

Recognition of Sound-Imitative Words: A Case Study of English and Georgian Languages

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Abstract

Onomatopoeias defy the general linguistic belief that words are arbitrary and reflect universal and language-specific characteristics across languages. Cross-linguistically, it is yet to be discovered to what extent speakers of different languages can comprehend foreign onomatopoeias. This article aims to investigate the recognition process of sound-imitative words of English (Indo-European language of the West Germanic branch) in monolingual Georgian speakers (the Caucasian language family of the Kartvelian branch). Through a quantitative method, this research examines whether non-English Georgian speakers can identify the meaning of English onomatopoeias and discovers what kind of role Georgian L1 plays in comprehending English onomatopoeias. Hereby, a survey was conducted that involved 60 non-English Georgian participants who had to guess the meaning of animal kingdom, environment, humankind, and miscellaneous onomatopoeias via answering multiple-choice, linear scale rating and open-ended questions. The results of quantitative data disclosed that the absence of certain Georgian phonemes in English hinders the recognition process, while onomatopoeias involving shared phonological or morphological features were easily understood. The study discovers and emphasises universal and language-specific characteristics of onomatopoeias in the English and Georgian languages.

Keywords: sound imitation, onomatopoeia, cross-linguistic comparison, English language, Georgian language

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Introduction

It has been long established in traditional linguistics that word form and its meaning are arbitrary (Saussure, 1916). However, in Bredin's (1996) view, speakers are naturally driven to make connections between sound and meaning, and, therefore, humans are motivated to create onomatopoeias, sound-imitative words. Hereby, the presence of a large class of sound symbolic words where the meaning of a word is established by the imitation of a sound makes it impossible to deny the existence of onomatopoeias like "thump" (imitating the beating of a heart), "chirp" (imitating a bird's singing), "pop" (imitating a bubble bursting).

Semantically, onomatopoeias primarily represent natural sounds of animals (mainly birds and mammals), human sound imitations (eating, laughing, crying, talking), and sounds of actions that emit certain noises like hitting, breaking, banging, and clanking. Onomatopoeias also cover the sounds of water, air, fire, metal, and other miscellaneous sounds, such as a car's horn (involving electronics) and the sound of a bomb (weapons).

Linguistically speaking, while onomatopoeia proves the existence of sound-meaning correspondence, it is yet to be shown to what extent speakers of different languages can understand each other's onomatopoeic words. Based on the scarce research that has been conducted on this topic, two different approaches can be found: universal and language-specific.

The universal approach states that sound imitations are similar in every language. Tsur (2001) examined the sound of "Cuckoo" and concluded that speakers of different languages clearly associate /k/ sound with birds' singing, and /k/ with /o/ are prominent in names of the birds ("cuculo" in Italian, "koekoek" in Dutch and "kukavica" in Croatian). Benczes and Szabó (2022) added that although we cannot vividly hear the /k/ sound in birds' chirping, many languages still often use this back vowel, as it is easier to pronounce than /t/ or /p/ in birds' sounds. In addition, Assaneo et al. (2011) studied "click" and "knock" in search of similar results and discovered that in many languages, these sound imitations have co-articulated consonants. Kanerva and Häikiö (2022) added to the discussion that, according to their experiment, monolingual speakers of Finnish can understand the general meanings of Russian sound-imitations, and if they have hints, their answers are more exact.

On the other hand, the language-specific approach has been based on the fact that humans cannot mimic a sound without following their language's phonological rules (Veldi, 1994). Simply speaking, sound imitations are lexicalised according to the phonemes the speaker's language possesses and how the sound is heard by the speaker. Vivid examples of such differences can be sounds of vibration or buzzing, which are lexicalised with voiced fricative [z] in languages in which it exists and with nasal consonants [n] and [ŋ] where the [z] sound is non-existent (Tsoi Wai Chuen & Chung Hoi Wa, 2004).

Therefore, it is still arguable to what extent speakers of different languages can comprehend onomatopoeias due to the phonological constraints of their languages. As the English and Georgian languages come from different language families and, especially, vary in their phonological system, comparison between the characteristics of onomatopoeias in both languages is yet to be conducted.

Literature Review

Brief Overview of the English and Georgian Languages

English is a part of the Germanic branch of the Indo-European language family. English, at first, was only spoken in England, but now it has become a lingua franca, and it is widely spoken as a second language in many places. English is mainly an analytic language but it also showcases some synthetic features. English has 26 letters (21 consonants and 5 vowels) from which it has 24 consonant phonemes and around 20 vowel sounds. Stress also plays an important role in words as it helps to differentiate some similar words from each other.

Georgian, on the other hand, belongs to the Kartvelian Branch of the Caucasus family. It is the official language of the Republic of Georgia, and it is only spoken by natives. Georgian is an agglutinative language, and it scarcely has analytic features. Georgian has more letters than English, in total 33, from which 28 are consonants and 5 are the same vowels that the English language has. However, Georgian does not have any diphthongs, and stress is not taken into consideration. The biggest and the most vivid difference between these two languages is the fact that, in English, letters are pronounced differently according to their combination (it explains a larger number of phonemes in English), while, in Georgian, every letter has its own sound no matter their position in the word (therefore, the words are pronounced the way they are written).

Phonology of Sound Imitations in the English and Georgian Languages

According to Stump (2021), onomatopoeias in English are heterogeneous and follow phonological rules. They follow regular syllabic structure but some deviations can still be detected. They may lack resonant syllable nuclei like in [bzzz] or [pʃʃʃ] (splashing sound), and they may use atypical consonant clusters for English like /vr/ in “vroom” (Stump, 2021). In addition, some English onomatopoeias contain voiceless velar fricative /x/, which is not commonly found in English phonology (For example, [pçxx^w] in the gunshot onomatopoeia).

While Georgian onomatopoeias also mainly adhere to the phonetic principles of Georgian, according to Topadze-Gäumann (2024), some deviations can be found in written texts and mostly in ad-hoc coinage of onomatopoeias. For example, Georgian primary onomatopoeias may lack vowels or consonants and use reduplication, which is not acceptable for Georgian, as in “shshsh” (the sound of shushing) and “uuu” (the sound of the wind; found in poetry).

It shows that vowel and consonant inventory of onomatopoeias may sometimes deviate from the typical phonological patterns of their own languages while trying to exactly imitate sounds. Cross-linguistically, the striving to create an accurate imitation increases the degree of similarity across onomatopoeias in these two languages and lessens the difference between their phonological rules.

Word Formation of Sound Imitations in the English and Georgian Languages

Word formation process of onomatopoeias in English and Georgian involves simple conversion of primary onomatopoeias into secondary onomatopoeias by acquiring characteristics of parts of speech, e.g., “meow” as a primary onomatopoeia becomes a verb by conversion (“The cat meowed all day”) (Gogolashvili, 2011). In English and Georgian, primary onomatopoeias generally do not inflect, and, as they are not part of any word class,

they have limited or no grammatical function. Secondary onomatopoeias belong to the parts of speech. In both languages, they follow inflection, derivation and compounding. From a syntactic view, they have the same grammatical functions as any other members of parts of speech. For example, in the sentence “A frog is croak-ing. | ბაყაყი კიკი-ნებს.” - “croak” and “q’iq’ini” are inflected secondary onomatopoeias and also belong to a verb class.

Furthermore, suffixation is also common in both languages. Secondary onomatopoeias after conversion follow common derivation rules to form onomatopoeic words like “moan-er” or “whine-y” in English. As for Georgian, Gersamia et al. (2016) distinguish the most common suffixes – an, - un and - in that are used with onomatopoeias, stating that onomatopoeic stems can take all of them one by one, e.g., “tkac’an-i”, “tkac’un-i” and “tkic’in-i” (the sound of smacking). Interestingly, in Georgian, by adding the suffix -a primary masdars obtain the meaning of constant and continuous repetition of the sound, e.g. “shushkhun-a” - something that constantly/continuously makes the sound of “shushkhuni”, in English, fizzing sound (Apridonidze, 1993). In English no derivational suffixes can add such additional sensation, amplitude or strength to onomatopoeias. Therefore, it would be practically impossible for English speakers to grasp the difference between similar forms of onomatopoeia like “shushkuna” and “shushkhuni” on an instinctive level.

A rather unique phenomenon of onomatopoeias can be detected in English, where monosyllabic onomatopoeias add -ka or ker- prefixes and create iambic onomatopoeias. For instance, “ka-ching” is the sound of a cash register and “ker-choo” is the sound of sneezing (Stump, 2021). It is interesting to note that as prefixes do not change the meaning of primary onomatopoeias, and are synonymous. In addition to this difference, the Georgian language does not commonly utilise compounding with onomatopoeias, while English does, e.g., popcorn, barf bag and firecracker.

The process of reduplication of syllables and ablaut is very common in terms of word formation processes in Georgian (e.g., “ts’kap” is a sound of rain falling and “ts’kap-ts’kup” is its reduplicated form), in contrast to English, which only sometimes falls under reduplication (“bla bla” [trivial talking] and “pew pew” [the sound of laser pistol]). English onomatopoeias are quite different from each other and have their own cluster of letters. However, Georgian onomatopoeias have many similar (reduplicated/repeated) forms, and the difference in meaning may be created by only one letter. For example, “sisini” (hissing sound) – “shishini” (sound of a broken radio) – “ghighini” (humming sound)- “ghughuni” (sound of a pigeon) or “kivili” (screaming sound/ screech) – “wivili” (high-pitched screaming sound) (Akhvlediani, 1949).

In light of the above-mentioned, it is clear how onomatopoeias are very common in both languages. Their creation process shares many similarities not only in connection to sounds but also forms. The importance of onomatopoeia can also be observed by their usage in text or speech. Nowadays, onomatopoeia is an asset to literature, children’s books, comic books, advertisement, media, music and many others. Interestingly, as onomatopoeias belong to an open word class in both languages, with the avid usage of onomatopoeias, it leaves room for further inventory. Many mentioned instances made it clear that sound-imitative words try to defy the rules of their languages and be as universal as possible. Therefore, it will be interesting to see if Georgian speakers can overcome these differences and identify English onomatopoeias.

Methodology

This research paper applied quantitative methodology to gather statistics and encode data provided by participants in the survey. The survey contained 32 questions in total. The first four questions concerned demographics, while every seven questions related to four different groups of onomatopoeias. The four groups of onomatopoeias were distinguished according to their source and included animal kingdom, environment, humankind and miscellaneous sounds. The survey was created in Google Forms and utilized multiple-choice questions, linear scale rating and open-ended questions that required short answers. The survey took approximately 5-7 minutes.

This research utilised a survey that combined questions that varied according to difficulty. Half of the onomatopoeias in the survey were expected to be greatly recognised by Georgian monolingual speakers, while the other half would be found harder to detect. As the participants did not know English, they had to listen to the pronunciation of the onomatopoeias provided by YouTube videos and then answer the questions. The participants filled out the questionnaire after they were given proper directions, and they were notified how to answer the questions to avoid technical issues.

Participants

The research participants were 60 (40 female and 20 male) monolingual Georgian speakers above the age of 18. The majority of the participants (30%) were between 18-25, while 18% were between 26-30, 21.7% were between 31-40, and the rest of the participants were 41-51+. The participants were selected according to their lack of knowledge of the English language, so they did not have any prior knowledge of English. Furthermore, only six of the participants had heard about onomatopoeia, and others were not aware of this sound imitative phenomenon. They were mainly part of a convenience sample, and a questionnaire was directly sent to them.

Results

The results will be presented by subcategories of the animal kingdom, environment, humankind and miscellaneous onomatopoeias.

Animal Sounds

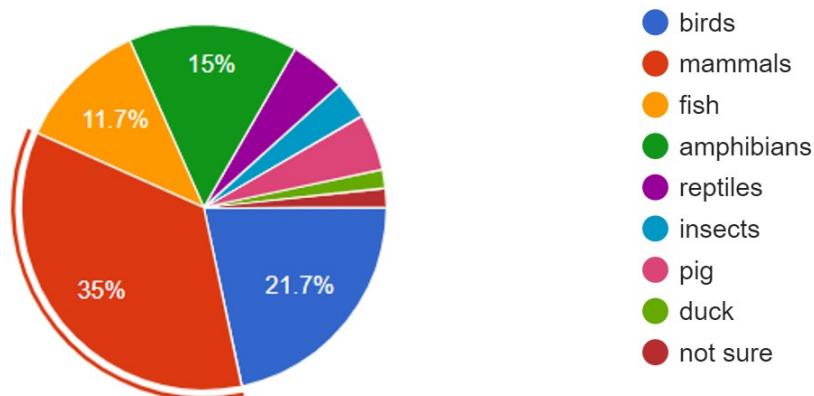
Animal onomatopoeias included questions concerning the identification of animal sound imitations according to their animal kingdoms.

In the onomatopoeias of animal sounds, “buzz” was greatly identified by the participants. 70,1 % of the participants identified “buzz” as the sound of an insect, and 11,8% from the given majority even specified that it was the sound of a bee or a wasp. Other animal sound imitations did not showcase similar striking results; however, “hiss”, “quack,” and “growl” still held the highest percentage (40%) of the correct answers. In the case of “hiss” (“sisini” and “sss” in Georgian), 6.7% of the participants even indicated that it was a snake’s sound. Similarly, 8,3% could identify that “quack” was the sound of a duck. However, 20% of the Georgians associated “quack” with amphibians. As for “growl”, 40% opted for mammals, and one of the participants even wrote “bear” as a source. 23,3% incorrectly chose “amphibians” and 13,3% viewed it as the sound of birds.

Other onomatopoeias like “oink”, “neigh” and “caw” showed lower percentages of recognition, and participants' answers greatly diverged.

Figure 1

Q7 - Which Sound Imitation of the Animal Kingdom Does “Oink” Belong to?

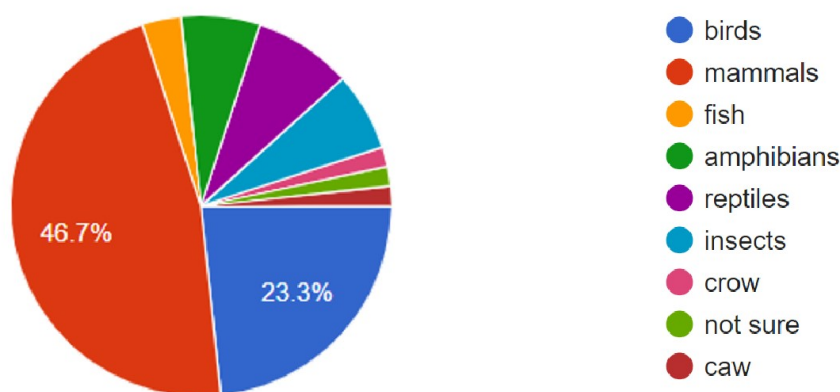


As it is shown in the pie chart above, the majority of the participants (35%) chose the correct answer and indicated mammals. 5% of the participants even wrote “pig” as a source. However, 35% is still lower than the results given above, and it is clear how the participants were not sure, as 21.7% opted for birds, 15% for amphibians and 11.7% - for fish.

The question concerning “neigh” showed similar divergence. 38.3% of the participants opted for mammals, which is correct. One of the participants indicated that it must be the sound of a pig, which in Georgian reality can be true. Nevertheless, 23% indicated birds as a source, 18,3% chose amphibians and 10% - reptiles.

Figure 2

Q7: Which Sound Imitation of the Animal Kingdom Does “Caw” Belong to?



“Caw” was the only question that was answered incorrectly by the majority of the participants, as illustrated above. 46.7% of the participants stated mammals as a source. 23.3% have opted for birds, and one even mentioned “crow” as a source.

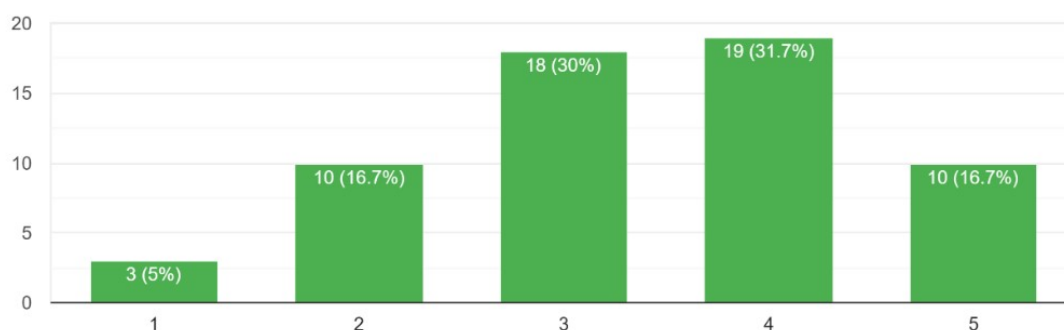
Environment Sounds

Onomatopoeias of nature included linear scale rating questions, and they helped to identify the participants' views and perspectives on the resemblance of onomatopoeias in both languages. It is also noteworthy to mention that to avoid biases, the participants were not aware that the given onomatopoeias were the exact imitations of the given explanations in the questions.

The results showed that “bubble” (“buq’buq’i” in Georgian), “whoosh” (“shriali” in Georgian) and “squelch” (“ch’q’apuni” in Georgian) held more resemblance and similarity to their sounds according to the participants.

Figure 3

Q16 – To What Extent Does “Bubble” Resemble the Sound of Water Bubbling (Buq’buq’i in Georgian)?



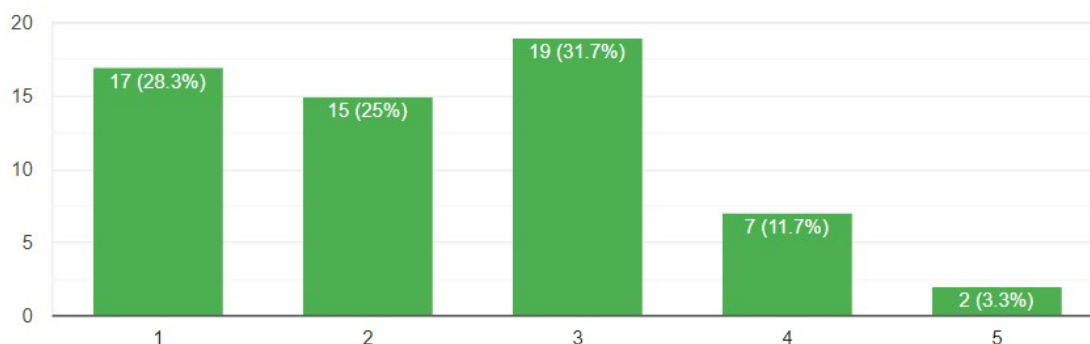
The bar chart given above represents how the majority of the Georgian participants think that “bubble” corresponds to the sound it derives from by rating it 4 (31.7%) and 5 (16.7%). 30% responded with 3, 16.7% opted for 2, and only 5% did not notice any imitation.

As it seems, “Whoosh” is also vividly perceived by the participants. Although 20% believe that it does not have any resemblance to the sound of the wind, the sum of the percentages that mainly rated this sound imitation by 3-5 points is larger. “squelch” can also fall under the same observation. Only 10% have not seen any kind of resemblance. However, 28.3% rated it as 3 - meaning that they could identify the similarities. 26.7% even rated it 4, and 13.3% chose 5. By comparing and summing up the odds between the similarities and differences, the resemblance of “squelch” to the sound of walking in snow or mud (“chq’apuni”) is higher.

The questions concerning “pitter patter” (“ts’k’ap’ts’k’up’i” in Georgian) “sizzle” (“shishkhini” in Georgian), “rustle” (“shriali” in Georgian) and “snap” (“t’k’ats” in Georgian) represented divergence in the answers of the participants, and they could not see much resemblance.

Figure 4

Q12: To What Extent Does “Pitter Patter” Resemble the Sound of the Rain?



In the bar chart above, it is visible how 28.3% did not associate “pitter patter” with the sound of rain and rated it 1. 25% could see only a slight resemblance and opted for 2. Only an insignificant percentage (11.7% and 3.3%) chose 4-5, which is an indicator that Georgians would not recognise “pitter patter” in real-life situations. Although 31,7% saw the resemblance to some degree, it is not enough to overpower the negative answers.

When it comes to the question concerning “sizzle” as a sound of (fire) burning, results varied. A significant number of participants (26,7%) opted to rate the resemblance as 4, and only 6.7% chose 5. However, 45% in total did not associate it with the given sound and chose 1-2. Interestingly, “rustle” and “snap” were among the least recognisable onomatopoeias. Up to 30% rated the resemblance as 1.

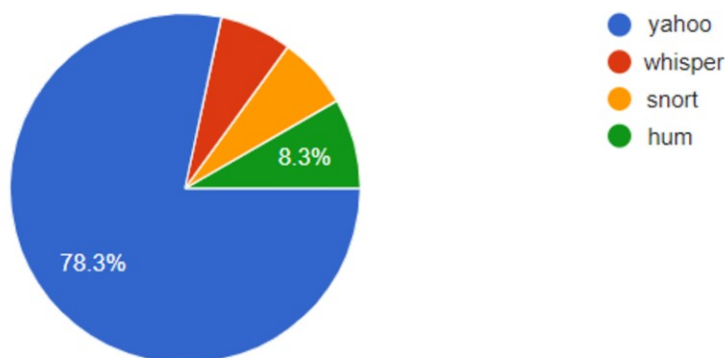
Humankind Onomatopoeias

Human onomatopoeias included multiple-choice questions, where the participants had to identify the English analogue of the Georgian onomatopoeias. Some questions had four alternative choices, and some had five.

Sounds like “yahoo”, “shush!” and “giggle” were greatly recognised by the participants. “Murmur” and “grumble” did not show such high percentages; however, they need to be discussed from the features of universal onomatopoeias, as almost half of the participants could comprehend their meanings.

Figure 5

Q20: In Your Opinion, From the Given Four Onomatopoeias That You Have Listened to Above in the Videos, Which One of Them Means “Vasha!”?

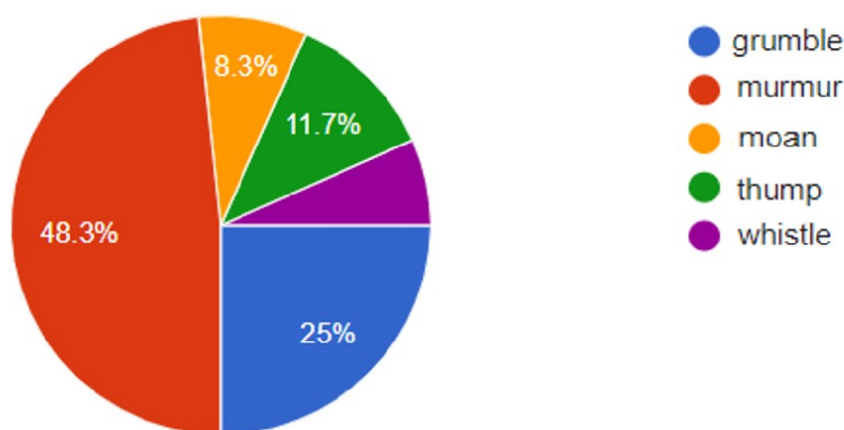


The chart vividly demonstrates how 78.3% of the participants could associate “vasha” with “yahoo” correctly, and only a small number of the participants chose alternative answers. 8,3% indicated “hum” and 6,7% selected “whisper” and “snort”. The same pattern can be viewed for the question concerning “chu”. The majority (68.3%) of the participants answered that “chu” may mean “shush” which is a correct answer. 15% picked “sniff”, 11,7% decided on giggle, and 5% opted for “squeal.”

Another highly recognised onomatopoeia was “k’isk’isi” meaning “giggle.” The participants had to identify it from “shush”, “sniff” and “squeal” (just like in the questions above). More than half (58.3%) could identify its Georgian correspondence. However, interestingly, “squeal” was also popular (21.7%) among the participants as they may have focused on the /s/ sound that is present in both sound imitations. Furthermore, 11,7% selected “shush” and 8,3% - sniff.

Figure 6

Q23: In Your Opinion, From the Given Five Onomatopoeias That You Have Listened to Above in the Videos, Which One of Them Means “Butbuti”?



The above-provided pie chart showcases that almost half of the participants (48,3%) chose the correct answer - “murmur” in case of “butbuti”. Furthermore, 25% of the participants opted for “grumble” as an answer, 11.6% selected “thump”, 8.3% chose “moan” and 6.7% - “whistle”. As for the question concerning the word “dudghuni,” a significant number of participants (43.3%) chose the correct answer and connected “dudghuni” with “grumble”. 21,7% chose “moan”, 16,7% opted for thump, 11,7% for murmur and 6,7% - “whistle”.

The percentage of correct answers decreased when the participants had to identify “k’vnesa, k’rusuni”. The highest percentage (33,3%) chose the correct answer and indicated “moan”. However, the other four options were also chosen in similar manners: 21,7% selected “whistle”, 16,7% opted for “thump” and “murmur,” and 11,7% selected “grumble”.

As for the incorrectly chosen answers, “ghighini” was incorrectly linked with “snort” by the majority of the participants (40%) from the given 4 options: “yahoo”, “whisper”, “hum”, and “snort”. Only 30% chose the correct answer - “hum.” 25% opted for “whisper” and 5% chose “yahoo”.

Miscellaneous Sounds

Miscellaneous onomatopoeias represented valuable data and observed how the participants could label the given English onomatopoeias in the open-ended questions.

One of the most recognised onomatopoeia was “tick-tock.” 41 participants labelled it as the sound of a clock, and some even indicated the Georgian version “ts’ik’ts’iki”. Interestingly, some of the participants linked “tick-tock” to the sound of the raindrops, which can bear the similarity.

More than half (32) participants wrote the exact sound definition of “knock” (k’ak’uni in Georgian). Furthermore, others could also write similar definitions that have a closer meaning to “knock,” like “cracking your fingers”, “sound of steps” or “sound of hooves” (in Georgian “bakuni”, similar to the clicking sound made by high heels or mammals’ feet) and “sound of something falling”. All of the given answers are similar in the sense that they all represent forceful interaction with the hard surface.

Half of the participants comprehended “beep” as a signal - “pipini” in Georgian. Some participants associated beeping sounds with different sources; however, their guesses were counted as correct because “pressing buttons on the phone” and “siren” do make a “beeping” sound. Some incorrect answers were connected to animals, e.g., a goat, a bear, a cow and an owl.

“Pew-pew” and “screech” also contained correct answers to some degree. 15 participants could link “pew-pew” with the sound of a pistol correctly, while a large number of the rest of the participants had similar associations linked to different sources. Most of the repeated answers were “signalisation.” Other interesting answers were “the sound of a toy” and “the sound of calling”. On the other hand, “screech” did have different answers; however, a large number of them were correctly associated with similar harsh and piercing sounds like “scraping with pen”, “the sound of nails on the board”, “scratching on a hard surface” “the sound of scissors”. Some of the repeated but deviated associations were: “the sound of breaking”, animal sounds (bird, crow, chaffinch), “the sound of shouting” and “the sound of snow”.

In the question concerning “clap”, 25 participants indicated the correct meaning and wrote the Georgian analogue “t’ashi.” Interestingly, 5 participants linked “clap” with something forcefully being smashed to the surface, which is close enough to the main meaning. Nevertheless, the majority of the participants indicated different associations: “the sound of birds chirping”, “the sound of water running from the fuse,” and “the sound of calling”.

Concerning the onomatopoeia “zip”, the results must be questioned. The Georgian language does not have any similar onomatopoeia meaning “zip”. Therefore, comprehending its meaning must have been difficult. Nevertheless, 17 participants indicated its exact meaning as “fastening with a zip”. Therefore, the mentioned participants may have used some helping tools. The majority of the participants could not guess the correct answer, but some interesting and repeated answers included “vibration”, “signal,” and “the sound of an insect”.

Analysis and Discussion

The obtained data from the survey demonstrated some vital information concerning universal and language-specific characteristics of onomatopoeias. The results showed that monolingual Georgian speakers, who do not know English, can identify most of the English onomatopoeias.

The percentage of recognition is much higher when onomatopoeias in both languages share the same sounds. As an illustration, Georgians can identify the exact meaning and source of “buzz” which is “bzuli/bzz” in Georgian (phonetically, /b/ and /z/ sounds are present), “hiss”-“sisini” in Georgian (emphasis on the repetitive /s/ sound), “knock”-“k’ak’uni” in Georgian (/k/ and /n/ sounds are present in both) and “shush”-“chu/shh” in Georgian. Interestingly, this also applies to the onomatopoeias that have similar forms in both languages, especially repetitive roots. According to this research, “murmur,” which does not share similar phonemes with “butbuti,” is still comprehensible for Georgians probably due to their similar form (mur-mur/but-but). The same example can be found with “pitter patter”-“ts’k’ap’ts’k’up’i”. Therefore, reduplicative forms could serve as a clue to see the resemblance between them.

Once the sound and form of the English onomatopoeia diverge from the same Georgian onomatopoeia, it becomes less understandable. Nevertheless, the study investigated that if onomatopoeias in these two languages have similar main sounds that facilitate similar associations, Georgians may not fully identify the right meaning, but they can still link it to the correct source. For instance, the majority (35-38%) of Georgian speakers linked “oink” and “neigh” to mammals correctly. Due to phonological constraints that onomatopoeias adhere, “oink”- “ghrut,” and “neight”- “ch’ikhvini” in Georgian have no striking similarities in phonemes. The absence of the Georgian /ɣ/ sound in „oink,” and the absence of /tʃ/ and /x/ in „neigh” make it difficult to link these two words. However, according to the results, Georgians will still identify them as mammal’s sounds, while they may not directly link these sounds to a pig or a horse.

It is noteworthy to mention that if Georgians are given some clues the degree of comprehension increases. This research observed that when participants had a direct Georgian analogue of the English onomatopoeia next to it, they could see the resemblance. As an illustration, “whoosh”- “shriali,” “squelch”- “ch’q’ap’uni” and “bubble”- “buq’buq’i” share no striking similarities. However, the results showed that a much higher percentage of the participants could link them to the source probably due to the fact that they were given the exact Georgian onomatopoeias in the question, unlike other questions in the same section.

In the case of the above-mentioned points, Georgian L1 does not interfere but even facilitates the universal view on onomatopoeias, unless the English onomatopoeias do not share any similarities with Georgian. Once the smaller number of sounds in English (compared to Georgian) is not enough to imitate the sound, Georgian L1 hinders the process of comprehension. It is challenging for Georgians to view sounds only from the perspective of English phonology, while Georgian speakers are exposed to an array of sounds like /q’/, /tʃ’/, /dʒ/, /ʒ/, /kʰ/, /dʒ/ or ts’/. For instance, the results of “caw”- “q’va,” “hum”- “ghighini,” and “squelch” – “ch’q’ap’uni.” show that Georgians will hardly (more likely, not at all) understand these English onomatopoeias.

Moreover, Georgian L1 confuses its speakers when the same English and Georgian onomatopoeias diverge in meaning. The Georgian word for “quack” is “q’iq’qini” which represents the sound of a frog; therefore, it is no surprise that 20% of the Georgians associated “quack” with amphibians and did not view it as the sound of a duck. Concerning the word “neigh”, one of the participants indicated that it must be the sound of a pig, which in Georgian reality can be true. In Georgia, “nei” is used in some provinces by farmers to call pigs. Therefore, it is debatable if Georgians can comprehend “neigh” as a sound of a horse rather than a pig’s.

Apart from that, Georgian L1 does not always have the same analogue for every English onomatopoeia, and some sound imitations may not exist in the Georgian context. Therefore, if Georgian L1 does not have an analogue of English onomatopoeia, non-English Georgian speakers have a hard time comprehending such sound imitations. They try to make sense of them by linking them with other Georgian onomatopoeias that may sound similar. For instance, “zip”, which is not expressed by Georgian onomatopoeia, was perceived as a vibration or the sound of an insect probably due to the /z/ sound, which mainly denotes vibration in the Georgian context.

Conclusion

This study highlighted some patterns that the comprehension process followed and observed some factors that must be present to successfully understand English onomatopoeias. It revealed that phonological constraints with divergence in meaning cannot be avoided between onomatopoeias of these two languages. They were attributed to hindering Georgians from guessing the meaning of English onomatopoeias. However, even small similarities in the sounds and forms between onomatopoeias are found to be enough for Georgians to quickly grasp the meaning and understand it without any additional clues.

It is recommended that further research focuses on exploring to what extent non-Georgian English speakers can comprehend Georgian onomatopoeias. This way it can be discovered if similar outcomes and comprehension levels can be found. Furthermore, analyzing onomatopoeias from cognitive and psychological aspects can also provide valuable insight into how the interpretation process occurs and what role psychology plays.

Nevertheless, some limitations of this research must also be acknowledged. Firstly, the number of participants can be viewed as a limitation of this research. 60 participants may not be enough to generalise the provided results. Much more profound data can be collected with a bigger and more diverse sample. Furthermore, another limitation may be the participants’ dishonesty. Although the participants knew that they were not expected to provide correct answers, as they did not know English, some participants may have used some tools for aid. Lastly, most of the questions in the survey contained multiple-choice options, and the participants were not given much freedom. They could have chosen any option without thinking thoroughly. It could have been avoided if all the questions were open-ended or the research had been done face-to-face. Therefore, this research can be further expanded and conducted with a diverse sample.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

This research used Grammarly to check sentences and ensure grammatical correctness.

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