

Lampungese Lexicalized Onomatopoeia

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Abstract

This study examines lexicalized onomatopoeia in Lampungese, a local Indonesian language whose sound-symbolic system has not yet been systematically described despite its longstanding contact with multiple linguistic communities. Onomatopoeia, understood as the creation of lexical items through the imitation of natural sounds, demonstrates both universal cognitive tendencies and language-specific phonological shaping. The purpose of this research is to identify Lampungese onomatopoeic items that have undergone lexicalization and to analyse their phonetic resemblance, morphological patterning, and semantic characteristics. The data were obtained through naturalistic observation of spontaneous Lampungese interactions, guided lexical elicitation based on Dingemanse's sound-source categories, and verification through the method of depiction, in which speakers responded to auditory and visual stimuli to confirm the iconic basis and contextual use of each form. All items were analysed using detailed phonetic comparison and interpreted through the degrees of iconicity framework. The study identifies 28 sound-imitating forms in Lampungese, yet only eight display stable usage, semantic consolidation, and structural regularity sufficient to be considered lexicalized. These lexicalized items share a consistent structural pattern: each contains an iconic core that approximates the natural sound source and an empty morpheme that attaches without contributing semantic content but aligns the form with Lampungese phonotactic constraints. All eight forms fall under direct onomatopoeia and belong to the domains of animal sounds and object-interaction sounds, while the remaining items function only as descriptive sound expressions in discourse. Overall, the findings provide a systematic account of how sound imitation becomes integrated into the Lampungese lexicon.

Keywords: Onomatopoeia; lexicalization; Lampungese

Introduction

One key source of language development is the sounds found in nature (Darwin, 1871). As a result, it makes sense that signs of imitating natural sounds can show up in words. This phenomenon is known as onomatopoeia. Onomatopoeia is typically defined as a process where new words are created by imitating sounds made by natural elements or living things, including animal sounds or movements, environmental events, human voices, and activities that produce sound (Akita, K & Mutsumi I, 2022; Dingemanse, 2018; Ferber, M, 2019; Fitriana, I and Suparno, D, 2025; Laing, C. E., 2019). In simpler terms, this word formation involves changing sounds we hear into words that closely resemble those sounds. Ferber (2019) summarizes onomatopoeia as words that sound like what they refer to. In English, many examples illustrate this word formation, such as tap, tick, clap, and pip (Flaksman M.A, 2018). These words are spoken in ways that closely match the sounds they represent. Together, these viewpoints emphasize the important role of sound imitation in creating onomatopoeic expressions.

Creating onomatopoeic expressions is seen as a basic and universal human skill. It shows the close link between our senses and how we use language. Dingemanse (2018) claims that onomatopoeia appears in all known spoken languages and follows a basic principle of sound imitation. This suggests that people have a shared ability to turn sounds into words, which lets

speakers connect concrete sounds with language. These forms are also important for development. They often appear among the first and easiest words that infants learn to say, as shown by Kimi Akita and Mutsumi Imai (2022) and Laing, C.E. (2019). Their early presence in child language supports the idea that iconicity aids early word learning. It gives children a way to enter the world of words based on what they perceive. Together, these observations highlight the cognitive, perceptual, and developmental roots of onomatopoeic forms.

Even though the basic idea is imitating sounds from the environment, the actual words can be quite different across languages due to structural and sound rules. A well-known example is how people express rooster calls: English speakers say “cock-a-doodle-doo,” French speakers say *cocorico*, Germans say *kikeriki*, Hungarians use *kukuriku*, Japanese speakers say *kokekokkō*, Persian speakers say *ghughuli-ghughu*, Hindi speakers say *kukruukuu*, Sudanese speakers say *kongkorongok*, Thai speakers say *ake-e-ake-ake*, and Tagalog speakers say *kukaok* (Ferber, M, 2019). This variation happens because each language interprets sound imitation through its own sound system, including allowable consonants, vowels, syllable structures, and patterns of sound. As Ferber (2019) and Qinghua (2018) point out, speakers recreate environmental sounds in ways that fit their language’s phonological rules, leading to systematic but varied words. Therefore, onomatopoeia shows both the universal human urge to imitate sounds and the linguistic differences that shape how those imitations become words.

Since each language has its own onomatopoeic words, research in this area, especially in languages that haven't been studied much, is important for several reasons. First, as Sidhu (2024) notes, documenting onomatopoeic expressions could reveal how speakers map natural sounds onto words. This analysis can help us understand how perception, categorization, and language interact within a specific speech community. Second, studying onomatopoeia enriches the linguistic resources available for the language being studied. This is particularly important for languages that frequently interact with others or are at risk of disappearing. For these languages, a systematic study of onomatopoeia not only preserves a unique part of their vocabulary but also supports broader efforts in documentation, revitalization, and comparative linguistic research (Eberhard et al., 2023).

Even though onomatopoeia is a universal language feature, research on this topic, especially within Indonesia's local languages, is very limited. This is surprising considering that Indonesia has around 700 local languages, many of which are becoming increasingly endangered due to globalization and changing social dynamics (Eberhard et al., 2023). To date, systematic studies on onomatopoeia in Indonesian local languages have focused only on Javanese (Alfarisyi, Fitri et al., 2022 and Fitriana & Suparno, 2025), Devayan (Kustina, 2020), and Indonesian (Nurhidayati, S. A and Mulyadi, 2024). Beyond these examples, most research relies on data that doesn't accurately reflect local linguistic diversity, such as Indonesian webtoons (Fadhilah, Suwandi, & Sugianti, 2024), Indonesian comics (Muin, Rauf, & Hidayat, 2016), and Indonesian children's songs (Apriliandini et al., 2025, and Laili, N. M and Putri, F, 2021). As a result, the current research provides only a partial view of onomatopoeia in Indonesia and emphasizes the urgent need for more thorough documentation across its many under-studied local languages.

One of the local languages in Indonesia is Lampungese, the ancestral language of the Lampungese ethnic group. They mostly live in the Lampung Province and nearby areas (Reranta, 2021). The language has interacted with at least five other local languages due to large-scale migration programs in the region (Badan Pengembangan Bahasa dan Perbukuan, 2019). Despite this multilingual context, current documentation and revitalization efforts for Lampungese remain limited and inconsistent, raising concerns about the long-term health of the language.

Given these circumstances, this study focuses on Lampungese as an interesting area for linguistic research, especially in the largely untapped area of onomatopoeia. While many

Indonesian local languages employ diverse sound-related expressions, detailed descriptions of these forms in Lampungese are still missing. This research aims to identify and analyze the language's onomatopoeic words regarding their structure and meaning. Unlike previous studies that tried to catalog all sound-imitating expressions, including those representing animal sounds like meow or woof and environmental sounds like splash or rustle, this paper focuses on onomatopoeic forms that have become fully recognized as words, similar to English *buzz*, *ring*, and *knock*. This narrower focus allows for a deeper analysis since fully lexicalized onomatopoeia is more stable, commonly used, and culturally embedded. This makes them better for identifying clear patterns in structure, sound, and meaning in Lampungese. The findings are expected to contribute to both the descriptive linguistics of Lampungese and broader discussions on sound symbolism in Austronesian languages.

Theory and Method

Given that this research aims to construct a theoretical framework for onomatopoeia in Lampungese, a qualitative research design is employed. Qualitative methodology, which centres on the interpretive analysis of social and behavioural phenomena, is particularly suited for examining, explaining, and clarifying linguistic patterns for the purpose of theory building (Creswell, 2018). In accordance, the method will be applied to investigate the data, which consists of audio recordings containing Lampungese utterances in which lexical items identified as onomatopoeic occur.

McLean and Dingemans (2025) said that onomatopoeia can be found in both everyday language and at the highest levels of verbal art. Deeper verbal narratives contain more (Choksi et al., 2021). To obtain the data, the researcher employed covert naturalistic observation to record spontaneous conversations among selected Lampungese speakers, allowing onomatopoeic forms to surface naturally in everyday interaction without researcher influence. As a stimulus, the researcher regularly requested informants to tell any personal story. Informant selection was necessary to ensure that the data represented authentic Lampungese usage rather than interference from other languages. The criteria established required that informants be native speakers who use Lampungese as their dominant daily language, fall within the age range of 40–60 years to ensure stable long-term linguistic acquisition and cognitive reliability, and reside in traditional Lampungese hometown areas. Based on these criteria, five communities were identified, and three of them were chosen due to practical limitations and the researcher's familial access. The researcher spent approximately one week in each community observing naturally occurring speech events and recording utterances that contained potential onomatopoeic items.

In addition to observation, the researcher applied guided lexical elicitation as a supplementary technique. A list of potentially onomatopoeic words was prepared based on McLean and Dingemans's (2025) classification, which identifies four major types of onomatopoeia: animal sounds, bodily sounds, environmental events, and object interactions. Informants were asked to provide the Lampungese equivalents for each word on the list, enabling the researcher to compare elicited forms with those found in natural speech. To avoid influencing their responses, the purpose of the elicitation was not disclosed to the informants, allowing the data to reflect their spontaneous lexical knowledge rather than metalinguistic reasoning.

Having compiled a substantial corpus of recordings, the researcher proceeded to identify Lampungese lexical items with potential onomatopoeic characteristics through detailed phonetic examination. At this stage, the analysis centred on evaluating the degree of resemblance or iconic imitation between each word's phonetic form and the natural sound it is assumed to represent, as determined through systematic transcription. To classify these forms,

the researcher applied the phonetic degree categories of onomatopoeia proposed by Dofs (2008), who distinguishes three types: (1) direct onomatopoeia, referring to lexical items whose phonological shape closely replicates the actual sound source, such as *bang* and *cluck*; (2) associative onomatopoeia, in which the sound–meaning connection arises through conventional or context-based association rather than direct imitation, such as *whip*, associated with the sound produced by a whip; and (3) exemplary onomatopoeia, derived from speakers’ articulatory efforts to produce a sound-like representation. Nevertheless, unlike several previous studies discussed in the preceding chapter, the researcher did not classify phonetically similar forms as onomatopoeic by default. Additional verification was undertaken to ensure that any phonetic resemblance was not coincidental nor merely the result of regular phonological processes that do not reflect intentional sound imitation.

To verify the data, the researcher applied the method of depiction, a mode of representation that involves showing rather than telling (McLean and Dingemans, 2025; Zlatev, 2023). This method is commonly used to analyse ideophones, including onomatopoeia, by presenting visual stimuli—such as pictures, videos, body gestures, and facial expressions—and auditory stimuli—such as sound recordings or direct speech—to elicit sensory-based responses from speakers. In this research, data from the previous steps are adapted into a sequence of nuance which is then shown to native Lampungese speakers. After that, they will be asked to produce lexical items they associate with the perceived sound or event. The elicited forms will then be examined to determine whether (1) the items are naturally used by speakers in everyday contexts, (2) they accurately represent the sound or event depicted in the stimuli, and (3) they exhibit iconic or imitative properties consistent with onomatopoeia, with brief follow-up questions used to clarify meaning, context, and semantic nuances. In this step, informants are different people but with the same criteria, and they knew the purpose of the ask. Finally, the responses were taken into consideration to decide the findings.

For data presentation and analysis, all verified onomatopoeic items were organised into a structured dataset that includes their phonetic transcription, semantic description, usage context, and classification according to McLean and Dingemans's (2025) categories. The analysis followed an iterative interpretive approach, beginning with descriptive categorisation and progressing to thematic and functional interpretation aimed at identifying phonetic, morphological, and semantical patterns. Instances from natural conversation, elicitation, and depiction-based verification were cross-referenced to ensure internal consistency and to capture variation across contexts. These analytic steps collectively support the development of a theoretically grounded account of onomatopoeia in Lampungese, allowing the findings to be presented in a coherent, systematic, and analytically transparent manner.

Findings and Discussion

From the combined procedures of data collection, phonetic analysis, depiction, and final interpretation, this study identifies 28 Lampungese onomatopoeic forms. Of these, only eight of them function as established lexical items, while the remaining forms operate solely as descriptive sound expressions in discourse. For instance, forms such as *gemeghitok* /gəməʔitoʔ/ and *gemeghitas* /gəməʔitas/, both denoting the sharp sound of raindrops striking a hard surface, appear only as spontaneous descriptions of natural phenomena and do not show evidence of lexicalization. This pattern aligns with distinctions commonly observed cross-linguistically, where some onomatopoeias evolve into stable lexemes while others remain context-bound. In English, for example, *buzz* represents a lexicalized form, whereas expressive imitations like *brmmm* (engine sound) typically remain non-lexical. Accordingly, the present analysis focuses exclusively on the eight Lampungese items that meet the criteria for lexical status.

Based on their sound sources, these lexicalized forms fall into two categories: animal sounds and object-interaction sounds. Morphological examination further reveals a consistent structural pattern across all items, characterized by the presence of an iconic core that directly reflects the imitated natural sound, accompanied by an empty morpheme that attaches to the iconic base without contributing semantic meaning. This affixational pattern constitutes a stable morphological strategy in the formation of onomatopoeia in Lampungese. Each lexical item is examined in detail in the sections that follow.

Animal Sounds

First, the lexical item for ‘dog’ offers a clear illustration of onomatopoeic formation. Lampungese employs two terms for this animal: *asu* /asu/ and *duguk* /duguʔ/. The form *asu* is widely distributed across Indonesia and is therefore not regarded as a native Lampungese creation. Conversely, *duguk* is considered an indigenous Lampungese lexeme, as it is not attested in neighboring regional languages. Phonetically, the final segment /guʔ/ in *duguk* is suspected to derive from imitation of canine barking due to its perceptible resemblance to the natural sound. To substantiate this association, elicitation sessions were conducted in which native speakers were encouraged naturally and respectfully to imitate the sound of a dog. All speakers produced the imitation /guʔ-guʔ/. One consultant further remarked, “Yu ngeduguk wuy” (‘of course, it sounds /ŋəduguʔ/’). The morphological verbal form *ngeduguk* ‘to bark’ shares the same lexical root *duguk*, providing additional morphological evidence of an iconic link between the lexeme and the animal sound. Based on these phonetic and morphological correspondences, *duguk* can be classified as an onomatopoeic animal name. Morphologically, the sequence /du-/ functions as an empty morpheme that attaches to the iconic base /guʔ/ without adding semantic content.

Second, the Lampungese designation for ‘tiger’, *lemawong* /ləmawoŋ/, likewise indicates an onomatopoeic origin. Phonetic examination suggests that the final constituent /woŋ/ echoes tiger-like vocalizations. This interpretation is supported by testimonies from three informants who had previously encountered tigers; their elicited imitations included forms such as /woŋ/ and /wɔŋ/. Despite minor phonetic variation among the imitations, the forms exhibit structural and auditory similarity to the final syllable of *lemawong*. These convergent patterns point to an iconic relationship between the lexeme and the natural sound, indicating that the name for ‘tiger’ also arises at least in part from sound-based imitation. In this form, the sequence /ləma-/ operates as an empty morpheme preceding the iconic core /woŋ/.

Third, the term *agas* /agas/ ‘mosquito’ presents an additional example of an onomatopoeic animal name. During elicitation, speakers consistently reproduced the mosquito’s buzzing as /gas/, a high-pitched and continuous sound closely aligned with the final segment of the lexeme. The strong phonetic parallel between the natural buzzing and the segment /gas/ suggests that this portion constitutes the iconic core of the word. Accordingly, *agas* can be interpreted as originating from auditory imitation that later underwent lexicalization. Here, the initial vowel /a/ functions as an empty morpheme attached to the iconic root /gas/.

Fourth, the Lampungese word for ‘elephant’, *liman* /liman/, also reflects an onomatopoeic basis. Speakers imitated the elephant’s call with an extended, high-pitched vocalization rendered as /ma:n/ or /man/. This elicited form corresponds closely to the final syllable of *liman*, indicating that /man/ represents the iconic nucleus derived from the animal’s natural vocalization. The phonetic alignment and consistent speaker imitations support the conclusion that *liman* incorporates an onomatopoeic component. In this case, the segment /li-/ serves as an empty morpheme that precedes the iconic element /man/.

Object Interaction

First, the lexeme *peting* /pətiŋ/, denoting the action or sound associated with the verb ‘picking’ a guitar string with the fingers, exemplifies onomatopoeic formation. During elicitation, the researcher prompted native speakers to imitate guitar-string sounds by asking them to distinguish between low- and high-pitched strings. In response, the informant produced /dub/ for the low string and /tiŋ/ for the high string. The segment /tiŋ/ aligns directly with the final portion of the lexeme *peting*, representing the iconic core that captures the sharp, resonant sound of a plucked high string. The initial syllable /pə-/ functions as an empty morpheme attached to the iconic base /tiŋ/ without contributing semantic content. The selection of the high-string sound as the lexical basis indicates that Lampungese speakers perceptually prioritize the high register over the low one, a preference consistent with observations in classical Spanish guitar tradition, where treble strings are described as the “melodic” or “singing” line (Tyler & Sparks, 2002). This preference is also reflected in Lampungese musical practice, particularly in Lampungese Classical Guitar, characterized by its distinctive string tuning and predominant fingerstyle technique.

Second, the lexeme *cetik* /cəti?/ designates a traditional Lampungese bamboo instrument, played by striking it with two sticks. When played, the instrument produces the sound /tik/, which is mirrored in the lexical form, indicating an onomatopoeic origin. To verify this interpretation, the researcher asked native speakers why the instrument is called *cetik*, and they spontaneously responded that the name derives from the sound it produces, /tik-tik/. Notably, the word ends with a glottal stop /?/ rather than a velar /k/, reflecting a consistent phonological pattern in Lampungese. Morphologically, the initial syllable /cə-/ functions as an empty morpheme attached to the iconic base /tik/ without adding semantic content.

Third, the lexeme *canang* /tʃanaŋ/ refers to a traditional Lampungese metallic instrument, typically round and hollow with a diameter of approximately 15–25 cm, played by striking it with a rounded stick. The instrument produces sounds approximating /taŋ/ or /naŋ/, which are directly reflected in the lexical form and indicate an onomatopoeic basis. Confirmation was obtained from native speakers, who spontaneously associated the name *canang* with the sounds produced during performance. Morphologically, the initial syllable /tʃa-/ functions as an empty morpheme attached to the iconic base /naŋ/ without contributing semantic content.

Finally, the lexeme *caghik* /tʃaʁik?/ denotes the action of tearing, typically applied to paper or cloth, and demonstrates onomatopoeic formation. The researcher confirmed the iconic basis of this form by secretly tearing a piece of cloth near native speakers, simulating a natural ripping sound. Upon hearing the sound, the informants immediately asked, “Whose clothing is torn?” When the researcher inquired about what they had heard, informants responded that the perceived sound was /ʁik-ʁik/ and /ʁi?- ʁi?/. The segment /ʁi?/ aligns with the final portion of the lexeme *caghik* and constitutes the iconic core representing the auditory impression of tearing. The initial syllable /tʃa-/ functions as an empty morpheme attached to the iconic base /ʁi?/ without contributing semantic content.

Conclusion

The findings of this study show that lexicalized Lampungese onomatopoeia is shaped by systematic phonetic, morphological, and semantic principles. Phonetically, all established lexemes contain an iconic core, a segment whose sound pattern approximates the natural auditory source. When examined through the three degrees of iconicity, all lexicalized items fall under direct onomatopoeia, as their phonological forms closely replicate the sounds speakers naturally produce during imitation tasks. No lexical items exhibit features of associative onomatopoeia, in which meaning arises through cultural or contextual association, nor exemplary onomatopoeia, which emerges from speakers' heightened articulatory efforts.

This distribution indicates that, in Lampungese, only forms with strong, observable phonetic resemblance undergo lexicalization, whereas forms with weaker or more abstract sound–meaning connections remain non-lexical.

Morphologically, all lexicalized items follow a stable pattern in which the iconic base is combined with an empty morpheme, a prefixed syllable that contributes no semantic meaning but confirms the structure to Lampungese phonotactic requirements. Semantically, these forms retain a direct auditory motivation, linking the iconic core to a specific natural sound source. Importantly, the study also shows that not all onomatopoeic expressions develop into established lexemes. Of the 28 forms identified, only eight are lexicalized, while the rest function solely as descriptive sound expressions in discourse. This pattern suggests that lexicalization in Lampungese depends on strong direct iconicity, consistent community usage, and semantic stabilization. Collectively, these phonetic, morphological, and semantic patterns provide a coherent account of how sound imitation becomes integrated into the Lampungese lexicon.

References

- Akita, K., & Imai, M. (2022). The iconicity ring model for sound symbolism. In S. Lenninger, O. Fischer, & E. Tabakowska (Eds.), *Iconicity in cognition and across semiotic systems* (pp. 27–45). John Benjamins. <https://doi.org/10.1075/ill.18.02aki>
- Alfarisyi, F., et al. (2022). Analisis onomatope dalam bahasa Jepang dan bahasa Jawa. *Comserva: Jurnal Penelitian dan Pengabdian Masyarakat*, 1(11), 1047–1053.
- Apriliandini, A., et al. (2025). Onomatope dalam lagu anak-anak terhadap perkembangan bahasa. *Jurnal Basataka (JBT)*, 8(1), 596–605.
- Badan Pengembangan Bahasa dan Perbukuan. (2019). *Bahasa dan peta bahasa di Indonesia*. <https://petabahasa.kemdikbud.go.id/provinsi.php?idp=Lampung>
- Choksi, N. (2020). Expressives in Hindi language film songs. In N. Badenoch & N. Choksi (Eds.), *Expressives in the South Asian linguistic area* (pp. 177–194). Brill.
- Creswell, J. W. (2018). *Qualitative inquiry and research design*. SAGE Publications.
- Darwin, C. (1871). *The descent of man, and selection in relation to sex*. John Murray. <http://dx.doi.org/10.1037/12293-000>
- Dingemans, M. (2018). Redrawing the margins of language: Lessons from research on ideophones. *Glossa: A Journal of General Linguistics*, 3(1), 4. <https://doi.org/10.5334/gjgl.444>
- Dingemans, M., & Enfield, N. J. (2024). Interactive repair and the foundations of language. *Trends in Cognitive Sciences*, 28(1), 30–42. <https://doi.org/10.1016/j.tics.2023.09.003>
- Dofs, E. (2008). *Onomatopoeia and iconicity: A comparative study of English and Swedish animal sound* (Master's thesis). Karlstads University.
- Eberhard, D. M., Simons, G. F., & Fennig, C. D. (2023). *Ethnologue: Languages of the world* (26th ed.). SIL International.
- Fadhilah, S., Suwandi, S., & Sugianti, S. (2024). Analisis makna dan fungsi onomatope dalam Webtoon “7 Wonders” karya Metalu pada season 1. *Pustaka*, 4(4), 22–45.
- Ferber, M. (2019). Onomatopoeia and sound symbolism. In N. Fabb, V. Attridge, A. Durant, & C. MacCabe (Eds.), *Poetry and language: The linguistics of verse* (pp. 93–110). Cambridge University Press.

- Fitriana, I., & Suparno, D. (2025). Mapping morphonosemantic categories in Javanese onomatopoeia. *Linguistik Indonesia*, 321–335.
- Flaksman, M. A. (2018). Onomatopoeia and regular sound changes. *Journal of Siberian Federal University: Humanities & Social Sciences*. <https://doi.org/10.17516/1997-1370-0351>
- Laing, C. E. (2019). Phonological motivation for the acquisition of onomatopoeia: An analysis of early words. *Language Learning and Development*, 15(2), 177–197. <https://doi.org/10.1080/15475441.2019.1577138>
- Laili, N. M., & Putri, F. (2021). Phonological study of onomatopoeia in children’s song. *JELTL: Journal of English Language Teaching and Linguistics*, 6(1), 211–224.
- McLean, B., & Dingemanse, M. (2025). A multi-methods toolkit for documentary research on ideophones. In J. P. Williams (Ed.), *Capturing expressivity*. Oxford University Press. <https://doi.org/10.1093/oso/9780192858931.003.0005>
- Muin, A., Rauf, M., & Hidayat, N. A. (2016). The onomatopoeia in Robert Vendetti’s comic “The Flash.” *Elite: English and Literature Journal*, 3(1).
- Nurhidayati, S. A., & Mulyadi. (2024). Struktur semantik onomatope bahasa Indonesia: Pendekatan Metabahasa Semantik Alami. *Semantik*, 13(2), 219–238.
- Qinhua, M. (2018). The significance of onomatopoeia in languagization: From the perspective of sound–meaning relationship under dynamic system principle. *Macrolinguistics*, 6(8), 43–62.
- Reranta, R. C. (2021). Comparison of declarative–interrogative intonation in Lampungnese. *Teknosastik: Jurnal Bahasa dan Sastra*, 19(31), 31–41.
- Kustina, R. (2020). Onomatope bahasa Devayan. *Jurnal Metamorfosa*, 8(1), 112–122. <https://doi.org/10.46244/metamorfosa.v8i1.348>
- Sidhu, D. M. (2024). Sound symbolism in the lexicon: A review of iconic–systematicity. *Language and Linguistics Compass*, 19(1). <https://doi.org/10.1111/lnc3.70006>
- Thompson, A. L., & Do, Y. (2019). Defining iconicity: An articulation-based methodology for explaining the phonological structure of ideophones. *Laboratory Phonology*, 10(1), 1–33.
- Tyler, J., & Sparks, P. (2002). *The guitar and its music: From the Renaissance to the Classical Era*. Oxford University Press.
- Zlatev, J., et al. (2023). Analyzing polysemiosis: Language, gesture, and depiction in two cultural practices with sand drawing. *Semiotica*, 253, 81–116.