptualizing them. Our corpus is a kind of anti-dictionary because it defines ideophones with examples and images of their use, rather than by simply providing approximately equivalent terms to conceptualize them. It also goes against the grain of typical dictionary because we are not dealing with words that have standardized forms, versus dialectal variants. We simply don't know at this point about how much variability in ideophonic use can be 'gotten away with' by speakers. Whether ideophones vary more or less than the non-ideophonic lexicon is an open question that should be empirically investigated.

By examining various instances from audiovisual recordings, together with concepts from the cross-linguistic study of subjective modality, and gesture, we were able to formulate more concise definitions that unified what had appeared to be different. The identification of a contrast between speaker-internal and speaker-external perspective underlying ideophones' use has provided a valuable analytic tool for understanding ideophonic communication.

We envision our anti-dictionary as a multi-purpose tool, which will provide research data for linguists with interests in the polysystematicity of language, for anthropologists and anthropological linguists with interests in nonreferential, multimodal forms of communication, and for speakers themselves, who are feeling subtle cultural pressures to abandon their use of ideophones. Childs (1996, 2014) and Webster (2014) have both found that ideophones are particularly vulnerable to loss from speakers' active use when a language becomes minoritized. They are an endangered way of speaking. Although Pastaza Quichua is not at present considered an endangered language, there are reasons for believing that it is heading in the direction of greatly reduced usage by younger generations who prefer Spanish and even English over Quichua. Ideally, our anti-dictionary will also serve as a reference tool for younger speakers who are feeling subtle cultural pressures to abandon their use of ideophones, because of their society's growing dependence on written forms of communication, which 'erase' much of the malleability of language.

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