

Animacy's Possible Relevance for Creating New Ideophones from Old Words in Pastaza Kichwa

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Abstract

Ideophones, also known as mimetics, expressives, and onomatopoeia, are imitative words which communicate perceptions, emotions, and cognitions with linguistic sounds, intonation, and gesture. They are an open class of expressions which often recruit ordinary words from the conventional lexicon. Preliminary findings are that Kichwa speakers can take words from their non-ideophonic Kichwa lexicon, attach certain suffixes commonly used in derivational and inflectional processes, and create new ideophones featuring performative elaborations with intonation and gesture. Evidence for this study consists of data acquired from an online open access archive Quechua Real Words, featuring audiovisual examples of hundreds of ideophones in actual usage by native speakers of Pastaza and Napo Kichwa. A novel finding is that the suffixes follow a pattern which seems to distinguish between expressive temporality and manner of motion on the one hand, and spatial patterning on the other. This recruitment pattern points to the possibility that conceptual animacy may be relevant.

Keywords: *ideophones, iconicity, semantics, gesture, animacy*

1 Introduction

Ideophones, also known as mimetics, expressives, and onomatopoeia, are imitative words which communicate perceptions, emotions, and cognitions with linguistic sounds, intonation, and gesture. Examples from English include *tik tok*, *boom*, and *zoom*, but ideophones occur abundantly in languages throughout the world. Notable features of all ideophones include their status as words which often feature unusual sounds, phonotactic patterns, and syllabic structures (Nuckolls et al. 2016). However, they are also an open class of expressions (Dingemanse 2019) which raises questions about how new items enter the ideophonic lexicon.

One possibility is that novel sensory and extra-sensory experiences may give rise to the creation of new ideophones. I have documented a small number of such experiences which involve the use of unique imitative performances by Kichwa speakers, but broad generalizations about these phenomena cannot be made at this time. Another possibility is that new ideophones may enter a language's lexicon when speakers are in active contact with other ideophone users from another linguistic variety. Such contacts may result in an ideophone being borrowed as an entire word, although Childs states that this is a rare occurrence (Childs 1994: 267.) Another scenario for the creation of new ideophones involves distinctive sounds of another language being borrowed and used to create new ideophones in one's own language. This is the claim by Mannheim (1990), who argues that contact between Quechua and Aymara speakers resulted in the presence of ejective and aspirate sounds being borrowed into the expressive lexicon of Peruvian Quechua speakers.

Yet another route for new ideophones is created when speakers 'recruit' ordinary words from their lexicon and transform them into ideophones (Haiman 2020: 140). This process is attested and evident in enough examples from Kichwa speakers to make cautious

generalizations which will be presented in this paper. Preliminary findings are that Kichwa speakers can take words from their non-ideophonic Kichwa lexicon, attach certain suffixes, which are commonly used in derivational and inflectional processes, and create new ideophones. In a few cases these new ideophones have been recruited from the Spanish language. Crucial to this process of ideophonization is the role of depictive intonation and gesture. Both are necessary for the resulting form to become an ideophone which follows typical ideophonic patterns for this language. A novel finding is that the suffixes follow a pattern which seems to distinguish between expressive temporality and manner of motion on the one hand, and spatial patterning on the other. Furthermore, this recruitment pattern points to the possibility that conceptual animacy may be relevant.

I first describe details about Pastaza Kichwa ideophones' structural properties which distinguish them from the non-ideophonic lexicon for the purpose of showing that the newly created ideophones fall in step with these properties. Next, I discuss interrelations between gestures and semantics in ordinary ideophones to demonstrate that newly created ideophones' semantic and gestural characteristics are congenial with what has been found in existing ideophones. I then present examples from audiovisual data which illustrate the 2 main suffixation strategies for turning ordinary words into ideophones. One strategy involves creating ideophones depictive of high-animacy entities by suffixing ordinary words with the morpheme *-ng*. The suffix *-ng* is likely a clipped version of the instrumental/comitative suffix *-wang*. Words ideophonized with *-ng* tend to depict an action or an ongoing activity. The second pattern involves using words for relatively low-animacy perceptions such as static visual patterns. Such words are converted into ideophones by suffixing two morphemes, the attributive *-k*, and the emphatic *-lla*. Both patterns make use of expressive intonation and gesture as well as final stress, to foreground a newly created ideophone's status as a depiction.

The examples presented here reveal that animacy can be a complex and flexible designation. As noted by de Swart and de Hoop (2018), animacy is both a binary property in language when it involves distinct morphosyntactic encoding, as well as a conceptual property which is variable in discourse contexts. For example, the authors (2018: 2) mention an example from Dutch involving verbs such as hit, bite, and kick. When the receivers of these verbs' actions are animate they are treated as direct objects occurring after a verb: 'The dog bit the man' However if a receiver of these verbs' actions is inanimate, the receivers are treated as prepositional objects: 'The dog bit into the bread'. In addition to the grammatical animacy discussed above, where a case marking indicates the non-animate status of a referent, deSwart and deHoop also discuss the gradience of animacy, which they consider to be conceptual and shifting. They refer to an experiment in which research subjects heard a story involving a dancing peanut which listeners were able to categorize as animate based on the discourse context of a short narrative (ibid., 14-15). The examples from this study indicate that both kinds of animacy, binary, and gradient may be involved in the two ways of creating new ideophones from old words. For this study, there is binariness in the choice between the two marking systems for turning ordinary words into ideophones. However, the actual complexities of how speakers deploy them in discourse suggest the need for further study involving a gradient approach to how animacy is conceptualized.

2 Methodology

This is a qualitative study, and as such, its findings are subject to further refinement and review. Data were acquired from an online open access archive Quechua Real Words.¹ This archive features audiovisual examples of hundreds of ideophones in actual usage by native speakers of Pastaza and Napo Kichwa. These examples typically occur while speakers have been relating personal experiences or traditional stories which were invited by the interviewers, whether colleagues, students, or the author. There are currently 254 ideophones listed in the archive, with each ideophone having unique examples of use. Some have only 1 example. Other more frequently used ideophones may have as many as 50 distinctive audiovisual examples on its page. Examples are listed under separate tabs both alphabetically and also by 10 sensory modalities, such as sound, visual, haptic, etc. Each ideophone example, however, is usually categorized by more than one sensory feature. Certain ideophones depictive of sound, for example, are also depictive of motion, since movement of some kind creates the sound. The ideophone *taras*, for example is the sound heard when movement through dense foliage happens.² The use of sensory features, as well as recollections of specific examples has guided the ‘convenience sample’ approach to collecting examples for this paper. Analyses have used comparison and contrast as the central methodology.

3 Ideophones’ structural characteristics in Pastaza Kichwa

Ideophones in Pastaza Kichwa manifest a number of distinctive characteristics from the regular or ‘prosaic’ lexicon (Nuckolls et al. 2016, Nuckolls 2024). They add new sounds to the consonantal inventory through palatalization. In the prosaic lexicon, only a few stop consonants are palatalized, but ideophones include palatalized stops, fricatives, and affricates. A number of consonants in ideophones are aspirated. There are also pre-nasalized and labialized word initial consonants in ideophones. Besides adding new sounds to the consonantal inventory, ideophones also subtract resonant sounds. They occur with statistically less frequency in ideophones than they do in the regular lexicon.

There are restricted syllable types which occur in ideophones in statistically significant numbers. CV monosyllables are significantly more common in ideophones and onomatopoeia than in prosaic words. CVC syllables, whether monosyllabic or not, are significantly more common as well. Although Pastaza Kichwa seems to prefer word-final open syllables, many onomatopoeic words end in closed syllables. Other syllable types for onomatopoeic words in Pastaza Kichwa include many which do not commonly occur in the prosaic lexicon. These include: CCV, CCVC, and CCVCC, typically consisting of an initial obstruent followed by a sonorant, which is then followed by a vowel. Examples of CCV include *bru* ‘sound of a frog’, and *grijaw* ‘sound of a toucan bird’. The CCV onset normally occurs in the prosaic lexicon only in recent borrowings from Spanish. Yet, this onset occurs in ideophones that are not related to Spanish lexical items.

Another anomalous syllable type is the CVCC syllable as in *gjawη* ‘sound of a tree trunk groaning as it falls’. Normally, the CVCC occurs only in the prosaic lexicon as a third-

¹ <http://quechuarealwords.byu.edu>

² Four examples of this ideophone are featured here: <https://quechuarealwords.byu.edu/?ideophone=taras>

person plural inflectional ending on verbs. Other unusual syllable types occurring within onomatopoeic words include: CVCVCV, as in *piriya* ‘sound of a bird crying’, CVCVCVCV, as in *bullukuku* ‘sound of a hawk conversing,’ CVCVC, as in *tulun* ‘sound of angry thunder’.

Regarding stress patterns, there is a tendency for stress to occur on penultimate syllables in Pastaza Kichwa. Ideophones frequently deviate from this pattern, by using word final stress instead. The ideophone *chiling*, for example, is said to depict the sound of a frog and is stressed on its final syllable.³ Highly performative uses of ideophones may also feature expressive lengthening of a final stressed syllable, as happens with *mema* ‘sound of a baby sloth crying’.⁴ In addition to expressive lengthening, final syllables of ideophones may also be pronounced by raising the pitch of that syllable. An example of such lengthening and pitch raising is *hahay* ‘the sound of happy laughter’.⁵ Another possibility exemplified by the ideophone *tsiri* ‘sound of a snail crying’, is for there to be no stress on any one syllable. Rather, for this word, it is pronounced at a very high pitch throughout its expressive performance, with each syllable receiving equal stress.⁶ Newly created ideophones which are disyllabic follow the stress pattern of existing ideophones by featuring stress on their final syllables.

4 Neuroimaging evidence for ideophones’ semantics and distinctiveness from ordinary words

Ideophones’ semantics have been considered to be non-existent, context-dependent, or at best highly elusive (Moshi 1993, Bodomo 2006, DeSchryver 2009). A neurolinguistic study, however, has found that ideophones stripped of their sentential contexts and presented to native speakers of Pastaza Kichwa as auditory clips, elicit principled and patterned brain reactions, evidenced by fNIRS (functional, near-infrared spectroscopy) reactions (Dewey et al. 2024). Speakers’ heads were fitted with caps featuring optodes placed throughout to measure blood flow activity which occurred in response to audio versions of ideophones. Results indicate that ideophones’ sensory semantic profiles which had been postulated were largely affirmed, although in unexpected ways, and at times in ways that revealed more complexity at play than was previously expected.

The posterior areas of the brain associated with shape, pattern, and color recognition were activated more for visual than sound ideophones. Areas of the brain which were activated for visual + movement ideophones are associated with spatial processing, motor control, and the recognition of movement by others. Also, there was more oxygenation for motion-related areas of the brain when sound + motion ideophones were heard, than there was when pure sound ideophones were heard. Finally, ideophonic words activated Wernicke’s and Broca’s areas of the brain more than non-ideophonic words. This study reveals then that ideophones encode semantic information in ways that are richer and more principled than has previously been thought. Importantly for this paper, the study validates the semantic characterization of the two main categories of ideophones considered here: ideophones involving visual impressions and ideophones involving movements and active patterns. Both were reacted to by distinctive patterns in the brain.

³ The audiovisual example may be found at: <https://quechuarealwords.byu.edu/?ideophone=chiling> (video 1)

⁴ The audiovisual example may be found at: <https://quechuarealwords.byu.edu/?ideophone=meme> (video 1)

⁵ The audiovisual example may be found at: <https://quechuarealwords.byu.edu/?ideophone=hahay> (video 1)

⁶ The audiovisual example may be found at: <https://quechuarealwords.byu.edu/?ideophone=tsidi> (video 1)

5 Ideophones and their gestural patterns

Given the neurolinguistic evidence which shows that ideophone semantics are not random or strictly context-dependent, it is also not surprising that gestures accompanying ideophones are principled and tied to the sensory semantic properties of ideophones. Gestures occurring with ideophones can provide a significant source of insight into ideophones' semantics, as has also been noted by Dingemanse (2012, 2015; Kita 1993, 1997; Klassen 1998; Kunene 2001, Reiter 2013; Samarin 1971). Nuckolls (2020), following Streeck (2008) found that iconic gestures can be more finely differentiated in ways that correlate in general, with the sensorisemantics of ideophones. Specifically, ideophones depictive of visual perceptions exhibit a strong propensity for bounding gestures. Bounding gestures are those which use fingers, hands, and occasionally a foot to depict figurative distance or spatial extent, often with a gesture that sweeps across space or across a surface.⁷ Ideophones encoded for visuality have a natural affinity for bounding gestures, possibly because the visual field is often apprehended by scanning one's eyes across a fixed area of space. Bounding gestures might then be considered a physical act which mimics this embodied apprehension of visuality.

Ideophones depictive of movement, however, have the greatest semantic complexity and are accompanied by the greatest varieties of imitative gestures. Their greater semantic complexity is due to the fact that movement ideophones are often simultaneously encoded for sound and may also be encoded for the visual sensorisemantic category. Ideophones depictive of such events may use gestures which imitate handling an object such as a machete and using it to strike something, resulting in sound. Movement ideophones may also be used to depict visual patterns, such as lines which trace the markings on an animal, or to mark one's own body with point-like touchings which depict decorative patterns.

6 Thesis and analyses

These gestural patterns observed in ideophones will also be shown to be relevant for newly created ideophones. The next section features analyses of examples which use lexical items, mostly from Kichwa, but a few from Spanish, which demonstrate a pattern of using suffixes to distinguish between expressive temporality and movement versus extendedness in space and configurational patterns. These examples point to the possibility that animacy is relevant for the two methods of creating new ideophones from ordinary words: highly animate beings and entities such as humans and other forms of life tend to be depicted with newly created ideophones using *-ng*, while lower animacy entities such as landscape features and static visual patterns are likely to be ideophonically depicted with *-klla*. However, as the following examples will also demonstrate, the complexities of conceptual animacy may be a factor which allows these suffixes to be deployed in unexpected ways.

⁷ Taking into account the data on ideophones archived in the *quechuarealwords* site, out of 47 ideophone tokens for color and for other visual patterns, 33 were accompanied by bounding gestures.

7 Newly created ideophones depictive of movement

I turn now to examples of newly created ideophones which use ordinary words that are suffixed with *-ng* to depict movement. This suffix, which, is likely a clipped form of *-wang*, has both comitative ‘along with’ as well as instrumental ‘by means of’ meanings. The examples to follow feature both senses. They typically involve beings or entities capable of movements which are characteristic of animate beings.

Example (1) features a depiction of a firefly’s back and forth movements evident by the flashing light it creates as it moves. The speaker uses her index finger to trace the pattern of these movements.⁸ These gestures are coordinated with each pronunciation of the ideophone *pundhang*, which is created from the word *pundzha* ‘day’ and each instance of *pundzha* receives word final stress, as is true for all subsequent examples as well.

Figure 1



Pundza ‘day’ + *-ng*

- (1) *Pundzhang pundzang pundzang pundzang pundzang paj mujuri-g a-ŋ.*
 IDEO IDEO IDEO IDEO IDEO he circle-ATR be-3
Pundzhang (brightly) *pundzhang* (brightly) *pundzhang* (brightly)
pundzhang(brightly)*pundzhang* (brightly) it circles around.’

Example (2) features the word *maki* ‘hand’ to depict the way a sloth climbs slowly up a tree to reach its canopy garden⁹:

Figure 2



Maki ‘hand’ + *-ng*

⁸ This example can be viewed at <https://quechuarealwords.byu.edu/?ideophone=pundzhang> (video 1)

⁹ This example can be viewed at: [makin – Quechua Realwords](https://quechuarealwords.byu.edu/?ideophone=makin) (video 1)

- (2) λ aki- λ a sika- η ga makiiiii η makin paj t η fari ima pundza pakta- η ga
 sad-LIM climb-3FUT IDEO IDEO. he perhaps what day arrive-3FUT
 Being pitiful it will climb, ‘*makin makin*’ (hand after hand), and on what day will it arrive?’

Example (3) of this very same ideophone is used to depict the digging motions of a squirrel with its paws.¹⁰ The different gestures used in these two examples demonstrate that their shape and motion can distinguish between what are very different lexical verbs in English, namely ‘climb’ used in example 2 for the sloth and ‘dig’ for example 3, featuring a squirrel:

Figure 3



Maki ‘hand’ + -ng

- (3) *Makiiiii η a λ a-fa tarpu-k m-a- η*
 IDEO dig-COR plant-ATR EV-be-3SG
 ‘Digging with both hands *makiiing* it plants’

Example (4) from a traditional story features the ideophone *chaking* created by suffixing *chaki* ‘foot’ with -ng to depict a succession of footprints made by a tapir which was being tracked by men wanting to kill it. The speaker mimics the action of making a footprint by lowering her hand as if it is the tapir’s foot making a footprint on the ground, and then lifting it up again¹¹.

Figure 4



Chaki + -ng

¹⁰ This example can be viewed at: [makin – Quechua Realwords](https://quechuaarealwords.byu.edu/?ideophone=makin) (video 2)

¹¹ This example may be viewed at: <https://quechuaarealwords.byu.edu/?ideophone=chakin> (video 1)

- (4) siriri-ʃkaj turi-guna maska-w-ʃka-wna-ʃi, na, tʃakiŋ tʃakiŋ-ʃi puri-k a-ʃka

Lie-CN brother-PL search-DUR-PRF-3PL-EV then IDEO IDEO-EV walk-ATR be-PRF
 ‘While it was lying down, the brothers were said to be searching and saw a foottttt
 and a foottttt (one footprint after another) that it had walked.’

Example (5) uses the word *nambi* ‘road’ or ‘path’ to depict the line of movement left on sand by a large snake’s body. The speaker moves her hands away from her body to imitate the direction of movement made by the snake as it left its body print¹²:

Figure 5



nambi ‘path +-ng

- (5) riku-kpi(g)a nambiiŋ-ei ri-eka teaj-ma-ei euk kutea a-eka
 look-SWRF IDEO-EV go-PRF there-DAT-EV one pond be-PRF
 ‘And upon looking (I saw) a pathhhh had apparently been created by it, as it headed
 toward where there was a pond.’

8 Newly created ideophones depictive of visual patterns

Another ideophone-building suffix is actually 2 suffixes combined: *-k* an attributive suffix which is combined with the emphatic suffix *-lla*. The suffix *-k* is similar to the suffix *-er* as in ‘baker’, ‘editor’, ‘teacher’, etc., but it is used far more often in Kichwa than in English. It attributes agency, not only to humans and animals, but also to plants, rocks, landscape features, and atmospheric phenomena. Humans, animals, plants and rocks are variously seen as agentive, to varying degrees and in ways which can only be understood in context: rain is a ‘fall-er’, rocks are ‘move-ers’, and the earth can be a ‘quake-er’.

Although attributive *-k* is used for both high animacy beings as well as low animacy entities in ordinary discourse, it is my impression that it mostly occurs with high animacy beings and entities. However, when deployed with emphatic *-lla* to create new ideophones, these 2 suffixes combine to depict the patterning and vividness of colors and other low animacy entities mostly consisting of visual perceptions. In some examples, the patterning or spatial expanse is often further depicted with a bounding gesture of the hand. In example 6 the word *muru* ‘spotted, speckled’ is ideophonized with *-xlla* to depict the spottedness of a stone¹³. In this example the speaker turns the stone over in her hand to show that the pattern is seen throughout the stone’s surface.

¹² This example may be viewed at: <https://quechuarealwords.byu.edu/?ideophone=nambing> (video 1)

¹³ This example may be viewed at: <https://quechuarealwords.byu.edu/?ideophone=muru> (video 1)

Figure 6



Muru ‘spotted’+ *k-lla*

- (6) *Kay-ga muruxlla rumi rik-i*
 This-TOP IDEO stone look-IMP
 ‘Look, as for this one, it is a spottttted-all-over stone’

In example (7), it is the color white *ruya* ‘white’ which is ideophonized to depict the vivid whiteness of an old woman’s hair. In this example the speaker sweeps her hands over her head, using a bounding gesture to depict how thoroughly white the old woman’s hair was¹⁴.

Figure 7



Ruya ‘white + -*k-lla*

- (7) *riku-kpi-ga rujaaa-k-lla uma-jug apa wawa-ɛi*
 look-SWRF-TOP IDEO head-pos grandmother little-EV
 ‘And upon looking what he saw was an extremely whiiiiite-haired little grandmother’

A variation in the suffixing pattern of this group of ideophones occurs in the following example (8). The speaker depicts the purple color of a stone by taking the word for purple *sani* and adding the simulative suffix *-naya* ‘like’, before adding *-k-lla*. At the same time, she sweeps over the stone, creating a bounding gesture with her foot.¹⁵

¹⁴ This example may be viewed at: <https://quechuarealwords.byu.edu/?ideophone=ruyag> (video 1)

¹⁵ This example may be viewed at: <https://quechuarealwords.byu.edu/?ideophone=sani> (video 1)

Figure 8



Sani + *-naya-k-lla*

- (8) *mæti sani-naja-xxx-lla rikuri-k rumi*
 um IDEO appear-ATR stone
 ‘Um, it’s a purpllllle-ish stone.’

Example (9) displays a variant patterning in suffixation whereby the lexical item already ends in the consonant *k* and is simply suffixed with *-lla*. In the following, the word *wamak* ‘bamboo’ is ideophonized by simply adding *-lla* to depict the expanse of a bamboo grove which grows along a hill. The speaker also uses a bounding gesture to illustrate the sweeping expanse of the bamboo grove.¹⁶

Figure 9



Wamak ‘bamboo’ + *-lla*

- (9) *kasna lomaga loma m-a-ra wamaagggggg-lla m-a-ra*
 Like.this hill-TOP hill EV-be-PST IDEO EV-be-PST
 ‘Like this, there was a hill, it was a hill and it was bamboooooo all over.’

Another example of a variant pattern in suffixation occurs in example (10). The Spanish word *chispas* ‘sparkle’ also features a consonantal ending, this time with *s* which is simply suffixed with *-lla* and expressively lengthened to depict an expanse of sparkling light emanating from the sun. The spatial expanse of this gesture is again reinforced gesturally with the bounding gesture of her hand.¹⁷

¹⁶ This example may be viewed at: <https://quechuarealwords.byu.edu/?ideophone=wamag> (video 1)

¹⁷ This example may be viewed at <https://quechuarealwords.byu.edu/?ideophone=chispaslla> (video 1)

Figure 10



Chispas ‘sparkle’ + *-lla*

- (10) *tʃi-ga riku-kpi-ga, indi-ga na tʃispassss-ʎa-fi*
 And.so look-SWRF sun-TOP then IDEO
 ‘And so upon looking, it was the sun then that was, they say, just sparklinnnng.’

9 Lexical items which alternate ideophonic suffixes

I turn now to examples which illustrate how the two suffixal patterns identified here reveal the shifting nature of conceptual animacy distinctions underlying the creation of new ideophones. Words which become ideophonized can be depictive of both high-animacy and low-animacy entities and events, depending on the contexts of their use. This is congenial with insights articulated by de Swart and de Hoop (2018), who state that animacy is not inherent to arguments, but can change by means of case marking or by the use of specific constructions (ibid, 2018).

Example (11) features the ideophonized *santong*, which is derived from Spanish *santo*, ‘saint’, and was inspired by Catholic iconography of seated, saintly personages which often decorate Catholic churches in stylized seated postures featuring faces slightly pivoted downward, with hands neatly composed. When ideophonized, however, the idea of Catholic saintliness seems to have become detached from the basic sense of *santo* and the new ideophone seems more focused on expressing a postural depiction. This is what happens in the following example, where the speaker imitates the appearance of a mythical old woman who is believed to have created all animals from her human children.¹⁸

Figure 11



santo ‘saint + *-ng*

¹⁸ This example may be viewed at: <https://quechuarealwords.byu.edu/?ideophone=santong> (video 1).

- (11) *wamag ukwi-ga santo-η tija-εa-εi kanta-w-εka*
 bamboo inside-TOP IDEO dwell-COR-EV sing-DUR-PRF
 ‘Inside the bamboo grove she was said to be seated-stilllllll, and she was singing.’

With example (12), however, the saintly, the human, and the human body posture all seem semantically bleached out of *santo*, which, in the next example is simply about uprightness. The speaker is depicting the way houses built on the ground have an erect appearance, pointing straight upward. She uses *-xlla* combined with a sweeping gesture while uttering this ideophone to express the houses’ widespread distribution in space.¹⁹

Figure 12



Santo ‘saint’ + *-k -lla*

- (12) *runa-ga riku-εa na santo-kλa wasi-ga tija-w-εka-wna*
 People-TOP look-COR then IDEO house-TOP dwell-DUR-PRF-3PL
aλpa wasi a-εka-j-ga
 earth house be-PRF-CN-TOP
 ‘And a person looking sees the straight.upnesssss of the houses as they were earthen houses.’

Another ideophone which is drawn from a lexical item reveals a similar pattern of alternating animacy. The Kichwa word *puka* ‘red’ becomes ideophonized in the following example with *-ng* to depict the movement of a deer. This color term is rather broad, encompassing not only bright reds but also oranges and reddish browns. In example nineteen, *puka* is depicting the way the color of a deer makes evident its movement into a garden, while the gardner, who was the speaker’s own father related how he watched and waited to see what animal had been eating the food he was trying to grow for himself.²⁰

Figure 13



Puka ‘red’ + *ng*

¹⁹ This example may be viewed at <https://quechuarealwords.byu.edu/?ideophone=santong> (video 3)

²⁰ This example may be viewed at [pukang – Quechua Realwords](https://quechuarealwords.byu.edu/?ideophone=pukang) (video 1)

- (13) *tcapa-ca tija-w-eka-j-ga camu-eka taruga pukaŋŋ-ɛi camu-eka*
 Wait-COR dwell-DUR-PRF-CN-TOP come-PRF deer IDEO-EV come-PRF
 ‘Waiting he was there as the deer came, redlllly visible, it apparently came.’

The next example shows how *puka* can also take the low animacy suffix *-klla* to depict the reddish brown color of a path which had been cleared in the forest. The speaker sweeps her hand expansively to display the extent of the path’s vivid color against the surrounding green of the forest.²¹

Figure 14



Puka ‘red’ + *-k -lla*

- (14) *kaj rikw-i teasna pitea-eka ɛina puka-xx-ʎa m-a-eka-ra*
 here look-IMP like.that sweep-PRF like IDEO EV-be-PRF-PST
 ‘So look! it was as if it had been swept clean, all reddishhhhhh it was.’

10 Newly created ideophones which do not accord with the pattern

The pattern of suffixation presented so far has been fairly straightforward and explainable if we consider the animacy of entities whose appearances, characteristics, and actions accord with traditional classifications of animate and inanimate entities. High animacy beings such as humans, animals, and insects are ideophonically depicted with the suffix *-ng*, while perceptions of low animacy entities such as colors and patterns are ideophonically depicted with the combined suffixes *-xlla*. In the next set of examples, however, the pattern breaks apart. Perceptions of low animacy entities such as a camera tripod, the color of a snake lying still, and smoke from a fire are all depicted with the *-ng* suffix attached to their ideophones. By contrast, a burning sensation moving through a human body is ideophonically depicted by two different speakers with the *-klla* suffixes rather than with the expected *-ng* suffix.

Example (15) features an ideophone formed by *changa* ‘thigh, leg’ to imitate the configuration of a tripod’s legs. The speaker watched how the person who was about to interview her spread the tripod’s legs outward. She then imitated that movement by spreading out her upper arms.²²

²¹ This example may be viewed at <https://quechuarealwords.byu.edu/?ideophone=pukax> (video 1)

²² This example may be viewed at <https://quechuarealwords.byu.edu/?ideophone=changang> (video 1)

Figure 15



changa ‘leg, thigh’ + -ng

- (15) N: *Ima shina-ta rikuri-n?*
 How like-INT appear-3SG
 ‘What does it look like?’
 C: *changang!*
 IDEO
 With-leggggs-spreading!

The expected suffix for this construction would be *-klla* since a tripod is an inanimate object. In this example it is depicted as an object with a capacity, spreading outward, which reminds the speaker of her own human bodily movement. Although her laughter is a reminder that she is adopting a whimsical stance, her depiction relates empathetically to this object which is capable of a familiar kind of movement. Empathy is mentioned by Yamamoto (199) as a possible factor in perceptions of high animacy

Example (16) depicts a venomous snake. In this case it is the color of the snake which is ideophonically focused upon as it lies on the ground.

Figure 16



yana ‘black’ + -ng

- (16) *iepa-ngawa ri-u-kpi, iɬa-ra kaspi, janay siri-u-k-ka*
 urinate-FINF go-DUR-SWRF lack-PST stick IDEO lie-DUR-ATR-TOP
 ‘As I was going to urinate, and despite there being no sticks there, there was a blacknesssss lying (in the path)’

Although color words which are transformed into ideophones are typically depictive of static perceptions involving relatively low animacy entities, in the foregoing example the speaker focusses with her gesture and her words on the blackness created by a deadly *motolo* snake’s appearance of its body as the linear shape she observed²³. Her gesture of the snake’s appearance involves moving her index finger forward and away from her body to depict the linearity of its

²³ This example may be viewed at: [yanan – Quechua Realwords](#) (video 1)

bodily shape. The snake’s body is not said to be actively moving, however, which indicates that we should classify her gesture as bounding the extent of the snake’s body, rather than depicting its movement. This paper’s argument would predict that the suffix *-klla* should have been used, since the perception is essentially static. However, the snake is alive and therefore an animate being, which might explain why she uses *-ng* to ideophonize this word.

Example (17) features the word *kushni* ‘smoke’ suffixed with *-ng* to depict the rising movement of smoke coming from a burning fire²⁴ which had been deliberately set as a way of forcing people out of their homes so that they could be attacked and captured or killed by enemy invaders.

Figure 17



kushni ‘smoke’ + *ng*

- (17) *Teiga na βiη wasi sindi kaλari-eka, hapiri-eka wasi kuεniη*
 So.then now all house burn begin-PRF catch-PRF house IDEO
 ‘And so all of the house began to burn (and) the caught-on-fire houses went up in smokkkke.’

Smoke from fire is not alive, which leads to the prediction that its suffixation would use *-klla* rather than *-ng*. However, it is visually evident as a pattern of rising movement which is gesturally enacted in this example. Its ability to manifest as movement may explain why it is suffixed by the speaker with *-ng*.

The final two examples of this section ideophonize the same Kichwa lexical item. Both examples come from the verb *rupana* ‘to be warm, to burn’, and both concern experiences which involve a distinct sensation of heat in the body. In example 18 *rupana* is suffixed with *-klla* by a speaker who is depicting the places where the heat moved through her body, by moving her hands across her upper chest.²⁵

²⁴ This example can be viewed at: <https://quechuarealwords.byu.edu/?ideophone=kushnin> (video 2)

²⁵ This example may be viewed at <https://quechuarealwords.byu.edu/?ideophone=rupax> (video 1)

Figure 18



Rupa ‘heat’ + *k-lla*

- (18) *na yatei-wa-ŋ amsa rupaxxxxλaa kwerpo-ta yatei-wa-ra*
 then feel-1OB-3SG some IDEO body-OB feel-1OB-PST
 ‘And it felt like a kind of burniiiiing, inside my body.’

The perception of a burning sensation moving through one’s body is not that of a low animacy being, making it more probable, according to this paper’s argument, that the suffix *-ng* would have been used.

Example (19) from another speaker uses the same ideophone to depict what it would feel like to have hot water poured over her body. In this example, the speaker temporarily steps into a character role from a traditional story and becomes the old woman she is depicting. According to this story the old woman is turned into tree sap after hot water is poured over her. As in the previous example 18, there is a sweeping movement across her body, in this case, her arm, to trace the path of the heat. In this example, however, her gestures combined with the ideophone are only anticipating how the sensation of heat will move through her body, because her words simply describe the preparing of the hot water by the two sisters who will pour it over her.²⁶

Figure 19



Rupa ‘heat’ + *k-lla*

- (19) *tʃiga rupaxxxλa ra-ʃa rupaggλa na rupaxxxλa yaku-ta (ra)-ʃa*
 so.then IDEO do-COR IDEO then IDEO water-OB do-COR
 ‘Then, making it hottttt, hottt, making the water hottttttt...’

Although both examples 18 and 19 are depictive of a movement throughout a human body, and might therefore be more appropriately suffixed with *-ng*, both speakers use *-lla*. A burning

²⁶ This example may be viewed at <https://quechuarealwords.byu.edu/?ideophone=rupax> (video 2)

feeling is not a sensation that a person controls and also not one that can be visually witnessed as individuated or isolable, both of which tend to be characteristic of high animacy beings and entities (Yamamoto 1999). These factors may explain the speakers' use of *-klla* for examples (18) and (19).

11 Concluding thoughts

The expressivity of ideophones is systematic. Their principled structures begin at the level of sound segments, and include as well, syllabic structures, stress patterns, and intonational profiles. Ideophones also encode semantic information in ways that are principled and identifiable in neurolinguistic profiles. These profiles, which reveal that brain activity is distinctive for different sensory modalities, also correlate generally with gesture patterns which distinguish different sensory modalities. Visual perceptions of static entities are depicted with bounding gestures, while gestures accompanying movements are far more varied in their iconic patternings.

This study has argued that there is another kind of systematicity embedded within Kichwa ideophone usage, possibly involving animacy, which seems relevant for many examples from naturally occurring discourse. This systematicity is evident in distinctive suffixation patterns for turning ordinary words into ideophones. Words for low animacy entities such as colors or patterns tend to be ideophonized with the suffix *-klla*. Newly ideophonized words for low animacy entities also use bounding gestures when depicting colors and patterns of various kinds. By contrast, words depictive of high animacy entities such as humans, animals, and insects tend to be ideophonized with the instrumental/comitative suffix *-ng*. Their gesture use is also congenial with ideophones in general, specifically involving usage of a variety of iconic gestures. Examples which do not fit the suffixal pattern identified here with *-klla* for low animacy entities and *-ng* for high animacy entities require further investigation, possibly involving testing speakers' perceptions with sets of ideophonized words, involving substituting the two different possible suffixes to determine which is favored.

Abbreviations

- 1 first person
- 2 second person
- 3 third person
- ATR attributive
- COR coreference
- CN connective
- DAT dative
- DUR durative
- EMP emphatic
- EV evidential
- FUT future
- FINF future infinitive
- IDEO ideophone
- IMP imperative

INST instrumental
 INT interrogative
 OB object
 PL plural
 POS possessive
 PRF perfect
 PST past
 SG singular
 SWRF switch reference
 TOP topicalizer

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