

JUAN CARLOS MORENO CABRERA

# Iconicity in Language

An Encyclopaedic Dictionary



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## *An Encyclopaedic Dictionary*

By

Juan Carlos Moreno Cabrera

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“One summer, when there was a great drought at Fredkrisstad (Norway), the following words were posted in a W.C. ‘Don’t pull the string for bimmelim, only for bummelum’. This was immediately understood” (Jespersen 1933: 558).

“The existence of a universal symbolism in the case of certain sounds of language ... which has been merely a very plausible hypothesis for a long time, appears to be well established today. Individuals can be more or less sensitive to it, but their reactions are not found to be contradictory when observation is made with all the requisite guarantees: the timbre of [i], for example, goes together with the concept of smallness, which is not invalidated by either *big* or *small* in English; the timbre of [u] naturally evokes thickness and heaviness. [...] One need not to be a great scholar of articulatory phonetics to understand the reason for such identifications: [i] is the vowel for which the speech organs strive to realize the smallest possible resonating cavity toward the front of the mouth by pushing the bulk of the tongue toward the inside portion of the palate and by drawing in the lips the maximum against the gums; for [u], in contrast, the bulk of the tongue is drawn backward and the lips are pushed forward in such a way that the resonating cavity is as wide as possible. The symbolic equations [i] = thinness and [u] = thickness have an obvious physiological foundation, and it is this foundation that permits us to assume that they are the reality for all mankind, although the observation on which they are based did not involve the whole humanity—far from it” (Martinet 1965: 231; English version by T. E. Morgan in Genette 1995: 320-321).



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# INTRODUCTION

## 1. Iconicity in language

The form of words does not usually reveal their meaning, since it is impossible to predict the meaning of a word through a direct inspection of its form (auditory or visual). For example, what does the Georgian word *bichi* mean? For those with no knowledge of this language, it is impossible to guess its meaning by merely inspecting its phonetic configuration (it means 'boy'). But, in some cases, there is a certain natural affinity between the form and the meaning of a linguistic expression. Onomatopoeic words (such as English *cuckoo*, Georgian *guguli*) are typical examples of this motivated form-meaning relationship.

But the iconic nature of natural language goes far beyond onomatopoeic expressions. Motivated relationships between linguistic form and linguistic meaning can be seen in every component of language: sound symbolism, alliteration, phonaesthemes, reduplication, ideophones, echoic words, expressives, affix ordering, word order, lexical iconicity, and many other phenomena collected in this dictionary show that natural languages (both spoken and signed) have an undeniably iconic nature.

## 2. An encyclopaedic dictionary

This dictionary is encyclopaedic. This means that it includes not only a wide variety of terms and concepts directly relevant to the study of iconicity in language, but also gives examples of iconic expressions in many languages of the world (notably ideophones); natural sounds giving rise to onomatopoeias in different languages; animal nouns that are frequently based on the imitation of the sounds they produce (notably bird names); as well as summaries of significant works in the development of the study of iconicity in human language. More specifically, the entries in this dictionary can be grouped in the following categories: (a) specialized terminology of iconicity research; (b) concepts, principles, axioms and theories relevant to the study of linguistic iconicity; (c) linguistic units and processes related to linguistic iconicity; (d) significant iconic words and expressions; (e) ideophones; (f) graphic iconicity; (g) significant works in

the history of language iconicity research; and (h) iconicity in languages and language families.

This dictionary presupposes a basic knowledge of linguistics, which can be obtained by studying any elementary introduction to the field, such as Akmajian, Demers, Farmer and Harnish (2010) or Fasold and Connor-Linton (eds.) (2014).

### 3. Specialized terminology of linguistic iconicity research

Iconic research requires the study of different phenomena not mentioned or described in the traditional linguistic literature. In order to refer to some of them, new terms and expressions have been proposed in the specialised literature. The following list includes some neologisms defined and exemplified in this dictionary:

Allolanguage, anti-iconicity, automorphism, *Bildwort*, dysmorphy, echo words, echoic palindromoids, expressiveness, graphic radicals, icon, ideophone, incopyfixation, lexosymbolism, logosymbolism, mimetic, mimic nouns, *mimographie*, morphosymbolism, palimphony, pentestheme, phenomime, phonomime, *phonomimographie*, phonosemantics, phonosymbolism, picture words, psychomime, *Schallnachahmung*, *Schallverba*, *Schallwort*, *Urschöpfung*,

### 4. Concepts, principles, axioms and theories relevant to iconic research

This dictionary includes a wide selection of concepts directly relevant to the study of linguistic iconicity. The following alphabetical list enumerates all of the concepts defined and exemplified in this dictionary.

- A: absolute iconicity, analogue-building model of linguistic iconicity, anti-iconicity, arbitrariness, associative iconicity, autoiconism.
- B: *bow-wow* theory.
- C: Caesar's Law, secondary Cratylism, cultivated iconicity.
- D: de-iconization, diagrammatic iconicity, diagrammatic legisign, *ding-dong* theory.
- E: experimental approaches to linguistic iconicity, expressive, expressiveness, expressive symbolism.
- F: firstness, frequency code hypothesis.
- G: generative grammar.

- H: hypoicon, hypoiconic diagrammaticity.
- I: icon, iconic diagram, iconic imperative, iconic index, iconic lengthening, iconic motivation, iconic sign, iconic treadmill hypothesis, iconicity, iconicity chain, iconicity of complexity, iconicity of lexical categories principle, iconicity in Peirce's semiotics, iconicity meta-principle, iconism, *ideomimographie*, index, isomorphism.
- J: Janus-faced iconicity.
- K: kinaesthetic iconicity, kinomorphomimetic iconicity.
- L: lexical iconicity hierarchy, linear order principle.
- M: matrix and etymon theory, meta-iconic markedness principle, meta-iconic principle of universality, secondary mimologism, mirror principle, multimodal iconicity.
- N: naïve iconism, natural iconicity.
- O: onomasiological iconicity, onomatopoeia.
- P: phenomimetic root, phonomimetic iconicity, phonomimetic root, phono-symbolism, picture theory of the proposition, polysynthesis parameter, proximity principle.
- Qu: quantity principle.
- R: referential association binding, relative iconicity.
- S: secondary iconicity, secondness, semasiological iconicity, size-sound symbolism, sound shape symbolism, sound symbolism, symbol, syncretism principle.
- T: thirdness.

Terms related to Peircean semiotics:

Diagrammatic legisign, iconicity in Peirce's semiotics, firstness, hypoicon, hypoiconic diagrammaticity, icon, iconic diagram, iconic index, index, secondness, symbol, thirdness.

## 5. Linguistic features and processes related to iconicity

This dictionary gathers together a wide selection of linguistic phenomena directly related to iconicity. The following list includes the relevant entries grouped by linguistic level:

- **General:** chromaesthetic iconicity, diagrammatic iconicity, endophoric iconicity, exophoric iconicity, expressive, echoism, gestalt iconicity, expressive symbolism, iconicity in invented languages, iconicity in sign languages, imagic iconicity, mimicking, Kaluli ᑕᓄᓄ To onomatopoeic expression, onomatopoeic iconicity,

paradigmatic iconicity, phonaesthetic iconicity, primary iconicity, referential symbolism, sensory sound symbolism, size-sound symbolism, sound shape symbolism, sound symbolism, synesthesia, synaesthetic iconicity, structural iconicity.

- **Phonology:** alliteration, apophony, articulatory iconicity, *bouba-kiki* effect, dysphony, iconophone, intonation, phonestheme, phonetic metaphors, phonetic symbolism, phonological iconicity, phonometaphoric iconicity, prosodic iconicity, *takete-maluma* phenomenon, tonal iconicity, tongue-twister, vowel harmony.
- **Morphology:** ablaut reduplication, anti-iconic suffix ordering, auditory iconicity, blending, dysmorphy, echoic palindromoids, echo words, echoic words, expressive morphology, ideophone, ideophones in verbal art, incopyfixation, *ištiktukai*, morphological iconicity, nominalization, palimphony, pentestheme, reduplication, spatial deixis.
- **Lexicon:** basic vocabulary, bird calls, bird names, brand names, delocutive ornithonyms, etymology, global etymologies, imitative roots, lexical iconicity, lexical symbolism, mass nouns, nursery words, ornithonyms, *verba sonandi*.
- **Syntax and Discourse:** calligram, grammatical iconicity, grammaticalization, syntactic iconicity, syntagmatic iconicity, textual iconicity.

## 6. Significant iconic words and expressions

This dictionary includes a brief explanation of some notable mimetic radicals that are used in different languages, including English. The following are the relevant entries:

*Babble, bang, blah blah, boom, butterfly, buzz, bow-wow, bzzz, cackle, click, crack, crash, cricket, croak, crow, cuckoo, cucumber, gargle, grunt, kap, kiskadee, mim/mom/mum, pip, puff, see-saw, she sells sea shells..., tick-tock, veni vidi vici, {-wr-}, zigzag.*

## 7. Ideophones

Ideophones are one of the most interesting and challenging aspects of linguistic iconicity. The following list includes all the entries dealing with ideophones in different languages. As can be immediately seen, they are not exclusive to African languages and can be found in languages all over the world.

Baka, Bantu, Bini, Cantonese, Chintang, Cilubà, Didinga, Ebwela, Edo, Emai, Ewe, Gbaya, Hausa, Hindi, Hixkaryana, Karo, Katuena, Khmer (Cambodian), Kilba, Kolokuma Ijo, Mundang, Nigerian Pidgin, Pastaza Quechua, Ruihong, Setswana, Shona, Siwu, Somali, Sotho, Souletin Basque, Swedish Sign Language, Tamil, Tetela, Thai, Tommo-So, Totonac, Tsonga, Turkish, Vietnamese, Wolaitta, Yir-Yoront, Zulu.

## 8. Graphic iconicity

Writing has many iconic properties. The following entries explore this aspect of linguistic iconicity:

Chinese characters, comics, graphological iconicity, hieroglyphics, Japanese writing, Korean alphabet, letter-iconicity, *mimographie*, picto-phonetic iconicity, pictographic iconicity, picto-phonetic-graphic iconicity.

## 9. Significant works in the history of language iconicity research

This dictionary contains summaries of pioneering works in the study of linguistic iconicity; each one has its own entry. These are listed in chronological order:

- *Cratylus*
- *Grammatica Linguae Anglicanae* (J. Wallis 1653)
- *Traité de la formation mécanique des langues et des principes physiques de l'étymologie* (de Broses 1765)
- *Nouveaux essais sur l'entendement humain* (Leibniz 1765)
- *Origine, formazione, meccanismo, ed armonia degl'idiomi* (Hervás y Panduro 1785)
- *Dictionnaire des onomatopées françaises* (Nodier 1808)
- *Über den Naturlaut* (Buschmann 1853) [see NURSERY WORDS]
- *Doppelung (Reduplikation, Geminatio)* (Pott 1862)
- *Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluß auf die geistige Entwicklung des Menschengeschlechts* (W. von Humboldt 1863)
- *Voces variae animantium. Ein Beitrag zur Naturkunde und zur Geschichte der Sprache* (Wackernagel 1867)
- *Primitive Culture. Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom* (Tylor 1871)

- *Primitive and universal laws of the formation and development of language. A rational and inductive system founded on the natural basis of onomatops* (Augustus & F. Pincott 1874)
- *Die Entstehung der Sprache durch Nachahmung des Schalles* (Curti 1885)
- *Onomatopées et mots expressifs* (Grammont 1901)
- *Schallnachahmungen und Schallverba in Litauischen* (Leskien 1902)
- *Völkerpsychologie. Eine Untersuchung der Entwicklungsgesetze von Sprache, Mythos und Sitte Erster Band. Die Sprache* (Wundt 1904)
- *Schallnachahmung, Wortschöpfung und Bedeutungswandel* (Hilmer 1914)
- *Elementare Wortschöpfung* (Oehl 1917-1924)
- *Symbolic value of the vowel I* (O. Jespersen 1922)
- *Language. Its nature, development and origin* (Jespersen 1922)
- *Laut, Ton und Sinn in Westafrikanischer Sudansprachen* (Westermann 1927)
- *A Study in phonetic symbolism* (Sapir 1929)
- *Fangen-Finger-Fünf. Studien über elementar-parallele Sprachschöpfung* (Oehl 1933)
- *Das Lallwort in der Sprachschöpfung* (Oehl 1933) [see NURSERY WORDS]
- *The sign is not arbitrary* (Bolinger 1949)
- *Quest for the essence of language* (Jakobson 1965)
- *Diccionario de voces naturales* (García de Diego 1968)
- *Psychophonetik. Untersuchungen über Lautsymbolik und Motivation* (Ertel 1969)
- *Recherches expérimentales sur le symbolisme phonétique* (Peterfalvi 1970)
- *Notes on Expressive Meaning* (Diffloth 1972)
- *Mimologiques. Voyage en Cratyle* (G. Genette 1976)
- *Osnovy fonosemantiki* (Voronin 1982)

In the entries devoted to these papers and books, the main proposals and ideas are briefly described and exemplified. In all cases, the original ideas and statements have been respected. In the references to the world's languages and language families, some out-of-date names have been updated.

## 10. Iconic words in languages and language families

This dictionary contains iconic words and expressions from different languages and language families. The following list includes only those languages having an entry in this dictionary. Those that are only mentioned in passing without providing at least one example of their iconic words and expressions, are not included in this list. Those languages marked with an asterisk have their own entry. The figures in parentheses refer to the number of examples of each language provided in the dictionary.

Each language has a reference entry listing all entries in which examples of its iconic words and expressions can be found.

Language families: African languages, American Indian languages, Asian languages, Australian languages, Balto-Slavic languages, Finno-Ugric languages, Germanic languages, Indo-European, Pacific languages, Romance languages, Slavic languages.

Spoken languages (languages or families with an asterisk have their own entry):

- African languages\*: Adele (1), Akpafu (1), Akposo (1), Akra (1), Asante (4), Baka\* (12), Bambara (12), Bangala (1), Bini\* (75), Boviri (2), Chichewa (4), Cilubà\* (50), Didinga\* (43), Dinka (2), Dogon (1), Duala (1), Ebwela\* (32), Ewe\* (67), Fang (1), Fulani (23), Fur (1), Ganda (1), Gbaya\* (35), Gola (1), Guang (1), Gwari (1), Hausa\* (37), Haya (1), Hottentot (Khoisan) (1), Ibibio (2), Ibo (2), Ifumu (1), Ijo\* (12), Ik (1), Ju/'hoan (1), Kanuri (4), Kilba\* (27), Kimbundu (1), Kisi (6), Kongo (2), Kru (1), Kunama (1), Lamba (8), Luvale (2), Maasai (3), Maba (2), Makua (1), Mande (2), Mandingo (6), Mbay (1), Mbundu (1), Mende (7), Mokilko (2), Monjombo (2), Mpongwe (3), Mwera (3), Ngiti (1), Ngombe (2), Nubian (2), Rundi (1), Rwanda (1), Sandawe (2), Sango (1), Setswana\* (9), Songhay (13), ShiNzwani (1), Shona\* (58), Siwu\* (32), Sotho\* (20), Susu (1), Swahili (4), Taita (1), Tetela\* (28), Tsonga\* (9), Twi\* (27), Vai (2), Venda (1), Wolof (2), Xhosa (5), Yao (2), Yoruba\* (55), Zulu\* (106).
- Afro-Asiatic: Alaba (1), Amazigh (1), Amharic (2), Arabic\* (75), Bedaue (Beja) (2), Burji (1), Harari (2), Hebrew\* (244), Tigre (1), Tuareg (1), Oromo (Galla) (11).
- Eskimo-Aleut: Aleut (2), Eskimo (4), Greenlandic (2).



- American Indian\*: Araucanian (Mapudungun, Huilliche) (1), Apalai (1), Arawak (1), Bare (1), Biloxi (1), Bonari (1), Botocudo (6), Bribri (2), Carib (1), Chinook (1), Chippewa (1), Choctaw (1), Cocopa (1), Cora (2), Cree (3), Dakota (3), Damana (4), Guaraní (12), Guatuso (1), Hopi (2), Karitiána (3), Kapiékram (Canela) (1), Kahita (1), Karo\* (24), Katuena\* (46), Kayapo (1), Koasati (1), Kuskokwim (1), Lule (1), Maku (1), Maxakalí (3), Micmac (1), Miwok (1), Moseten (1), Muinane (2), Nahuatl (9), Nambikuara (2), Navaho (4), Nez-Perce (4), Nootka (3), Omagua (1), Otomi (2), Oyampi (1), Potawatomi (2), Purépecha (6), Quechua\* (118), Quiché (2), Quichua (10), Sahaptin (2), Seneca (1), Shipibo (1), Tariana (4), Tepehuano (1), Totonac\* (36), Tsimshian (1), Tupi (5), Tuscarora (1), Tzeltal (1), Vilela (2), Wishram (Upper Chinook) (4), Wiyot (2), Yucatec-Maya\* (42).
- Asian: Ainu (3), Bahnar (12), Balti (4), Burmese (1), Burushaski (2), Cantonese\* (57), Chinese\* (108), Chintang\* (6), Chukchee (1) Hainan Chinese (1), Hmong\* (14), Itelmen (2), Japanese\* (76), Javanese (7), Kalmyk (2), Kammu (9), Ket (1), Khmer\* (32), Khumi\* (27), Korean\* (58), Koryak (3), Manchu (3), Mlabri (1), Mongolian (2), Nicobarese (2), Pacoh (4), Rengao (6), Ruihong\* (46), Semang (1), Temiar\* (17), Thai (6), Tibetan (1), Tungusic (1), Vietnamese\* (113), Yukaghir (1), Yunnan Chinese (1).
- Creoles and pidgins: Berbice Dutch (5), Fa D'ambu (3), Ghanaian Pidgin English (1), Guadeloupean French Creole (4), Guyanese (4), Haitian (6), Jamaican (14), Krio (12), Kriyòl (2), Louisianais (1), Martiniquais (2), Negerhollands (6), Papiamentu (9), Saramaccan (11), Sranan (8), Trinidad French Creole (1).
- Dravidian: Kannada (2), Malayalam (2), Tamil\* (76).
- Indo-European: Afrikaans (3), Albanian (9), Ancient Indian (1), Anglo-Saxon (2), Armenian (4), Asturian (1), Balto-Slavic, Bengali (2), Breton (3), Bulgarian (4), Catalan\* (94), Czech (24), Cornish (1), Dutch (29), Danish (21), English (1974), Flemish (1), French\* (484), Galician (2), German (358), Greek (Ancient and Modern) (68), Gothic (6), Hindi (29), Hindustani (2), Icelandic (14), Proto IE (14), Irish (9), Italian (50), Kurdish (1), Latin (185), Latvian (29), Lithuanian (204), Livonian (1), Marathi (5), Nepali (2), Norwegian (19), Occitan (1), Old Irish (1), Old Slavic (2), Persian (46), Polish (26), Portuguese (13), Provençal (2), Punjabi (2), Romanian (6), Russian (46), Sanskrit (43), Scottish Gaelic (2), Serbian (34), Sinhalese (1), Slovak (1), Slovene (2), Spanish\* (278), Swedish (26), Swiss German (1), Urdu (3), Welsh (19).

- Caucasian: Abkhaz (4), Chechen (2), Dzhed (1), Georgian\* (72), Kuri (1), Lezguian (1), Mingrelian (1), Svan (1), Tabasaran (2), Udi (1).
- Uralic: Cheremis (Mari) (1), Estonian (43), Finnish (100), Hungarian (90), Khanty (10), Komi-Zyrian (1), Livonian (1), Mordvin (2), Sami (2), Udmurt (1), Vepsian (1).
- Turkic: Chagatay (1), Khakas (29), Tatar (1), Turkish\* (104) Turkmen (1), Uyghur (1), Yakut (1).
- Other European: Basque\* (344).
- Oceanic: Anatom (1), Balinese (1), Bauro (1), Dayak (3), Fijian (4), Hawaiian (1), Ilocano\* (61), Indonesian (21), Kapampagan (1), Madurese (2), Malagasy (10), Malay (18), Maori (10), Marshallese (1), Merelava (1), Mokilese (2), Motu (2), Samoan (4), Sundanese (1), Tagalog (18), Tahitian (8), Tausug (1), Tongan (7), Tontemboan (2), Torres Island (1), Tumleo (2), Ureparapara (Löyöp) (1), Vanua (1), Yami (1).
- Australian: Djagubay (7), Djaru (4), Dyrbal (4), Gooniyandi\* (35), Jaminjung\* (13), Kabi (1), Madhi Madhi (1), Nhanda (5), Wemba Wemba (1), Yir-Yoront (90).
- Papuan: Bamu (1), Hua (Yagaria) (1), Ibu (2), Kapaur (1), Maisin (2), Monumbo (3), Namau (Purari) (1), Nasioi (2), Savo (1), Sentani (1).
- Trans-New-Guinea: Amele (1), Bongu (2), Kaluli\* (47), Kobon (1), Melaripi (1), Pay (1), Tauya (1), Telefol (1), Toaripi (1).
- Sign languages: Adamorobe Sign Language\*, American Sign Language\* (2), Australian Sign Language\* (3), Brazilian Sign Language, British Sign Language\* (7), Chinese Sign Language, French Sign Language\*, Danish Sign Language, German Sign Language\*, Icelandic Sign Language (1), Indo-Pakistani Sign Language\*, Italian Sign Language\*, Spanish Sign Language\* (6), Taiwanese Sign Language\* (5).
- Invented languages: Black Speech (1), Klingon(ese) (2), Na`vi, Quenya (37).

## 11. Glossary

The glossary contains a semantically classified list of all the iconic words and expressions that appear in the dictionary. It will be very useful for quick consultation.

## **12. Acknowledgement**

All sign language drawings were made by my colleague: Iván Martín Cerezo.

# A

## *A Study in phonetic symbolism* (Sapir 1929)

This paper is one of the first experimental studies in phonetic symbolism. In the experiments reported, E. Sapir (1884-1939) hoped to determine whether there are certain preferential tendencies towards expressive symbolism\* in the meaning contrast ‘big’/‘small’. In one of these experiments, the subjects were presented with meaningless word pairs differing only in the vowels [a]/[i] and were requested to indicate in each case which of the two meaningless words meant the larger and which the smaller variety of an arbitrary selected meaning. It was observed that an overwhelming majority chose the [a]—word as denoting the larger variety of the selected meaning. The paper contains three interesting observations: (1) Vocalic and consonantal contrasts tend to have a definite symbolic feeling-significance barely related to the associative values of actual words. (2) It makes little difference whether the phonetic contrast was contained in a phonetically ‘possible’ or a phonetically ‘impossible’ context. (3) The certainty of the symbolic distinction tended to vary with the nature of the phonetic contrast (Sapir 1929: 228). In this paper, Sapir introduced the expression *phonetic symbolism*: “we are really dealing with a measurably independent psychological factor that for want of a better term may be called ‘phonetic symbolism’” (Sapir 1929: 233). In addition, Sapir provided an articulatory explanation for the observed symbolic interpretation of the contrast between [a] and [i]. In the case of [i] the tongue is high up towards the roof of the mouth and articulates forward, so that the vibrating air is passing through a narrow resonance chamber. In the case of [a], the tongue is lowered and the vibrating air passes through a much wider resonance chamber (Sapir 1929: 16).

## **Abkhaz**

A Northwest Caucasian language spoken in Abkhazia (South of the Greater Caucasus Mountains, northwestern Georgia) by approximately 200,000 people

See *BUTTERFLY, PRIMITIVE CULTURE, VÖLKERPSYCHOLOGIE*

## Ablaut Reduplication (AR)

A type of reduplication with vowel alternation frequently used in a number of languages to mimic movement. Ablaut reduplication is associated with a physical (visual or acoustic) alternating movement in the following way: reduplication in AR mimics continuity, including repetition, plurality, distribution, and habitualness; vowel alternation mimics change, including variation, change of direction, instability, uncertainty, vacillation, reciprocity, and interruption. The following examples are taken from Moreno-Cabrera (2017: 75-81), which gives the relevant sources.

English AR expressions conveying motion: **dangling and flapping:** *dindle-dandle, dingle-dangle, flip-flap, flipperty-flopperty*; **wagging:** *wiggery-waggery, wiggle-waggle, wiggly-waggly, wig-wag, wriggle-wraggle*; **swinging:** *pip-pop, swig-swig, wigglety-wagglety*; **see-saw:** *shig-shog, shoog-shaggle, titter-totter, titter-tatter, swing-swang, quee-quaw, see-saw*; **nodding and bobbing:** *niddle-naddle, niddle-noddle, nid-nod*; **trembling and unsteadiness:** *didder-dadder, didder-dodder, niddle-noddle, pintle-pantle, shig-shog, titter-totter, whiltie-whaltie, wibble-wobble, wib-wob, widdle-waddle, wimbly-wambly, wingle-wangle*; **walking and running:** *jitty-jetty, neck-nack, stip-step*; **limping, hopping and jogging:** *chick-chock, hiphop, hippety-hoppety, jidderty-jadderty*.

Basque ARs for swinging and related movements: **swinging, rocking, staggering, swaying:** *bantzin-bantzan, bilin-bolan, biliki-balaka, bilinba-balanba, bilintzi-balantza, bilist-balast, binbi-banba, binbili-bonbolo, bindi-banda, dilin-dalan, dinbili-danbala, dingili-dangala, dingolodango, dringili-drangala, kikili-kakala, kikili-makala, kinkili-kankala, kizkili-kazkala, kixkiti-kaxkata, tiki-taka, tilintalanka, tingli-tangla, trinko-tranko, trinkulin-trankulin, zibuka-zabuka, zirrun-zarrun*.

Estonian ARs: *tipa-tapa* ‘(walk) with quick and short steps’; *kips-kõps* ‘(walk) with quick and short steps’; *liipadi-laapadi* ‘(to move) heavily, cumbersome, dragging along’; *nika-naka* ‘(to move) steadily, heavily with short steps’; *vinka-vonka* ‘(for a vehicle) when not heading straight, from one side to the other, zigzagging’; *hiroh-haroh* ‘scattered, confused’; *kriima-kraama* ‘carelessly, sloppy’; *liga-loga* ‘confused, sloppy, bad’; *pira-para* ‘scattered, sloppy, carelessly, quickly’; *plihva-plahva* ‘bungling, carelessly’; *limma-lamma* ‘(to do something) bungling, carelessly, thoughtlessly’; *priuh-prauh* ‘quickly, carelessly’.

Khakas (South Siberian Turkish): *tip-tap* ‘blinking, winking’; *sh’iltix-sh’altix* ‘twinkling, gleaming’; *xújbang-xájbang* ‘zigzagging’; *pitir-patir* ‘to and fro’; *tirbax-tarbox* ‘entangled’; *táltang-túltang* ‘toddling’; *sîrt-sart* ‘hopping along’ (like a magpie); *salá-sulá* ‘anyhow, somehow’; *sîrêng-saráng* ‘thoughtlessly’; *sîrex-sarax* ‘upstart’; *xijîr-xajîr* ‘crooked’.

Ablaut reduplication can also mimic some types of alternating sounds (Moreno Cabrera 2017: 69-75):

English AR expressions conveying sound: *click-clack* ‘reduplicated expression for recurring or successive sounds of the click type’; *clip-a-clap* and *clip-clop* ‘imitation of sounds of alternating rhythm’; *knick-a-knock* ‘a succession of knocks of alternating character’; *knick-knack*, *nick-nack* ‘an alternation of knocking sounds’; *pitter-patter* ‘an imitation of a rapid alternation of light beating sounds, rain, hail, light footfall’; *tick-tack* ‘an imitation of a reduplicated or alternated sound, esp. that made by a clock’; *tick-tock* ‘an imitation of the ticking of a clock, esp. the slow ticking of a large clock’; *clish-clash* ‘the reciprocal or alternate clash of weapons’; *clitter-clatter* ‘alternating repetition of clattering noise’; *drip-drop* ‘continuous dripping with alternation of sound’.

Basque AR expressions mimicking a repetition of alternating sounds: **cracking, creaking, crackling**: *grik-grak* ‘crackling’; *kriski-kraska*, *krisk-krask* ‘creaking, crackling’; *kriskitin-kraskitin* ‘clacking of castanets, snapping’; *klis-klas* ‘to crack, crackle’; *kisk-kask*, *kisk-kosk* ‘to clash, crack’; *kirrin(ka)-karran(ka)* ‘squeaking, creaking’; **splashing**: *pilisti-palasta*, *plisti-plasta* ‘splish-splash’; *tilist(i)-talast(a)* ‘to splash’; *txipli-txapla*, *txipi-txapa*, *txipla-txapla* ‘to splash about’; *tisti-tasta* ‘to splash’; *zifli-zafli* ‘splashing about’; *tifli-tafla* ‘beating, splash’; *xifli-xafli* ‘to splash about’; *zipli-zapla* ‘to splash’; *glin-glan* ‘wine poured in a bottle’; *pilist-palast* ‘sound of water moving in a bucket’; **beating, hitting, slapping**: *tis-tas* ‘heart beating’; *tiki eta taka* ‘to hit’; *trinbilin-tranbalan* ‘hitting’; *zipirt eta zapart* ‘hitting, beating’; *zipirt-zapart* ‘to throw punches left, right and center’; *zifri-zafri* ‘beating, shaking’; *tri-tra* ‘to beat’; *xirti-xartaka* ‘to kick a ball around’; *kri-kra* ‘strumming’; *tingili-dangala* ‘to crash’; *ris(t)-ras(t)*, *sisti-sasta* ‘to burst, sting, punch’.

Khakas: *Tîr-tar* ‘loud crackling’; *tîsh-tash* ‘soft repetitive noise’ (steps, knocking); *tîshlîrge/tashlîrge* ‘to stamp, to knock’; *pîlchîx-pâlchîx* ‘splashing’; *pux-pax* ‘splashing noise’; *sigdir-sagdir* ‘clattering’; *tîzh’îx-tazh’îx* ‘clicking noise’; *tîzh’îr-tazh’îr* ‘strong, repetitive noise’ (shooting, thundering); *sîbîx-sabîx* ‘whispering’; *xîrt-xart* ‘clucking’; *mîzh’îr-mazh’îr*

‘crackling, crunching sound’, ‘noisy quarrel’; *nizirt-nazirt* ‘strong noise’; *tidirt-tadirt* ‘strong, sharp noise’; *sabá-subá* ‘muttering, unintelligible speech’; *pish-pash* ‘Shorian dialect’; *sir-sar* ‘strong crying’; *sîx-saax* ‘screaming, squeaking’.

Mandarin Chinese: *dídá* ‘the sound of dripping’, *dīngdōng* ‘the sound of tingling’, *dīngdāng* ‘the sound of jingling or clattering’, *pīpā* ‘the sound of crackling’.

See REDUPLICATION

### **Absolute Iconicity**

A property of a set of words for which there is a similarity function that relates form and meaning. In absolute iconicity, there is a correlation between one or more form dimensions and one or more meaning dimensions. The most obvious example is onomatopoeia\*, for which forms are intended to imitate sounds in nature. Thus, there appears to be a weak correlation between the vowel formants in conventional words for animal sounds (*moo*, *quack*, *cheep*) and the perceived formants in the actual sounds made by the animals (Gasser, M., N. Sethuraman and S. Hockema 2010: 167).

### **Adamorobe Sign Language**

The Adamorobe Sign Language (AdaSL) is a sign language used in Adamorobe, an Akan village in Eastern Region, Ghana. The following data are taken from Edward 2015.

Edward groups the AdaSL signs mimicking size and shape into the following classes. (A) Complete iconicity: the handshape is configured to represent the entire entity by its size or shape, as in the signs for BENCH, BARREL, SMALL, BIG; (B) Synecdoche representation: the handshape is configured to represent the size or shape of a part of an entity denoting the whole, as in the signs for SUNDAY (opened book), MAN (beard), WOMAN (breast), MONTH (crescent); (C) Activity representation: the sign denotes an entity by mimicking an action directly related to that entity, as in THURSDAY (cutlass repair), ADAMOROBÉ (drumming), CHURCH (closing palms as in worshipping).

Concerning the denotation of time, the hand moves forward to denote TOMORROW and backwards to denote YESTERDAY. The first sign is also used to convey future tense.

Iconic metaphors are also used to express cognition in AdaSL. For instance, the sign for UNDERSTAND is signed with the index finger touching the side of the forehead and then both hands open up simultaneously, literally THINK+CLEAR; FORGET is signed as THINK+LOST and CONFUSE as THINK+HAPHAZARD.

Verbal directionality in AdaSL is highly iconic, as in signed languages in general. For example, the signs EAT, HAVE, LIKE, LOVE, BRING contain a movement towards the signer; CARRY contains a movement from the signer toward other participants in the signing act and TELL, GIVE, and PAY can present both movement types to signal whether the signer is the source or the goal of the action referred to.

## Adele

Kwa language of Togo and Ghana spoken by approximately 37,000 people.

See *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## African languages

Onomatopoeic words and expression are common in African languages. The following examples mimic sounds made by certain animals (Childs 1994: 190): Kisi *nyaayoo* ‘meow’, *ng oong ng oong ndo* ‘bullfrog’; Gbaya *kokeng ge-koo* ‘cock-a-doodle-do’. They can also mimic the noise made by certain machines: Swahili *piki-piki* ‘motorcycle’, *ting’a-tin’a* ‘tractor’; Gbaya *kutu-kutu-kutu* ‘rumble of a car motor’; Ibibio *toi-toi-toi-toi* ‘motorcycle sound’, *akpokko-toi-toi* ‘motorcycle’; Yoruba *fakafiki* ‘sound of a train’. The sound of moving air is mimicked in the following onomatopes\*: Kisi *faka-faka* ‘moving fast’, *fee/fee-fee* ‘being blown, a whistle, a horn, breathing’, *foo* ‘wind whistling’; Hausa *fir* ‘flutter of wings’; ShiNzwani (Comorian) *fwii* ‘sound of rapidly passing by’.

Ideophones\* were first observed in African languages. They are extensively used in Bantu languages, including: Asu, Basa, Bemba, Bobangi, Bujeba, Bulu, Bushong, Cewa, Chagga, Duala, Ganda, Giriama, Holoholo, Hunde, Ila, Kamba, Kiha, Kikuyu, Konde, Kongo, Kwangali, Lamba, Luba, Luvale, Mongo, Mwera, Ndebele, Ngombe, Ntomba, Nyamwezi, Nyanja, Nyiha, Ombo, Rimi, Ronga, Runyankore, Rwanda, Rundi, Ruund, Sena, Shambala, Shona, Songye, Sotho, Swahili, Swati, Tabwa, Tetela, Tonga, Tsonga, Tswana, Tumbuka, Venda, Xhosa, Yao, and Zulu (Samarin 1971: 141, 160). Here are some examples: Ngombe (*yenge akekumaka*) *keku-keku* ‘the child stutters’; Lamba *ukupama pame pame pame* ‘to beat and beat and beat again’;



Shona *chámuchácha-muchácha* ‘straining’, *mbiriviri* ‘fire’; Yao (*nyama siluwimwile*) *kuputu kuputu* ‘the herd went off at a full gallop’ (Samarin 1971).

African languages of other linguistic families also have ideophones: Gbaya *tál-tál* ‘pure white’, *kilang-kilang* ‘a zigzagging motion’; Somali *shalalab* ‘sound of rain dripping’, *halalac* ‘to give off a sparkling light’; Siwu *gùdùù* ‘pitch dark’, *gblogblogblo* ‘bubbling’, *kpotoro-kpotoro* ‘walking like a tortoise’, *kpie-kpie* ‘lukewarm’ (Dingemanse 2012: 661); Yoruba *gboogboo* ‘space being repeatedly clear’, *búú-búú* ‘completely hidden underneath’, *fèrègèdè-feregedè* ‘having very wide appeal’, *porogododo-porogododo* ‘being completely used up’, *hába-hàbà-hába* ‘very difficult and clumsy motion’ (Awoyale 1989: 21, 24); Kilba (a dialect of Huba, a Chadic language) *wàdàu* ‘being hurt’, *màkidàmà* ‘surprise’ (Muazu 2009: 5).

See AKUAPEM TWI, BAKA, BANTU IDEOPHONES, BINI, CILUBÀ, DIDINGA, EBWELA, EDO, EMAI, EWE, GBAYA, HAUSA, KOLOKUMA IJO, KILBA, LAUT, *TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*, MUNDANG, NIGERIAN PIDGIN, SETSWANA, SHONA, SIWU, SOMALI, SOTHO, TETELA, TOMMO-SO, TSONGA, WOLAITTA, ZULU

## Afrikaans

See BIRD NAMES

## Ainu

Language of the Ainu people on the northern Japanese island of Hokkaido. It is spoken by approximately 15,000 people.

See *CACKLE*, *CUCKOO*, *PRIMITIVE CULTURE*

## Akpafu

A dialect of Siwu\*.

See *BUTTERFLY*, SIWU

## Akposo (also Kposo, Ikposso)

Kwa (Niger-Congo) language spoken in Ghana, near the Togo border, by approximately 8,000 people.

See *BUTTERFLY*

## Akra [Ga]

Kwa language spoken in Ghana by approximately 700,000 people.

See *PRIMITIVE CULTURE*

## Akuapem Twi ideophones

Akuapem Twi is a dialect of the Akan language spoken by the Adamorobe people of the Eastern Region of Ghana.

The following data and classification are taken from Edward 2015.

Akuapem Twi ideophones are usually reduplicated as in *ngaa-ngaangaangaa* ‘the sound of a baby’s cry’ or *pum-pumpumpum* ‘the sound of heavy knocking’; partial reduplication is also possible, as in *kikiriw* ‘rough surface’, *fekɔfekɔ* ‘smooth’. Ideophones can have special phonemes not found in normal words, as with the labiovelar [gb] in *gbim* ‘collision’. Vowel lengthening only occurs in ideophones: *sokooo* ‘rosy/smooth/wealth’. In general, ideophones behave as adverbs and, therefore, are linked with verbs: *ɔsereɛ kwaakwaa* ‘he/she laughed’, where *kwaakwaa* is an ideophone and *ɔsereɛ* means ‘he/she laughed’.

From a semantic point of view, some ideophones depict sound: *gagaga* ‘pain’, *ngaa-ngaa* ‘cry of a baby’, *kai* ‘o’clock’; others reproduce tactile sensations: *fekɔfekɔ* ‘smooth’, *kikiriw* ‘rough surface’, *gyirumgyirum* ‘not very smooth’; others depict smell: *hūam* ‘pleasant smell’, *nyān* ‘fetid’, *kānkān* ‘bad smell’; others suggest visual impressions: *korangyee* ‘clear’, *kusuu* ‘cloudy’, *kabii* ‘darkness’, *hān* ‘brightness’; other ideophones represent movement: *santan* ‘rapid’, *kekɔyɛ* ‘skillful’, *pa* ‘fast pace’, *pampam* ‘briskly’; in other cases, size and shape are depicted: *kakraa* ‘huge/big’, *fiaa/fiaa/hwīaa* ‘slim’, *bebreɛ* ‘many’, *teteɛter* ‘flat/plain’; *yantamm* ‘vast’.

## Alaba (East Cushitic)

East Cushitic (Afro-Asiatic) language spoken in the Great Rift Valley (Ethiopia) by approximately 300,000 people.

See *CROW*

## Albanian

Indo-European language spoken in Albania, Kosovo, Macedonia, Montenegro, and Serbia by 5.4 million people.

See BIRD NAMES, *BOW-WOW*, *CAKLE*, *CROAK*, *CROW*, *CUCKOO*, *ELEMENTARE WORTSCHÖPFUNG*, *FANGEN-FINGER-FÜNF*.

## Aleut

Eskimo-Aleut language spoken in Alaska by approximately 150 people.

See {-WR-} IDEOPHONIC ROOT

## Alliteration

The use of sound repetition in words, phrases or sentences in order to suggest a special nuance of meaning, sometimes of an onomatopoeic or ideophonic character. Frequently, initial consonant sounds of words are repeated in close succession, as in *the beautiful bouquet blossomed in the bright sun; your friends will flip-flop fast when facing trouble*. Idioms and proverbs usually show alliteration: *so many men so many minds; he who laughs last laughs longest* (Carson Williams 2011: 42). Company names can also show this type of alliteration: *Coca-Cola*, *Paypal*, *Dunkin' Donuts*. It is especially used in tongue-twisters: *Peter Piper picked a peck of pickled pepper; Peter Piper's Practical Principles of Plain and Perfect Pronunciation* (Cowdell 2011: 65, 68). It is said that Ludwig Wittgenstein was ridiculed by his schoolmates with the following alliterative jingle: *Wittgenstein wandelt wehmütig widriger Winde wegen Wienwärts* 'Wittgenstein wends his woeful windy way towards Vienna' (Monk 1991: 16). Tongue-twisters can be used in foreign language training, as in the following examples: Japanese *namamugi, namagome, namatamago* 'raw wheat, raw rice, raw eggs'; Ibo (an African language) *pappa Peter patara papaya pa nye papa Paul* 'Peter's Papa peeled a papaya and passed it to Paul's papa' (Cowdell 2011: 70). Alliteration is frequently used in poetry both in oral and signed languages (Kaneko 2011). The following verses are from *The Raven* by E. A. Poe: *Doubting, dreaming dreams no mortal ever dared to dream before / Followed fast and followed faster till his songs one burden bore / Desolate yet all undaunted, on this desert land enchanted*. Vowel alliteration is usually called *assonance* and consonant alliteration is called *consonance*.

See also AUTOICONISM, *SHE SELLS SEA SHELLS*

## Allolanguage

A term proposed by R. W. Wescott to denote language that is “alienated from conventionally structured speech”. The following antitheses opposing language to *allolanguage* can be used to characterize the latter (Wescott 1975b: 19-20): gestureless/co-gestural, digital/analogic, conceptual/perceptual, symbolic/iconic, grammatical/grammarless, business-like/playful, standardized/privatized, denotative/connotative, specific/polysemic.

Concerning the iconicity of *allolanguage*, Wescott says: “allolanguage is perceptual, rather than conceptual, in the sense that it is replete with echoes like the verbs *clink*, *cackle*, and *croak*, which not only echo themselves by means of consonant repetition but also echo non-speech sounds in the environment. This perceptuality is iconic to the extent that speech-sounds exhibit a more than conventionalized resemblance to extra-linguistic realities. The small oral cavity used in producing such modifiers as *itty-bitty* and *teensy-weensy*, both meaning ‘very small’, is a case in point” (Wescott 1975b: 20). Allolanguage frequently shows palimphony\*, apophony\*, dysphony\* or dysmorphy\*.

## Amazigh

Berber language of North Africa spoken in Morocco by about 3 million people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Amele

Trans-New Guinea language spoken in the Madang Province of Papua New Guinea by 5,000 people.

See *PUFF*

## American Indian languages

Sound symbolism is widely attested in Native American languages. E. Sapir reported that, in Wishram, to express the diminutive non-*fortis*, stopped consonants become *fortis* and velars become back-palatals; in addition *c*, *tc* and *tc!*, become *s*, *ts*, and *ts!*, and *x* becomes *X*. To express the augmentative, *fortis* consonants become non-*fortis* stops and *s*, *ts* and *ts!* become, respectively, *c*, *tc* and *tc!*. This can be seen in the following examples:

*aq!o'xl* 'knee'/ak!u'xl (diminutive)/*aGo'xl* (augmentative); *itcli'au* 'snake'/ *its!i'au* (diminutive)/*idji'au* (augmentative) (Sapir 1911: 243-245).

Diminutive consonant alternation can also have lexicalized meanings (Sapir 1911: 245):

*itcli'nôn* 'eagle' → *iLts!i'nôn* 'bird'

*itcli'laq* 'cricket' → *itsli'laq* 'grasshopper'

This diminutive consonant shifting is widespread in Northwest American Indian languages. It has been observed in Northern Paiute, Nez Perce, Coos, Kalispel, Coeur d'Alene, Twana, Snohomish, Karok, Southern Sierra Miwok, Cocopa, Coos, Luiseño, Yurok, Cree, Diegueño, Lower Chinook, Hupa, Dakota, Tillamook, Sahaptin, Squamish, and Wiyot (Nichols 1971). Wiyot knows a diminutive/augmentative consonant alternation, as in *laptohw* 'cloud'/*lapcohyawoc* 'little cloud'/*lapchohyawach* 'big cloud, storm cloud' (Nichols 1971: 842).

In Nootka, Sapir noticed that when “speaking of or about a child it is customary to add the regular diminutive suffix -*is* to the verb or other forms, even though the word so affected connotes nothing intrinsically diminutive; affection may also be denoted by it” (Sapir 1915: 359). Thus, the normal *qwístci* ‘do so!’ (*qwis-* ‘to do thus’; -*tci*’ second person singular imperative, ‘go and ....!’) is changed to *qwis'istci* ‘do so, little one’ when speaking to a child” (Sapir 1915: 359).

“In talking about fat people or people of unusual size, the suffixed element -*aq*’ is used in a manner analogous to the diminutive -*is*. Thus, the normal *hint'cilLwe'iní* ‘he comes it is said’ (*hin-* ‘empty’ verb stem ‘to be, do’; -*t'*-shortened form of -*iní* ‘to come’; *ciL* ‘inceptive’; *we'iní* ‘quotative’) becomes *hint'cilLaqwe'iní*’ (Sapir 1915: 360).

Beck (2008) discusses ideophones in Upper Necaxa Totonac, such as *lam* ‘a bright light flashing, a fire flaring up’, *lipli* ‘a diamond or piece of glass sparkling’, *lipilip* ‘sun glinting off the water, a mirror, etc.’, *limlim* ‘sun sparkling off flowing water’, *slimslim* ‘something twinkling’ (Childs 2015: 301). We can see that the /m/-/p/ alternation corresponds to longer vs. shorter, sharper phenomena (*lam* vs. *limp*) or punctual events (*lip*, *lipi*) vs. events with a continuous, static component (*lim*, *slim*). In addition, Beck (2008) observes that the *s/x/lh* alternation is correlated with increasingly more energetic or forceful action, or with the size of an event/participant:

*lanks* ‘hand hitting something hard’, *lanhx* ‘a blow striking with great force’, *lanhlh* ‘something being kicked with great force’ (Childs 2015: 301).

Ideophones\* are also found in Native American languages. In Katuena, a Cariban language of the Amazon basin, *shiiii* is used to suggest falling rain, *wuuuu* ‘wind blowing close’, *thuuu* ‘wind blowing far’, *shuuu* ‘flowing water’ (Smoll 2015: 82, 84, 89). Le Guen (2011) discusses some ideophones in Yucatec Maya. In this language, the pattern CvC suggests a short sound or event as in *p’uch* ‘beat’, *t’in* ‘tighten’; CvVC suggests a long sound or event as in *tsah* ‘fry’, *tsaah* ‘sound of water on embers’; and Cv’vC suggests a sound or event with an internal division, as in *tsa’ah* ‘sound made by certain animals when moving’, *so’oh* ‘to go in a random fashion’. Some Yucatec Maya ideophones are lexicalized: from *tack* ‘stick, adhere’ the *táak’a’ach* ideophone is obtained and lexicalized as *tak’ach* ‘flip-flop’; from *tix* ‘rinse, wash out’ we can obtain the ideophone *tíihrix’ix* lexicalized as *tirix ta* ‘strong diarrhoea’ (Le Guen 2011: 18).

Nuckolls (1996) discusses ideophones in Pastaza Quechua in depth. In this language, *sa* describes expanded or random movement from or within a locus: *sa shitana* ‘to scatter anything’ (146); *dzawn* suggests an action or event that involves a clustering together of individual agents: *dzawn makanakuna* ‘to fight as a group’ (148); *ʔam* means ‘to revolve, roll or turn, in a complete revolution’: *ʔam upina* ‘to drink up by drinking everything from a clay bowl or hollowed out gourd, thus turning it over’ (151); *polang* describes the moment of emergence from underwater to the surface: *polang wambuchina* ‘to raise something from underwater to the surface, e.g., an animal its head’ (156); *tsupu* describes the idea of the sound made at the moment of falling into water: *tsupu saltana* ‘to leap and fall into water, e.g. catfish, freshwater dolphin’ (159). In her impressive book, Nuckolls discusses many more ideophones describing types of contact and penetration, opening and closing, falling, deformation, suddenness and completion.


See KATUENA IDEOPHONES, PASTAZA QUECHUA IDEOPHONES, TOTONAC IDEOPHONES,

## American Sign Language

This sign language is widely used in the United States and most of Anglophone Canada with about 500,000 signers. Many of the signs in this language, as in other sign languages, have a clear iconic nature. For example, the sign for *tree* is a schematization of selected characteristics of a real tree:

trunk shape, verticality, branching, and horizontality (soil). Each one of these features is represented by a corresponding hand and forearm shape. The trunk is represented by the arm in vertical position, the branching by the fingers and the soil by a flat hand (the same sign is made in British Sign Language, see figure B6).

In her detailed study of iconicity in American Sign Language, S. Taub discusses and exemplifies the following devices (Taub 2001: 67-93):

1. Shapes of articulators represent shape of referent.  
 ASL classifiers work in this way: certain handshapes and hand-forearms. For example, the index finger extended from a fist pointing upwards represents a person: .  
 The movement of articulators represents the movement of the referent. For example, signing the person classifier and moving it upward in a zigzag\* path represents the movement of an actual person upward following a zigzag path, most likely on a winding road up a hill.
2. The shape of the articulator's path represents the shape of the referent.  
 ASL uses a number of conventional shapes as "traces". For example, index fingertips trace out lines, flat hands with fingers together trace out planes, curved hands trace out curved surfaces, and thumb-and-forefinger circles trace out small cylinders. This path-to-shape method enables signers to make very detailed specifications of shapes beyond the general outlines of fingers, hands, and arms. For example, in order to refer to a floor lamp, the signer might begin with the lamp sign followed by both hands sketching out a vertical cylinder and then both spread hands tracing the shape of the lampshade.
3. Locations in signing space represent locations in mental space.  
 For example, when describing a room, the signer can establish in space the limits of the room and proceed to name objects and place them in the signing-space locations that correspond to their real-world locations.

4. The size of articulation represents the size of the referent.  
In general, the shapes created by path-for-shape (see 2) iconicity are proportionally accurate; the relative sizes of each part of the shape correspond well to the relative sizes of parts of the referent image.
5. The number of articulators represents the number of referents.  
For example, in ASL signs for numbers ‘one’ through ‘five’ each consists of a handshape with the appropriate number of fingers extended. This type of iconicity can also be seen in verbal agreement. In the case of the sign meaning ‘to give’, the hand movement expressing it is made twice in different directions if there are two recipients, as in *I gave it to two people*.
6. Temporal ordering of signing represents temporal ordering of events.  
In general, elements that are signed first can be understood as occurring earlier in time (diagrammatic iconicity\*).
7. Signing represents signing.  
This occurs in reported signing: the signer’s bodily actions can iconically represent the bodily actions of a referent person. In addition, signers can represent several characters and their interactions in a single discourse: each character will have a characteristic direction of gaze and possibly a facial expression or posture.

Although iconicity in ASL takes many forms in both lexicon and grammar, it “is a single process, characterized by *image selection*, *schematization* and *encoding*” (Taub 2001: 93).

See ANALOGUE-BUILDING MODEL OF LINGUISTIC ICONICITY, ICONICITY CHAIN, ICONICITY IN SIGNED LANGUAGES

## **Amharic**

Semitic language of Ethiopia spoken by approximately 22 million people.

See *CAKLE*, *ELEMENTARE WORTSCHÖPFUNG*



## Analogue-Building Model of Linguistic Iconicity

This model was proposed by S. F. Taub (2001: 43-62) to account for iconicity in both spoken and signed languages. It is summarized by this author as follows:

“To create an iconic item, one *selects* an image to represent, modifies or *schematizes* that image so that it is representable by the language, and chooses appropriate forms to show or *encode* each representable part of the image. Moreover, when modifying the image or ‘translating’ it into linguistic form, one makes sure that the new image preserves the relevant physical structure of the previous stage” (Taub 2001: 44).

As an example of this process, Taub analyses the American Sign Language sign for TREE (see American Sign Language). The point of departure is an initial concept *tree* that includes its shape, texture, smell etc. Through image selection, a prototypical visual image of a tree is obtained. Then, this image is schematized to fit the categories of American Sign Language; in this schematization three aspects are selected: the branching, the vertical position of the trunk, and the horizontal axis of the soil. These aspects can be encoded in a structure-preserving correspondence in a gestural configuration involving one hand and the two forearms:

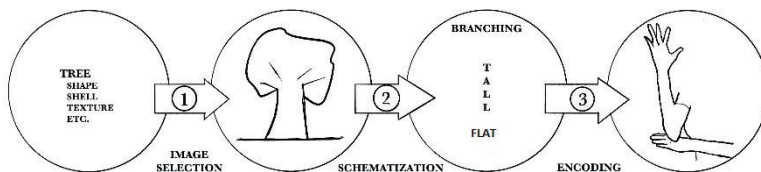


FIGURE A1

Based on S. F. Taub (2001: 44)

The basic tenet of this model is that iconicity, both in spoken and signed languages, is a single phenomenon, characterized by three processes: image selection, schematization, and encoding. Sign languages offer more possibilities in the image selection process and more encoding resources than spoken languages.

See AMERICAN SIGN LANGUAGE, ICONICITY IN SIGN LANGUAGE

## **Anatom (Aneityum)**

Malayo-Polynesian language spoken on the Aneityum Island (Vanuatu) by approximately 900 people.

See *BUTTERFLY*

## **Ancient Slavic**

See OLD SLAVIC

## **Ancient Indian**

See, *ELEMENTARE WORTSCHÖPFUNG*, SANSKRIT

## **Anglo-Saxon (Old English)**

The earliest historical form of the English language.

See *BUTTERFLY*, ENGLISH, *FANGEN-FINGER-FÜNF*.

## **Anti-iconic suffix ordering**

In general, the ordering of multiple suffixes is iconic insofar as outer suffixes register categories of higher constituents (Evans 1995: 411). An anti-iconic ordering does not abide by this principle. For example in the Australian language Wemba Wemba, the word *lan-ad-ug* ‘in his camp’ has the suffix ordering oblique case suffix (*ad*) plus the third person singular possessive suffix (*ug*); in the Australian language Madhi Madhi, *dali-ngu-rin* ‘in your language’ presents the ordering operative case suffix (*ngu*) plus the second person singular possessive suffix (*rin*) (Evans 1995: 415).

The causes of these anti-iconic orderings may be the temporal order of grammaticalization processes affecting suffixes or a shift from prefixing to suffixing morphology, among other possible reasons (Evans 1995: 423).

## **Anti-iconicity**

A type of relative iconicity\* in which expressions with similar meanings tend to have dissimilar forms, as defined by M. Gasser, N. Sethuraman and S. Hockema (2010: 168). These authors give the following illustration of this property. Consider the nouns *dog*, *fox*, *wolf*, and *cat*. From a semantic point of view, a dog is more similar to a wolf and to a fox than to a cat; but

from a phonetic point of view *cat* and *dog* are more similar to each other than *dog* and *wolf* or *fox*. The first two nouns share the pattern: stop-vowel-stop and the second pair share the pattern consonant-vowel-consonant-fricative

Some syntactic-semantic mismatches are also seen as anti-iconic. They occur when a syntactic asymmetry does not directly map onto a semantic one. Egg (2004: 121) gives the following example. In the phrase *beautiful dancer*, in the sense of ‘a person who usually dances beautifully’, the adjective operates on the entire noun *dancer*, but only affects the verbal part of its meaning and can be analyzed as “a person who usually” + “dances”. The semantic interpretation of *potentially controversial plan* (Egg 2004: 122) offers another example of anti-iconicity. The adverb *potentially* modifies syntactically the phrase *controversial plan*, but from a semantic point of view only the meaning of *controversial* is affected by it. Thus, *potentially* does not affect the meaning of *plan*, since we are talking about an undisputed plan that could be controversial, not about something that could be a plan and could be controversial.

## Apalaí

Cariban language of Brazil spoken by the Aparai people and with approximately 450 speakers.

See *BUTTERFLY*

## Apophony

Sound alternation conveying grammatical information, such as the vowel alternation seen in English *drink/drank/drunk*. This alternation can also be used iconically, as in *clink, clank, clunk*. In these words, the vowel *i* iconically expresses a high pitched sound, *a* suggests a strident sound, and *u* a muffled sound (Wescott 1975b: 24). Consonant alternation can also be used iconically as in the following kinaesthetic frequentatives: *dripple-dribble-drivel-drool* (from Middle English \*driw(e)len); or in the following rhyme tags of echo-compounds: *hodge-podge, hurly-burly, pell-mell, fuzzy-wuzzy*.

## Arabic

Moroccan Arabic has, as described in Chatar-Moumni (2017), many iconic morphemes, words, and expressions. In this dialect, as well as in Classical Arabic, consonant reduplication can mimic an intensification or causation

of a process or action. Examples include: *drəb* ‘to hit’/*dərreb* ‘hit violently’; *fhəm* ‘understand’/*fəhhəm* ‘to make understand’; *daqq* ‘to knock’/*dəqdaq* ‘to tap at/on, to pat’; *zəff* ‘to blow (of wind)’/*zəfzəf* ‘to blow continuously’.

Syllabic reduplication in Moroccan Arabic mimics a repetitive sound: *zənzən* ‘to buzz, to hum’, *zəqzəq* ‘to chirp, to babble’, *zəgzəg* ‘to screech, to grind one’s teeth’, *wəshwəsh* ‘to whisper’, *wəkəkək* ‘to stutter, to stammer’, *wəhwəh* ‘to groan’, *wərwər* ‘to howl, to holler, to cry (of children)’. In some cases there is partial reduplication, as in *gərgəb* ‘to gurgle (of humans)’, *tərtəq* ‘to burst’, *xərxəb* ‘to poke around, fumble, rummage, scratch, scrape’, *xərxəsh* ‘to ring (phone), scratch (animal), whirr, wrinkle, crease’. The following mimetic verbs are produced from a quadriliteral root: *məwəwəq* ‘to miaow’, *qərbəq* ‘to click’, *sərfəq* ‘to flap (wings), slap, smack’, *xərbəsh* ‘to scratch’, *zəxnən* ‘to whine, moan, whimper’, *zəgnən* ‘to hum, buzz, whirr’, *hərnən* ‘to speak through one’s nose’. Animal sounds are also mimicked: *səh* ‘to bleat, moo, bawl, bellow’, *əwəwəg* ‘to howl’, *gərgər* ‘to croak’, *fərfər* ‘to flap (wings)’, *nəbək* ‘to bark’, *həmhəm* ‘to whinny, neigh’, *muwəg* ‘to moo’, *bəbəbə* ‘to bleat (sheep)’, *məməmə* ‘to bleat (goat)’. Human sounds are mimicked by the following onomatopoeic verbs: *kəhkək* ‘to cough’, *dəndən* ‘to hum’, *bəzhgət* ‘to stammer’, *xərnən* ‘to chatter’, *təmtəm* ‘to stutter’.

See *BABBLE*, *BUTTERFLY*, *CROW*, *ELEMENTARE WORTSCHÖPFUNG*, *MATRIX AND ETYMON THEORY*, *NURSERY WORDS*, *ONOMATOPOEIC EXPRESSION*, *PHONOMIMETIC ROOT*, *PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*, *REDUPLICATION*

## Araucanian

Language family of central Chile comprising Mapudungun and Huilliche.

See *BUTTERFLY*, *PRIMITIVE CULTURE*

## Arawak

The Arawakan language spoken by the Lokono people of South America (French Guiana, Guyana, Suriname, Venezuela). It has 2,000 speakers.

See *PRIMITIVE CULTURE*

## Arbitrariness

One of the fundamental properties of human natural languages. The majority of the words of a natural language do not show any natural or motivated connection between their meaning and their phonetic form.

Following Ferdinand de Saussure's proposal, it can be said that linguistic signs are arbitrary or purely conventional: different languages use very different words for denoting the same object or concept.

“The bond between the signifier and the signified is arbitrary. Since I mean by sign the whole that results from the associating of the signifier with the signified, I can simply say: the linguistic sign is arbitrary. The idea of ‘sister’ is not linked by any inner relationship to the succession of sounds s-ø-r which serves as its signifier in French that it could be represented equally by just any other sequence is proved by differences among languages and by the very existence of different languages: the signified ‘ox’ has as its signifier b-ø-f on one side of the border and o-k-s (Ochs) on the other” (Ferdinand de Saussure 1959: 67-68).

In de Saussure's terms the linguistic sign is formed by the union of a phonetic form (the signifier) and a meaning (the signified). The arbitrariness principle of the linguistic sign says that the meaning of a linguistic sign is not predictable from its phonological configuration: the meaning of English *dog*, Spanish *perro* ‘dog’, French *chien* ‘dog’ or Russian *sobaka* ‘dog’ cannot be deduced on the basis of their phonological forms. Only onomatopoeias, a very small part of the vocabulary of the languages of the world, can be said to be partly or completely justified on the basis of their phonetic configuration.

## Armenian

Indo-European language spoken by 6.7 million people mainly in Armenia.

See BIRD NAMES, *CROAK*, *CROW*, *CUCKOO*

## Articulatory iconicity

This expression was used by A. Fischer (1999a: 126) to refer to the association of the vowel /i/ with something of small size and of the vowel /a/ with something of large size. English examples include *little*, *wee*, *tiny* in contrast to *large* or *vast*. Fischer (1999a: 128) notes that the /i/-/a/ opposition can indicate many kinds of contrast: little and large, near and far, high and low, bright and dark, angular and round, hard and soft, light and

heavy, tense and relaxed, tight and loose, narrow and broad, thin and thick, etc. The vowel /i/ tends to be associated with the first member of each pair and the vowel /a/ with the second. Fischer thinks that the reason for this regularity must be articulatory: /i/ is a high, unrounded, front vowel and /a/ is a low, (often) rounded, back vowel. L. Nobile (2011: 125) analyzed the vowel monophonemes of grammatical person and adverbs in Italian and reached the conclusion that the [open : closed] phonological pair tends to constitute an imagic diagram of several {complex : simple} semantic pairs such as {more-relational : less-relational} and {areal : punctual}; while the [front : back] tends to constitute an imagic diagram of several {positive : negative} semantic pairs, such as {definite : indefinite}, {plural : singular}, {unitive : separative}, {convex : concave}, {P3 : P1}, {far : near}, {future: past}, {more : less}, {well : badly}. In another study concerning French, Nobile (2015) concludes that the acoustic feature [grave : acute], inherent to the articulatory features [voiced : voiceless] and [nasal : oral] (as well as, to a lesser extent, [palato-velar : alveo-dental]) seems to respond in particular to graphic properties such as {large : small}, {dark : bright}, and {thick : thin}. The acoustic feature [continuous : discontinuous], determined by the articulatory feature [fricative : plosive], as well as (at the level of the syllable) by the feature [voiced : voiceless] (and, to a lesser extent, by [sonorant : obstruent]), seems to be sensitive to the graphical characteristics of the lines, such as {continuous : discontinuous}, {curved : angular} and {obtuse : acute}. The acoustic feature [“clean”: “dirty”], inherent to the articulatory feature [alveo-palatal : palate-velar] seems to relate to properties of the figures, such as {regular : irregular} or {sparse : dense} and, to a lesser extent, {curved : angular} (Nobile 2015: 88).

See SOUND-SIZE SYMBOLISM

## Asante

Kwa (Atlantic-Congo) language of the Ashanti people of West Africa with approximately 2.8 million speakers.

See *BUTTERFLY*

## Asian languages

Southeast Asian languages are rich in iconic words and expressions. Ideophones\* or expressives\* have been found (Watson 2001: 385-386) in Semai (Diffloth 1976), Pacoh (Watson 1966), Bahnar (Banker 1964, Banker 1965), and Kammu (Svantesson 1983, 1992).

In Bahnar, a Mon-Khmer language of Vietnam, vowel alternation in ideophones can convey size, as in: *bloong-bloong* ‘reflections caused by rays of light on a large object, elongated in shape’/*blɔ̃ng-blɔ̃ng* ‘id., small object’; *bleel-bleel* ‘large flames appearing intermittently, but remaining vivid’/*blɛ̃l-blɛ̃l* ‘id., small flames’ (Diffloth 1994: 110); *gəluung-gəlaang* ‘very big heaps, very great pilings, of a confused, awe-inspiring scuffle’/*gəloong-gəlaang* ‘big heaps, great pilings, in disorder’/*gəlɔ̃ng-gəlaang* ‘small heaps, small pilings, in disorder’ (Diffloth 1994: 112). In Rengao, another Mon-Khmer language of Vietnam, we can find contrasts like the following: *chahəh* ‘sight of a very small mouth’, *chahah* ‘...small mouth’, *chahəh* ‘...medium-sized mouth’, *chahuh* ‘...rather large mouth’, *chahəh* ‘...largemouth’, *chahoh* ‘very large mouth’ (Watson 2001: 397). In Kammu (Mon-Khmer) similar contrasts can be observed in verbs: from the root *ngük* ‘nod’ the following variations can be produced: *ngük-knngük* ‘one person keeps nodding’, *ngük-rngngük* ‘many people keep nodding’, *cngük* ‘one person nods once’, *rngük* ‘many people nod once’, *cngük-cngük* ‘one person nods at intervals’, *rngük-rngük* ‘many people nod at intervals’, *ckngük* ‘one person bends his head down’, *rkngük* ‘many people bend their heads down’ (Svantesson 1992: 370; Watson 2001: 399). In Pacoh, a Mon-Khmer language of Vietnam there are cases of ablaut reduplication\*, such as *tip-tup* ‘sound of two people pounding rice alternately’, *e:t-o:t* ‘sound of bamboo rubbing together in the wind’, *kluk-klek* ‘two persons agreeing’, *pe:l-klup* ‘hobbling lamely’ (Watson 2001: 399). Surin Khmer has ideophones, such as *mpeh-mpeh* ‘staggering’, *senca'-senca:c* ‘twinkling’, *leha'-leha* ‘soaking’ (Diffloth 2001).

In Vietnamese and Thai, onomatopes mimicking animal sounds are introduced by the verb ‘to sing’ (Vietnamese *gáy* and Thai *kan*) or ‘to bark’ (Viet. *súa* and Thai *hào*)/Viet. *Gáy ò ó o o o*/Thai *kan êk í êk êk* (cock-a-doodle-do); Viet. *súa gâu gâu*/Thai *hào hông hông* (bow-wow), Viet. *súa ăng ăng*/Thai *hào eng eng* (bow-wow). In addition, in Viet. we have *meo meo* ‘miaow’, *cuc tác* ‘cluck cluck (chicken)’, *ủn ỉn* ‘oink oink’. In Viet. /i/ /e/ and /u/ are used sound-symbolically to mimic sharp and strident sounds, such as *hí* ‘to whinny, neigh’, *rát* ‘to hiss (snakes)’, *ré* ‘elephant trumpeting’, *hú* ‘howl (wolf)’. The vowel /i/ is systematically used in Vietnamese to mimic the sounds produced by small animals, such as chickens, birds, mice or insects (Thành Do-Hurinville 2017)

In the tonal languages of Asia, variations in tone can be used iconically. For example, in Cantonese, a change to a high tone suggests intensity in reduplicated adjectives: *hong*<sup>21</sup> ‘red’ can be modified to *ho:ng*<sup>35</sup> *hong*<sup>21</sup> ‘very red’; from *soen*<sup>21</sup> *pan*<sup>35</sup> ‘good tempered’, *soen*<sup>35</sup> *soen*<sup>21</sup> *pan*<sup>35</sup> ‘very

good tempered'. In Thai, there is *dii<sup>55</sup> dii<sup>33</sup>* 'very good' from *dii<sup>33</sup>* 'good' and in Hainan Chinese there is *bui<sup>55</sup> bui<sup>33</sup>* 'very fat' from *bui<sup>33</sup>* 'fat' (LaPolla 1994: 132-133). In Chinese we can find reduplicative onomatopes\* such as *bābā* 'smacking one's lip', *bājī* 'the sound of squelching barefoot throughout the mud', *cācā* 'the sound of rubbing', *dídá* 'the sound of dripping', *dīngdōng* 'the sound of tingling', *sèsè* 'rustling of the wind', *wēngwēng* 'buzz/hum' (Hu 2011: 91). Phonaesthemes\* can also be found: words ending in *-ang* usually expresses something strong, wide, primary, long, while words ending in *-ing* usually express smallness, narrowness, lightness: *āng* 'abundant', *qīng* 'lightness'; *chǎng* 'wide open', *míng* 'close'; *guāng* 'sunlight', *míng* 'sunset'; *máng* 'bright', *míng* 'dark' (Hu 2011: 92). There is some sound symbolism associated with certain consonants when appearing in initial position (Hu 2011: 93-94): [x] (a voiceless alveo-palatal fricative) is sometimes related to laughing (*xī* 'giggling', *xiào* 'smile', *xuī* 'laugh'); the initial consonant [h] sometimes mimics a loud cry (*hāi* 'to call somebody', *háo* 'to yell', *hē* 'to shout loudly', *hēng* 'to roar', *huān* 'loud cheer', *huàn* 'to call out'); the initial sound [m] suggests obscurity (*máng* 'blind', *mí* 'to be confused', *méng* 'obscure', *míng* 'dark', *mù* 'dusk'); an initial [f] sound sometimes suggests negation (*fēi* 'not', *fēi* 'poor', *fú* 'not', *fǎ* 'to lack', *fèi* 'to spend', *fèi* 'to stop', *fǒu* 'not'). Chinese also has animal onomatopes\*: *wāng wāng* 'bow-wow', *mīmī* 'meow', *mōumōu* 'moo' (Hu 2011: 90). Other Chinese onomatopes include *míng* 'the chirp of a bird', *hōngmíng* 'the roar of machinery', *hǒu* 'roar, howl', *sī* 'hoarse, whinny', *háo* 'howl, roar', *xiào* 'whistle, howl, roar', *tí* 'crow, caw' (Kholkina 2017).

Among the languages of India, Tamil has a rich iconic vocabulary. It has reduplicated onomatopes, such as *tik tik* 'heart beating with fear or sadness', *pak pak* 'bursting into loud laughter', *paT paT* 'palpitation of heart', *TaaN TaaN* 'ringing the bell', *kiich kiich* 'chirping', *gala gala* 'tinkling or rattling of anklets or bangles', *jilu jilu* 'glittering appearance', *taLa taLa* 'grown well (of plants, persons), plump or sleek (of person), fertile, lush (of plant)', *giDu giDu* 'tremor, as of an earthquake', *kaba kaba* 'burning sensation in abdomen from hunger or strong passion' (Emeneau and Hart 1993: 77-79). In addition, there are more than 600 ideophones produced by affixing the verb *eNal* 'to say', which functions as a quotative marker: *akkataaveNal* suggesting repose, non-interference, *acceNal* suggesting swiftness, *acaTTuppicaTTeNal* 'behaving foolishly, stupidly', *ammeNal* suggesting filling or overflowing, as of water, *aluvaluveNal* 'unceasing chatter', *avvaLavilavaNmakiLkaveNal* 'maxim of satisfying the opponent by accepting his earlier position with a view to refute his further arguments' (Chevallard 2004: 5).



See BAHNAR, CANTONESE IDEOPHONES, CHINESE CHARACTERS, HINDI IDEOPHONES, HMONG, JAPANESE, KAMMU, KHMER, KHUMI, KOREAN, MANCHU, NICOBARESE, PACOH, RENGAO, TAMIL, TEMIAR, THAI, TIBETAN, VIETNAMESE

### **Associative iconicity**

A. Fischer (1999a: 129) notes that in some cases speakers associate certain sounds with certain meanings (primary association) because they mentally associate the words in which they appear with others that also contain these sounds (secondary association). This is associative iconicity, in Fischer's terminology. The phonaestheme\* *fl-* 'emission of light' in words such as *flimmer*, *flicker*, *flame*, *flare* can be an example of this type of iconicity. This phonaestheme possesses its meaning because there exist many words with similar meanings, all containing *fl-*, but not necessarily because of the intrinsic quality of the *fl-* sound combination.

### **Asturian**

West Iberian Romance language spoken in Asturias (Spain) by approximately 600,000 people.

See *DICCIONARIO DE VOCES NATURALES*

### **Auditory iconicity**

The representation of non-speech sounds or noises by speech sounds (Fischer 1999a: 123): *toc-toc* represents knocking on a piece of wood, *miaow* is the characteristic noise a cat makes.

See ONOMATOPOEIA

### **Auslan**

See AUSTRALIAN SIGN LANGUAGE

### **Australian languages**

In a study on sound symbolism in Australian languages (Hainye, Bownen, and LaPalombara 2014) based on 120 languages, the association of meanings denoting 'smallness' or 'nearness' with front vowels or palatal consonants and the association of meanings denoting 'largeness' or 'distance' with back vowels or velar consonant was statistically assessed.

104 of the surveyed languages are members of the Pama-Nyungan family and the rest come from the Nyulnyulan, Worrوران, Bunuban, Gunwinyguan, Garrwan, and Maningrida families. “The results of this study demonstrate significant associations between meanings of ‘smallness’ and ‘nearness’ and front vowels and palatal consonants and a slightly weaker patterns linking ‘large’ and ‘distant’ meanings to back vowels and velar consonants” (Hainye, Bowern and La Palombara 2014: 8). The most consistent languages for sound symbolism in the sample were Ngarluma, Djabugay, Paakintyi, Martu Wangka, and Pintupi-Luritja. For example, in Djabugay there are examples, such as *pangkal* ‘big’ versus *pipuy* ‘small’; *wakarra* ‘wide’ versus *wiki* ‘narrow’; *kalkalay* ‘tall’ versus *wanti* ‘short’; and *kakay* ‘far’ versus *pirri* ‘near’ (Hainye, Bowern and La Palombara 2014: 11).

In his study of the Australian language Gooniyandi, McGregor (1996: 340) illustrates size/distance symbolism with the following examples: *thigi* ‘small’, *nyamani* ‘big’, *thigiyigi* ‘short’, *girrabi* ‘long’, *ngirndaji* ‘this’, *ngoorroo* ‘that’. McGregor (1996: 343-348) observes that verbs ending in -g convey causatives and inchoatives (*wangarrag* ‘get lost’, *gawoorrg* ‘fall dead’); activities (*jarrg* ‘jump’, *yarrig* ‘escape’); vocalisations and oral activity (*niyig* ‘swallow’, *goonthoorrg* ‘cough’); and sharp, bubbly sounds (*dawoorrag* ‘burp’, *boorrag* ‘bubble up’)

In addition, verbs ending in -j convey launching and movement in a usually horizontal trajectory (*birrij* ‘jump across’, *baj* ‘get up and go’), weak contact of surfaces (*daj* ‘wear’, *jinggirrij* ‘tickle’), breaking contact with a body (*dij* ‘snap’, *gaj* ‘cut, cop off’), following and tracking (*bandaj* ‘sneak up on’, *barraj* ‘track someone’) and durative bodily states and feelings (*boordaj* ‘stand up [penis]’, *woolowij* ‘have toothache’). In addition, -rr suggests rolling or changing direction (*boorr* ‘rub’, *loorr* ‘change direction’), (repeated) sharp actions (*jar* ‘stamp feet’, *jawoowoorr* ‘jump into water’, *mirrmirr* ‘shiver’), sliding actions (*dalyarr* ‘slip along’, *girarr* ‘crawl’), and multiplicity of actors (*balbirr* ‘return’ [many people], *door* ‘sit together’). Verbs ending in -l mimic processes of sharp effective action (*banggool* ‘snap, break’, *lool* ‘pluck up’), repetitious processes (*bayal* ‘swim’, *boorrool* ‘snore’), and continuous motion in a trajectory (*dal* ‘extend wind’, *dinggil* ‘sink to bottom of water’).

In Jaminjung (Schultze-Berndt 2001), as in Gooniyandi, an alveolar trill in medial or coda position suggests ‘multiplicity’ and/or ‘extension’: *dudurr* ‘(sit with) legs straight’, *warrb* ‘be/sit together’, *war* ‘scratch’, *burrurrug* ‘scatter’, *garb* ‘pick up, of multiple entities’, *yirrirrij* ‘slide’. In addition,

Schultze-Berndt (2001) points out that telic and punctual coverbs are monosyllabic and atelic dynamic coverbs tend to be polysyllabic: *bag* ‘break’, *barr* ‘hit against something, smash’, *bily* ‘burst, burst open’ vs. *thawaya* ‘eat’, *lilaj* ‘swim’, *mangan* ‘wave’. Besides, reduplication of coverbs serves to express extended duration, repetition, or intensity of events: *burl-burl* ‘emerge’, *jurl-jurl* ‘remove skin’, *wij-wij* ‘scraping’.

Ideophones\* are common all around Australia including the north coast of Western Australia (Nyangumata), northeast Arnhem Land (Gupapuyngu, Dhuwal, Ritharrngu), and, specifically, in the languages of the western Cape York Peninsula area: Wik-Mungkan, Wik-Ngathana, Kuuk-Thaayorre, and Olgol (Alpher 1994: 164). Many Australian languages have a *verb-particle* construction in which an uninflected particle carries the specific meaning of a lexical verb, while the grammatical information is conveyed by a purely inflectional verbal form. For example, in Djaru (Pama-Nyungan) the particle precedes a verbal form that can be fully inflected (this is indicated by a hyphen): with the verb *bung-* ‘hit’, *djunggudj bung-* ‘to walk away’, *dulg bung-* ‘to get up’; with the verb *gang-* ‘carry’, *badj gang-* ‘to fly’, *gidj gang-* ‘stop (of rain, wind) (Alpher 1994: 165-166). Dhuwal and Mangarayi have similar constructions.

Yir-Yoront, a language of the Cape York Peninsula, has a significant number of ideophones. These ideophones appear in sentences with a single verb or a set of verbs. For example *kət* ‘of spearing’ occurs with *kal* ‘to spear’ and *chan* (of hanging) occurs with *mar* ‘to hang (intrans.)’ and with *wenhth* and *marlon* ‘to hang (trans.)’ (Alpher 1994: 167).

Here are some of the Yir-Yoront ideophones gathered by Alpher (1994: 172-175): *chichichi* (of a dog running), *chikchikchik* (of a sex act), *chirr* (of the separation of the shaft and butt of a spear or harpoon), *choq* (of a bird’s sudden take-off), *chul* (of liquid gushing forth; of going downwards to water; of crossing a creek), *churr* (of spearing a man), *karrkerrkerr* (of spearing multiple times at an object in water), *karrq* (of scraping), *law* (of breaking off a leaf from a twig), *parr* (of a quick cutting motion), *pith* (of spitting), *polpolpol* (of a fish’s tail flopping on the ground, of waves lapping), *poth* ‘of smoke puffing up from a fire’, *purr* (of putting something down with a flopping motion, of making camp), *pum* ‘of covering over or burying’, *puut* (of farting), *puy* (of setting off and going away, of turning aside from something finished), *tala tala* (of beating someone up), *titititi* (of a dog shaking water off), *toll* (of a rope breaking), *trrra* (of gathering together things that clatter), *trrt* (of entering, of waking up, of running), *tu tu tu* (of repeated blows, of kicking while swimming, of gunshots), *tuk* (of

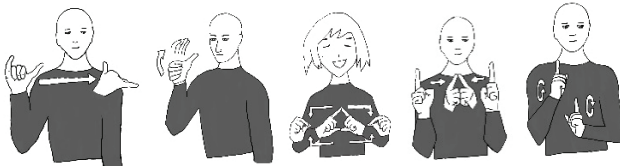
spearing or hitting with a thrown object, with emphasis on knocking down the target, of smashing something up), *wirr* (of pulling or dragging something), *wurr* (of emerging).

See DJAGUBAY, DJARU, GOONIYANDI, YIR-YORONT IDEOPHONES

## Australian sign language (Auslan)

Auslan is the language of the Australian deaf community and has about 10,000 signers. It is related to British Sign Language\*.

As in other sign languages, many signs have an iconic nature. For example, the following signs schematically depict the objects they refer to:



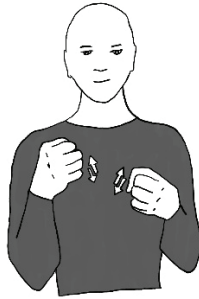
Aeroplane, drink, ticket, meet, meeting

### FIGURE A2

(Based on Johnston and Schembri 2007: 175)

Following Johnston and Schembri (2007: 8.5.2), four degrees of iconicity in sign languages can be distinguished: transparent, translucent, obscure, and opaque.

The meaning of a transparent sign is more or less obvious to any observer who comes from the same social and cultural background as the community of Auslan signers. Only about five percent of the Auslan lexicon can be considered iconically transparent. Here is an example:

**FIGURE A3**

(Based on Johnston and Schembri 2007: 159)

Car

The sign for *car* depicts a person turning a steering wheel and can be easily understood by many people from all parts of the world.

The meaning of a translucent sign may not be understood by a naive observer, but once told its meaning, the iconic relationship between the shape of the sign and the referent becomes clear. The following examples taken from Johnston and Schembri (2007: 238), are provided with an additional explanation that clarifies the iconic motivation of the corresponding sign:

**FIGURE A4**

(Based on Johnston and Schembri 2007: 238)

Flower

[Holding and sniffing a flower]

**FIGURE A5**

(Based on Johnston and Schembri 2007: 238)

Born

[The head of a newborn emerging]

**FIGURE A6**

(Based on Johnston and Schembri 2007: 238)

Science

[Pouring from test-tubes]

Obscure signs seem to be visually motivated, but the relationship between form and meaning is not clear. On many occasions *folk-etymologies* are proposed to account for them. These are *a posteriori* explanations that normally are not genuine, since they are purposively invented to explain a supposedly original iconicity (Johnston and Schembri 2007: 239).

Finally, opaque signs have no apparent iconic nature. The sign for ‘why’ is an example of an opaque sign (Johnston and Schembri 2007: 85).

## **Autoiconism**

A concept introduced by L. Brinton (1988) and defined as follows:

“For rhetorical schemes, though, both the *signans* and the *signatum* are linguistic. We have here an example of autoiconism [...] or automorphism, in which there is reciprocal diagrammatization between one domain or one dimension and another. The automorphic relationship holds here between styles or registers of language, formal and informal literary/poetic and nonliterary/nonpoetic, or between modes of language, the written and the spoken—a ‘horizontal’ relationship” (Brinton 1988: 166).

The principle of structural repetition operating in parallel is evident in alliteration\*, palimphony\* and reduplication\*. These processes can be seen as examples of autoiconism (Müller 2001: 309).

## **Automorphism**

See AUTOICONISM

## B

### ***Babble***

This imitative word means 'to talk rapidly and continuously in a foolish, excited, or incomprehensible way'. The underlying phonomimetic root seems to be {bilabial plosive, /a/, lateral/rhotic}. There are several onomatopoes with a similar syllabic configuration and meaning such as: *balb*, *blab*, *blep*, *blabr* (García de Diego 1968: 166-167). From *balb* comes Sanskrit *balbala-karoti* 'to stammer'; Latin *balbutire* 'to stutter'; Lithuanian *plepeti* 'to chatter'. The onomatopoe *blab* suggests confused speech, as in English *to blab*, *blabbing*, *blabber*, *blah* 'nonsense', *blah blah blah* 'etcetera'; Scottish Gaelic *blabaran* 'stammerer'; Spanish *balbucear* 'to stammer, to babble', *blablá*, *blablablá* 'idle talk'; with the rhotic variant Serbian *brbljati* 'to chatter'; Czech *brebentit* 'to chatter'. In Ancient Greek βάρβαρος 'non-Greek-speaking people, foreign', was applied especially to the Medes and Persians; *Berber* is an Arabic variant of the Greek word. Arabic *barbar* 'to babble noisily' and *barbari* 'Berber, barbaric, uncivilized' are related to this root.

In comics, *blab la* and *blah blah* are used to convey chattering: R. Goscinny and J. Tabary *Iznogoud* (1964), J. Hart *B. C.* (1965), Bill Ziegler, Cartoon published in *The New Yorker* (23-06-1981). [Gasca and Gubern 2011: 53]

See ECHOIC PALINDROMOIDS

### **Bahnar**

A Bahnaric (Austroasiatic) language spoken in Vietnam by 160,000 people.

See ASIAN LANGUAGES, NURSERY WORDS, SIZE-SOUND SYMBOLISM

### **Baka Ideophones**

Baka is an Adamawa-Ubangi language spoken in southern Cameroon by approximately 70,000 people. The following data are taken from Killian-Hatz 2001.



Ideophones in Baka have sentence-like character and denote a state or an action. They are not marked for person, tense and mood, like verbs, and they are not marked for case, gender and number, like nouns. For example: *wòàwòàwòàwòà* ‘the hunters are discussing’, *pòòò* ‘the chimpanzee interrupts eating’, *kung* ‘a spear strikes the chimpanzee’, *wóòò* ‘it falls down’, *pao* ‘he breaks a branch’, *tung* ‘falling hard he arrives on the ground’, *ndiandià* ‘staggering of a tortoise or a drunkard’. Ideophones can be reduplicated, as in *lang lang lang* ‘beat a nut or hard fruit with a machete’.

Ideophones are never negated. They can express states of mind, such as *tèè* ‘completely calm’ and mimic visible gestures, such as *mosimòsimosimòsimosi* ‘pulling a grimace of derisive laughter’.

In addition, ideophones can be placed in any major grammatical category. They can appear in verbal positions, nominal positions and complement phrase positions. In the sentence ‘*é à ’o lo, boom à tóló* ‘he climbs a tree but *boom* (i.e. he falls) to the ground’, the ideophone functions as a verb. In the sentence *pew ó ngo jé juuuu*: “*Ah yékè á là?*” ‘The moment when they hear *juuu* (i.e. the bees are buzzing), [they ask:] “Ah, what’s that”’, the ideophone occupies the position of a noun.

## Balinese

Malayo-Polynesian language spoken in Bali (Indonesia) by approximately 3.3 million people.

See NURSERY WORDS

## Balti

Tibetan language spoken in Pakistan and India by approximately 290,000 people.

See BIRD NAMES

## Balto-Slavic languages

Baltic languages are very rich in iconic words. In Latvian there are more than 250 verbal and nominal roots mimicking sounds. Examples are: *blarkšķēt* ‘to chatter’, *brakšķēt* ‘to roar, to thunder’, *būkšķēt* ‘to resound’, *čaukstēt* ‘to rustle, to whisper’, *čiepstēt* ‘to chirp’, *čūks* ‘to whistle, to hiss’, *gārkstēt* ‘to pant, to snore’, *klakšķēt* ‘to creak’, *klukstēt* ‘to cluck’, *knikšķēt* ‘to crack’, *krakšķis* ‘snap’, *krekstēt* ‘to cough’, *kunkstēt* ‘to whine’, *kurkstēt*

‘to croak’, *kiukstēt* ‘to bark’, *pakšķēt* ‘to drip’, *pēkšķēt* ‘to quack’, *plunkšķēt* ‘to splash, to squelch’, *sprakšķēt* ‘to crackle’, *strinkšķēt* ‘to tinkle’, *svepstēt* ‘to whisper’, *šņukstēt* ‘to sob’, *tirkšķēt* ‘to produce a muffled sound’, *urkšķēt* ‘to grunt, to grumble’ (Urdze 2010).

Lithuanian has onomatopoeic particles such as *trūkt* ‘a small pull’, *trūkt* ‘a strong pull’, *trūkt* ‘a very strong pull’, *brākšt~brākš* ‘crack’, *taukšt~taukš* ‘knock, tap’ (Danylenko 2015: 527, 529). As with Latvian, in Lithuanian there are also many onomatopoeic verbs: *treškėti* ‘to crackle’ *brakšėti/brakšėti* ‘to crackle’, *bárškinti* ‘to knock’, *stukėnti* ‘to knock’, *čėpsėnti* ‘to smack one’s lips’, *bruksėnti* ‘to crackle’, *mirkčioti* ‘to blink’, *vepnóti* ‘to chatter’, *bak(s)nóti* ‘to poke’, *pakšnóti* ‘to drip’, *kiáksyti* ‘to yap’, *bákšyti* ‘to urge’ (Danylenko 2015: 535)

The following examples are from Slavic languages. In Russian there are many imitative words mimicking different types of sound, including natural sounds: *grom* ‘thunder’, *pliesk* ‘splash’, *khliupat* ‘to squelch’, *shelest* ‘rustle, rustling’, *zhurzhaniye* ‘purling, babbling, murmur’; mechanical sounds: *grokhot* ‘crash, din’, *lyazg* ‘clank, clang’, *skrezhet* ‘grating, scraping’, *skrip* ‘squeak, creak, crunch (snow)’, *stuk* ‘knock’, *tresk* ‘crack, crackle, crackling’, *khlopók* ‘clap, bang’, *khrust* ‘crunch, crunching sound’, *shchelchok* ‘flick (fingers), click (computer mouse)’; sounds made by humans and animals: *bleyat* ‘to bleat’, *vizg* ‘scream, squeal, yelp, screech’, *voi* ‘howling, wailing’, *vopl* ‘wailing, howling’, *gógot* ‘cackle, loud laughter’, *kárvat* ‘to caw, croak’, *krik* ‘shout’, *kriákat* ‘to quack, to grunt’, *láyat* ‘to bark’, *murlýkat* ‘to purr, to hum’, *pisk* ‘squeak, cheep’, *pykhtiet* ‘to puff, pant’, *ryov* ‘roar, bellow, howl’, *svist* ‘whistle’, *chirikat* ‘to chirp’, *chmokat* ‘to smack one’s lips, to squelch’, *shyopot* ‘whisper’, *shipeniye* ‘hissing, sizzling, sputtering’, *zhuzhzhat* ‘to hum, buzz, whizz’, *shum* ‘noise’.

Serbian has imitative verbs, such as *blejati* ‘to bleat’, *cvrkutati* ‘to twitter, warble’, *cvrčati* ‘to chirp, to sizzle’, *frktati* ‘to snort’, *gakati* ‘quack’, *groktati* ‘to grunt’, *brujati* ‘to hum’, *gukati* ‘to coo’, *klicati* ‘to screech’, *kvakati* ‘to quack’, *kokodakati* ‘cackle’, *kukati* ‘to cuckoo’, *kreketati* ‘croak’, *kljucati* ‘to peck’, *lajati* ‘to bark’, *mjaukati* ‘to miaow’, *presti* ‘purr’, *mukati* ‘to moo’, *cijukati* ‘to squeak’, *mumlati* ‘to roar’, *rikati* ‘to roar’, *rzati* ‘to neigh’, *siktati* ‘to hiss’, *cviljeti* ‘to whine’, *urlati* ‘to howl, to roar’, *hukati* ‘to hoot’, *zavijati* ‘to howl, whine’, *zujati* ‘to buzz, hum’ (Kor Chahine, I. and T. Milosavljević 2017: 82-83).

West Slavic languages have similar iconic words. Polish *grom* ‘thunder’, *chlupać* ‘to splash’, *szeleścić* ‘to whisper’, *rżeć* ‘to neigh’, *chrapać* ‘to snore’, *trzaskać*, *trzeszczeć* ‘to crackle’, *zgrzytać* ‘to squeak, to grind (teeth)’, *chrząkać* ‘to grunt’, *wyć* ‘to howl’, *piszczeć* ‘to chirp’, *szczekać* ‘to bark’. Czech *hrom* ‘thunder’, *piskat* ‘to whistle’, *chrochtat* ‘to grunt’, *švitořit* ‘to chirp’, *chrápat* ‘to snore’, *syčet* ‘to hiss’, *prskat* ‘to splutter, spit, sizzle, crackle, hiss’, *bzučet* ‘to buzz, hum, whirl’, *bučet* ‘to moo’, *mňoukat* ‘to miaow’, *hřmět* ‘to thunder’.

See also *ÍSTIKTUKAI, SCHALLNACHAHMUNGEN UND SCHALLVERBA IN LITAUISCHEN*

## Bambara

Mande language of Mali spoken by approximately 10 million speakers.

See *BUTTERFLY, NURSERY WORDS, REDUPLICATION, LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## Bamu

Papuan language of New Guinea spoken along the Bamu River by approximately 6,000 people.

See *CACKLE*

## Bang

English iconic word mimicking a loud, sudden, explosive noise. It is frequently used in comics to mimic the sound of a gunshot: Elzie Crystel Segar *Popeye* (1936), F. Gottfredson *Mickey Mouse* (1937), B. Jacovitti *Cocco Bill* (1957), Al Capp *Li'l Abner* (1960), Chick Young, *Blondie* (1965), Quino *Mafalda* (1966), G. Crepax *Bianca* (1972), J. Bernet and E. Sánchez Abulí *Torpedo* (1994); also a car backfiring: Bud Fisher *Mutt and Jeff* (1927); a knock at the door: P. D. Robinson *Etta Kett* (1935); the sound of a firecracker: C. Anderson *Henry* (1932) (Gasca and Gubern 2008: 40-44).

## Bangala

Bantu language spoken in the Democratic Republic of the Congo (Haut-Uele District) by approximately 3.5 million people.

See *BUTTERFLY*

## Bantu Ideophones

In an overview of Bantu ideophones, W. J. Samarin (1971) includes the following data and analyses.

Bantu ideophones have some phonological peculiarities; they may have special phonemes that do not occur in the language concerned. These include: some kind of [h] (Ganda, Mongo); infra-flapped labiodental in which the lower lip is briskly flapped out from behind the upper teeth (Shona); syllabic trills (Southern Sotho, Shona); pre-nasalized aspirated *k* [ŋkh] (Southern Sotho); non-syllabic nasals *mp* and *ng* (Southern Sotho); ejective consonants /p'/, /t'/ (Kongo); affricates /bv/, /ts/, /tsy/ (Kongo); or nasalized alveolar clicks (Kongo).

Concerning vowels, there is phonemic lengthening, as in Lamba and Shona *bha* 'be finished' and *bhaa* 'bright'; nasalization (Cewa, Kongo, Mwera, Lamba); and devocalization as in Southern Sotho *phū* 'of evil smell'.

Zulu illustrates the different types of syllabic shapes found in ideophones. Monosyllabic: *be*, *bha*, *bhaa*, *bhee*, *bhii*; disyllabic: *babu*, *baka*, *baku*, *bande*; polysyllabic: *bekebe*, *bendlelele*, *bhabhabha*; first syllable reduplication: *bhabhalala*, *dedelele*, *fafalazi*, *fofololo*, *gogololo*; triplication: *bhabhabha*, *bhebhebhe*, *bhobhobhoo*, *bhubhubhuu*; identical first and last syllables: *bekebe*, *mokomo*; last syllable reduplication: *bukululu*, *bhanana*, *cababa*, *conono*; syllable reduplication: *bhabha*, *bubu*, *fufu*, *gaga*, *gogo*; consonantal alternation: *bhaba*, *bhibi*, *mbaba*.

There are also prosodic peculiarities involving tone or stress. For example, in Tswana there are abnormally high or low tones and devocalization of normally voiced sounds. There can also be fewer tone patterns than in nouns and verbs, as well as sound tone patterns that are only found in ideophones.

As we have seen, reduplication and triplication are frequent.

The existence of deverbal ideophones is characteristic of Bantu languages. It is frequently found in Bemba, Bulu, Cewa, Lamba, Luba, Luvale, Mongo, Mwera, Ngombe, Ntoma, Shona, Tetela, Tsonga, Tswana, Venda, and Zulu. In Ngombe *yengé akekumaká keku keku* 'the child stutters', the ideophone *keku keku* is derived from the verb *akekumaká* (-*keku*).

In addition, nouns and verbs can also be derived from ideophones. In some Bantu languages there are de-ideophonic verbal suffixes. For example: *-ka* 'causative, intransitive' (Lamba, Mwera), stative (Xhosa); *-anjila* 'manner

of walking' (Lamba); *-za* 'factitive' (Xhosa); *-tsa* 'causative' (Southern Sotho). There are also de-ideophonic noun suffixes: *gulu* > *mgulo* 'jump, leap' (Mwera); *kolo* 'of being sunken' > *umukolo* 'valley' (Lamba); *lapu* 'of snatching' > *indapulapu* 'teeth pickings' (Lamba). Shona and Mongo also have de-ideophonic nouns.

Ideophones can be modified to convey certain semantic nuances. For example, in Shona *mbú* 'white' > *mbúre* 'very white', *mbúretete* 'extremely white'; *tónho* 'quite' > *tónhono* 'very (quite)'; *tsamú* 'a handful' > *dzamú* 'a large handful'.

Bantu ideophones are usually preceded by a verb. The typical verb introducing an ideophone means 'to say, express, manifest': *-ti* or *-thi* in Chichewa, Mwera, Yao, Zulu-Xhosa; *-tou/-ri* in Venda; *-re* in Sotho and Tswana; *-ku* in Tsonga; *-ngo* in Rwanda; *-linga* in Luvale; *-ndi* in Shona; *be* in Ganda; and *ná* in Duala and Kongo.

As an example, consider the following Luvale sentence: *vifwoyo vili naku-linga ngúndúngu-ngúndúngu* 'the tins are clanking, clank clank'.

From a semantic point of view, Bantu ideophones depict actions or ideas, sense impressions or perceptions, and emotions and feelings.

Several proto-Bantu ideophones have been proposed by Fivaz (1963) in his study of Zulu ideophones: *\*-vata* 'be flat' > *batha* 'waddling'; *\*-venge* 'splendour' > *benge* 'glittering', *\*-vuvu* > *bubu* 'moaning, sighing, groaning'; *\*-vuta* 'cower down' > *buthalala* 'crouching, squatting, ducking down'; *\*-pí* 'darkness' > *fí* 'screwing up the eyes'; *\*-pína* 'contract' > *fínye* 'contracting, flashing of light'; *\*-koka* 'prick' > *hloko* 'jabbing, poking'; *\*-pua* 'dry up' > *hlwa* 'drying up'; *\*-kapa* 'spill' > *khapha* 'splashing'; *\*-laka* 'be angry' > *laka* 'anger'; *\*-mina* 'bend' > *mene* 'being fickle'; *\*-mina* 'squeeze' > *minyí* 'swallowing up'; *\*-nama* 'adhere' > *nama* 'adhering closely'; *\*-nyala* 'be ashamed' > *nyala* 'guilty look'; *\*-penda* 'bend sideways' > *phendu* 'turning, revolving'; *\*-penu* 'bending over' > *phenu* 'falling over'; *\*-popú* 'blind' > *phumpu* 'groping'; *\*-puta* 'hurry' > *phutha* 'hastening'; *\*-tala* 'look at' > *thala* 'looking about'; *\*-tamba* 'stretch out' > *thambalala* 'sprawling'; *\*-teka* 'be shaky' > *theke* 'quivering lump'; *\*-tela* 'slide, glide' > *thele* 'smoothness'.

See AFRICAN LANGUAGES, CILUBÀ, EBWELA, SETSWANA, SHONA, SOTHO, TETELA, TSONGA, ZULU

## Bare

Nearly extinct Arawakan language of South America (southwestern Venezuela and northwestern Brazil).

See *ELEMENTARE WORTSCHÖPFUNG*

## Basic Vocabulary

The American linguist Morris Swadesh (1909-1967) proposed a list of 220 meanings that are expressed by different words in all the languages of the world (Swadesh 1952). This Basic Vocabulary List can be used to make cross-language generalizations in the fields of historical linguistics, lexicostatistics, linguistic typology, mass lexical comparison, psycholinguistics, and sound-symbolic research. Swadesh reduced the original list to 100 elements in the 1960s (Swadesh 1972: 283)

Wichmann, Holman and C. H. Brown (2010) examined a forty-word list from the Basic Vocabulary List in the 7,000 languages included in the Automated Similarity Judgment Program (ASJP) database (<http://asjp.clld.org/>), in order to discover significant sound-meaning correlations. The forty meanings considered are:

BLOOD, BONE, BREAST, COME, DIE, DOG, DRINK, EAR, EYE, FIRE, FISH, FULL, HAND, HEAR, HORN, I, KNEE, LEAF, LIVER, LOUSE, MOUNTAIN, NAME, NEW, NIGHT, NOSE, ONE, PATH, PERSON, SEE, SKIN, STAR, STONE, SUN, TONGUE, TOOTH, TREE, TWO, WATER, WE, YOU (SG).

Following a statistical analysis, the authors propose the following sound-meaning pairings:

BREAST *muma*; DRINK *iaaa*; I *naa*; STAR *karaaa*; KNEE *kokaau*; NIGHT *kanaa*; YOU *nin*; PATH *taaa*; NOSE *nani*; SEE *kana*; NAME *nani*; MOUNTAIN *kaaaa*; WE *nina*; BONE *kaka*; SKIN *kaaak*; FISH *aaia*; LEAF *aaaa*; LIVER *kanaa*; TONGUE *aanaa*; EYE *naki*; HORN *kaaaa*; EAR *kaaaa*; LOUSE *kami*; TOOTH *kaia*; COME *haaa*; HEAR *naaaa*; DOG *kaaaa*; BLOOD *aaaa*; STONE *kaaa*; DIE *kaaa*; FIRE *kaaa*; NEW *kamaa*; PERSON *nanaa*; TWO *aaaaa*; FULL *kaiaa*; ONE *tanaa*; HAND *maka*; TREE *aaaa*; WATER *kaa*; SUN *kana*.

These words have been constructed in order to account for certain statistical tendencies. The length and phonetic configuration of each word reflect the typical length and phonetics of words of corresponding meaning in more than one half of the languages of the ASJP database.

In the case of *muma* (BREAST), we find two bilabial consonants mimicking suckling. The contrast *nin* (YOU)/*naa* (I) points to a deictic contrast mimicked by the *i/a* alternation; the forward movement of the tip of the tongue can be interpreted as iconically conveying the act of pointing towards the addressee. Interestingly, WE (*nina*) is a combination of YOU and I. The words for KNEE (*kokaau*) and BONE (*kaka*) contain the sound *k*, which can suggest something hard and *o/a*, which can suggest something round or cylindrical. NOSE (*nani*) contains two nasal consonants. In addition, *nani* (NAME) has a clear phonetic relationship with I (*naa*) and PERSON (*nanaa*), so an internal or diagrammatical iconicity could be at play here.

It is interesting to note some partial coincidences between these constructed words and some of the global etymologies reconstructed by Ruhlen and Bengtson (1994): *bu(n)ka* and *kokaau* for KNEE; *chun(g)a* and *nani* for NOSE; *kati* and *kaka* for BONE; *kaaaa* and *kuan* for DOG; *maliq'a* and *muma* for BREAST; *aq'wa* and *kaa* for WATER; *kama* 'hold in the hand' and *maka* 'hand'.

See GLOBAL ETYMOLOGIES

## Basque

Basque is a language spoken in southern France and northern Spain by around one million people. It is genetically unrelated to other European languages or to any other known living language (see Trask 1997: 358-429). It has many iconically motivated words, expressions and idioms.

Basque has a large number of onomatopoeic words, some of which show phonetic peculiarities: *dzast!* 'bang!', *krak!* 'crack!', *kosk!* 'crunch!', *taup* 'sound of a heartbeat', *murmur* 'whisper', *zurrunga* (the sound of snoring or purring), *plast*, *zirrist* 'splash', *miau* 'meow', *au-au* 'bow-wow', *me* 'baa', *mu* 'moo', *pio*, *txio* 'cheep', *din-dan* 'ding-dong', *zart* 'bang, boom, snap', *zanpa* 'crash, bang', *zapar* 'the sound of heavy rain', *txin-txin* 'clinking', *zurrut* 'gulp', *pil-pil* 'the sound of boiling', *burrumba* 'clatter', *gur-gur* 'growling (of the stomach)', *txirri-txirri* 'chirping (of crickets)' (Trask 1997: 257).

The palatalization of consonants in Basque can have a sound-symbolic use. It is employed to convey diminution or affection. In the following pairs, the first word is the basic form and the second is its corresponding diminutive: *sagu/xagu* 'mouse', *zuzen/xuxen* 'straight, correct', *zezen/xexen* 'bull', *zahar/xahar* 'old', *zozo/xoxo* 'blackbird', *errez/errex* 'easy', *tanta/tantta*

‘drop’, *kutun/kuttun* ‘dear, darling’, *adio/addio* ‘goodbye’, *eder/edder* ‘beautiful’. In some cases, the palatalized form is the basic one and the non-palatalized form is used to express augmentation: *txakur* ‘dog’ and *zakur* ‘large dog’; *txerri* ‘pig’ and *zerri* ‘pig (used as an insult)’ (Hualde and Ortiz de Urbina 2003: 39).

In some dialects all the initial consonants of a sentence are palatalized in speech directed at children, as in: *zazi ta erraiozu tortzeko/ xaxi tta erraioxu ttortxeko* ‘go and tell him/her to come’, *otz iten du/ otx itteñ ddu* ‘it is cold’, *tortzen bazara/ ttortxen baxara* ‘if you come’.

Reduplication is extensively used in Basque to express intensification or greater precision: *on ona* ‘very good’, *zahar-zaharra* ‘very old, ancient’, *bero-bero* ‘very hot’, *bete-betea* ‘(over)full’, *gorri-gorri* ‘fiery red’, *eder-ederra* ‘very beautiful’, *gozo-gozoa* ‘most blissful’, *guzti-guztia* ‘absolutely all’, *bihotz-bihotzeko* ‘most cordial’, *bene-benetako* ‘most sincere’, *dagoen-dagoenean* ‘exactly as it is’, *alfer-alferrik* ‘completely in vain’, *bizi-bizirik* ‘alive and kicking’, *poz-pozik* ‘overjoyed’, *zut-zutik* ‘straight as an arrow’, *asko-asko* ‘a lot, very much’, *gutxi-gutxi* ‘very little’, *segur-segur* ‘absolutely sure’, *ia-ia* ‘just barely’, *bene-benetan* ‘really and truly’, *aurre-aurrean* ‘right in front of’, *pare-parean* ‘right opposite’, *erdi-erdian* ‘exactly in the middle’, *azken-azkenean* ‘at the very last’, *gau-gauean* ‘in the dead of night’, *argi-argitan* ‘in full light’, *su-sutan* ‘in the blazing fire’, *goiz-goizean* ‘early in the morning’ (de Rijk 2008: 877-881).

Basque is also extremely rich in ideophones, which are usually reduplicative in nature, as in *dzarra-dzarra* ‘scribble, doodle’, *gurka-gurka* ‘in gulps’, *nir-nir* ‘twinkle’, *trinkulin-trinkulin* ‘staggering, tottering, reeling’; triplication is also attested: *draka-draka-draka* ‘horse galloping’, *fil-fil-fil* ‘fall down in a circle and slowly’, *ter-ter-ter* ‘in a straight line’, *za-za-za* ‘speak fast’ (Ibarretxe-Antuñano 2017: 201).

Partial reduplication with vowel alternation is also common in Basque ideophones: *klik-klak* ‘swallow’, *binbili-bonbolo* ‘gently; ding-dong, peal, ringing; rocking’, *pilpil-pulpul* ‘palpitation’ (Ibarretxe-Antuñano 2017: 201).

According to Ibarretxe-Antuñano (2017), Basque ideophones can be semantically classified as follows:



- Actions and events: a) motion: *tzainku-tzainku* ‘limp’, *antxintxi* *egin* ‘run’; b) communication: *xuxu-muxu* ‘whispering’, *zitzipatza* ‘verbosity’; c) light: *nir-nir* *egin* ‘shine’, *zirrinta* ‘ray, beam’; d) sound: *brinbraun* ‘clang’, *dilindolon* ‘ding-dong’, *ziris-zarraz* ‘sound of sawing’; e) ingestion: *lafa-lafa* ‘gnawing’, *zurga-zurga* ‘drink in gulps’; f) destruction: *birrin-birrin* ‘devastate; tear’, *sisti-sasta* ‘sting’; g) hitting: *blisti-blasta* ‘slapping’, *furrust-farrast* ‘roar’, *panpa-panpa* ‘hit continuously’; h) boiling: *gal-gal* ‘boil’, *txil-txil* ‘soft boiling’; i) emotions: *irri* *egin* ‘laugh’, *intziri-mintziri* ‘sob’; j) bodily functions: *pilpil-pulpul* ‘palpitate’, *pirri-pirri* ‘diarrhoea’; k) miscellany: *bil-bil* *egin* ‘wrap tightly’, *sorki-morki* ‘sew clumsily’, *firristi-farrasta* ‘work carelessly’.
- Animals: a) insects: *burrin burrun* ‘bumblebee’; b) crustaceans: *karramarro* ‘crab’; c) birds: *bili-bili* ‘duck’; d) amphibians: *klunklun* ‘toad’; e) fish: *perpelete* ‘gilthead seabream’; f) others: *igiri-migiri* ‘otter’.
- Plants: *txantxar* ‘henbane’, *ziza* ‘mushroom’.
- Weather: *xirimiri*, *zirzira* ‘drizzle’, *xixta-mixta* ‘lighting’.
- Musical instruments: *dunbala* ‘drum’, *txintxirri* ‘rattle’.
- Characteristics: a) physical: *bonbili* ‘fat’, *farras* ‘slovenly’; b) psychological: *kokolo-mokolo* ‘idiot’, *sinkulin-minkulin* ‘wimpy’.
- Gadgets: *garranga* ‘hook, bait’, *firinda* ‘pulley’.
- Things: a) general: *kiribil* ‘spiral’; b) low value: *tunt* ‘not a thing’, *tzirtzil* ‘unimportant thing’.
- Child language: *txitxi* ‘meat’, *mau-mau* ‘eat’, *ttotto* ‘dog’.
- Quantity: *barrasta-barrasta* ‘profusely’, *dalan-dalan* ‘full’.
- Nature: *brenk* ‘precipitous mountain’.
- Sexual terms: *txitxil* ‘penis’.
- Other: *kinkirrinkon* ‘champagne’.

Ideophones in Basque, as in other languages, have a clear expressive or dramaturgic function, as shown in the following example: *upela oso-osorik atzaparretan artu ta zanga-zanga* ‘he grabbed (*artu*) the barrel (*upela*) with his paws (*atzaparretan*) and (*ta*) *zanga-zanga* until it was empty’. In this sentence, we see a reduplicative *oso-osorik* (‘full-full-partitive’) and the ideophone *zanga zanga* depicting the act of drinking in a very expressive and vivid way (Ibarretxe-Antuñano 2017: 204).

*See* ABLAUT REDUPLICATION, BIRD NAMES, BUTTERFLY, CACKLE, CRACK, CROAK, GRUNT, IDEOPHONE, NURSERY WORDS, ONOMATOPOEIC EXPRESSION, POLYSYNTHESIS PARAMETER, PUFF, REDUPLICATION, SOULETIN BASQUE IDEOPHONES

**Bauro**

Malayo-Polynesian language of the Solomon Islands spoken by approximately 5,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*

**Bedauye (Beja)**

Cushitic (Afro-Asiatic) language spoken in Eritrea by approximately 1.2 million people.

See *BUTTERFLY*

**Bengali**

Indo-Aryan language spoken in Bangladesh and India by 300 million people.

See NURSERY WORDS, SIZE-SOUND SYMBOLISM

**Berbice Dutch**

An extinct Dutch-based creole of Guyana.

See CREOLES

***Bildwort***

German word meaning ‘picture-word’. W. Oehl (1933b: 3) defines it as an onomatopoeic word mimicking a visual impression. As an example, Oehl mentions some denominations of the butterfly in the languages of the world, such as French *papillon* or Italian *farfalle* ‘butterfly’ (see Oehl 1922). Oehl wrote an entire monograph on this type of iconic word (Oehl 1933b).

See *BUTTERFLY, SCHALLWORT*

**Biloxi**

Extinct Siouan language formerly spoken in Mississippi, Louisiana (US).

See *ELEMENTARE WORTSCHÖPFUNG*

## Bini

Bini (also called Edo) is a Volta-Niger language spoken in Edo state (Nigeria) by approximately one million people.

Ideophones in Bini cover the following semantic domains (Wescott 1977: 204): visual: *wéré* ‘narrow’, *gièrè* ‘small’, *gélété* ‘high’, *kákáká* ‘dark’, *bigóbìgòbigó* ‘crooked’; kinaesthetic: *gòlògòlò* ‘swaying’, *rhúrhùrhú* ‘staggering’; auditory: *wèwèwè* ‘whispering’, *góró* ‘loud’, *guàzà* ‘crash’, *hùhùhù* ‘muttering’; tactile: *xúaráxúará* ‘rough’, *kinókinòkinó* ‘woven’; attitudinal: *mità* ‘listless’.

As seen in the above examples, vowel repetition is common, as in *gólótó* ‘way up high’ and *kpùkpùkpù* ‘cowering’. In general, total repetition is frequent, as can be seen in *lele* ‘to follow’, *sìesìesìe* ‘so begins the tale’, *títítítí* ‘sounding like the wind in the tress’, *fìefìefìefìefìe* ‘squeak-squeak (as of a rat)’.

Wescott (1977: 202-203) observed certain phonological peculiarities in Bini ideophones: they can violate phonotactic patterns, such as *gbr* ‘grr!’; they can have abnormal vowel length, as with *kpū* ‘plop!’ (with a vowel of only half normal length); they can represent the sounds of a foreign language, as in *jòjòjò* ‘jingle-jangle’ (with a Yoruba affricate); and they can use children’s speech sounds, as in *bàbá* ‘daadaa’.

In addition, Wescott (1977: 202-203) notices a sort of sound symbolism: non-apical phonemes, particularly labial and velar consonants, are used expressively in derogatory terms: *kpa* ‘to vomit’, *kpòkpò* ‘bug-eyed’, *àkpà* ‘fool’, *òkpò* ‘hemorrhoids’, *òkpá* ‘nose-bleed’, *ùkpòkpò* ‘trouble’.

Bini has tonal icons (Wescott 1973). The contrasts *tall/short*, *thin/thick*, *tight/lose*, *bright/dull*, *open/closed* are suggested by the contrast uniform high tone/uniform low tone: *hìgbóó* ‘tall and fat’, *bètèè* ‘short and fat’, *kpèkùrlù* ‘short’, *gógóógó* ‘very high’, *gúlùgúlù* ‘deep and narrow’, *pàpààpà* ‘flat and smooth’, *sìgósìgó* ‘tall and thin’, *gbànkàngbànkàn* ‘big and thick’, *kánkàánkán* ‘tight’, *pànpàànpàn* ‘slack’, *kákááká* ‘hard’, *lògòlògò* ‘loose jointed’, *lúkùlúkù* ‘strong’, *guàzàguàzà* ‘billowy’, *gòghògòghó* ‘high-pitched’, *muèn* ‘faint, dull’, *rhánrháànrhán* ‘loud’, *gbóó* ‘wide open’, *kùkùùkù* ‘closed’. Sometimes minimal pairs, such as *bétéé* ‘big and fat’/*bètèè* ‘short and fat’, *gidìgbíí* ‘tall’/*gidìgbìí* ‘husky’, *léléléé* ‘big (of a corpse)’/*lèlèlèè* ‘big (of a yam-stick)’ can be found.

Wescott (1977: 245) notes that a non-uniform tone suggests, without exception, irregular shape or motion: *pérlépèrlèpérlé* ‘fluttering’, *tíghítíghítíghí* ‘twisted’, *kinókinòkinó* ‘woven’, *bigóbígbígó* ‘crooked’, *góbágòbàgòbá* ‘crippled’, *khúrlúkúrlúkúrlú* ‘jerky’, *yínghényínghényínghén* ‘skimp’y’, *vàghàvaghá* ‘staggering’, *wèkèèwèkèè* ‘waddling’.

There is also tonal iconicity in Bini colour terms (Wescott 1975). Words for *black*, *green* and *blue* are associated with a high base-tone, while terms for *red*, *yellow* and *brown* are associated with a low base-tone: *khúiri* ‘black’, *kánkánkán* ‘very dark’, *dúndúundún* ‘dark blue’, *súnsúunsún* ‘dark blue, dark’, *giàngiaangian* ‘bright red’, *rierierie* ‘pale yellow’, *bisibisi* ‘reddish brown, mud-coloured’. In order to explain this type of iconicity, Wescott proposes the following hypothesis: “Specifically, in terms of an implicitly Aristotelian cosmography, Bini words for black, green, and blue may be regarded as having high base-tone because they represent ‘sky colour’, while words for red, yellow, and brown may be regarded as having low base-tone because they represent ‘earth colour’” (Wescott 1975: 254).

See AFRICAN LANGUAGES, DYSMORPHY, TONAL ICONICITY

## Bird calls

K. Masuda (2003) carried out two experiments involving the following 10 linguistic representations of birdcalls: *chiff-chaff/chiff-chaff*; *coot/kowk*; *crake/crex-crex*; *cuckoo/cuckoo*; *curlew/cur-lee*; *keelie/kee-kee-kee*; *kittiwake/kitti-wark*; *pewit/pee-wit*; *twite/chweet*; *whew/whee-oo*. These experiments were designed to check the front cavity resonance (FCR) hypothesis. The FCR is considered to be responsible for imitating the birdcall, rather than a sequentially numbered formant (F2). In addition, the FCR dynamic pattern seems to determine the selection of the vowels of the linguistic representation.

See BIRD NAMES, *CUCKOO*, KALULI BIRD NAMES, *KISKADEE*, *VOCES VARIAE ANIMANTIUM*

## Bird names

Onomatopoeic ornithonyms are based on bird onomatopoeias, such as, English *cuckoo*. Bird names often have an onomatopoeic nature. In many languages, bird names mimic birdcalls. English *tweet*, *twitter*, *cheep* and *peep* also show this onomatopoeic nature. The equivalents of *to chirp*, *to twitter*, *to peep* in different languages clearly show a common onomatopoeic basis:

Greek: *πιπιίζω, πιπιίζω*; Latin: *pipio*, Spanish, Portuguese: *piar*; Italian: *pigolare*; German: *piepsen*; Dutch: *piepen*, Danish: *pippe*, Norwegian: *pipe*; Russian: *чирикать, пищать*; Bulgarian: *пискам*; Serbian: *пиштати*; Polish: *piszczeć*; Hungarian: *csipog, csicsereg*; Turkish: *cıvıldamak, cır cır ötmek*; Georgian: *ჭიჭიჭი* (*ch'ik'ch'ik'i*) (Moreno Cabrera 2016a: 74).

If we compare, for instance, English *to chirp* and Hungarian *csipog* ‘to chirp’ there are differences, but there is also one revealing similarity: the use of the vowel [i] in order to convey a high-pitched sound produced by a small bird (Moreno Cabrera 2016a: 75).

Marttila (2011: 95-96) collected equivalents to *cheep* and *peep* in different languages.

- Cheep: *chiichii baaya* (Harari, Semitic); *tswina* (Xhosa); *txiokatu* (Basque); *ciu-ciu* (Albanian); *cil-cil* (Western Armenian); *čiułbėjimas* (Lithuanian); *chiyaannu* (Nepali, Indic); *chirikat* (Russian); *zhigxe* (Kalmyk, Mongolic); *civildamak* (Turkish); *dzilgalny* (Komi-Zyrian); *csicsereg* (Hungarian); *chit-chít* (Vietnamese); *cicit-cicit* (Indonesian); *zhī zhī* (Mandarin Chinese); *ciscis* (Cocopa, Yuman); *ch'ich'iankil* (Yucatec, Mayan); *tsid* (Navaho, Athapaskan); *ci.pone* (Miwok); *tsiro* (Hopi).
- Peep: *bicco* (Harari, Semitic); *pjo* (Basque); *pīkstēt* (Latvian); *pibaid* (Irish); *pipa* (Swedish); *pipižo* (Modern Greek); *piauler* (French); *pipat* (Czech); *piyo piyo* (Japanese); *piipittää* (Finnish).

There are also ideophones imitating birdcalls in most American Indian languages. Marttila (2011: 97) discusses the following examples:

- Damana: *si-bi* ‘owl’, *sih-ih-kí* ‘seagull’, *si-ri-ka* ‘sparrow hawk’, *si-rrun-ka* ‘swallow’.
- Karitiána: *synh* ‘jacamin bird’, *mimijo* ‘parrot’, *nhe'okon* ‘toucan’.
- Maxakalí: *konnug* ‘parrot’, *soxmetmet* ‘tyrant flycatcher’.
- Muinane: *máruúcu* ‘owl’, *cúúru* ‘ibis’.
- Nambikuara: *tu<sup>3</sup>tu'ti<sup>3</sup>su<sup>2</sup>* ‘jacamin bird’, *ho<sup>3</sup>ho<sup>3</sup>ka<sup>3</sup>lxí<sup>3</sup>su<sup>2</sup>* ‘owl’.
- Tariana: *kuhwe* ‘woodpecker’, *piimi* ‘hummingbird’, *huuli* ‘swallow’, *maami* ‘tinamou bird’.
- Purepecha: *cincuni* ‘humming bird’, *coréki* ‘woodpecker’, *ka'katsi* ‘ara’, *tu'kuru* ‘owl’.
- Nez Perce: *awí.xno* ‘curlew’, *qú.ynu* ‘dove’, *icpó.qox* ‘grey jay’.

There are many onomatopoeic bird names in Costa Rican Spanish. The following list includes the scientific name of the corresponding bird (Sandoval 2006):

<b>Scientific name, English name</b>	<b>Costa Rican Spanish onomatopoeic ornithonyms</b>
<i>Aramus guaranauna</i> , limpkin	carao
<i>Leptotila verreauxi</i> , white-tipped dove	yuré
<i>Amazona albifrons</i> , white-fronted parrot	kankan
<i>Crotophaga ani</i> , <i>Crotophaga sulcirostris</i> , smooth-billed ani	tijo
<i>Otus choliba</i> , tropical screech owl	estucurucu
<i>Otus clarkia</i> , bare-shanked screech owl	sorococa
<i>Pulsatrix perspicillata</i> , spectacled owl	oropopo (murucututu, Brazil)
<i>Nyctidromus albicollis</i> , pauraque	cuyeo
<i>Semnornis frantzii</i> , prong-billed barbet	cocora
<i>Aulacorhynchus prasinus</i> , emerald toucanet, <i>Pteroglossus torquatus</i> , collared aracari	curre
<i>Pteroglossus frantzii</i> fiery-billed aracari	cachis, cusingo
<i>Ramphastos swainsonii</i> , chestnut- mandibled toucan	quioro
<i>Vireo flavoviridis</i> , yellow-green vireo	chiguisa, chuesa
<i>Cyanocorax morio</i> , brown jay	piapia
<i>Thryothorus modestus</i> cabanis's wren	chinchirigui
<i>Ptilogonys caudatus</i> long-tailed silky flycatcher	pitorreal
<i>Tangara icterocephala</i> silver- throated tanager	chia
<i>Zonotrichia capensis</i> rufous-collared sparrow	pirris
<i>Saltator maximus</i> , buff-throated saltator	chojuí
<i>Pheucticus tibialis</i> black-thighed grosbeak	chorcho

In the Australian language Dyirbal, more than half of the names for birds, locusts and crickets are onomatopoeic. Marttila (2011: 98) lists those Dyirbal bird names showing reduplication: *biyilbiyil* ‘peewee’, *digirdigir* ‘willy wagtail’, *gugu* ‘mopoke owl’, *gurilnguril* ‘storm bird’.

Many onomatopoeic bird names can be found all over the world. Marttila (2011: 98) mentions the following:

- Mende: *bani* ‘small water bird’, *kpokpomanja* ‘woodpecker’, *mbu* ‘owl’.
- Afrikaans: *hoep-hoep* ‘Upupa africana’, *kwê-kwêvoël* ‘Camaroptera brachyura’, *tinktinkie* ‘Cisticola rufilata’.
- Balti (Tibeto-Burman), *huhup* ‘hoopoe’, *kuukuu* ‘dove’, *cung-pa* ‘cuckoo’, *uk-pa* ‘owl’.

The following is a list of Finnish onomatopoeic ornithonyms (components in parentheses are not onomatopoeic and usually designate the habitat or a physical trait of the bird referred to): *alli* ‘long-tailed duck’, *huhhkaja* ‘Eurasian eagle owl’, *kaakkuri* ‘red-throated diver’, *kiuru* ‘Eurasian skylark’, *korppi* ‘common raven’, *(koski)kara* ‘white-throated dipper’, *(lapin)kirvinen* ‘red-throated pipit’, *kuikka* ‘black-throated diver’, *kuiri* ‘godwit’, *(kari)kukko* ‘ruddy turnstone’, *(pikku)kuovi* ‘whimbrel’, *(tundra)kurmitsa* ‘grey plover’, *(jänkä)kurppa* ‘jack snipe’, *(uuttu)kyyhky* ‘stock dove’, *käki* ‘common cuckoo’, *peippo* ‘common chaffinch’, *(terva)pääsky* ‘common swift’, *(musta)rastas* ‘common blackbird’, *räyskä* ‘Caspian tern’, *sirittäjä* ‘wood warbler’, *(kelta)sirku* ‘yellowhammer’, *(iso)sirri* ‘red knot’, *(kivi)tasku* ‘northern wheatear’, *tiira* ‘tern’, *tikka* ‘woodpecker’, *tiltalti* ‘common chiffchaff’, *tylli* ‘plover’, *(töyhtö)hyypä* ‘northern lapwing’, *(pikku)-uikku* ‘little grebe’, *(musta)viklo* ‘spotted redshank’, *västäräkki* ‘white wagtail’ (Marttila 2011: 190-213).

In Hungarian, all corvid bird names consist of back-vocalic syllables with a heavy first-syllable prosody (long vowel or short vowel plus coda): *csóka* ‘jackdaw’ (*Corvus monedula*), *szajkó* ‘jay’ (*Garrulus glandarius*), *szarka* ‘magpie’ (*Pica pica*), *varjú* ‘rook/crow’ (*Corvus*), *holló* ‘raven’ (*Corvus corax*). All other ornithonyms with names of this shape, with the exception of *banka*, refer to aquatic birds: *szárcsa* ‘coot’ (*Fulica atra*), *bakcsó* ‘night heron’ (*Nycticorax nycticorax*), *kócsag* ‘egret’ (*Egretta*), *cankó* ‘sandpiper/ruff/redshank/greenshank’ (*Tringa*), *hattyú* ‘swan’ (*Cygnus*), *banka* ‘hoopoe’ (*Upupa epops*). The following terms cluster around the presence of a labial followed by a high (or, in the case of the *é* of *gébics*, non-low) front vowel: *bibic* ‘lapwing’ (*Vanellus vanellus*), *gébics* various shrikes (*Lanius*), *pityer* various pipits (*Anthus*), *pinty* ‘chaffinch, brambling’

(*Fringilla*), *fürj* ‘quail’ (*Coturnix coturnix*). In parallel fashion, the next grouping is characterized by the presence of the affricate consonant /cs/ plus a front vowel: *csíz* ‘siskin’ (*Carduelis spinus*), *csér* ‘common tern’ (*Sterna hirundo*), *csicsörke* ‘serin’ (*Serinus serinus*), *pacsirta* various larks (for example, *Alauda arvensis*), *csirke* ‘domestic chicken’. The three owl terms show iconicity for relative size: *uhu* ‘eagle owl’ (*Bubo bubo*), *bagoly* various owls (*Tyto*, *Asio*, *Nyctea*) and (16) *kuvik* ‘scops owl’ (*Otus scops*). The vowels in the name of the largest owl, *uhu*, are kinomorphomimetic\* since they suggest the relatively large size of the bird; the second-syllable i of the name of the smallest owl, *kuvik*, is phonometaphoric\*, and *bagoly* takes an intermediate position (Abondolo 2007: 16-19).

See also *CUCKOO*, *KALULI BIRD NAMES*, *KISKADEE*, *MIMOLOGISME*, *VOCES VARIAE ANIMANTIUM*

### **Blah Blah**

See *BABBLE*

### **Black Speech**

Language invented by J. R. Tolkien and spoken in Mordor (Middle-Earth).

See *ICONICITY IN INVENTED LANGUAGES*

### **Blending**

A morphological fusion between two words iconically denoting a corresponding semantic fusion of their meanings, as in English *smog* > *smoke* + *fog*; *brunch* > *breakfast* + *lunch*; *goodbye* > *good* (-night), *good* (-morning) + *goodbye*; *slender* > *slight* + *tender*. This is a clear case of diagrammatic iconicity\* [Jespersen 1922: 312-312].

### **Bonari**

Extinct Cariban language once spoken along the Uatumá River (Amazonas, Brazil).

See *NURSERY WORDS*

### **Bongu**



Trans-New Guinea language spoken in the Madang province of Papua New Guinea by approximately 800 people.

See *BUTTERFLY*

## ***Boom***

Onomatopoeia of a resonant sound. An example of the phonomimetic root {bilabial + back vowel + bilabial nasal}, also appearing in other languages. For example, the German interjections *bum*, *bumm* mimic an explosion, *bums* mimics an impact and the verb *bummern* mimics knocking; Catalan *pam-pam* ‘sound of strong repeated impacts’; Spanish interjection *pum* ‘sound of an explosion or of a strong impact’ (García de Diego 1968: 539-540). In Spanish, *pim-pam-pum* is used to mimic the sound of a series of explosions (especially those produced by guns), in addition, *catapum* and *cataplum* mimic the sound produced by a noisy impact or an explosion.

*Boom* is frequently used in comics to denote a strong explosion. For example the sound of an object hitting the ground: *Madballs* (vol. 1, 7, 1987); the sound of a sonic blast: *G. I. Joe* (vol. 1, 60, 1987); the sound of a large explosion: *The Punisher: War Zone* (vol. 1, 1, 1993); the sound of a gunshot blast: *Ralph Snart Adventures* (vol. 5, 1993); the sound of cannon fire: *FREEX* (7, 1994); the sound of bullets ricocheting off an object: *The Adventures of Kool-Aid Man* (6, 1989); the sound of a footstep: *Captain Atom* (7); the sound of multiple explosions: *Fightin' Marines* (145, 1979), *X-Factor* (vol. 1, 84, 1992); The sound of an explosion: *The Twisted Tantrum of the Purple Snit* (1, 1980).

In comics, the following variants are attested: BOOM-KA-BOOM [*Captain Atom* (7)], BOOMM [*Fightin' Marines* (145, 1979)], BOOUMM [*X-Factor* (vol. 1, 84, 1992)], BOOOOOM [*War Machine* (vol. 1, 1, 1994)], BOOM BOOMETTY BOOM [*Al Capp Li'l Abner* (1965)], BOOMPH [G. Herriman *Krazy Kat* (1937)], BOOMP [F. Gottfredson *Mickey Mouse* (1933)] (Taylor 2000, Gasca and Gubern 2008: 68-71).



FIGURE B1

## Botocudo

Nearly extinct Macro-Gê language of Minas Gerais (Brazil).

See *NURSERY WORDS, PRIMITIVE CULTURE*

## Bouba-Kiki effect

This effect is based on spontaneous association between meaningless words and abstract shapes. It was first documented by the psychologist Köhler (1929), who used the meaningless words *maluma* and *takete* and provided a biological foundation for sound-symbolic relations. Ramachandran and Hubbard used *bouba* and *kiki* to provoke the same effect:

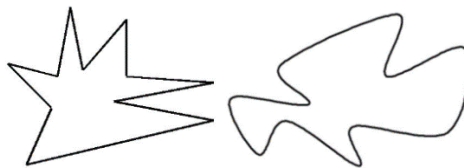


FIGURE B2

“Demonstration of *kiki* and *bouba*. Because of the sharp inflection of the visual shape, subjects tend to map the name *kiki* onto the figure on the left, while the rounded contours of the figure on the right make it more like the rounded auditory inflection of *bouba*” (Ramachandran and Hubbard 2001: 19).

These authors explain this effect in the following way:

“If you show fig. [B2] (left and right) to people and say ‘In Martian language, one of these two figures is a “bouba” and the other is a “kiki”, try to guess which is which’, 95% of people pick the left as *kiki* and the right as *bouba*, even though they have never seen these stimuli before. The reason is that the sharp changes in visual direction of the lines in the right-hand figure mimics the sharp phonemic inflections of the sound *kiki*, as well as the sharp inflection of the tongue on the palate” (Ramachandran and Hubbard 2001: 19).

Maurer, Pathman and Mondloch (2006) found that both 2.5 year old children and adults consistently matched words with rounded vowels to rounded shapes, suggesting that these associations are present early enough in development to assume that sound symbolic correspondences themselves may influence language learning (D’Onofrio 2014: 368).

This phenomenon seems to have a clear biological basis:

“For example, Maurer et al. (2006) described the strong *bouba-kiki* effect in their results as a product of cross-modal activation cued by the sound of a rounded vowel in a nonsense word. This sound is posited to trigger visual or proprioceptive sensation of rounded lip shape that is then mapped onto visual roundedness of an external object. It has been suggested that this process could occur through cognitive mechanisms similar to those that underlie synesthesia (Ramachandran and Hubbard, 2001), the phenomenon in which an individual experiences sensation in a particular modality when a different modality is stimulated (seeing a particular color when hearing a musical note, for example)” (D’Onofrio 2014: 368).

In her experimental study on the *bouba-kiki* effect, D’Onofrio (2014) concludes that the place of articulation plays an important role in this effect:

“[T]he abstract shape task carefully considers phonetic features involved in round versus spiky sound-shape correspondences, demonstrating that features like place of articulation that have not previously been described to be involved in these correspondences do, in fact, have significant effects on round versus spiky shape selection. In particular, voicing of consonants, place of articulation of consonants, and backness of vowels are significant predictors of whether a participant matched a nonsense word with a rounded abstract shape or a spiky abstract shape” (D’Onofrio 2014: 388).

In addition, D’Onofrio tested the *bouba-kiki* effect on real objects (several kitchen items), rather than abstract shapes, and reached the conclusion that in this case the effect is also operative:

“In a different vein, this study also adds depth to previous work on sound-shape correspondences by moving from a study of these correspondences in

an abstract setting into the real world, through the use of a class of real-world objects: kitchen items. A finding of the abstract shape task—that back vowels correlate with round shapes—holds up not only with abstract objects, but also within this group of real-world objects” (D’Onofrio 2014: 388).

In another experimental study, Ford, Martin, and Peperkamp (2015: 259) concluded that listeners are influenced more by consonants than by vowels when associating pseudo-words with visual shapes.

## **Boviri (Bowili)**

Kwa (Niger-Congo) language spoken in the Volta Region (Ghana) by approximately 11,000 people.

See *BUTTERFLY, LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## **Bow-wow**

Onomatopoeia of a dog barking. This onomatope is expressed in different ways in different languages: Greek *gavgav*, Italian *bau bau*, Romanian *hau hau*, French *ouah ouah*, Spanish *gau gau*, Portuguese *au au*, Irish *uf uf*, Dutch *woef*, English *woof*, German *wau wau*, Danish *vov vov*, Swedish *vof voff*, Finnish *hau hau*, Hungarian *ham ham*, Albanian *ham ham*, Serbian *av av*, Czech *hafhaf*, Polish *hau hau*, Russian *gafgaf*, Bulgarian *au au*, Turkish *hav hav* (Gay, P. and A. Rosenstiehl 1989: 62), Mandarin Chinese *wāng wāng*, Burmese *woke woke*, Japanese *wan wan*, Korean *mōng mōng*, Malay *gong gong*, Thai *hong hong*, and Vietnamese *gau gau*.

## **Bow-wow theory**

Expression proposed by M. Müller (1862: 358) to refer to those language origin theories which maintain that the original roots of language were imitations of natural sounds. This theory was popular among scholars of the eighteenth century. Müller explains this hypothesis as follows:

“It is supposed then that man, being as yet mute, heard the voices of birds and dogs and cows, the thunder of the clouds, the roaring of the sea, the rustling of the forest, the murmurs of the brook, and the whisper of the breeze. He tried to imitate these sounds, and finding his mimicking cries useful as signs of the objects from which they proceeded, he followed up the idea and elaborated language” (Müller 1862: 358-359).

J. J. Rousseau in *Essai sur l'origine des langues* (1781) and J. G. Herder in *Abhandlung über den Ursprung der Sprache* (1772) argued in favour of this theory. M. Müller criticized this approach in the following terms:

“Our answer is, that though there are names in every language formed by mere imitation of sound, yet these constitute a very small proportion of our dictionary. They are the playthings, not the tools, of language, and any attempt to reduce the most common and necessary words to imitative roots ends in complete failure” (Müller 1862: 360).

O. Jespersen had a very different view in which sound symbolism plays a prominent role:

“[S]ounds which in one creature were produced without any meaning, but which were characteristic of that creature, could by man be used to designate the creature itself (or the movement or action productive of sound). In this way an originally unmeaning sound could in the mouth of an imitator and in the mind of someone hearing that imitation acquire a real meaning. In the chapter on Sound Symbolism I have tried to show how from the rudest and most direct imitations of this kind we may arrive through many gradations at some of the subtlest effects of human speech, and how imitation, in the widest sense we can give to this word—a wider sense than most advocates of the theory seem able to imagine—is so far from belonging exclusively to a primitive age that it is not extinct even yet” (Jespersen 1922: 414).

Following this view, Jespersen criticized Müller’s objections to the *bow wow* theory in the following terms:

“There is not much value in Max Müller’s remark that ‘the onomatopoeic theory goes very smoothly as long as it deals with cackling hens and quacking ducks; but round that poultry-yard there is a high wall, and we soon find that it is behind that wall that language really begins’ (*Life* 2. 97), or in this other remark that ‘words of this kind (*cuckoo*) are, like artificial flowers, without a root. They are sterile, and unfit to express anything beyond the one object they imitate’ (ib. 1. 410). But *cuckoo* may become *cuckold* (Fr. *Cocu*), and from *cock* are derived the names Müller himself mentions, Fr. *coquet*, *coquetterie*, *cocart*, *cocarde*, *coquelicot*.... Echoic words may be just as fertile as any other part of the vocabulary” (Jespersen 1922: 414).

## Brand names

Brand names can have iconic properties. Piller (1999: 327) observes that *CatChow* for a cat food actually seems to mimic the sound a satisfied cat might make. In addition, she notes that *chow* ‘food’ might derive from

Chinese Pidgin English *chowchow*. She also notices that the close front vowel is often associated with smallness and endearment, as in *Huggies*, a brand of baby wipes. In addition, initial *cr-* is associated with ‘crispiness’ and indeed it shows up in the names of various food products: *Crunchie*, *Crispie*, and *Crisco*.

Following the results of an experimental study of sound symbolism in brand names, Abelin (2015) notes that sound symbolism might play a significant role in the names of some IKEA products: “The table lamps *Klabb* (chunk of wood), *Knubbig* (chubby) and *Stranne* (non-word), the work lamp *Kroby* (place name) and the bucket *Knodd* (non-word) all have form or surface structure that agree with the meaning of Swedish phonaesthemes. The movement associated with the cluster *fl-* is reflected in names of the trolley *Flytta* (move) and the rocking chair *Flaxig* (flapping)”.

In another study of sound symbolism in brand names (Pogacar, Plant, Rosulek and Kouril 2015) it was observed that the most common vowel sounds among top brand names are *e* (eBay, Estée Lauder) and *a* (AOL, Kraft). In general, front vowels carry the well-established cross-cultural meanings ‘small’, ‘feminine’, ‘fast’, ‘light’, and ‘angular’. These authors suggest that smallness and fastness are desirable attributes for electronics, so front vowels are more common than back vowels in the top brand names of this particular field: Dell, Apple, Nikon, Sony, SanDisk, Beats, Panasonic, Cisco, Philips, Intel, Nintendo, Logitech, Acer, Hitachi, Aiwa, Blackberry, Pioneer, Akai, Singer, Sylvania, Imetec.

## Brazilian Sign Language

See *ICONICITY IN SIGNED LANGUAGES*

## Breton

Brittonic (Celtic) language spoken in Brittany (France) by about 200,000 people.

See *DICCIONARIO DE VOCES NATURALES, DOPPELUNG (REDUPLIKATION, GEMINATION)*

## Bribri

Chibchan language of Costa Rica spoken by approximately 11,000 people.

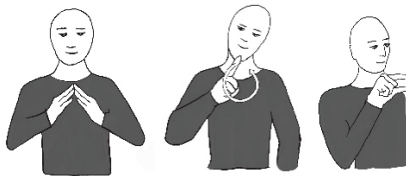
See *BUTTERFLY, ELEMENTARE WORTSCHÖPFUNG*

## British Sign Language

Sign language of the United Kingdom and used by about 200,000 signers (both deaf and non-deaf people). It is quite distinct from American Sign Language, since only 30 % of the signs are more or less similar. It is also distinct from Irish Sign Language, which is more closely related to the French and American sign languages.

In this sign language the body can be used to perform the action that is being referred to. Examples include STROKE, SCRATCH, HEADBUTT, RAISE-ONE'S-HAND and SWIM. There are also actions that are carried out with handshapes showing how an object is held. The following are some examples of this type of sign: WRITE, ELECTRIC-PLUG, COOK, DRUM (or TO-DRUM), BROOM (or SWEEP), DRIVE (or CAR), INJECTION, CURTAINS, FISHING (Sutton, R. and B. Woll 1999: 175).

In a virtual depiction, the hands act like a pencil drawing the outline of an object. This action leaves behind an imaginary trace of the object referred to. The following signs are examples of this type of iconic motivation: WINDOW, CIRCLE, HOUSE, COLUMN, ELEPHANT (Sutton, R. and B. Woll 1999: 175-176).

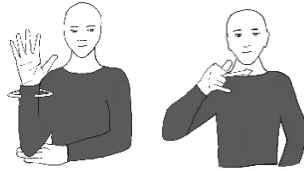


HOUSE CIRCLE BIRD

FIGURE B3

FIGURE B4

FIGURE B5



TREE      AEROPLANE

FIGURE B6      FIGURE B7

<http://www.british-sign.co.uk>

In substitutive depiction, the signer creates an image of an object with his/her hands, as in the signs for AEROPLANE, BIRD, TREE, BUTTERFLY, SNAIL or TELEPHONE (Sutton, R. and B. Woll 1999: 176).

British Sign Language, like other sign languages, uses the signing space to depict iconically real space. Spatial verbs are also iconically motivated when denoting some sort of movement.

In addition, the form of many nominal signs includes information about the size and shape of their referents. For example, to refer to a wide or narrow belt, the sign for 'belt' is changed to show its size, using analogues of real size, so that rather than BELT, we get signs better glossed as WIDE-BELT or NARROW-BELT (Sutton, R. and B. Woll 1999: 203).

## **Bulgarian**

South Slavic language spoken in Bulgaria and neighbouring countries by 9 million people.

See *BOW-WOW*, *BIRD NAMES*, *BUTTERFLY*, *CACKLE*,

## **Burji**

East Cushitic (Afro-Asiatic) language of Ethiopia and Kenya spoken by approximately 70,000 people.

See *CACKLE*



## Burmese

Lolo-Burmese (Sino-Tibetan) language spoken in Myanmar by 33 million people.

See *BOW-WOW*

## Burushaski

Language of the Burusho people of Gilgit-Baltistan (Pakistan) and Jammu and Kashmir (India) spoken by about 95,000 people.

See *CAKLE, CROW*

## Butterfly

The etymology of many of the words for ‘butterfly’ in European languages, such as Latin *papilio*, Italian *farfalle* or Old High German *fifaltra* present many challenges and apparently unsolvable problems. W. Oehl (1922) proposed that these terms have a mimetic origin. This mimesis cannot be based on sound, since butterflies do not produce any audible noise; it seems instead to be based on the linguistic mimicking of the jerky, erratic flight and wing flapping of these insects. Oehl (1922) identifies the following mimetic roots denoting ‘butterfly’ in the languages of the world.

First, there is *pepe* with a reduplication mimicking the flight of this insect. This root is instantiated in different languages with changing vowels: Monjombo *pepe*, Namau *pipi*, Lamba *pipiya*, Samoan *peapea*, Sango *pupu*, Swahili *popo*; with added syllables: Georgian *pepela*, Nahuatl *papalotl*, Akposo *papavilityo*. There are also variants with a different initial consonant *b-, f-, ph-, w-, v-*: Guatuso *fuufu*, Tongan *phaphatane*, Asante *odefufu*, Fijian *bebe*, Kapiekram *veve*, Melaripi *fifi*, Bedauey *babalana*, Pay *wuwul*, Ibu *flebiba*, Akpafu *kokobvabya*, Asante *ovefufu*, Motu *kaubebe*, Maisin *bimbaba*, Asante *afofanto*, Tontemboan *kalimpo’po’an*.

There are also some examples of triplication: Maori *pepepe*, Boviri *supepepei*, Marshallese *babub*, Kapaur *papa papa pu*. Cases of consonant repetition are also attested: Vanua Lava *pep*, Torres Island *pip*, Merelava *pep*, Ureparapara (Löyöp) *peb*.

A second mimetic root contains only one labial consonant, as in Semang *bagä*, Yunnan Chinese *fu-tie*, Tabasaran *pazi*, Chavante *piro*, Tupi *panama*,

Moseten *baxtata*, Mingrelian *pharpali*, Tarasco [Purépecha] *parakata*, Hawaiian *pulelehua*.

A third widely attested mimetic root contains the sequence *p...l*: Hungarian *pillangó*, Bedauye *bilekanay*, Galla [Oromo] *bilatsha*, Chechen *poltu*, Quechua *pillpintu*, Ifumu *imfulanga*, Kuri *chcheppeluk*, East Turkic *kupalak*. The two consonants can be contiguous: Ibu *flebiba*, Wolof *löplöp*, Sami *lablok*, Estonian *liblikas*. As we have already seen, the root *pele* can also be reduplicated: Udi *pepalak*, Ewe *kpakpaluwui*, Savo *bebeula*, Bangala *pelepele*, Somali *balanbalis*, Dzhek *palpalut*. The consonant order is reversed in Hungarian *lepke*, Cheremis *lepe*, Basque *uliparpaila*, Chippewa *memengwa*.

There are other mimetic roots with *m*: Monumbo *mamatambur*, Bongu *mambris*, Tumleo *mampalit*, Chapacura *mamakru*, Micmac *memegee*, Cree *kamamak*, Kapampangan *gamogamo*, Anatom *mokemoke*, Araucanian *l'amkel'make*. This root can be extended with a *p/b*, as in: Taita *bamba*, Lamba *pempele*, Basque *pinpirin*, Maisin *bimbaba*, Sentani *aibumbu*, Kahita *kobamu*, Kimbundu *mbiambia*, Bongu *mambris*, Tigre *tsömbölaliö*, Tontemboan *kalimpo'po'an*, Tumleo *mampalit*, Monumbo *mamatambur*, Kabi *balumbir*.

There is also a mimetic root *keke*: Bribri *kuakua*, Toaripi *kaokao*, Dayak *kakupo*, Asante *akukua*, Nahuatl *tlecocoz*, Madurese *kakapper*, Malay *kupukupu*.

A mimetic root with *p/f+l/r* is rather common: Mandingo *firifiri*, Bambara *fereferey*, Tagalog *paroparo*, North African Arabic *fortotto*, Finnish *perhonen*, Tabasaran *kebirkol*, Madurese *kakapper*, Monumbo *mamatambur*, Abkhaz *pharphalik*, Svan *farfol*.

In his paper, Oehl (1922: 99) also discusses butterfly words in European and Indo-European languages.

In the Slavic languages there are examples of the mimetic root *pepe*, as in Bulgarian *peperuda*; this root can also be found in Albanian *perperuge*; Latin *papilio* is a variant with *l*. Lithuanian *peteliškė* shows the pattern *p + t + l*. Irish *féileacán* shows the type *p + l + k*. In Germanic languages there are examples of the *fefe/pepele* mimetic root: Anglo-Saxon *fifealde*, Old Icelandic *fifrilde*, Old Saxon *fifoldara*, Old High German *fifaltra*. A presumably ancient form of the *pepele* type is attested in Middle Dutch *pepel*, Swiss German *pipolper*, *pipolder*, Flemish *pepel*, *pimple* (cfr. Latin *papilio/pampilio*).

Oehl (1922: 104) analyses the *butter* component of English *butterfly* as a mimetic root of the  $p + t + r$  type. The popular etymological analysis derives this word from *butter + fly*; other proposals derive it from *beatan* ‘to beat’ and *fleoge* ‘fly’.

The Romance languages also present some of the most widespread mimetic roots: Megleno-Romanian *piperigă*, *piperugă*, Italian *farfalla*, French *papillon* (from Latin *papilio*), Provençal *parpal’u*, *parpal’ol*, Catalan *papallona*, Portuguese *borboleta*. Concerning Spanish *mariposa*, the popular etymology *Mary* (*mari-*), *pose!* (*-posa*) is usually mentioned. Nevertheless, Oehl (1922: 112) proposes a derivation from *maniposa* (attested in Sardinian) with an  $n > r$  dissimilation pointing to a  $m + n + p$  mimetic root, as in Tupi, Oyampi and Apalaí *panama* in which the consonants appear in reversed order. Oehl speaks of a mimetic type  $p + n + m$  versus a counter-type  $m + n + p$ ; this reversal is rather frequent in mimetic word types.

In Basque dialects, there are plenty of words for ‘butterfly’ based on various mimetic roots: *abekata*, *matxita-mutxita*, *farfail*, *kalaputxi*, *mitxeleta*, *mitxilikota*, *mitxirrika*, *mixirrike*, *pinpilin-pauxa*, *pinpilinpoxa*, *pinpirin*, *pitxilota*, *pitxileta*, *txaketa*, *tximeleta*, *txinbeleta*, *txipileta*, *txipilipeta*, *txipilita*, *txipilitona*, *txipilota*, *txipiriña*, *txipiritona*, *txiribiri*, *tximirrika*, *txirrimika*, *txirrimista*, *txirripita*, *txiruliru*, *ulifarfaila* (Bähr 1928: 2; Mugica Berrondo 1973: 574).

In these examples, there are cases of reversed syllable order: *mitxeleta/tximeleta*, *txirrimika/mitxirrika*, *pitxilota/txipilota*, *pitxileta/txipileta*. In *ulifarfaila* the Romance root *farfalla* is quite evident.

## **Buzz**

A low vibrating, humming sound as of bees, machinery, or people talking. It is an example of a cross-linguistic phonomimetic root than can be characterized as the unordered pattern {bilabial, back vowel, sibilant}. English shows the order bilabial + vowel + sibilant. Romanian *băzâi* has the same ordering. Czech *bzučet* presents the order bilabial + sibilant + back vowel. Croatian *zujati* has only two of the components in the reverse order (sibilant + back vowel). Russian *zhuzhzh-at* shows a reduplication of the sibilant instead of the expected bilabial. German, Danish *summ(en)* and Dutch (*ge*)*zoem* realize this onomatopoeic root as sibilant + back vowel + bilabial. Hungarian *zümmög* shows the same ordering. In Spanish *zumb-ar* there are two bilabials and in Modern Greek *bómbos* there is a reduplication

with two of the components of the phonomimetic root: two bilabials and one back vowel.

In comics it appears without a vowel as **BZZZ** or **BZZZZZZ** mimicking the sound of a telephone buzzer: *Cold Blooded Chameleon Commando* (1, 1986); the buzzing sound of a fly: *Darkhold* (10, 1993); a buzzing sound, the sound of an intercom buzzer: *Crackbusters* (1, 1986); the buzzing sound of a bee: F. Ibáñez *Mortadelo y Filemón* (1992); Chuck Jones *Pepe le Pew* (1971); P. Liégeois and Bob De Groot *Léonard* (1984) (Taylor 2000; Gasca and Gubern 2008: 78-79).

### ***Bzzz***

See ***BUZZ***

## C

### *Cackle*

This English verb mimics the cry of a hen. It seems to be based on the phonomimetic root {velar plosive, low/front vowel, rhotic/lateral consonant}. It is attested in many language families: Mokilko (East Chadic) *kêrkirè*, Burji (East Cushitic) *ka(a)kkisaskakka*, Amharic *as-kakka*, Ainu *rokrokki*, Khmer *tokketoot*, Nicobarese *kòk kòk kòk*, Malagasy *mikakaka*, Tagalog *kakak*, Basque *kakaratu*, Burushaski *qolòq*, Kannada *kokkok*, Lithuanian *kudakuoti*, Irish *glagarnach*, Norwegian *kakle*, Modern Greek *kakarizo*, Punjabi *kurkur(karna)*, Spanish *cacarear*, Czech *kdákat*, Chontal Maya *ko'ko'ankil*, Chickasaw *tok to'k*, Navaho *k'ol*, Xhosa *kokoza*, Ewe *kuko*, Mende *kpekpe*, Mbay *kòkòkòó*, Chinese *gē gē*, Guarani *kokore*, Turkish *gidaklamak*, Finnish *kotkotataa*, Hungarian *kotkodácsol*, Hopi *kot kot* (Marttila 2011: 117-118).

The same phonomimetic root also produces the corresponding onomatopoeic *cock-a-doodle-do*, which mimics the crowing of a rooster. This onomatopoeic appears in many languages of the world in an iterated form: Mokilko (East Chadic) *kóókilè*, Hausa *kikiriki*, Spanish *quiquiriquí*, Italian *chicchirichi*, Khmer *kykkikòlkòk*, Modern Greek *kikiriku*, Portuguese *cucuricar*, *cocorococó*, Russian *kukareku*, Bulgarian *kukurigu*, Serbian *kukuriky*, Czech *kykyryký*, Polish *kukuryky*, Japanese *kokekokkoh*, Bamun (Kiwaiian) *okoko*, Koasati (Muskogean) *kokokóoko*, Chichewa *kokoliko*, Kisi *kükülúúkú*, Guarani *tokoro'ó*, Hungarian *kukurikú*, Romanian *cucurigu*, French *cocorico*, Dutch *kukeluku*, German *kikeriki*, Lithuanian *kakarikū*, Swedish *kuckeliku*, Danish *kykliky*, Norwegian *kykkeliky*, Finnish *kukkokiekku*, Albanian *kikikiii* (Gay and Rosenstiehl 1989; Marttila 2011: 113).

Some languages use different onomatopoeic words derived from the above phonomimetic root for the different kinds of calls produced by hens and chickens, or related to them. Tagalog is a case in point: *kurók*, *kakak* 'sounds of a hen', *kumurukutók* 'sound that a hen makes when calling her chicks', *kurukyá* 'sound that a person utters when calling his chickens', *pumuták* 'cackle after laying or when frightened' (Marttila 2011: 116).

## Caesar's Law

This law (Haiman 2018: 284) says that the order of propositions iconically reflects the order of events. It was stated by Jakobson (1965), who exemplified it with the famous sentence *veni, vidi, vici*\* pronounced by Julius Caesar.

See, DIAGRAMMATIC ICONICITY, SYNTACTIC ICONICITY, *VENI, VIDI, VICI*

## Calligram

A calligram is a text visually arranged in such a way that it forms an image associated with its contents. It can be a poem, a phrase, or a single word. The form of the text is an iconic reflection of the entity referred to or of the event described by it.

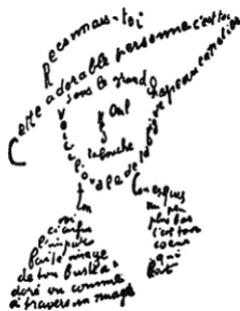


FIGURE C1

A calligram by Apollinaire

## Cantonese

Yue (Chinese) language spoken in Guangdong and eastern Guaxi (China) by approximately 60 million people.

See ASIAN LANGUAGES, CANTONESE IDEOPHONES, FREQUENCY CODE HYPOTHESIS, *SYMBOLIC VALUE OF THE VOWEL I*

## Cantonese ideophones

A typical Cantonese ideophone consists of two to four syllables. Very often an adjective or a part of it is reduplicated in several ways. Bodomo (2008: 3) has identified nine morphological types. They are as follows (the numbers stand for the six Cantonese tones):

“AA, *ding<sup>1</sup> ding<sup>1</sup>* ‘tram in Hong Kong’, (ii) AB, *baa<sup>1</sup> zaa<sup>1</sup>* ‘talkative (neg.)’, (iii) ABC, *mou<sup>4</sup> lei<sup>4</sup> tau<sup>4</sup>* ‘illogical’, (iv) AAB, *baang<sup>4</sup> baang<sup>4</sup> seng<sup>1</sup>* ‘increasing rapidly’, (v) ABB, *coeng<sup>4</sup> laai<sup>4</sup> laai<sup>4</sup>* ‘long’, (vi) ABCD, *bing<sup>4</sup> ling<sup>1</sup> baang<sup>4</sup> laang<sup>4</sup>* ‘noise made by falling things’, (vii) ABAC, *faa<sup>1</sup> li<sup>1</sup> faa<sup>1</sup> luk<sup>1</sup>* ‘colorful’, (viii) ABAB, *saap<sup>6</sup> haa<sup>5</sup> saap<sup>6</sup> haa<sup>5</sup>* ‘silly, absent-minded’, and (ix) AABB. *aam<sup>4</sup> aam<sup>4</sup> cam<sup>4</sup> caam<sup>4</sup>* ‘irregular, asymmetric’”.

Bodomo (2008: 4) explains that the components of Cantonese ideophones do not seem to have an independent denotational meaning and therefore it is very difficult to provide glosses for them. This author includes the following examples in his corpus:

“Sound: *zi<sup>1</sup> zi<sup>1</sup> seng<sup>1</sup>* ‘creaking sound’, *si<sup>4</sup> li<sup>1</sup> saa<sup>4</sup> laa<sup>4</sup>* ‘sound of rain drops’, *gei<sup>1</sup> li<sup>1</sup> gu<sup>1</sup> lou<sup>1</sup>* ‘sound of a foreign language’, *bing<sup>4</sup> ling<sup>1</sup> baang<sup>3</sup> laang<sup>4</sup>* ‘noise made by falling things’, *baang<sup>4</sup> baang<sup>4</sup> seng<sup>1</sup>* ‘increasing rapidly’, *am<sup>4</sup> am<sup>4</sup> cam<sup>4</sup> cam<sup>4</sup>* ‘murmuring’, *bing<sup>4</sup> bing<sup>4</sup> tiu<sup>3</sup>* ‘beating, usually of heart’, *siu<sup>3</sup> ke<sup>4</sup> ke<sup>4</sup>/ke<sup>4</sup> ke<sup>4</sup> siu<sup>3</sup>* ‘laughing’.

Light: *gwong<sup>1</sup> caang<sup>4</sup> caang<sup>4</sup>* ‘very bright’, *hak<sup>1</sup> maa<sup>1</sup> maa<sup>1</sup>/hak<sup>1</sup> mang<sup>1</sup>/hak<sup>1</sup> mi<sup>1</sup> maa<sup>1</sup>* ‘very dark’.

Colors: *baak<sup>6</sup> syut<sup>1</sup> syut<sup>1</sup>* ‘white (snow snow)’, *ceng<sup>1</sup> bi<sup>1</sup> bi<sup>1</sup>* ‘green’, *hong<sup>4</sup> dong<sup>1</sup> dong<sup>3</sup>* ‘red’, *wong<sup>4</sup> gam<sup>4</sup> gam<sup>4</sup>* ‘yellow’, *hyut<sup>3</sup> lam<sup>4</sup> lam<sup>4</sup>* ‘blood red’, *ceng<sup>1</sup> bi<sup>1</sup> bi<sup>1</sup>* ‘light green’.

Movement: *bang<sup>1</sup> bang<sup>1</sup> tiu<sup>3</sup>* ‘jumping around’, *diu<sup>4</sup> diu<sup>2</sup> fing<sup>6</sup>* ‘hanging loosely, about to fall down’, *goek<sup>3</sup> ngan<sup>3</sup> ngan<sup>3</sup>/ngan<sup>3</sup> ngan<sup>3</sup> goek<sup>3</sup>* ‘leg/feet moving shaking’, *ngaan<sup>5</sup> zaam<sup>2</sup> zaam<sup>2</sup>* ‘blinking eyes’, *bai<sup>1</sup> bai<sup>1</sup> dei<sup>2</sup>* ‘crippled’, *faai<sup>3</sup> faai<sup>3</sup> ceoi<sup>3</sup> ceoi<sup>3</sup>* ‘fast’, *maan<sup>6</sup> tan<sup>1</sup> tan<sup>1</sup>* ‘slow’.

Behaviour: *gwaai<sup>3</sup> gai<sup>1</sup>* ‘strange’, *gwaai<sup>1</sup> gwaai<sup>1</sup> dei<sup>2</sup>* ‘well-behaved-like’, *gwai<sup>2</sup> gwai<sup>2</sup> syu<sup>2</sup> syu<sup>2</sup>* ‘behaving with hidden motives’, *ke<sup>4</sup> le<sup>4</sup>* ‘behaving awkwardly’, *lap<sup>6</sup> lap<sup>6</sup> lo<sup>6</sup> lo<sup>6</sup>* ‘doing things slowly/being inefficient’, *leon<sup>6</sup> leon<sup>6</sup> zeon<sup>6</sup> zeon<sup>6</sup>* ‘clumsy’, *mou<sup>4</sup> mou<sup>4</sup> liu<sup>4</sup> liu<sup>4</sup>* ‘being idle’, *mung<sup>2</sup> bai<sup>3</sup> bai<sup>3</sup>/mung<sup>2</sup> sing<sup>6</sup> sing<sup>6</sup>* ‘being silly/absent-minded’, *ngaang<sup>6</sup> baang<sup>1</sup> baang<sup>1</sup>* ‘being stubborn’.

Emotions: *hei<sup>3</sup> gu<sup>2</sup> gu<sup>2</sup>* ‘to be angry’, *ngaan<sup>5</sup> sap<sup>1</sup> sap<sup>1</sup>* ‘starting to cry’, *nau<sup>1</sup> baau<sup>3</sup> baau<sup>3</sup>* ‘angry’.

Taste: *fu<sup>2</sup> fu<sup>2</sup> gip<sup>3</sup> gip<sup>3</sup>k* ‘a bit/too bitter’, *haam<sup>4</sup> haam<sup>2</sup> dei<sup>2</sup>* ‘a bit/too salty’, *syun<sup>1</sup> mei<sup>1</sup> mei<sup>1</sup>* ‘a bit sour’, *tim<sup>4</sup> je<sup>4</sup> je<sup>4</sup>* ‘a bit sweet’, *syun<sup>1</sup> lau<sup>6</sup> lau<sup>6</sup>* ‘sour’.

See ASIAN LANGUAGES

## Carib

The Cariban language is spoken by the Kalina people in Venezuela, Trinidad and Tobago, the Guianas, Suriname and Brazil. It has approximately 7,000 speakers.

See *PRIMITIVE CULTURE*

## Castilian

See SPANISH

## Catalan

Catalan (Gallo-Romance language) is rich in onomatopoeic and sound-symbolic words. The following examples are taken from Riera and Sanjaume (2011) and are attested in literary texts.

Onomatopoeias for beating: *bum-bum*, *catric-catroc/cataract/catruc*, *clap-clap*, *patatrap/patatrop/patatrip*, *patrip/patrap*, *tic-tac*, *tec-tec*, *tric-trac*, *trip-trap*, *trop-trop*. Ideophones for different manners of walking: *catatric/catacrac*, *patim/patam*, *tipitap/tipitip*. Onomatopoeias for slapping: *bim-bam*, *clic-clac*, *flis(t)-flas(t)*, *paplaf*, *pataf*, *patapaf*, *plif-plaf*. Onomatopoeias for the sounds produced by falling and hitting the ground: *barrabam/borrobom*, *cataclac/cataclec/cataclac*, *pataphum*, *patatim/patatum*, *pum*, *pom*. Onomatopoeias for hitting: *bim-bam*, *bom/bum*, *catacrac/catacrec/catacrac*, *citric-catroc*, *papam*, *patam*, *patapaf*, *pataplum*, *patim-patam*, *plim-plam*, *trinc-tranc*, *tum-tum*, *tutum*. Onomatopoeias for shooting: *bam*, *bang*, *clic*, *crac*, *flop*, *flup*, *pac-pac-pac*, *pam*, *pang*, *patapum*, *pim-pam-pum*, *ratatatà*, *tacatac*. Ideophones for crashing: *paplaf*, *paplum*, *pataplaf*, *pataplum*, *pataplim*, *pataplof*, *patapluf*, *patatxaf/patatxof/patatxuf*, *txaf/txof/txuf*, *xaf/xof/xuf*. Onomatopoeias of flowing liquids and splashing: *blap*, *blub-blub*, *glac-glac*, *glec-glec*, *glo-glo*, *glu-glu*, *glop-glop*, *paplaf*, *pataplaf*, *patatxip-patxap*, *patxip-patxap*. Ideophones related to talking: *bla-bla*, *garranyeu*, *gu-gu*, *nyau-nyau*, *nyic-nyic*, *patatam*, *patatim-patatum*, *piu*, *tipitap/tipitip*, *xa-xa-xa*, *xec-i-xec*, *xep-a-xep*. Breaking onomatopoes: *cataclac/cataclec/cataclac*, *catacrac/catacrec/catacrac*, *clac*, *craix*,



*clanc, clang, clec, clic, clinc, clong, cluc, crac, cric-crac, patacrac, tinc, trac.*

See *BOOM, BUTTERFLY, CRACK, CROAK, CUCKOO, ELEMENTARE WORTSCHÖPFUNG, ETYMOLOGY, SYMBOLIC VALUE OF THE VOWEL I, TICK-TOCK*

## **Cayuga**

A nearly extinct northern Iroquoian language spoken on Six Nations of the Grand River First Nation, Cattaraugus Reservation (Canada, US).

See NURSERY WORDS

## **Chagatay**

Extinct Turkish language that was spoken and written in Central Asia until the early twentieth century.

See *FANGEN-FINGER-FÜNF*

## **Chapacura**

Extinct indigenous language of the Bolivia-Brazil border area.

See *BUTTERFLY*

## **Chavante**

A Ge language of Brazil spoken by about 10,000 people in Mato Grosso.

See *BUTTERFLY*

## **Chechen**

Northeast Caucasian language spoken by 1.4 million people in the Chechen Republic.

See *BUTTERFLY, NURSERY WORDS*

## **Cheremis [Mari]**

Uralic language spoken by the Mari people in the Mari Republic (Russia). It has 500,000 speakers.

See *BUTTERFLY*, {-WR-} IDEOPHONIC ROOT

## **Cherokee**

American Indian language of the Iroquoian family spoken by the Cherokee people (USA).

See *DOPPELUNG*, NURSERY WORDS

## **Chiapanec**

Oto-Manguean language of Mexico spoken in Chiapas by approximately 2,000 people.

See NURSERY WORDS

## **Chickasaw**

Nearly extinct Muskogean language of Oklahoma (US).

See *CACKLE*, *DOPPELUNG*

## **Chichewa [Nyanja]**

Bantu language of Zambia, Malawi, Mozambique and Zimbabwe spoken by 12 million people.

See *CACKLE*, MIRROR PRINCIPLE

## **Chinese/Mandarin Chinese**

Sino-Tibetan language spoken in the People's Republic of China and Republic of China (Taiwan) by more than one billion people.

See ASIAN LANGUAGES, BIRD NAMES, *BOW-WOW*, *BUTTERFLY*, *CACKLE*, *ELEMENTARE WORTSCHÖPFUNG*, ONOMATOPOEIC EXPRESSION, REDUPLICATION, SIZE-SOUND SYMBOLISM, *VÖLKERPSYCHOLOGIE*

## Chinese characters

The Chinese writing system is said to have begun in the eighteenth century BCE. This writing system has many iconic characteristics. Some of them will be explained and exemplified in this entry: pictographic aspects, diagrammatic aspects, and phonetic and semantic aspects.

Originally, many simple Chinese characters were pictures of concrete objects; these are termed *pictographic* and constitute iconic representations. Over time, these pictures have been stylized, simplified and standardized and, as a result, the iconic relation with the depicted object is not easily recognizable. The following examples are taken from Li (1993).

- 安 *ān* ‘stable, comfortable, safe’ ‘in a silent house, with her hands folded on her bosom a woman kneels calmly’ (1).  
 白 *bái* ‘bright, clear’, ‘a burning candle’ (3).  
 北 *běi* ‘north’, ‘two persons standing back to back’ (9).  
 比 *bǐ* ‘to juxtapose’, ‘two persons stand one in front of the other’ (11).  
 車 *chē* ‘vehicle’, ‘a carriage, two shafts and two wheels’ (30).  
 虫 *chóng* ‘viper’, ‘it takes the shape of a worm: its upper part is the pointed head; its lower part is the crooked body’ (41).  
 出 *chū* ‘to go outside’, ‘primitive man lived in caves; when he let one foot out of the cave, he indicated that he was going out’ (43).  
 大 *dà* ‘big’, ‘a man standing straight with his arms extended outward’ (51).  
 典 *diǎn* ‘rule, law’, ‘two hands holding a book’ (62).  
 高 *gāo* ‘high, tall’, ‘it represents a high building with the upper part as the pointed roof, the middle part as a wall and tower, and the lower part as a gate in the foundation’ (99).

The repetition of a basic character inside a complex character usually denotes some sort of plurality or multiplicity and it is a salient diagrammatic feature of some Chinese characters. Here are some examples (taken from Myers 2016): 炎 *yán* ‘inflammation’ (cf. 火 *huǒ* ‘fire’); 森 *sēn* ‘forest’ (cf. 木 *mù* ‘wood’); a forest (森) contains more trees (木) than do woods (林 *lín*); 叕 *zhuó* ‘join together’ (cf. 又 *yòu* ‘also’); 三 *sān* ‘three’. Two of the characters presented above also show this iconic reduplication: 北 *běi* ‘north’ and 比 *bǐ* ‘to juxtapose’. The character 从 *cóng* ‘to follow’ depicts a man walking and another man following him. A similar iconicity can be seen in: 多 *duō* ‘many, much’; 分 *fēn* ‘to split or divide’ (representing a knife cutting a thing in two halves); 宮 *gōng* ‘palace’ (two squares signifying the buildings of a palace); 晶 *jīng* ‘brilliant, glittering’ (three

stars); 麗 *lì* ‘beautiful’ (originally, a deer with a pair of good-looking antlers); 品 *pǐn* ‘article, product’ (originally, many/three containers); 區 *qū* ‘area, district’ (three small containers on a shelf); 絲 *sī* ‘silk’ (two sheaves of fine silk); 羽 *yǔ* ‘feather’ (two feathers); 眾 *zhòng* ‘many, numerous’ (three people, indicating a multitude).

The most common type of character is the semantic-phonetic compound: one component of the character relates to its meaning and the other relates to its pronunciation. In this way, the character reflects the two sides of the corresponding linguistic sign: the semantic side and the phonetic side. The inner structure of the character iconically conveys the two main components of the corresponding word. The following examples (taken from Rogers 2005: 35) illustrate this point. The simple character 馬 *mǎ* ‘horse’ is used in different compound characters in order to indicate their pronunciation:

瑪 *mǎ* ‘agate’: 玉 *yù* ‘gem’ + 馬

碼 *mǎ* ‘weights’: 石 *shí* ‘stone’ + 馬

螞 *mà* ‘grasshopper’: 虫 *chóng* ‘insect’ + 馬

罵 *mà* ‘scold’: 口 *kǒu* ‘mouth’ (written twice) + 馬

It is also interesting to note that many Chinese characters conveying sounds that mimic onomatopoeias have the single character 口 *kǒu* ‘mouth’ as one of their components (Hu 2011: 90-91): 咪咪 *mīmī* ‘meow’; 哞哞 *mōumōu* ‘moo’; 吧吧 *bābā* ‘smacking one’s lips’; 叮叮 *dīngdīng* ‘the sound of tingling’; 咕啾 *gūjiū* ‘the sound of murmuring’; 咕咚 *gūdōng* ‘the sound of a heavy thing falling down’; 呼呼 *hūhū* ‘the sound of breathing’; 嚓嚓 *cācā* ‘the sound of rubbing’; 噼啪 *pīpā* ‘the sound of crackling’; 咚 *dōng* ‘sound of beating a drum or knocking at the door’; 啪 *pā* ‘the sound of clapping and slapping’.

See PICTOGRAPHIC ICONICITY, PICTO-PHONETIC-GRAPHIC ICONICITY

## Chinese Sign Language

The following data and descriptions of Chinese Sign Language (CSL) are taken from Chang and Xu (2008). Number representation is iconic in CSL;

for example, in order to denote the number three the middle finger, ring finger and little finger are extended. In addition, the signer can use a handshape to depict particular shape images of the referents. For example, the sign for *bird* uses the right hand to represent the shape of a bird's beak, and then uses both hands to represent the shape of a bird's wings, together with an up-and-down motion to represent the flapping of the wings. To depict a mountain, the signer moves their hands from one side to the other, with undulating movements to trace the outline of mountains: the visual shape of a mountain is therefore traced out in space.

Movement depictions are carried out through movement of the hands, fingers and/or forearms. In the sign for *worm*, the index finger is used to represent the shape of the invertebrate and its wiggling movement depicts the writhing and wiggling of a moving earthworm. Size can be also signed iconically, for example, the signing of *long* and *short*. In the sign for *long*, the signer moves his/her hands away from each other to lengthen the distance between the two hands. For the sign *short*, the signer moves his/her hands toward each other shrinking the distance between them.

Sometimes, only a part of the denoted entity is iconically depicted. For example, the sign for *cat* only depicts the animal's head. The signer first puffs up his/her cheeks to depict the cheeks of a cat, and, with the middle, ring, and little fingers representing the whiskers, the hands are moved outwards across the cheeks tracing the cat's whiskers.

When comparing iconicity in CSL and Taiwanese Sign Language (TSL, Tai 2005), Chang and Zu (2008: 355-358) observe the following contrasts regarding the iconic motivation (IM) of the signs and the iconic devices (ID) used to perform those signs. In the first case, both languages use a sign with the same IM and ID. For example, the sign for *mountain* in both languages is produced by the hand tracing the outline of a mountain. In the second case, the IM is the same in both languages, but they use different IDs. For example, *kill* in CSL and TSL is depicted by mimicking the image of killing a person by beheading. However, they use different IDs to depict this: CSL uses the thumb of the left hand to represent a person's head and the right hand to depict a knife. The sign for *kill* in TSL uses the right hand to depict a knife and performs a cutting movement across the signer's neck to represent beheading. In the third case, the same ID is used for different IMs. An example of this is the sign for *tree* in both sign languages. In CSL, both hands trace the trunk of a tree and the ID is a shape representation. In TSL, the image of an entire tree standing up from the ground is depicted using both arms: the upright arm with spread fingers represents the trunk and the

upper part of the tree, resting on the ground, represented by the other arm and hand (see figure A1); the movement of the branches and leaves is represented by rotating the wrist back and forth. In the fourth case, the sign has a different IM and ID in both languages. For example, the sign for *man* in CSL is iconically motivated by the image of a man's short hair; in TSL it is motivated by the social status of men. The IDs employed are also completely different.

See **ICONICITY IN SIGNED LANGUAGES, TAIWANESE SIGN LANGUAGE**

## Chinook

American indigenous mixed language spoken in the interior and along the coast of the Pacific Northwest (Canada and US) by approximately 600 people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Chintang Ideophones

Chintang is a member of the Kiranti branch of the Sino-Tibetan language family spoken by about 6,000 people in Nepal. Rai, Bickel, Gaenszle, Lieven, Paudyal, Netra, Rai, Rai and Stoll (2005) studied the case in which Chintang ideophones are triplicated.

Triplicated ideophones are provided with an adverbializing suffix *-wa*:

*asinda reprep-rep-wa nam nude* 'yesterday the sunshine was very bright'; *akko aphuwa dikdikdik-wa lise* 'my elder brother became seriously ill'. In the first example, the ideophone *rep* must be triplicated; in contrast, the ideophone *dik* can appear in certain sentences in a reduplicated form: *mahimanya kanchi uthaũbeta dikdik-wa lisadañse* 'Kanchi has become so ill that she cannot move'. In addition, the adverbializer *-wa* is obligatory with triplicated ideophones, but optional with reduplicated forms: *bago pak-pak kok cano* 'this one eats without ever stopping'.

If we add the nominalizing suffix *-go*, the ideophone can function as an adjective: *phakhi toktoktok-wa namno* 'the pig-shit smells very strongly' > *toktoktok-wa-go phak-hi* 'very strong smelling pig-shit'.

The authors point out that triplicated ideophones are very common in everyday speech since they constitute the major source of adverbials.

## Chippewa

Algonquian language spoken in upper Michigan and westward to North Dakota (US) by about 7,000 people.

See *BUTTERFLY*

## Choctaw

Muskogean language spoken in Oklahoma, Mississippi, Louisiana and Tennessee (US) by about 10,000 people.

See *DOPPELUNG*

## Chromaesthetic iconicity

Expression proposed by P. Sadowski (2003: 418) to denote cases in which colour perception is evoked transmodally through sound, as in correlating the vowel spectrum with colour patterns, or in iconising the liquid /l/ with light and brightness (e.g. *gleam*, *glitter*, *gloom*, see Sadowski 2001). The following table gives a selection of different proposals concerning the correlation between vowels and colours collected by Genette (1976: 461).

	A	E	I	O	U
A.W. Schlegel	red	---	sky blue	purple	violet
J. Grimm	white	yellow	red	blue	---
Victor Hugo	white	blue	white	red	black
G. Brandes	red	white	yellow	---	---
Rimbaud	black	white	red	blue	green
R. Ghil	black	white	blue	red	yellow
G. Fechner	white	yellow	---	red	---
V. Nabokov	brown	yellow	---	red	---
M. Ghyka	black	yellow	white	red	green
E. Werth	brown	yellow	white	dark blue	---
K. Langenbeck	red	yellow	white	blue	grey
F. Boas	red	yellow	white	---	---
J. de Cours	red	grey	yellow	orange	green
M. Chastaing	red	orange	yellow	violet, red	green

This type of iconicity is frequently observed in grapheme-colour synaesthetes (i.e. people who consistently associate colours and letters in a natural way). In fact, grapheme-color synaesthesia is one of the most common forms of synaesthesia. Certain regularities between these

synaesthetic relations have been detected. A prototypical model of a synaesthetic alphabet was established by some scholars in a study gathering statistics on the letter-color preference of 70 synaesthetes (Simner et al. 2005):

“In that alphabet some letters have a single color significantly associated with them: red ‘A’, white ‘I’ and ‘O’, black ‘X’ and ‘Z’, gray ‘L’, brown ‘N’ and violet ‘V’. Other letters are shown as having two or three colors because they each had more than one significant color tendency across synesthetes. Interestingly, the letter ‘K’ had no significant tendency, at least in that study. Given their data, among English speaking synesthetes this letter could apparently take almost any color with about equal likelihood”.

In addition, Simner and colleagues (2005) found several linguistic rules that determine the assignment of synaesthetic colours in the Latin alphabet: (1) frequent graphemes associated with frequent colour words (e.g. more frequently ‘a’ is red, whereas less frequently ‘v’ is ‘purple’); (2) synaesthetic letter-colour associations reflect first-letter priming (e.g. ‘r’ tends to be red and ‘g’ tends to be green); (3) frequent letters correspond to colours occurring early in Berlin and Kay’s (1969) typology of colour terms across languages. This typology describes the fact that black and white are the most common colours across language systems, followed by red, yellow, green, blue, and brown (equal frequency), then orange, violet, grey, and pink. Simner et al. (2005) found that this ordering tended to map onto graphemes from high to low frequency, at least in the synaesthetes tested in the study (Mroczo-Wąsowicz and Nikolić 2013: 173-174).

See ECHOIC PALINDROMOIDS

## **Chukchi**

Chukotko-Kamchatkan language spoken in Chukotka Autonomous Okrug (Russia) by approximately 5,000 people.

See NURSERY WORDS

## **Cilubà Ideophones**

Cilubà is a Bantu language of Central Africa and an official language of the Democratic Republic of the Congo; it is spoken by more than 6 million people.

In an overview of Cilubà ideophones, N. S. Kabuta (2001) includes the following data. In this language, ideophones show a meaning preserving



vowel and consonant alternation, as in *nyàkàtàà/nyèkètèè* ‘silence’, *sùbùsùbù/zùbùzùbù* ‘flabby’, *zeezeze/teeteete* ‘whiteness’. A characteristic of Cilubà ideophones is the accumulation of low tones, as seen in the preceding examples.

Many ideophones have onomatopoeic and sound-symbolic natures: *ncàncàncà/zàkàzàkà* ‘trembling’, *kìdikìdì/tòkotòkò* ‘bursting’, *shèhèhèshè* ‘limping along, dawdling’, *bondòbondò* ‘mess’.

Other ideophones mimic sounds: *kabyùù*, *mpyùù* ‘sound of something falling’, *cyàcyà*, *kwàà*, *mvùmvmvù* ‘rustling’, *njènjenjè* ‘slow rustling’, *mbambamba*, *ntùm ntùm*, *tàkàtàkà*, *tukùtukù* ‘heart beat’, *nkenkenke* ‘sound of a hammer in a smithy’, *ntùù* ‘sound of drum’, *nzelelee* ‘sound of metal coins’, *pee*, *puupu* ‘sound of wind’. Interestingly, there are also ideophones for silence: *nyaa*, *vii*, *nyèkètèè*.

Other ideophones depict different kinds of movement: *peepeepe* ‘swinging of a flame’, *bokòbokò* ‘repeated and accelerated movement’, *njen* ‘quick movement’, *mbùù*, *mbyùù* ‘movement of something or someone falling’.

Ideophones usually function as adverbials, although they can also function as adjectives: *kuboobola byàta bokòbokò* ‘to beat out a carpet’ ‘bokoboko’/ *bintu kabùkabù* ‘miscellaneous things’, *nshìngù lebàlebà* ‘long and supple neck’.

In addition, Cilubà also has ideophonic nouns, verbs and adverbs. These words share many phonological and semantic features with onomatopoeic ideophones. Examples of ideophonic nouns: *cibàyibàyì* ‘butterfly’, *cipèlèkèsè* ‘shell’, *lukòtòtò* ‘crust’, *cibùtùkù* ‘a kind of grasshopper’; ideophonic adverbs: *cibùtàcibùtà* ‘secretly’, *bibàtàbàtà* ‘leaning to the ground’, *lùngidingidi* ‘confusingly’, *mipàsàpàsà* ‘at the same time’; ideophonic verbs: *kubaabata* ‘palpate’, *kuboobola* ‘beat out’, *kunyeneyeta* ‘twinkle’, *kukukumina* ‘stutter’.

## Click

This onomatopoeic conveys a slight, sharp sound. The corresponding phonomimetic root seems to be {velar plosive, front vowel, lateral/rhotic}. In French, we find *cliqeter* ‘to rattle, clatter’, *cliqetis* ‘rattle, clatter’, *clique* ‘clique, drums and trumpets of a military band’; in Dutch *klik* ‘click, snap’, *klikken* ‘to click’; in German *klickenk* ‘to click’; in Czech *klikatý* ‘zigzag’, *kliknout* ‘click’, *klika* ‘door handle, doorknob, crank, handle’. This onomatopoeic is also used in Basque: *klikatu* ‘to swallow’, *klik-klik* ‘sound of

hair cutting', *kili-kili* 'tickling', *kilika* 'tickling', *kili-kolo* 'unstably, wobbly, loosely, uncertainly, to lean' (García de Diego 1968: 413-415). The variant with a rhotic consonant is attested in English *crick* 'sharp, painful spasm', *cricket* an insect producing a loud chirping sound, and *to creak* 'to make a sharp, harsh, grating or squeaking sound'. Spanish *grillo* 'cricket' from Latin *grillus* 'cricket' is also based on this phonomimetic root. In Japanese, *kiri-kiri*, *giri-giri* mimics a creaking or grinding sound made by hard objects rubbing together or a rope, wire etc. being wound tightly (Kakehi, Tamori and Schourup 1996: 411, 674)

A click consonant is an obstruent articulated with two closures: one forward and one at the back. These consonants can be found in the phonological systems of various South and East African languages

The written version of this onomatope is widely used in comics. For example, *Detective Comics*, vol. 47 #529, 1983. It can be used to mimic the sound made by a switch: *G. I. Joe* vol. 1 #104, 1990; the sound made by an Uzi with an empty clip: *Ralph Snart Adventures* vol. 5, 1993; the sound of a key turning in an ignition switch: also *clikk*, *Avengers West Coast Annual* vol. 2 #8, 1993; the mechanical sound of objects coming into forced contact (Taylor (ed.) 2000); the sound made by a camera shutter: *Popeye*, 1936, F. Gottfredson *Micky Mouse*, 1932, M. Walker and D. Browne *Hi and Lois*, 1972; the sound of a gun being cocked W. Eisner, *The Spirit*, 1950, C. Barks *Donald Duck*, 1942, M. Sommer *Frank Cappa*, 1981, H. Pratt *Corto Maltese*, 1974; the sound of a key lock: *Grock*, 1928, Al Capp *Fearless Fosdick*, 1943; the sound of a button being pushed: F. Locher *Cicero Sapp*, 1926, O. Messmer *Felix the Cat*, 1927, B. Parker and J. Hart *The Wizard of Id*, 1965, J. Davis *Garfield*, 1985; and the sound of igniting a lighter: C. Swan *Superman*, 1984, among many other meanings (Gasca and Gubern 2008: 95-102).

The *creak* onomatope is also widely used in comics to suggest a creaking sound: F. Locher *Cicero Sapp*, 1928, W. Eisner *The Spirit*, 1949, B. Parker and J. Hart *The Wizard of Id*, 1965 (Gasca and Gubern 2008: 121).

See ECHOIC PALINDROMOIDS

## Cocopa (Cocopah)



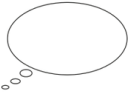


Yuman language spoken in Arizona (US), Baja California and Sonora (Mexico) by about 500 people.

See BIRD NAMES

## Comics

Comics are very rich in visual iconicity.

The speech balloon in comics is an iconic visual representation of the linguistic act. These balloons are usually drawn with a tail pointing to the speaker. There are four main types of balloon (Gasca and Gubern 2011: 279-318):

- 
  - normal speech [M. Caniff *Terry and the Pirates* (1939), D. Messick *Brenda Starr* (1940), B. Brent and B. Wells *Judge Wright* (1945)]
- 
  - whisper [Ph. Davis *Mandrake* (1934), C. Giménez *Paracuellos* (1980)]
- 
  - thoughts [M. Caniff *Terry and the Pirates* (1939), M. Caniff *Steve Canyon* (1952), Bert Bem (1982)]
- 
  - screams, metallic sounds (radio, loudspeakers) [M. Caniff *Terry and the Pirates* (1939), A. Capp *Li'l Abner* (1970), W. Eisner *The Spirit* (1949), M. Caniff *Steve Canyon* (1952, 1973)]
- 
  - dreams, thoughts [D. Calkins *Buck Rogers* (1929), *Micky Mouse* (1933), W. Eisner *Spirit* (1948), R. Moore *The Phantom* (1953), W. Kelly *Pogo* (1973)]

Balloons can also have multiple tails in order to indicate that two or more characters are uttering the same words simultaneously: W. Eisner *The Spirit*, 1941, M. Caniff *Steve Canyon* (1947), Robert Williams *The Siamese Fiendlines*, Gilbert Shelton *Philbert Dessanex* (Gasca and Gubern 2011:

295). There are also balloons without a pointing tail. The text of such balloons consists of the narrator's comments (Khordoc 2001: 163)

The texts inside the balloons usually present iconic properties: “[T]he size of the letters conveys meaning: large bold letters suggest that the volume of the character's voice is quite elevated. In fact, there is a direct relationship between the size of the letters and of the volume of the voice: the bigger the letters, the louder the voice, and the smaller the letters, the lower the voice” (Khordoc 2001: 164-165).

The shape of the letters can also suggest or provoke a certain impression on the reader. The following example is given by Eisner (1990: 12) as an illustration:



FIGURE C2

EISNER 1990: 12 (detail)

The lettering style conveys the effect of terror, violence and anger, as if it were written using dripping blood instead of ink.

In addition, typography can be used to create other sound effects. For example, in *Asterix and the Goths* the speech of the Goths is printed in gothic lettering, which not only serves to identify the Goths, but also suggests that they are speaking a different language to Asterix and Obelix (who are Gauls) (Khordoc 2001: 165).

Even a foreign accent can be conveyed by altering the orthography. For example, in *Asterix and the Great Crossing* a speaker of a Scandinavian language says: *Mâis je te pârdonne* ‘But I pardon you’. The use of the letters *â* and *ø* convey a strong Scandinavian accent (Brethes 2015: 77). This can also be seen in onomatopoeias, such as *woof*, which becomes *wøøf* in order to convey the sound of “Scandinavian” barking.

Written elements outside balloons consist mainly of sound effects and onomatopoeias. There are two observable types of onomatopoeic expression

used in mainstream comic books. *Vocalizations*, such as grunts, laughs, or coughs often appear in the confines of speech balloons. *Sound effects*, such as explosions, punches, or any sound not imaginably produced by the vocal apparatus, are drawn outside speech balloons (Guynes 2014: 60).



FIGURE C3

English Comicbook Onomatopoeias



FIGURE C4

Japanese Comicbook Onomatopoeias

The first Japanese onomatopoeia reads *doon!!* and is used to mimic a dull resonant exploding sound. The second onomatopoeia reads *gogogogogo...* and mimics a roar, a rumble or an engine whirring.

[Varnum and Gibbons (eds.) 2001; Gasca, L. and R. Gubern 2008, 2011; Pietrini (Hg.) 2012; Bramlett, F. (ed.) 2012; Cohn 2013; Sasamoto 2019: 151-180]

## Cora

Uto-Aztecan language of Mexico (Nayarit, Jalisco and Durango) spoken by about 20,000 people.

See *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI*

## Cornish

A formerly extinct Brittonic (Celtic) language spoken as a L2 in Cornwall (UK).

See NURSERY WORDS

## Crack

This onomatopoeic mimics the sound of breaking and, in general, a sudden sharp noise in English, German (*krachen* ‘crash, crack’) and Dutch (*gekraak* ‘crackling, crack, crashing’). It is also attested in Basque in many words with various senses: *krak* ‘creak’, *krakada* ‘bursting, creak’, *krakatu* ‘to burst’, *krakez* ‘suddenly, slightly’, *karrak* ‘onomatopoeia of a crack’, *karraka* ‘wooden rattle, scraping, scratching’, *karrakada* ‘creak, crackle, crackling’, *karrakaildu* ‘drag one’s feet’, *karrakakin* ‘scratch’, *karrakari* ‘one who makes noise with a wooden noisemaker’, *karrakatu* ‘to scratch, to rasp, to grate’, *karrakazale* ‘scratcher’. It can also be found in Catalan: *crac* ‘sharp noise of something that breaks; in child language it conveys an almond, a hazelnut, a pine nut and other fruits with a dry and hard shell; bankruptcy of a company; uncouth, ignorant’, *craca* ‘in child language hazelnut, walnut or other fruit with a dry and hard shell’, *cracar* ‘to make creak’, *cracant* ‘rustle made by silk and cotton thread’, *craquejar* ‘to creak, a sharp noise made by something breaking’, *craqueta* ‘in the language of children, a fruit with a hard shell’. It is also widely attested in dialectal French with different semantic extensions. From the XV century, the French language has used *crac* as ‘an onomatopoeia mimicking the noise produced by certain objects when breaking or making a deafening sound’. Since the XVI century, the French *casquer* ‘to make a sharp noise’ has been used to mimic the call of the crane, the noise of stepping on dry leaves, the noise made by breaking something with one’s teeth and also corporate bankruptcy. *Craquetis* ‘noise made by chewing or by the clashing of a weapon’ is also attested in the same century. In addition, words that mean ‘to shout loudly’, such as *crailler*, *crâler* ‘common teal’, as well as *crâle* ‘the noise of breaking’, *crac*, *craque* ‘the noise of teeth grinding’, *craquer* ‘bursting’, *craquève* ‘digitalis, foxglove’, *cracot* ‘shell’, *cracotte* ‘tear’, *craquère* ‘call of the crane, the stork, the magpie’, *craqueter*, are grouped into a set of several hundred regional words mimicking noises and fragile and noisy things. This plethora of onomatopoeias based on *krak* is unknown in other Romance languages. In Italian there is *crac* ‘a word mimicking the sound of the smashing to pieces of an object or of a collapsing building’. Meyer-Lübke gives the meaning ‘to discharge matter from the throat or lungs by coughing and spitting’ for the Italian words *scracchiare*, *scracá* and for the Provençal *scracar*, as well as for the French word *cracher*, derived from the XII century French *craquier* with the same meaning. Other languages also have this onomatopoeic: Sanskrit *kraksa* ‘creaking’; Lithuanian *krakė* ‘pig honking’; Latvian *kraku* ‘pig honking, snoring, bellowing’; Russian *krakati*

‘to squawk, to croak’; Greek *κράζω* means ‘to croak, to caw, to scream’; Hungarian *krakog* ‘to be hoarse’ (García de Diego 1968: 448-449).

The underlying phonomimetic root seems to be {velar plosive, rhotic, /a/, velar plosive}.

*Crack, crac, crak* and *krak* are frequently used in comicbooks to mimic the sound of breaking, bursting, cracking, exploding, hitting, colliding, and crashing. Examples: Dominique Hé *Le testament de Dieu Chac*, 1984 (crashing), *Laurel and Hardy*, 1934 (sound of falling coins), H. Fischer *Joe Palooka*, 1940 (punching), W. Gould *Red Barry*, 1935 (fighting), M. O’Malley and R. Lane *Vic Flint*, 1948, W. Eisner *The Spirit*, 1949 (punching), C. C. Beck *Captain Marvel*, 1953 (kicking), G. McManus *Bringing Up Father*, 1954 (hitting and breaking), J. Hart *B.C.*, 1965, H. Ketchman *Dennis the Menace*, 1967 (hitting); L. Young *Tim Tyler’s Luck*, 1936, 1945, H. Pratt *Corto Maltese*, c.1970, M. Sommer *Frank Cappa*, 1983 (shooting) (Gasca and Gubern 2008: 111-115).

It is used to convey the sound of breaking glass (*Man of War* 8), a sound made when a punch or kick connects, also *crack* (*Fightin’ Marines* 145, 1979), the sound of an artillery shell hitting a tank (*Mantra: Infinity*, 1995), also *crack* (*Mantra: Infinity*, 1995), the sound of a hit (K. J. Taylor (ed.) 2000).



FIGURE C5

See ECHOIC PALINDROMOID

## ***Crash***

Breaking or falling to pieces with a loud noise, a sudden loud noise, as of something being violently smashed or struck: German *Krach* ‘noise, crash’, Swedish *krascha* ‘crash, smash’, Russian *krax* ‘collapse, crash’, Croatian *krah* ‘crash, bust’, Polish *krach* ‘crash, collapse’. The underlying phonomimetic root seems to be {velar plosive, rhotic, palatal/velar fricative}.

*Crash* is very frequently found in comicbooks. It is used to suggest a crashing sound, as of a collision: *Little Orphan Annie*, 1931, F. Gottfredson *Mickey Mouse*, 1935, *Abbie An' Slats*, 1937, G. Crepax *Neutron: La curva di Lesmo*, 1955, *Our Fighting Forces* 111, 1968, *The Incredible Hulk* vol. 1 226, 1978, *Steel* 1, 1994; the sound of a ball on a chain smashing against a wall: *G. I. Joe* vol. 1 60, 1987, the sound made by a door being kicked in: *G. I. Joe* vol. 1 61, 1987; a crashing sound, as of an object hitting into a wall: *Dare Devil: The Man Without Fear* vol. 1 5, 1994; the sound of a breaking wall: (also CRAASH) *Venom: The Enemy Within* 2, 1994; the sound of breaking glass: (also CRASHH), *Buster Keaton*, 1928, Ch. Gould *Dick Tracy*, 1934, M. Fleischer *Betty Boop*, 1936, *The Adventures of Kool-Aid Man* 6, 1989, *Daredevil: The Man Without Fear* vol. 1 3, 1993; the sound of ice breaking: *Daredevil: The Man Without Fear* vol. 1 5, 1994; a crashing sound, as of metal garbage cans falling over: *Archie* 407, 1993; a crashing sound, as often heard while playing an arcade game: *The Adventures of Toucan Sam*, 1994; also the sound of falling fruit (Taylor (ed.) 2000; Gasca and Gubern 2008 116-120).

### ***Cratylisme secondaire*** [secondary Cratylism]

This French expression (secondary Cratylism) was proposed by G. Genette (1976: 40) to denote the irresistible impulse to *reinterpret* or *reanalyse* iconically opaque linguistic expressions so as to make them amenable to an iconic explanation. Some of the mistaken etymologies given by Socrates in the *Cratylus*\* dialogue could be examples of this attitude. Th. E. Morgan (1994: xxv) suggests that, ironically, even F. de Saussure, who introduced the notion of the arbitrariness of the sign, was affected by secondary Cratylism when he tried to discover the names of ancient gods and heroes mysteriously concealed in letters and sounds in what he called *anagrams* and *paragrams* (see Joseph 2012: 483-488).

### ***Cratylus***

Dialogue by Plato. Socrates is asked by two men, Cratylus and Hermogenes, to tell them whether names are “conventional” or “natural”, that is, whether language is a system of arbitrary signs or whether words have an intrinsic relationship to the things they signify.

Following Sedley (2003: 3-5), the dialogue can be analysed in three parts. In part one, Cratylus and Hermogenes argue about the ‘correctness of names’. Cratylus holds that all names belong naturally to their referents. Hermogenes replies that nothing but arbitrary convention determines the



names we use. Socrates argues that naming is a skill analogous to cutting or weaving with its own appropriate tools. A name is therefore a tool that must be properly made to do its job. For this reason, the name-maker must propose a name for each entity in accordance with the nature of that entity.

In part two, Socrates proposes a series of etymologies in order to prove his theory. When properly analysed, the names can reveal the properties of the entities they denote by examining the meanings of their constituent parts. He works through a series of cosmological terms and words related to virtues and vices, both moral and intellectual, which he interprets as conveying the picture of everything as being in flux. Finally, he asks how names that cannot be decomposed into their meaningful constituents acquire their own meaning. He proposes that this comes from the imitative significance of primary sounds corresponding to single letters of the alphabet.

In the third part of the dialogue, Socrates relativizes his theory by arguing that names are less than a perfect description of the entities they denote, so they are not a secure route to the truth about those entities. There are two possible reasons for this: (a) the name-maker may not have known the truth; (b) names cannot be completely faithful to the nature of the entities to which they refer. Therefore, rather than relying on names, we should directly investigate the things themselves.

In the second part (specifically in paragraphs 426c-427c), the dialogue includes the first explicit discussion in Western philosophy of sound symbolism.

In 426c2-d3, Socrates states that the sound corresponding to Greek letter  $\rho$  is an instrument of every sort of motion, so this sound mimics movement, since when producing it the tongue is ‘least at rest and most agitated’ (426e4-5). In 426e6-427a2, the sound corresponding to the vowel  $\iota$  (iota) is employed ‘for all the fine things, those which should most go through everything’. The sounds of  $\phi$ ,  $\psi$ ,  $\sigma$  and  $\zeta$  (427a2-8) are ‘breathy’ and are appropriate for mimicking coldness ( $\psi\upsilon\chi\rho\acute{o}\nu$  [psykhron] ‘cold’), seething ( $\zeta\acute{\epsilon}\omicron\nu$  [dzéon] ‘seething’), and shock ( $\sigma\epsilon\iota\sigma\mu\acute{o}\varsigma$  [seismós] ‘shock’). The sounds of  $\delta$  and  $\tau$  mimic ‘bond’ ( $\delta\epsilon\sigma\mu\acute{o}\varsigma$  [desmós] ‘bond’) and ‘rest’ ( $\sigma\tau\acute{\alpha}\sigma\iota\varsigma$  [stasis] ‘rest’), since their pronunciation involves ‘compression’ and ‘leaning’ of the tongue on the teeth (427a8-b2). The sound  $\lambda$  mimics gliding ( $\acute{o}\lambda\iota\sigma\theta\acute{\alpha}\nu\epsilon\iota$  [olistháne] ‘glides’) and smoothness ( $\lambda\acute{\epsilon}\iota\omicron\nu$  [leion] ‘smooth’). The internal nature of the sound of  $\nu$  mimics inner location as in  $\acute{\epsilon}\nu\delta\omicron\nu$  [éndon] ‘inside’ y  $\acute{\epsilon}\nu\tau\acute{o}\varsigma$  [entós] ‘within’. The vowels  $\alpha$  and  $\eta$  are used to

mimic largeness and length, because they are ‘large’ (427c3-4). The vowel *o* can be used to mimic roundness, because when pronouncing this vowel the mouth takes on a round shape, although Socrates does not mention this reason.

In his exhaustive commentary, Ademollo (2011) denies the onomatopoeic character of these analyses:

“It is not an *onomatopoeic* analysis, because onomatopoeia consists in something rejected at 423ce, i.e. the imitation of something’s sound by the sounds of its name. According to Socrates’ theory, what ought to be imitated is rather the essence of things. It may be tempting to speak of a *sound-symbolic* analysis” (Ademollo 2011: 309).

In addition, Ademollo observes that Socrates concerns himself with the way each letter or sound is *articulated*, rather than with the letter or sound itself:

“The imitation is performed by the movements and positions of the tongue, the lips and all the phonatory apparatus; indeed, at 423b Socrates already spoke of indicating something ‘with voice, tongue and mouth’. [...] The sounds, however, do not constitute the factor that is responsible for the imitation; they are rather an epiphenomenon. So, strictly speaking, we should say that Socrates is interested in a sort of *articulatory mimesis*” (Ademollo 2011: 310).

This articulatory approach to sound symbolism is proposed in order to strengthen Socrates’ theory:

“A theory of primary names such as the one he has been sketching and should now put into practice should require that the associations rest on some firm, objective ground. Bringing articulation into the picture provides exactly such a ground—or so it may seem. For the articulatory facts admit of an objective description. Once we have supplied such an objective description we may hope to be able to establish a correlation, based on equally objective resemblances, between the articulation of sounds and the features of things” (Ademollo 2011: 310).

## Cree

Algonquian language spoken in Canada and the United States (Montana) by approximately 95,000 people.

See *BUTTERFLY*, *DOPPELUNG*

## Creoles

A creole is a natural language spoken as a mother tongue by an entire community arising in situations of intense contact. Creoles are fully fledged languages on a par with any other natural language in the world and are capable of fulfilling any linguistic need of the relevant speech community (Velupillai 2015: 43).

Creoles, like other natural languages, present many iconic uses of reduplication. Kouwenberg and LaCharité (2003: 8) give the following data on Caribbean creoles:

- Berbice Dutch: *inga-inga* ‘many thorns’ (*inga* ‘thorn’), *mangi-mangi* ‘to keep running’ (*mangi* ‘to run’, *nangwa-nangwa* ‘very long’ (*nangwa* ‘long’).
- Negerhollands: *stiki-stiki* ‘many pieces’ (*stiki* ‘piece’), *pek-pek* ‘look for food’ (*pek* ‘to peck, pick’), *wa-wa* ‘really true’ (*wa* ‘true’).
- Papiamentu: *pipita-pipita* ‘many grains’ (*pipita* ‘grain’), *bula-bula* ‘to jump about’ (*bula* ‘to jump’), *kayente-kayente* ‘very hot’ (*kayente* ‘hot’).
- Jamaican: *maka-maka* ‘many thorns’ (*maka* ‘thorn’), *luk-luk* ‘to keep looking’ (*luk* ‘to look’), *laas-laas* ‘very last’ (*laas* ‘last’).
- Sranan: *saka-saka* ‘many sacks’ (*saka* ‘sack, bag’), *yepi-yepi* ‘to help habitually’ (*yepi* ‘to help’), *bisi-bisi* ‘very busy’ (*bisi* ‘busy’).
- Ndyuka: *soutu-soutu* ‘various kinds’ (*soutu* ‘sort, type’), *suku-suku* ‘to keep looking’ (*suku* ‘to look for’), *tuu-tuu* ‘(to be) emphatically true’ (*tuu* ‘(to be) true’).
- Saramaccan: *kamian-kamian* ‘different places’ (*kamian* ‘place’), *bia-bia* ‘to wind (of river) (*bia* ‘to turn’), *langa-lang*a ‘very long’ (*langa* ‘(to be) long’).

In Guyanese Creole (Devonish 2003: 55), the repetition of a predicate phrase can be used to denote a continuing action or process, as in:

- *Di miit kùk !kùk !kùk so til I saaf* ‘the meat continued being cooked/was cooked repeatedly, until it was soft’ (! stands for high tone lowering).
- *Mi réd di floor, réd di floor, réd di floor, réd di floor til mi disgos* ‘I continued reddening the floor until I was fed up’.

In Saramaccan, verbs expressing a repetitive motion are reduplicated (Bakker 2003: 75): *jambajamba* ‘to walk up and down’, *tekuteku* ‘to hiccup’, *tibetibe* ‘to swim’, *tengutengu* ‘to walk with a limp’.

Distributive quantification can also be conveyed by the repetition of determiners in Ghanaian Pidgin English (Huber 2003: 142):

- *Bat wã-wã-wã-wan-wan dè jus tu kam from nof tu mi* ‘but one by one they used to come from the North [to visit] me’.

Sometimes, verb reduplication can also have a distributive interpretation, as in the following examples from São Tomé Creole (Ladhams, Hagemeyer, Maurer and Post 2003: 169):

- *E fê-fe ke* [he (e) make-make (fê-fe) house (ke)] ‘he built many houses’.
- *Bo le-le livlu* [you (bo), read-read (le-le) book (livlu)] ‘you read many books’.

Atlantic Creoles have many examples of sound symbolism. For example the pattern *bVm* is used to mimic the sound of a blow, of falling, and of diverse noises (Bartens 2000: 125-126):

- Papiamentu: *bum-bum-bum*, *bam-bam-bam* ‘sounds of footsteps’, *bim-bim-bim* ‘sound of knocking’.
- Kriyôl: *bang* ‘of a blow, thud’.
- Popular Brazilian Portuguese: *bum* ‘Boom! Pang! Pow!’.
- Caribbean Spanish: *bomba*, *bombo* ‘big drum, a dance noise’.
- Haitian, Guadeloupean French Creole, Martiniquais, Trinidad French Creole, Louisianais, Black English: *bamboula* ‘drum, dance with drumming, feast’.
- Haitian: *bim-banm* ‘clatter, quarrel, fistfight’, *bim* ‘rumble, a blow with a stick’, *boum* ‘boom!’ *bum* ‘of falling heavily’.
- Guyanese French Creole: *bim* ‘of a blow’.
- Krio: *bàm* ‘of falling’, *bum* ‘sound of drum being beaten, sound of a heavy fall’, *gbang* ‘sound of a heavy banging or slamming’.
- Jamaican: *bam* ‘of a sudden action’, *blam* ‘to make a sharp sound’.

The ideophone *jukijuki* applies to swift penetration (Bartens 2000: 132-133):

- Jamaican: *juki-juki* ‘perforated, punctured’, *joko-joko* ‘to poke or jab repeatedly’, *jigi-jigi* ‘repeated movement back and forth’.
- Krio: *jekjek* ‘to have sex with a harlot’, *jigjig* ‘sexual intercourse (vulgar)’.
- Haitian: *djage* ‘to stab’.
- Guadeloupean French Creole, Martiniquais, Guyanese: *choke* ‘to stab’.

Creoles are indeed rich in ideophones. In the case of Atlantic Creoles (Bartens 2000: 52-110) many of them are retained from their African substrate languages. For example, the ideophone *fitifata* ‘completely (of destroying)’ attested in Krio comes from Yoruba *fitá-fitá* ‘effort, energy, endeavour attempt’, Mandingo *fitifiti* ‘to struggle, to shake’ (Bartens 2000:

54); in a similar way, *kolokolo* ‘very (dry), plentiful’, as in Fa D’Ambu *sécu jolójólo* ‘very dry’ and Jamaican *kulu-kulu* ‘plentiful’, is an intensifying ideophone originally used in Yoruba, Ewe and Kongo (Bartens 2000: 58).

There are ideophones in Atlantic Creoles mimicking colour. The following ideophones convey ‘snow white’ (Bartens 2000: 47-48): Kriyòl (*branku fandán*), São Tomé Creole (*blanku fenene*), Fa d’Ambu (*bancu pepepe*). Krio *waytí fu*, Sranan (*weti faalfanfan*), Ndyuka (*weti fááng*). In these ideophones, the first element is from a European language (Portuguese or English) and the second is from an African language: Mende *fangfang* ‘lucidly, clearly (of speaking)’, Mandingo *fanfang* ‘very well’, *fer* ‘completely, very (white)’, Twi *fufu* ‘white’, Ewe *fu títiti/tatata* ‘snow white’, Yoruba *funfun láúláú* ‘snow white’.

## Cricket

See CLICK

## Croak

This onomatopoeic word mimics the characteristic sound made by a frog or a crow. The corresponding phonomimetic root seems to be {velar plosive, back (semi)vowel, (rhotic)}. It is widespread: Albanian *kuak*, German *quaken*, Armenian *krral*, Catalan *raucar*, Danish *kvækker*, Slovak *kvákať*, Slovene *kvakati*, Spanish *croar*, Basque *korroka (egin)*, *kro-kro (egin)*, Finnish *kurnuttaa*, French *croasser*, Georgian *kraki*, Modern Greek *γκρινιάζω*, Hungarian *kuruttyol*, Italian *gracchiare*, Latvian *kraukšķēt*, Lithuanian *kurkti*, *kvarkti*, Norwegian *kvekke*, Polish *krakać*, Portuguese *coaxar*, Romanian *cârâit*, *croncânit*, Russian *kvakat’*, *krakat’*, Serbian *kreketati*, Swedish *kraxa*, *kväka*, Turkish *karga (gibi ötmek)*.

This onomatopoeic is used in comics with the same meaning: B. Parker and J. Hart *The Wizard of Id*, 1981, F. Ibáñez *Mortadelo y Filemón*, 1992 (*croac*), (Gasca and Gubern 2008: 122).

See ECHOIC PALINDROMOIDS

## Croatian

South Slavic language spoken in Croatia and neighbouring countries by approximately 5.5 million people.

See BUZZ, CRASH, PUFF

## Crow

This bird name seems to be based on the same phonomimetic root as *croak*\*. This mimetic root is attested in Albanian *korb* ‘raven’, Western Armenian *akrav* ‘crow’, German *Kräh*e, Modern Greek *kórakas*, Latin *corvus* ‘raven’, Spanish *cuervo* ‘raven’, Czech *krkavec* ‘raven’, Japanese *karasu* ‘crow’, Turkish *karga* ‘crow’, Tarahumara *kora-chi* ‘crow’, Alaba (Eastern Cushitic) *qura* ‘crow’, Arabic *ghuraab* ‘crow’, Ju’hoan (Northern Khoisan) *k̥ura* ‘crow’, Sandawe *xooxori* ‘crow’, Makua *khware* ‘raven’, Fur (Nilo-Saharan) *kur* ‘crow’, Ik (Nilo-Saharan) *kòrak* ‘crow’, Ngiti (Nilo-Saharan) *àkùrù* ‘raven’, Maba (Nilo-Saharan) *agur-ak* ‘crow’, Maasai *ol-kúrrúk* ‘crow’, Burushaski *ghóqares* ‘raven’ (Marttila 2011: 215-218).

After doing research into *corvus* names in more than 140 languages, the scholar A. Marttila reached the following conclusion:

“One can sum up that the vast majority of the languages considered here have a name for crow or raven, based on an imitation of the *kaa/kraa/kaar* call. Some have imitated the call beginning with a semi-vowel type of sound, transliterated with [w], but there is no attestation in this sample of a name that would imitate the raven *pruk* type of call” (Marttila 2011: 167).

## Cuckoo

Cuckoos have a very characteristic call, which can be linguistically expressed by the disyllabic expression *cu-coo*, or the trisyllabic *kuk kuk kuk*; this call serves to advertise occupancy of territory (Marttila 2011: 137). The underlying phonomimetic root seems to be {velar plosive, high back vowel}.

Here are some examples (taken from Marttila 2011: 138-139 and several dictionaries): Ainu *kakkok*, Basque *kuku*, Itelmen *qekuk*, Kannada *kukil*, Albanian *qyqe*, Armenian *kkou*, Georgian *guguli*, Lithuanian *gegute*, Russian *kukushka*, Polish *kukulka*, Czech *kukačka*, Slovene *kukavica*, Irish *cuach*, Dutch *koekoek*, Danish *kukker*, Norwegian *gjøk*, Modern Greek *kukkos*, Nepali *kukku*, Kurdish *pûpû*, Spanish, Portuguese *cuco*, Catalan *cucut*, French *coucou*, Italian *cucù*, *cuculo*, Japanese *kakkoo*, Kalmyk *kuku*, Lezgian *kuk’up*, Manchu *gugun*, Turkish *guguk*, Finnish *käki*, Hungarian *kakukk*, Ket *qopkun*.

See ECHOIC PALINDROMOIDS, ONOMATOPÉES ET MOTS EXPRESSIFS, ONOMATOPOEIC EXPRESSION

## ***Cucumber***

R. Norrman (2001: 89-90) examines the iconic aspects of the names of cucurbits in different languages: Italian *cocomero*, Occitan *coucourbe*, English *cucumber*, Latin *cucumis*, Dutch *komkommer*.

In these examples, reduplication iconically mimics the fast growth of the vines and foliage and the bulging, characteristic of the plants that bear these fruits.

Another phonetic component of the nouns referring to *cucurbits* is the presence of bilabial stops: Spanish *pepino* ‘cucumber’ and *calabaza* ‘pumpkin’, French *calebasse*, German *Kürbis*, Latin *pepo*. In English, they co-occur with the bilabial nasal: *pumpkin* and *cucumber*.

Norrman (2001: 91) says that labial consonants seem to be used in words referring to massive roundedness.

## **Cultivated Iconicity**

The iconicity of natural languages can be exploited and elaborated with a particular purpose, most notably for literary purposes. Anderson 1998 gives a comprehensive survey of the intentional use of linguistic iconicity in literature. Cultivated iconicity is one of the aspects of cultivated languages (Moreno and Mendívil-Giró 2014).

See NATURAL ICONICITY

## **Czech**

West Slavic language spoken in the Czech Republic by more than 10 million people.

See *BABBLE*, *BALTO-SLAVIC LANGUAGES*, *BIRD NAMES*, *BOW-WOW*, *CAKLE*, *CROW*, *CUCKOO*, *FANGEN-FINGER-FÜNF*, *NURSERY WORDS*, *ONOMATOPOEIA*, *PIP*

# D

## **Dakota**

Siouan language of the Dakota people (US and Canada).

See *NURSERY WORDS, VÖLKERPSYCHOLOGIE*

## **Damana**

Chibchan language of the Wiwa People of Sierra Nevada de Santa Marta (Colombia).

See BIRD NAMES

## **Danish**

A North Germanic language spoken by more than 5 million people in Denmark.

See BIRD NAMES, *BOW-WOW, BUZZ, CACKLE, CROAK, CUCKOO, ELEMENTARE WORTSCHÖPFUNG, GERMANIC LANGUAGES, ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI, PRIMITIVE CULTURE, SYMBOLIC VALUE OF THE VOWEL I*

## **Danish Sign Language**

See ICONICITY IN SIGNED LANGUAGES

## **Dayak**

A group of mainly Malayo-Polynesian languages spoken in Borneo.

See *BUTTERFLY, FANGEN-FINGER-FÜNF. PRIMITIVE CULTURE*

## **De-iconization**

The gradual loss of iconicity caused by the simultaneous action of regular sound changes and regular sense development of a word (Flaksman 2017: 23). M. Flaksman (2017: 29-30) proposes the following four stages in this



process. A word in stage 0 (S0) gives an instance of pure iconicity. For example, an exclamation that can have sounds not included in the phonemic inventory of a language, such as the English *ough* containing the velar fricative /x/. Stage 1 (S1) contains iconic interjections that can violate phonotactic constraints, such as the English *ahchoo!* and *zzz!*. Stage 2 (S2) is reached when an iconic word becomes a verb, noun, or adverb, as in the English *clap*, *tap*, *hoot*, *splotch*. At this stage, the word is clearly iconic and is also fully integrated into the conventional system. Stage 3 (S3) can affect the phonological aspects of the iconic word, while preserving the original meaning, as in the English *laugh*, *bleat*, *chirr*, *purr* (S3a); or it can alter the meaning, while preserving the phonetic aspects (S3b), as in the English *clip* and *cliché*. At stage 4 (S4), the iconic word has been completely de-iconized and is now indistinguishable from the rest of the conventional vocabulary. For example, the English *lunch* originally denoted a munching sound.

In Spanish, there is the expression *chsst!* ‘sh!’, which is used to demand silence or call someone over. From this expression (S0) a *chis*, *chist* (S1) interjection is derived. The verb *chistar* ‘to say *chist*’ displays stage 2 (S2) of the de-iconization process. This verb also means ‘to call someone’s attention’ or simply ‘to speak’ (S3b). From it, the noun *chiste* ‘joke’ is derived (S4) reaching stage 4 of the de-iconization process.

Below is a list of some additional English examples of the different de-iconization stages taken from M. Flaksman 2016; all the included words have been given an onomatopoeic etymology in at least one etymological dictionary:

S0: *argh*, *ugh*.

S1: *aha*, *ahem*, *ahoy*, *alala*, *arf*, *arr*, *baa*, *bah*, *bla bla*, *bligh*, *bloot*, *boing*, *bom*, *boo*, *bratatat*, *brrrr*, *brum-brum*, *bzzz*, *choo-choo*, *cock-a-doodle-do*, *glop*, *glug*, *grrr*, *ha-ha*, *hallo*, *hi*, *hist*, *mm*, *paiff*, *pah*, *psst*, *pring*, *tarara*, *tra-la-la*, *tuff*, *tum*, *uh*, *um*, *wow*, *zzz*.

S2: *babble\**, *ball*, *balloon*, *bang*, *barf*, *bay*, *bead*, *bee*, *beep*, *belch*, *bit*, *blab*, *bladder*, *blade*, *blart*, *blash*, *blast*, *blather*, *blaze*, *bleb*, *bleep*, *blob*, *bloom*, *blop*, *blow*, *blur*, *blush*, *bobolink*, *boil*, *bomb*, *bomp*, *bong*, *boob*, *boom\**, *booze*, *brash*, *brattle*, *brawl*, *bray*, *break*, *bristle*, *brittle*, *brush*, *buff*, *burp*, *buzz*, *cackle\**, *cawk*, *cha-cha-cha*, *champ*, *chat*, *cheep*, *chink*, *chirrup*, *chitter*, *chizz*, *choke*, *chomp*, *clack*, *clamp*, *clang*, *clap*, *clatter*, *clench*, *click\**, *clinch*, *clink*, *clock* (*cackle*), *clonk*, *clop*, *cloud*, *clump*, *clunk*, *cluster*, *clutch*, *clutter*, *coo*, *crack\**, *crash*, *crawk*, *creak*, *crisp*, *crimp*, *crunch*, *crush*,

*cuckoo\**, *drum*, *fizz*, *flag*, *flake*, *flame*, *flap*, *flare*, *flash*, *flatter*, *flea*, *fleck*, *flick*, *fling*, *flip*, *flirt*, *float*, *flob*, *flog*, *flood*, *flop*, *flounce*, *flow*, *fluff*, *flump*, *flunk*, *flurr*, *flush*, *flutter*, *fumble*, *fuzz*, *gab*, *gaff*, *gaggle*, *gasp*, *gibber*, *giggle*, *glance*, *glare*, *glass*, *glaze*, *gleam*, *glib*, *glide*, *glimmer*, *glimpse*, *glint*, *glissade*, *glitter*, *gloaming*, *gloom*, *gloss*, *glow*, *glum*, *gob*, *gobble*, *goggle*, *gong*, *grate*, *gride*, *grinch*, *grind*, *groan*, *grouch*, *grouse*, *growl*, *grudge*, *gruff*, *grumble*, *grunt*, *hiccup*, *hiss*, *hizz*, *honk*, *hoot*, *hum*, *humdrum*, *jangle*, *jibber*, *jingle*, *knob*, *lall*, *lap*, *lick*, *lilt*, *little*, *loll*, *lull*, *lullaby*, *lump*, *moan*, *mumble*, *mush*, *oink*, *pant*, *peep*, *pew*, *pink*, *pip*, *pit*, *plump*, *pop*, *puke*, *rasp*, *rattle*, *ring*, *rumble*, *rustle*, *scape*, *scat*, *scrabble*, *scramble*, *scrap*, *scrape*, *scratch*, *scream*, *screech*, *scribble*, *scroop*, *scrub*, *scrunch*, *scuff*, *shrill*, *sing*, *sip*, *siss*, *sistle*, *slack*, *slam*, *slap*, *slash*, *sledge*, *sleek*, *slight*, *slim*, *slime*, *slink*, *slit*, *slobber*, *slope*, *slow*, *slush*, *slur*, *slut*, *smack*, *smash*, *smatter*, *smell*, *smile*, *snap*, *snatch*, *sneeze*, *sniff*, *snooze*, *snuff*, *sob*, *spank*, *spew*, *splash*, *splish*, *splosh*, *splurge*, *sputter*, *swallow*, *swap*, *swash*, *sway*, *sweep*, *swell*, *swift*, *swim*, *swing*, *swoop*, *tap*, *tattle*, *throb*, *thud*, *thunder*, *tick*, *tick-tock*, *titter*, *toll*, *troat*, *twaddle*, *tweek*, *twiddle*, *twinge*, *twingle*, *twink*, *twirl*, *twist*, *twitch*, *twitter*, *twizzle*, *wail*, *wap*, *wee*, *weep*, *weet*, *whack*, *wham*, *wheeze*, *whiff*, *whimper*, *whip-poor-will*, *whish*, *whisp*, *wibble*, *yammer*, *yank*, *yap*, *yawn*, *yell*, *yelp*, *yodel*, *zigzag\**, *zizz*, *zoom*.

S3a: *agogo*, *bark*, *bawl*, *beat*, *bellow*, *blare*, *bleat*, *bubble*, *bulb*, *bulge*, *bulk*, *bum*, *bumble*, *bunch*, *burble*, *burl*, *burst*, *call*, *caw*, *chew*, *chime*, *chirk*, *chirp*, *cough*, *croak*, *cry*, *cur*, *echo*, *gape*, *gargle*, *gnarl*, *gnash*, *gnaw*, *gurgle*, *gush*, *harsh*, *hoarse*, *howl*, *hump*, *jar*, *knap*, *knell*, *knock*, *laugh*, *lisp*, *murmur*, *mutter*, *neigh*, *pipe*, *pubble*, *puff*, *pumpkin*, *purr*, *roar*, *rough*, *sigh*, *snarl*, *snore*, *snort*, *sound*, *spout*, *squall*, *squawk*, *squeak*, *squeal*, *squeeze*, *squelch*, *suck*, *tiny*, *tooth*, *tush*, *ululate*, *warble*, *whine*, *whisper*, *whistle*.

S3b: *alalia*, *alley-oop*, *baboon*, *baby*, *baffle*, *bash*, *bat*, *bazooka*, *bib*, *boll*, *bolster*, *bullet*, *bunt*, *butt*, *chap*, *chickadee*, *chicken*, *chiff-chaff*, *chip*, *chock*, *chop*, *chuck*, *chump*, *chunk*, *claque*, *clash*, *clip*, *clock*, *clomp*, *club*, *cock*, *crick*, *cricket*, *crump*, *cuff*, *curlaw*, *cut*, *dash*, *dribble*, *drill*, *drip*, *driple*, *drop*, *dump*, *finch*, *funk*, *fuss*, *gag*, *grump*, *jab*, *jam*, *jink*, *job*, *jog*, *jolt*, *jump*, *kick*, *killdee*, *kiskadee\**, *lash*, *lush*, *mimic*, *mock*, *nip*, *paddle*, *pang*, *pebble*, *pick*, *ping-pong*, *piss*, *plod*, *plodge*, *plug*, *prick*, *prod*, *prang*, *puck*, *pudding*, *pudge*, *pump*, *pussy*, *quake*, *quiver*, *rabble*, *rash*, *rat*, *rip*, *rock*, *row*, *ruffle*, *rush*, *shatter*, *shuffle*, *snout*, *soak*, *spatter*, *spuffle*, *squabble*, *squash*, *stammer*, *thrash*, *thresh*, *tingle*, *tink*, *tip*, *totter*, *tremble*, *trickle*, *trot*, *trump*, *tumult*, *vibrate*, *whip*, *whisk*, *zap*, *zip*.

S4: *abash, astonish, bale, ballot, belly, big, billow, bird, boast, bounce, budge, buffoon, bullion, bun, carve, catch, cheek, crab, crow, flower, gap, goblet, have, hurry, jerk, knack, mouth, owl, picnic, poke, raven, spurt, strike, stun, tear, terror, touch, whirl, wind.*

See ICONIC TREADMILL HYPOTHESIS

## **Delocutive ornithonym**

A bird name derived from the linguistic interpretation of its characteristic call. The bird is said to “utter” a meaningful expression of a particular language. For example, in Spanish *cristofué* ‘it was Christ’ is the name given in Honduras and Venezuela to a species of bird known by the scientific name *pitangus sulphuratus*: the bird’s call sounds like this Spanish expression.

See BIRD NAMES, KALULI BIRD NAMES, *KISKADEE*

## **Diagram**

In Peirce’s semiotics, a diagram is a sign in which the internal relations of its complex form correspond to the internal relations of the complex thing it denotes. For example, a transit map is a schematic diagram in which straight lines and fixed angles illustrate a fixed distance between stations.

See PICTURE THEORY OF THE PROPOSITION, *QUEST FOR THE ESSENCE OF LANGUAGE*, *VENI, VIDI, VICI*

## **Diagrammatic Iconicity**

A type of similarity between form and meaning in which a structural relation between the elements of a complex linguistic form mirrors a corresponding relation between the entities or events denoted by it.

The diagram, inside Peirce’s semiotics, is defined as an icon of relations. Diagrams “represent the relations [...] of the parts of one thing by analogous relations in its own parts”. A typical example is any map depicting a territory, such as a schematic of a metro (Nöth 2008: 87).

In language, this type of iconicity is directly related to the *meta-iconic markedness principle\**, which explains the tendency that one and the same forms tends to represent one and the same meaning. The following

formulation of diagrammatic iconicity can be proposed (adapted from Ohori 2015: 269):

Construction 1: Form 1a-Form 1b <Relation W>	Construction 2: Form 2a-Form2b <Relation X>
W :: X	

A compositional transparent linguistic expression can be seen as a semantic diagram. For example, *taxi driver*, *truck driver* and *bus driver* are semantic diagrams: the grammatical connection between *driver* and *taxi*, *truck* and *bus* is iconically related to the relationship between a person and a type of vehicle.

#### Grammatical Construction

[[taxi]<sub>N</sub> [driver]<sub>N</sub>]<sub>N</sub> < direct object relation >

#### Semantic Construction

[[TAXI]<sub>patient</sub> [DRIVER]<sub>agent</sub>]  
< direct object relation > :: < agent-patient relation >

There is an asymmetric grammatical relationship between *taxi* and *driver* in [taxi driver]: the head of the phrase is *driver* and not *taxi*. For this reason, from *the taxi driver told me that* we can obtain *the driver told me that* but not *the taxi told me that*. The semantic relationship between the respective meanings of *taxi* and *driver* is also asymmetric, since the second denotes an agent acting on a patient: a taxi driver is a type of driver not a type of taxi.

In addition, Nöth (2008) observes, following Peirce, that every sentence presents a mental diagram of its syntactic and semantic form. For example, the sentence *Cain kills Abel* is a diagram “not only because it represents the two biblical figures isomorphically by means of the two proper names *Cain* and *Abel*, but much more generally, because the sentence presupposes the mental image of a dyad ‘composed of Cain, as first, and of Abel, as second member’. Notice that the dyad is an extremely general structure” (Nöth 2008: 91).

The most cited case of diagrammatic iconicity is the famous saying uttered by Julius Caesar after one of his military victories: *veni, vidi, vici* ‘I came, I saw, I conquered’\*. In this case, the sequential order of the three verbs included in this sentence mirrors the corresponding sequence of events referred to. First, Caesar came, then he saw and finally he conquered. The temporal order of the three events and the sequential order of the three verbs

are in perfect correspondence. This is an example of chronological diagrammatic iconicity.

In conditional sentences, the protasis, stating a pre-existing condition, usually precedes the apodosis, which presents the consequences of that condition. Here are two examples taken from Thompson and Longacre (1985: 191, 194): Gwari (Kwa language of Nigeria) *ngye ho si shnamá, ho ku gyi* ‘if you buy yams (*ngye ho si shnamá*), eat them up (*ho ku gyi*)’; Haya (a Bantu language) *ká laijá ndamu-bóna* ‘if he comes (*ká laijá*) I’ll see him (*ndamu-bóna*)’.

Certain cases of diagrammatic iconicity can also be found in morphology. In some languages, plurality is expressed by the repetition of a noun; for example in Malay *rumah* ‘house’ is pluralized by repeating the noun: *rumah rumah* ‘houses’. The repetition of a noun mirrors the fact that there is more than one object involved.

Jakobson (1965), the first linguist to recognize the relevance of Peirce’s concept of the diagram to the study of language, observed that the gradual increase in the number of phonemes mirrors the gradual intensification of a property in the positive, comparative and superlative form of adjectives, as in English *high-higher-highest*; or the corresponding Latin forms *altus-altior-altissimus*. In verbs, plural verbal forms tend to be longer than singular verbal forms. For example, in Polish we have *znam* ‘I know’, *znamy* ‘we know’, *znasz* ‘you (sing.) know’, *znacie* ‘you (plural) know’; in Spanish *se* ‘I know’, *sabemos* ‘we know’, *tengo* ‘I have’, *tenemos* ‘we have’.

See also HYPOICONIC DIAGRAMMATICITY

## Diagrammatic Legisign

In Peirce’s *semiotic language*, a complex diagram (see *diagrammatic iconicity*) is defined as a complex *rhematic iconic legisign*. Language offers a diagrammatic mental icon of the way verbal thought is structured. In Peirce’s terms, a legisign is a law that is a sign. Language consists of legisigns; these are general types that can be instantiated in discourse in order to denote a particular entity of the class associated with that type. In addition, the system of language is a rheme, a sign of mere possibilities that can be realized in different ways. In Peirce’s terms, the system of our language is “the living influence upon us of a diagram, or icon, with whose several parts are connected in thought an equal number of feeling or ideas” (Nöth 2008: 94).

## ***Diccionario de Voces Naturales (García de Diego 1968)***

In 1968, Vicente García de Diego (1878-1978), a Spanish philologist, published a seven hundred page book entitled *Diccionario de Voces Naturales* [A Dictionary of Natural Words]. The dictionary contains an impressive list of sound-symbolic and onomatopoeic radicals (more than two thousand) exemplified by words taken mainly from European languages.

As an illustration, here are two brief entries of the dictionary, translated into English.

“BRAK. ‘An onomatopoeia of some breaking noises’: Icelandic *brakak* ‘to crackle’, Swedish and Norwegian *brak braka* ‘crack’, English *brake* ‘machacar, tascar, espadillar’, Dutch *breken* ‘to break’. Tilander, RP, 29 460, admits that German *brak* ‘noise, explosion’ is a variant of its Latin counterpart *fragor*, of Swedish *bräcka* ‘to break’, *brackar* ‘crack’ and, with a different vowel, of English *break* and of German *brechen* ‘to break’. *Brak* is ‘an onomatopoeia conveying vomiting’. Dutch *braken* ‘to vomit’. *Brak* is ‘an onomatopoeia conveying a splashing noise’, counterpart of *brag*. Sainéan, 1 344, considers Provençal *brak* ‘boue’ as onomatopoeic. *Brak* is ‘an onomatopoeia of a roaring or mooing sound’. Valladares, Dic. Gall [Galician Dictionary], mentions *bracar* ‘bawling of a calf and other animals’, *braco* ‘bawling’. *Brak* is ‘an onomatopoeia of the croaking of frogs and other animals’. Ujfalvy, *Gram. vêpse*, mentions Veps *brakutan* ‘croasser’” (188).

“BROK. ‘An onomatopoeia of a breaking noise’, related to *brag* and *brik*. Kluge compares German *brocken* ‘piece’, Old High German *brocco* ‘piece’, Gothic *gabruka* ‘piece’ with the Germanic words *brikan*, *brekan*, *brechen* ‘to break’ which is a vocalic variant. English *broken* ‘partido, roto’ and Dutch *brokken* ‘to break off’, *brok* ‘piece’ belong to this onomatopoeia. *Brok* can be ‘an onomatopoeia of the sound of teeth grinding’. DRAE [Dictionary of the Royal Academy of Spain] does not include *broco* ‘having protruding teeth or horns’, but Carré found it in Galician. Acevedo mentions Asturian *broco* ‘ox or cow with protruding or low horns’, in addition, *broquero* or *barquero* is used to refer to cattle with protruding horns. Although *broco* does not seem to have an onomatopoeic character when referring to horns, it certainly does when it is used to refer to the displayed and grinding teeth of an enraged animal. It can be accepted that Castilian *broche* ‘buckle’ comes from French *broche* ‘buckle’, from Latin *broccus*; but *brocho* ‘said of a cow with protruding horns’ in Andalusia and a big part of the rest of Spain comes from Latin *brocculus*. Concerning Castilian and Portuguese *brocha* ‘fibula, brooch’ and Portuguese *brocho* ‘short nail’ of RL, 16 220, only from a historical point of view, we could ascertain whether they are original creations or Gallicisms. Ernout and Meillet do not provide a clear

etymology for *broccus*, but see in *cc* an expressive gemination, as in the onomatopoeias of other adjectives denoting a deformity, such as *maccus*, *lippus*. Holder, 618, discusses Ancient Irish *brocc* and Cornish and Middle Breton *croch* as Celtic words for beagle, following Thurneysen, and for ‘perro braco’ [pointer, setter], without referring to the origin of this name and without specifying whether it is based on a growling dog showing or grinding its teeth. Holder noted the name *Broccus* in various inscriptions of Andalusia and France. Prellwitz relates the Latin *broccus* ‘having projecting nose or prominent teeth’ to Greek βρύχω ‘grinding one’s teeth’, βρυχετός ‘chattering of teeth’. Boisacq, 136, relates it to Lithuanian *grauciu* ‘to gnaw’ and Old Slavic *gryza* ‘to bite’” (189).

Below is a list of the entries of the dictionary grouped by subject. Numbers refer to the pages of the dictionary in which the natural word can be found. The letter ð stands for an unspecified vowel; the rest of the letters are to be interpreted following standard Spanish orthography, except for H, which is interpreted as a glottal fricative:

**Animals:** ACH (119), AGÓ (122), ASK (142), BOD (155), BAR (180), CHE (206-207), CHU (208) [used to call to, drive, stop or scare away animals], UUL (129) [sound of hooting], OS (141) [used to urge on animals], ÆSTI (143) [used to drive back animals], GUED, GUID, GOD, GUEG (333, 335) [used to call to some animals], GRU (348) [onomatopoeia of grunting], HUCH, HISK (364, 381) [used to scare away animals], KUA (391) [sound made by ducks, ravens and frogs]. Dogs and cats: ULĚ (128) [barking], BAL (147) [barking], CHUCH (215) [used to refer to dogs], GLAP (339) [voice of dogs or humans], GOSK, GOZK, GUZK (356) [call to dogs], HURR (380) [sound of grunting or barking], MAU (495) [meowing], MOCH (496) [calling to cats], MIS (511) [calling to cats]. Horses: ARR (139) [used to urge on horses]. Pigs: GUICH (332), [call to pigs], GAÑ, GOÑ, GUAÑ, GÜEÑ, GÜIÑ, GĚR, GĚR, GORR (344, 346) [onomatopoeias of the grunting of pigs and dogs], KOCH, KUCH (393-395) [calling to pigs], KORR, KURR (470), RĚNG (587-588) [pig honking]. Sheep, goats and cows: BA (146), BAK (160), BLEK (169), BLAT (174), BLIT (174) [sound of bleating], CHIB (211) [used call to and refer to sheep and goats], HUE (362) [used to urge on sheep], ME (494-495) [bleating], MU (495) [mooing], MEK (500) [bleating], MIK (500) [sound made by several animals: cats, sheep, goats]. Birds and frogs: CHI (207), CHIRP (274) [bird chirping], CHOCH (214), CHAMRI (236-237), CHIRB, CHORB, CHURB (267), CHARCH (267-268), CHARR (274), CHERR (275) [used to refer to certain types of birds], FRING, FRINGL (327) [birds and insects], GARR (146) [voice of some birds], GARZ (355) [sound of heron], KAU (390-391) [sound made by some birds], KAK (396-397) [sounds made by birds], KIK (398-400) [sounds made by chickens], KOK (398-399) [sounds made by hens, roosters and frogs], KUK (400-401) [sound made by cuckoos], KAKAB (402) [sound made by partridges], KAKĚĚ (404) [sound made

by quails], KAKAR, KOKOR, KIKIR, KUKUR (404-405) [sound made by hens and roosters], KUAL (406) [sound made by ravens], KERK (446) [cackling], KROK (451-453) [sound made by ravens and frogs], KRAN (456-457) [sounds made by several birds], KRAT, KROT, KRUT (469) [sound made by various birds], KASK (472-473) [cackling], PIP (546-547) [cheeping and similar sounds], RO, RU, ROLL, RULL (567-568, 579-580) [dove cooing]. Ducks and geese: GANS (343) [sound of geese], HARL (379) [sound of a duck, a goose].

**Sounds:** UIP (137) [sound of yelling], CHAK (220-222) [various sounds], CHARL (271) [strident noise produced by humans and birds], CHARANG (273) [high-pitched unpleasant sound], CHOKL, CHAKR, CHAL (226-227), CHIN (238-239) [strident noise], CHANCH (240), BEK (162, 185) [slight noise], CHINCH (241) [tinkling], CHANKL (251) [noise produced by slipper while walking], CHUP (259) [sound of sucking], CHIST (284-285) [weak human voice, high-pitched sounds of musical instruments, sound of sneezing, spitting and other sounds], CHAT (286) [some sounds produced by humans and animals and sounds of impact and rubbing], CHIT (287) [low voice and silence; it is also used for calling to some animals], CHASK, CHISK (281-282) [conveys several noises produced by humans and animals], GLA (336) [guttural sound], FIRL (325) [resounding rapid movement], KLASK, KLESK, KLOSK, KLUSK, KLAT, KLET, KLIT, KLOT (430-432) [onomatopoeias mimicking a wide variety of sounds], KASK, KESK, KISK, KOSK, KUSK (473-475) [onomatopoeia of several sounds], KRANK (459-462) [an onomatopoeia of various sounds made by humans, animals (especially birds) and objects], KLAP (425-428) [tongue and water sounds, clapping, bursting], KLEP, KLIP (428-429) [a softer and weaker sound than that conveyed by *klap*], KRAMP (455-456) [onomatopoeia of various sounds: slamming, playing a chord instrument], KRASK (465-467) [various strident sounds], BRACH, BRÆK (184, 188) [sound of roaring], BAT (201) [sudden lip opening], FLAG (315) [sound produced by flexible objects when moving], KLIK (413-415) [sound of rapid movement, crackling, trembling, swinging, tickling], GLAG (337) [onomatopoeia of mud or something soft], TRANK, TRENK, TRINK (666-667) TRAP, TREP, TRIP, TROP (668-670) [various sounds], TURR (654) [resounding noise], PIR (550-551) [changing sounds], GUASK (356) [lash, slap in the face], HAP (375) [sound of something catching or of a spring holding something], HAL (367) [interjection to cheer up], HOP, HUP (376) [interjection to call, to encourage, to raise up], KLAk (411-413) [sound of clapping], PIK (531-532) [pecking], PIT (562-563) [pecking], SLAP, SLEP, (603-604) [slap in the face], TAP, TEP, TIP, TOP, TUP (645-648) [various sounds including thud or dull hitting], TITR (688) [puppet], ZURR (717-718) [harsh noise]. Babbling, chattering: BABL, BALB, BLAB, BLED, BARB (152, 166, 187), CHAM (230-231), CHARB (267) [also sound of pouring rain, running water], CHAR (261-264) [chatter, idle talk, small talk], GRING (353), KAN (434) [when repeated it conveys babbling and



staggering], LAL, LEL, LIL, LUL (484-486), MRACH (508), MOR, MARM, MIRM, MORM (508-509) [murmuring], PRAK, PROK, PRAT, PRITL (556-557), TATL, TITL (686-687). Sounds made by water: BREK, BRĒM, BRAMB, BRUMB (191-194) [noise of the sea, of the wind], CHIR (265) [also sound of blowing wind or of frying], GLU, GLOP, GLUT (336, 339, 341) [sound of pouring water into a bottle], PICH (525-526) [sound of a stream], PIMPL (542) [water hitting], SAK (599) [falling water]. Splashing, dabbling: BACH, BAD, BADR, BRUCH, BORR, BART (153-156, 185, 197-198), CHALP (229), CHAMPL (235), CHAP (253-257), CHAPL (260-261), CHARK (269-270), CHARP (273), FLIK, FLOK, FLAK, FLAS, FLASK, FLESK (315-318), GACH, GUACH (332-333), LAM (486-487), MARG (508-509), PACH, PICH (524-525) PAK, PEK (529-530), PLAS (538), PLASK (538-539), SKUABL, SKUAMP (600-601). Blowing, puffing: BĒLG (167-168), HU (360) [sound of blowing wind], PEF, PIF, POF, PUF (528) [noisy mouth blowing]. Buzzing, whistling: BRU (198), FURL, FĒRL, FRĒL, FRIL, FROL (325-326), FRI (322), RATL (595), ZUMB (695-696). Boiling, frying: BARBL, BORBL, BORBR (183-184), CHIND (242), CHER (264-265), GARF, GORG, GURG (349-350) [also gargling], KRAG (444-445) [frying]. Treading: KLOMP, KLUMP, KLAN (421), TROT, TRUT (676), PATL, PATR (564-565), TAM (634). Creaking, cracking, grating, rubbing: CHASP, CHISP (284) [also sound of pulling up something], CHIRRINK, CHARRASK, CHIRRISK, CHARRAST (279) [high-pitched unpleasant sound, creaking, cracking, noise of frying, noise of tearing or grating], DĒL, DAL (293) [dragging], KACH (392-393), FRIK (324) [friction], GRAND (353), RACH (569), STRID (616) [friction], FRAP (328) [slicing], RIF, RAFL, RIFL (572-574) [rubbing, dragging, tearing, ripping], ZORR (716-717) [dragging], RAF (572). Hitting, crushing, squashing, bumping, touching: CHACH (212), CHAF, CHAFL, CHAFR (216-219), CHANG (243-244), CHANK (248-249), ZAP (707-709), ZART (715), CHAZ (289), DAB, DUB (290) [soft impact], CHAST (284) [bumping or touching], FLAT (319) [soft impact], GAF (334) [catching, seizing], KLACH (409), KAP (440-441) [catching, touching or gripping], KROK (451-52) [impact on a cavity], PLAK, PLEK, PLOK, PLUK (535-536) [also breaking], KAT, KET, KIT, KOT, KUT (476-477) [also shaking], POT (563-564) [hand or beak hitting], TRAK, TREK, TRIK, TROK, TRUK (655-658) [several sounds including bursting, collapsing, shaking, breaking and hitting], MAK (499-500), PLANG (536), TANK, TENK, TINK (641-642), PLACH (534) [soft impact], PALP, PILP (537) [iterated hitting], TĚK, TAK, TEK, TIK, TOK, TUK (622-628) [hitting], TAKL, TEKL, TIKL (628-629), TRASK, TRESK, TRISK (673) [also trampling, jumping], TAST, TUST (680-681) [hitting], TRAMP, TRAMPL (662-663) [resounding blow], TRAS (672) [percussion], ZAS (719). Breaking and cutting: BROK, BRESK (188, 189, 195), BIT (202), CHAB (208-209), KLAD (409) [also boiling], KRAK, KREK, KRIK (447-451) [also expectorating and opening], RAK (575-576) [also splitting], SAP, SUAP (607-608) [also treading, shaking, loosening,

splashing, swallowing], ZARR (715-716) [sound of tearing]. Bursting, exploding: BAMB, BUMD (175-177), KLAF (410), PAT (559-562) [also treading, hitting], DAMB, DOMB, DUMB (297), PAF (527), RON, RUN, RIN (585) [vibrant and booming sound], RUM (582-583) [shaking, booming]. Metallic sounds: GRAP (348, 354) [sound produced by springs or staples], KLENK (424) [sound made by springs, clips and brooches], KLING (423) [high-pitched metallic sound], KLAMP, KLIMP (420-421) [sound of a moving spring], KRAP (463) [sound made by springs, staples, bolts, latches, shoes], KRANG, KRING, KRONG (458), PRANK (553) [sound made by springs, traps, fetters]. Music: FANFR (320) [sound of music or loud speech], TARL, TIRL, TORL, TURL [several sounds made by musical instruments], TATR (687-688) [music and singing], TU (619) [musical instruments]. Bells: DAND (300), DRANG (309) [also swallowing], KLOK (415-417) [also sound made by a brooding hen], KLOP (429-430) [also coughing, strong pulse, treading], TLAN (631), TANT, TINT (643). Drums: RAT (594), TANTARA (644). Trumpet, horn: BLAR (173), KLANG (422) [also sound of a bell and of some birds], TIT, TUT (683-686), TUB (620). BLISK (173) [glittering], CHAMR (235-236) [flames], GLIT (341) [sparkling], GRUMB (352) [mimics something curved or crooked], HAMP (371) [swelling], PAMP, POMP, PUMP (540-541) [inflation, pump], ZIRR (716) [sparkling]. Laughing: BARR (196-197).

**Movement:** Various: PIRI, PIRN (552) [quick turn], PARR, PERR, PIRR (555-556) [spreading noisily], TAR, TER, TIR (650-651) [sounds made by different types of movement]. Falling: BEMBI, BOMB, BAMBI, BAMBR, BUMP (also bumping) (178-179), DĚMB (247), PLUMP (536), POM, PUM, PAMP (540-541), TAMP, TEMP, TIMP, TUMP (638) [several sounds and falling].

**Swinging, rocking:** GONDL (342) [also hesitation], KLAMB, KLUMB (418-419), KLONG (423) [also trembling], BĚK, BLAND (160, 179), BLANG, BĚMB, BĚRLĚK (171, 175, 190), CHILIMB, CHILINCH, CHILING (228), CHAMBL, CHIMBL (232), CHINGL (246), DĚDL, DĚDR (292), DLĚND, DLANG, DLING, DLONG (295-296), GLIND (309) [also hanging], HĚNG (373), KANG, KING (436) [also trembling], PAMPR (542), SARAND (612-613), TAMB (635), TRANGL (665). Staggering, trembling: DALD DILD, DOLD, DULD (294), DĚMBL (298), DANDI, DINDI, DĚNG, DĚNGL, DINGL, DANZ, DONDI (301-304), PANGL (543). Rapid movement: UIN (133), BEZ (204). Sliding: DLAS, DLIS (296), LIS (492-493).

**Children:** AM (130), AÑ (134), AP (135), AT (144) [used to refer to older people], CHIK [222-223], DĚD (291), DAD (292) [father], MA (494) [mother], MAM, MEM (502) [mother], MEN, MIN (505-506) [little], NAN (515-516) [child, adult], PAP, PEP (544-546) [father, grandfather], PIS (558) [urinating, drizzling], ROK (577) [rocking], TAT (681-682) [father

and other relatives], TET (683) [mother's breast], TAIT (686) [father], ZUZ (722) [sucking]

**Human psychology and physiology:** AK (126) [noisy breathing, fatigue], OK (126) [tiredness, disgust], BAB (148-150) [drooling], BAF, BOF, BUF (156-157) [exhaling noisily], BASK (200) [disgust], CHUSK (283) [winking], CHUT (288) [heart beating], DAG [292] [tickling], DARD, DARDI, DARDR, DURDR, DART (306) [trembling], DRAG (307) [swallowing], FUF (313) [blowing, puffing], FARF, FARFL, FARFR (322-323) [difficult pronunciation], CHAMP (233) [chewing, swallowing sound], GUA (330) [sound of weeping], GAG (334) [onomatopoeia of guttural voice], GALD, GLAF (337) [onomatopoeia of swallowing], GLAG (338) [sound or noises produced by the throat], GAND (342) [noise produced when swallowing], GURR (347) [snoring, creaking], GARG, GARGL, GARGR (348-345) [noise of gargling], GRA, GREM, GRIM (351) [noise made by a raging human's mouth], GASP (356) [yawning], GATL (357) [tickling], HA, HE, HI, HO (359-360) [laughing], HUA (362) [weeping, pain], HĚK, HUK, HIMP, HUIMP, HIP (365-375) [hiccup], HIK (366) [sobbing], HAN, HAS (372, 380) [difficult breathing], KARD (444) [heart beating], KARK (445) [loud laughing], KATL, KITL, KOTL (478) [trembling, tickling, breaking, pinching], LAB, LIB, LABR, LAK, LEK (480-483) [licking, swallowing, sipping, drooling], LAMP (488) [sipping, swallowing], LANG (488) [swallowing], LAP, LEP, LOP, LUP (488-491) [eating, licking, sipping and swallowing], MUCH (496-497) [kissing], MOF (497) [disgust], MAFL, MOFL, MEFL, MUFL (498-499) [mouth blowing, pumping up], MIM, MOM (502-504) [awkward, imperfect or indistinct pronunciation], MAND, MORF MORFL (508) [chewing], MARR, MORR, MURR (509-510) [chewing, hoarseness, grumbling], MUT (512) [mumble], NEF, NIF, NAFL (514) [noisy breathing], NIN (517) [trembling], RUCH (570-571) [expectorating], RONF, RONFL, RUNFL (586-587) [noisy breathing, soft resounding sound], RANK (589) [snoring, grunting], SLAB, SLABR (602) [eating, drinking, sipping, drooling], SPIT, SPOT, SPUT (611) [expectorating, spitting], TRAG (654-655) [swallowing], TRAL, TRAM, TREM, TRIM, TROM (661-662) [trembling, swinging], TART, TARTL (674-675, 677) [stuttering, trembling], TARTN (677) [trembling], TUS (679) [coughing], ZAR (710) [stuttering], ZRUMB (713) [stunning noise], ZISK (720-721) [diarrhoea, flatulence or spit].

### *Dictionnaire des Onomatopées Françaises (Nodier 1808)*

The 'Reasoned Dictionary of French Onomatopoeia' produced in 1808 is the first sound-symbolic dictionary (Magnus 2013: 198). It contains a brief preface in which Nodier discusses some general principles of linguistic iconicity. Although limited to the French language, the original intention of the author (as stated in the dictionary's preface) was to include the

onomatopoeic words of all the peoples of the world to produce a polyglot lexicon of all known linguistic natural sounds that were common to all languages. These natural sounds may be considered remnants of a universally intelligible primitive language (Genette 1976: 175-180).

In addition to the onomatopoeic imitation of natural sounds, Nodier also sees an onomatopoeic (in the etymological sense of the word) relation between linguistic sounds and the organs of speech that produce them based on an articulatory iconicity\*. So, the labial *B* conveys the visible part of the mouth (including the lips); the dental consonants *T* and *D* signal the teeth; *G* and *K* are associated with the throat; *L* is directly related to the tongue; the nasal consonant *N* indicates the nose; and the aspirated *H* is directly related to human breathing. Finally, the rhotic consonant *R* is iconically associated with circular movements and, in general, with the idea of continuity, repetition and renewal.

Following the proposals of Charles de Brosses in his *Traité de la formation mécanique des langues et des principes physiques de l'étymologie\** (1765), Nodier collected numerous examples from different languages showing that the childhood words denoting *father* and *mother* include the sounds related to the lips (*b, m*) and/or to the teeth (*t, d*): for example Latin *pater*, German *Vater*, English *father*, Hungarian *apa*, Tatar *baba*, Tamil *bita*. The origin of this articulatory association has to do with the protraction of the lips in the act of sucking (labial consonants) and with the movement of the tongue drawing the nipple into the mouth (dental consonants).

In the definition of the onomatope *haha* (an exclamation of astonishment), Nodier distinguishes between *onomatope* (the imitation of natural sound) and *mimologism*, which is the imitation of natural vocal sounds produced by humans as in interjections. In the former case, a non-human sound is imitated; in the latter case a linguistic sound is directly inspired by an instinctive human sound (Genette 1975: 185-186). The following passage contains an explanation of these concepts:

“Strictly speaking, then, an onomatopoeia is a word created through imitation of an external noise (including animal cries), while a mimologism is a word created through imitation of a human cry, or more usually a ‘vocal noise’. ‘Mama’ and ‘papa’ are therefore not onomatopoeias but properly ‘affectionate mimologisms’, formed from the first bilabial blabberings, or the sucking noises at the maternal breast, or kissing noises. Clearly, the opposition between onomatopoeia and mimologism almost exactly reproduces the one between onomatopoeia and interjection, familiar to theoreticians of the origin of language” (Genette 1995: 127).

In the preface, Nodier explains the nature of sound-symbolism as follows:

“The extension of the radical sounds that express a noisemaking object to sensations of another order is not hard to understand. Among man’s sensations, only a certain number are proper to the sense of hearing, but since speech is addressed to this sense, and since it is through this sense that the sign of the object that strikes us is transmitted, all expressions would seem to be formed for the hearing. Sounds by themselves cannot express sensations of sight, touch, or smell, but these sensations can be compared to a certain extent with those of hearing and can be conveyed through their assistance. Moreover, these comparisons contain nothing that is not natural and spontaneous. It is to such comparisons that all natural languages owe their figures, and everything points toward the conclusion that the language system of primitive man was highly figurative.

For example, when we say that a colour is loud {*éclatante*}, we mean by this not that a colour is capable of producing the sensation of a violent noise in the auditory organ, like the noise expressed by the root *éclatant* {*éclat*: explosion}, but rather that this colour produces in the visual organ a sensation as lively and strong as the one to which it is compared” (Genette 1995: 136-137).

The following is a list of the main words included in the dictionary:

A: *aboi* ‘baying’, *aboiement* ‘barking’, *aboyer* ‘to bark’, *achoppement* ‘contention’, *affres* ‘throes’, *agacement* ‘irritation’, *agouti*, *agrafer* ‘to staple’, *agripper* ‘to grip, to grab’, *ahaler* ‘to breathe’, *ahaner* ‘to pant’, *âme* ‘soul’, *anche* ‘reed’, *asthme* ‘asthma’.

B: *babiller* ‘to chat’, *bâiller* ‘to yawn’, *barboter* ‘to dabble’, *baret* ‘white perch’, *bedon* ‘tummy’, *beffroi* ‘belfry’, *béguetter* ‘to bleat’, *béler* ‘to bleat’, *bélier* ‘ram’, *beugler* ‘to bellow, bawl’, *biberon* ‘nursing bottle’, *biffer* ‘delete’, *bombarde* ‘bombing’, *bombe* ‘bomb’, *bondir*, *bonde* ‘to pounce, leap, bounce’, *borborygme* ‘borborygmus’, *bouc* ‘goat, goatee’, *bouffée* ‘breath, puff, whiff’, *bouillir* ‘to boil, to simmer’, *bourdonner* ‘to buzz, hum’, *brailler* ‘to bawl, holler’, *braire* ‘to bray’, *bramer* ‘to bellow, howl’, *bredouiller* ‘to babble’, *briser* ‘to break, shatter’, *brouhaha* ‘hubbub’, *brouter* ‘to graze, munch’, *broyer* ‘to grind, crush’, *bruire* ‘to rustle’, *burbelin* ‘a musical instrument’.

C: *cacaber* ‘to call (of a partridge)’, *cahoter* ‘to shake’, *caille* ‘quail’, *canard* ‘duck’, *caqueter* ‘to cackle, cluck’, *cascade* ‘waterfall’, *catacombes* ‘catacombs’, *cataracte* ‘cataract’, *chat-huant* (a bird’s name), *chevêche* ‘little owl’, *choquer* ‘to shock’, *choucas* ‘jackdaw’, *chuchoter* ‘to whisper’, *cigale* ‘cicada’, *clapir* ‘to make a sound (of a rabbit)’, *clappement* ‘clicking’, *claquer* ‘to slam, snap’, *clignoter* ‘to flash, blink, twinkle’, *clinquant* ‘flashy’, *cliquetis* ‘knocking, rattling’, *cloche* ‘bell’, *closser* ‘to cluck’, *coq*

'rooster', *coua* 'madagascar cuckoo', *coucou* 'cuckoo', *courlis* 'curlew', *couroucou* 'a bird', *crabe* 'crab', *cracher* 'to spit', *cran* 'guts, notch, nerve', *craquer* 'to crack, break', *créselle* 'an instrument made of wood', *crex* 'a bird', *crier* 'to scream, shout', *cric* 'jack', *crinclin* 'a musical instrument', *crisser* 'to screech', *croasser* 'to croak', *croc* 'hook, fang', *croquer* 'to chew, crunch', *crouler* 'to collapse'.

D: *dandiner* 'to waddle', *dégringoler* 'to plummet', *drille* 'drill'.

E: *ébrouer* 'to snort', *éclater* 'to burst', *écraser* 'to crush, crash', *écrou* 'nut', *enfler* 'to swell, inflate', *esclaffer* 'to burst out laughing', *éternuer* 'to sneeze'.

F: *fanfare*, *fifre* 'fife, piper', *flacon* 'vial, flask, bottle', *flanquer* 'to slap, flank', *flèche* 'arrow, boom, jib', *fleur* 'flower', *flic-flac* 'whip crack', *flot* 'sound of running water', *flou* 'blur, fuzzy', *flûte* 'flute', *fracasser* 'to smash, shatter', *fredonner* 'to hum', *frelon* 'hornet', *frémir* 'to shudder, quiver, tremble', *frétiller* 'to wag, wiggle, squirm', *frire* 'to fry', *friser* 'to curl', *froisser* 'to wrinkle', *frôler* 'to touch, brush against', *fronde* 'slingshot', *frotter* 'to rub, scrub'.

G: *galoper* 'to gallop', *gargariser* 'to gargle', *gargouille* 'gargoyle', *gazouiller* 'to warble, babble', *geai* 'jay', *gémir* 'to moan', *glapir* 'to yelp', *glisser* 'to slide', *glouglou* 'gurgling', *glouton* 'glutton', *goret* 'pig, piglet', *goulot* 'neck, mouth', *goutte* 'drop, drip, gout', *graille* 'chow', *gratter* 'to scratch, scrape', *grêler* 'to hail', *grelot* 'bell', *grenouille* 'frog', *grésiller* 'to sizzle, hiss', *griffe* 'claw', *grignotter* 'to nibble', *grillon* 'cricket', *grincer* 'to grind, squeak, creak', *grive* 'thrush', *grogner* 'to grunt, growl', *grommeler* 'to grumble', *gronder* 'to yell', *groin* 'snout, oink', *grue* 'crane', *guêpe* 'wasp'.

H: *hache* 'axe', *haha*, *harpe* 'harp', *hennir* 'to neigh', *heurter* 'to hit, strike', *hisser* 'to hoist, lift', *hoquet* 'hiccup', *horreur* 'horror', *houhou* 'Egyptian cuckoo', *hourvari* 'uproar', *houtou* (a bird's name), *huer* 'to jeer', *hulotte* 'tawny owl', *hululer* 'to hoot', *humer* 'to smell, sniff', *huppe* 'hoopoe', *hurler* 'to scream, yell'.

J: *jacasser* 'to jabber', *japper* 'to bark'.

K: *kakatoès* 'cockatoo'.

L: *lapper* 'to drink like a dog', *lécher* 'lick', *loriot* 'oriole', *loup* 'wolf'.

M: *maman* 'mom', *miauler* 'meow', *moue* 'pout', *mugir* 'to bellow', *murmurer* 'to whisper, murmur', *musc* 'musk'.

N: *nez* 'nose', *nasiller* 'to speak through the nose'.

O: *oé, oie* ‘goose’, *oiseau* ‘bird’, *ouate* ‘wadding, tissue’.

P: *pâmer* ‘swoon’, *paon* ‘peacock’, *papa* ‘daddy’, *patapatapon* ‘a drumming onomatopoeia’, *patata-patata* ‘sound of a galloping horse’, *patatras* ‘crash’, *piauhau* (a bird’s name), *pépier* ‘to chirp’, *pic* ‘pick, peak’, *poue* ‘bang’, *pouf, poupe* ‘teat, stern, aft’, *puer* ‘to stink, smell’.

R: *racler* ‘to scrape’, *râler* ‘to moan’, *râper* ‘to grate’, *rataplan, rauque* ‘hoarse’, *rêche* ‘rough’, *redondance* ‘the sound of bouncing, redundancy’, *retentir* ‘to ring’, *rincer* ‘to rinse, flush’, *rixer* ‘brawl, fight’, *ronfler* ‘to snore’, *roquet* ‘pug’, *rossignol* ‘nightingale’, *roucouler* ‘to coo’, *roue* ‘wheel’, *rugir* ‘to roar, to growl’, *ruisseler* ‘to stream’.

S: *sagette* ‘arrow’, *sangler* ‘to strap’, *saper* ‘to undermine’, *scier* ‘to saw’, *siffler* ‘to whistle, hiss’, *sillonner* ‘to roam, criss-cross’, *souffler* ‘to blow, breathe’, *sourdre* ‘well up’, *strident, strie* ‘ridge, streak, stripe’, *sucer* ‘to suck’, *susurrer* ‘to whisper’.

T: *tact, taffetas, tambour* ‘drum’, *tampon* ‘pad, buffer’, *taon* ‘gadfly’, *tarin* ‘hooter’, *téter* ‘to suck’, *timbales* ‘cymbals’, *tinter* ‘to jingle, clink, ring’, *tocsin* ‘bell tolls’, *tonner* ‘to thunder’, *torrent* ‘stream’, *tourtereau* ‘lovebird’, *tourterelle* ‘turtledove’, *tousser* ‘to cough’, *toux* ‘cough’, *tracasser* ‘to bother, worry’, *trappe* ‘trap, hatch’, *traquer* ‘track down’, *trictrac* ‘backgammon’, *trinquer* ‘to drink’, *trompe* ‘wrong, mistaken’, *trompette* ‘trumpet, horn’, *trotter* ‘to trot’, *turlut* (a bird’s name).

V: *vagir* ‘to wail’, *violon* ‘fiddle’, *vite* ‘fast, quickly’.

W: *whip-pour-will, whist* ‘a game’.

Z: *zeste* ‘zest’, *zigzag, zizi* (bird’s name), *zon* (an interjection).

It is both interesting and revealing to read one of the somewhat fanciful iconic explanations given by Nodier for a particular word included in his dictionary:

“*Oiseau* {bird}: the construction of this word is imitative in the extreme; it is composed of five vowels linked by one softly sibilant letter, and this combination results in a kind of warbling very appropriate for giving us an idea of birds. (It should be noticed, as a very rare and singular case in our language, that the word *gazouillement* {warbling} is formed, like the word *oiseau*, from the same vocal sounds, linked by the same consonant. It is distinguished only by its intonation, which is drawn from a guttural letter and is consequently very well suited to the idea it expresses)” (Genette 1995: 133-134).

See FRENCH

## Didinga Ideophones

Didinga is an Eastern Sudanic language spoken in South Sudan by about 60,000 people. On the basis of a body of 80 oral stories, De Jong (2001) collected, classified and analysed a corpus of ideophones for this language. The following examples are taken from this source.

Didinga ideophones show sound symbolism, as in *tdul tdul* ‘gurgling sound’, *pum* ‘the sound of a drum’, *ding ding* ‘the sound of a small drum’, *dim dim* ‘the sound of walking’, *rim* ‘the sound of heavy things falling’, *xipik xipik* ‘with many colours’.

Verbs, nouns and adjectives can be derived from the ideophones. For example, the following ideophones can be transformed into verbs by adding the suffix *-an*: *but* ‘sound of removing’ < *butan* ‘uproot’; *uum* ‘manner of pouring’ < *umúúr* ‘pour out’; *llir* ‘sound made when falling down’ < *llir<sup>h</sup>an* ‘to fall’; *paraf* ‘manner of easily moving’ < *paráázan* ‘cause to come off easily’; *var* ‘sound of cracking a stick’ < *varán* ‘crack’. In the following cases, a noun or an adjective is derived from an ideophone: *kitdik kitdik* ‘manner of shaking, vibrating’ < *kitdikkitdik* ‘earthquake’; *pum* ‘sound of a drum’ < *pupuma* ‘big but light’; *yyok yyok* ‘manner of not being secure’ < *yoyyok* ‘disturbance’; *tding* ‘sound made by something bulky’ < *tdidinga* ‘bulky’; *ttel* ‘completely bare’ < *tella* ‘bare’.

Some ideophones are introduced by the auxiliary *ii* ‘say’. For example, *apák zérém zí áí xipik xipik* ‘she has a dress which “says” (*ái*) *xipik xipik* (= with many colours)’; other ideophones follow the main verb and are preceded by the adverb *nogo* ‘just’, as in *atíli tarí támmú búúk nógó fíuu* ‘in fact it was also raining just *fíuu* (= heavily).

Reduplicated ideophones include *duu duu* ‘manner of reacting in an uncontrollable way’, *kap kap* ‘articulately’, *wara wara* ‘manner of getting up quickly of people sitting or lying down’, *xapuk xapuk* ‘sound of the fluttering wings of a rooster’, *rel rel* ‘in a shy way’, *var var* ‘hurriedly, showing impatience’, *yyang yyang* ‘movement of long hair’, *kir kir* ‘manner of running’, *lililili* ‘completely bare’, *lulululu* ‘healthy, smooth’.

## ***Die Entstehung der Sprache durch Nachahmung des Schalles*** [The creation of language through sound imitation] (Th. Curti 1885)

This seventy page booklet by the Swiss politician Theodor Curti (1848-1914) was written as a response to a review of the German version of the book *Anthropology: an Introduction to the Study of Man and Civilization*



(London 1881) by the English anthropologist E. B. Tylor. In chapters IV, V, and VI of this book, Tylor discusses language. Tylor offers the following hypothesis on the origin of language at the end of chapter IV:

“It is maintained by some philologists that emotional and imitative sounds, such as have been described in this chapter are the very source of all language, and that although most words now show no trace of such origin, this is because they have quite lost it in the long change of pronunciation and meaning they have gone through, so that they are now become mere symbols, which children have to learn the meaning of from their teachers” (Tylor 1881: 130).

The following words of caution do not prevent Tylor from postulating an original connection between sounds and meanings:

“Now all this certainly has taken place, but it would be unscientific to accept it as a complete explanation of the origin of language. Besides the emotional and imitative ways, several other devices have here been shown in which man chooses sounds to express thoughts, and who knows what other causes may have helped? All we have a right to say is, that from what is known of man’s ways of choosing signs, it is likely that there was always some kind of fitness or connection which led to each particular sound being taken to express a particular thought. This seems to be the most reasonable opinion to be held as to the famous problem of the Origin of Language” (Tylor 1881: 130).

Curti (1885: 1) tries to demonstrate that all linguistic roots, including those that do not have an onomatopoeic nature, have an onomatopoeic origin, meaning that all languages were originally driven by some sort of sound imitation.

Curti discusses the first sounds made by small children when sucking. These sounds are unconscious and do not have any meaning. These sounds are perceived by adults and they associate them with a particular event or object. In that manner, they become linguistic. Curti noted that parents are prone to use the sounds made spontaneously by their children in order to denote things and events directly related to them (1885: 5). Besides, he observed that the universally attested nursery words are very similar to the sounds spontaneously produced by small children (1885: 8). Although he admitted that adults can also imitate the sounds of nature independently of children (1885: 8), for Curti the imitation of the sounds spontaneously produced by children played an important role in the origin of language.

Curti assumed that, originally, all roots were polysyllabic, as can be seen in nursery words such as *papa*, *mama*, *tata*. In addition, he stated that the association of *pu* with the idea of cleaning does not seem to have a clear iconic origin. Nevertheless, if we suppose that this root is an abbreviation of an original *pupupupu*, an imitative relation with a mouth blowing is easily seen, and the cleaning interpretation obtains when we realize that this activity can be performed to clean a flat surface. In a similar way, the expression *papapapa* mimics the sound made by stamping, walking, marching and tapping; from it, the iconic root *pa* ‘to stamp with our feet’ can be derived.

Another original imitative root is *dukhdukhdukhdukh*, which imitates the noise a baby makes at its mother’s breast; from this expression *dukh* is derived, with several related meanings: child, breast, mother, sucking, suckling, milk, sweetness, liquid. The root *rukrukrukruk* is an imitation of the noise produced when two sticks are rubbed one against another to start a fire; from this original polysyllabic root the simple root *ruk* is derived with several related meanings: stick, tree; rub, turn, burn; smoke, kindle, glisten; five, light (noun and adjective), flame, and pain.

The main point made by Curti in his booklet is stated thus:

“Language, the means of expressing thinking through words which no longer trigger those concepts originally suggested by their sounds, serves ultimately to imitate the sounds of nature in order to produce common representations in two or more people” (Curti 1885: 19-20).

See NURSERY WORDS, *PRIMITIVE CULTURE*, *PUFF*

## Ding-dong theory

This theory of the origin of language was proposed by Friedrich Max Müller in the following terms:

“There is a law which runs through nearly the whole of nature, that everything which is struck rings. Each substance has its peculiar ring. [...] Gold rings differently from tin, wood rings differently from stone; and different sounds are produced according to the nature of each percussion. It was the same with man, the most highly organized of nature’s works. Man, in his primitive and perfect state, was not only endowed, like the brute, with the power of expressing his sensations by interjections, and his perceptions by onomatopoeia. He possessed likewise the faculty of giving more articulate expression to the rational conceptions of his mind. That faculty was not of his own making. It was an instinct, an instinct of the mind as

irresistible as any other instinct. So far as language is the production of that instinct, it belongs to the realm of nature. Man loses his instincts as he ceases to want them. His senses become fainter when, as in the case of scent, they become useless. Thus the creative faculty which gave to each conception, as it thrilled for the first time through the brain, a phonetic expression, became extinct when its object was fulfilled" (Müller 1862: 384-385).

From this point of view, there is a human instinct (not based on imitation) by which linguistic sounds are in natural harmony with the thoughts they convey. This instinct is no longer operative as the main source of the lexicon, but it was at the initial stages of development of the human language: "What is antecedent to the production of roots is the work of nature; what follows after is the work of man, not in his individual and free, but in his collective and moderating, capacity" (Müller 1862: 389).

Jespersen (1922: 415) mentioned the theory "for the curiosity of the matter only" and did not consider it seriously. Nevertheless, modern experimental research has shown that certain recurrent sound/meaning correlations (for example, the Bouba-Kiki effect\*, Basic Vocabulary\*, Global Etymologies\*), may be based on some biological aspects of the human brain/mind and, therefore, could be considered natural. This result could give some support to some aspects of the *ding-dong* theory.

See BASIC VOCABULARY, BOUBA-KIKI EFFECT, GLOBAL ETYMOLOGIES

## **Dinka**

Nilotic language of the Dinka spoken in Sudan by 1.3 million people.

See *ELEMENTARE WORTSCHÖPFUNG*

## **Djabugay**

Nearly extinct Australian aboriginal language of Queensland.

See AUSTRALIAN LANGUAGES

## **Djaru**

Australian indigenous language spoken in southeast Kimberley (Western Australia) by about 200 people.

See AUSTRALIAN LANGUAGES

## Dogon

Language family (possibly, in the Niger-Congo stock) spoken by the Dogon people in Mali.

See REDUPLICATION

### *Doppelung (Reduplikation, Geminatio) (A. F. Pott 1862)*

The monograph *Doppelung (Reduplikation, Geminatio) als eines der wichtigsten Bildungsmittel der Sprache beleuchtet aus Sprachen aller Welttheile* [Doubling (Reduplication, Geminatio) as a major formational means of language illustrated with languages from all over the world], published in 1862 and written by the German linguist August Friedrich Pott (1802-1887), is the first and most comprehensive work to date on reduplication from a typological point of view. This three hundred page book is in two parts. The first part (16-20) briefly discusses the morphological variants of reduplication, including total and partial reduplication. The second part (22-303) contains a detailed discussion of the semantic aspects of reduplication and is illustrated with hundreds of examples from European, Asian, African and American languages. Pott organizes his book in the following way:

1. Intensification, especially in relation to human emotions:
  - A. Reduplicative interjections: *Haha!* (24-30).
  - B. Reduplicative words related to the female breast and other body parts (31-39): Spanish *mama* 'breast', *teta* 'teat, tit' (34); Sahaptin *hushus* 'head', *kukukh* 'hair'; Nootka *cheecheets* 'teeth'; Tahitian *paparia* 'the cheeks' (36).
  - C. Reduplicative words in the kinship vocabulary of an affective nature (40-47): Quechua *yaya* 'father', *mama* 'mutter'; Cherokee *atsatsa* 'boy'; Latin *pupus* 'child' (40).
  - D. Reduplicative words in vocatives and imperatives (47-50): Quechua *pacta pactapas* 'watch out' (47); Otomi *tè tè* 'do it' (50).
2. Sound imitation [*Lautnachahmung*] (51-81):
  - A. Bird names (51-60): *cuckoo*\*, Greek *píppos* 'a baby bird' (51); Spanish *abubilla* 'hoopoe' (55).
  - B. Other animals (60-63): Yoruba *akaká* 'hippopotamus', *kolloh kolloh* 'fox', *ketteh ketteh* 'donkey'; Betawi Malay *cullaculla* 'cockroach', *koora koora* 'a land turtle' (63).

- C. Musical instruments (63-65): Latin *tintinnabulum* (65); Yoruba *gagang* ‘war drums’, *doddong* ‘drum’, *gudduguddu* ‘small drum’, *korokoro* ‘small brass bells’ (64).
- D. Reduplication with vowel and consonant alternation (65-85).
3. Qualitative intensification (86-155):
- A. Reduplication in colour names (86-93): Tongan *hina-hina* ‘white’, *ooli-ooli* ‘black, dark’, *kula kula* ‘red’ (87-88); Yoruba *fufu* ‘white’, *dudu* ‘black’, *kpukpa* ‘red’ (91).
- B. Intensification of adjectives and pronouns (93-120): Malagasy *bé bé* ‘very big’, *râtsi râtsi* ‘very bad’ (98); Breton *isel isel* ‘very low’ *fall fall* ‘very bad’ (105); Chickasaw/Choctaw *lawwa lawwa* ‘very much’ (107); Hausa *nia kaina* ‘I myself (feminine)’, *ta-kanta* ‘she herself’, *mu-da-kamu* ‘we ourselves’ (115).
- C. Verbal reduplication: intensive, frequentative and desiderative verbal forms (120-143): Marathi *dardarâ* ‘an alarmist’, *thabthabanê* ‘to be soaked’, *kadâkadî* ‘a wrangling’, *lakhlakhit* ‘shining’, *malrmalranê* ‘to nauseate’ (126); Tibetan *phit’hephit’he* ‘keep coming’ (129); Nahuatl *chocachoca* ‘to cry repeatedly’ (129); Cree *kâ kithâsku* ‘he lies with iteration’, *kâ kithâskisku* ‘he lies with iteration and very frequently’ (130); Oromo *tchabtchabza* ‘to break violently or with great noise’, *tutura* ‘to wait a long time’, *dyabadyaba* ‘to vaunt or to boast’ (138-139).
- D. Syntax: *figura etymologica* (151-155). This section deals mainly with so-called cognate accusatives, as in English *to sing a song*, and Spanish *caminar un camino* ‘to walk along a road’, *cursar un curso* ‘take a course’, *soñar un sueño* ‘to dream’ (152).
4. Quantitative intensification (155-205):
- A. Distributive words, universal quantifiers (156-176): Italian *capo per capo* ‘item by item’, *parte per parte* ‘bit by bit’ (158); Quechua *kimsa kimsamanta* ‘every three...’, *tahua tahuamanta* ‘every four...’ (172).
- B. Plural formation (176-205): Malay *orang orang* ‘people’, *kuda kuda* ‘horses’, *sekalian raja raja* ‘all the kings’ (180).
- C. Tense formation (205-269): Greek and Latin verbal reduplication (210-269). Pott also gives some examples from other Indo-European languages.
- D. Miscellanea (*Verschiedenes*) (269-304). In this section Pott includes additional examples from American languages

(Botocudo, Tarahumara), Asian languages (Ainu), and many examples from the African language Yoruba, based on the vocabulary and grammar by S. Crowther published in London in 1843 and other sources (274-296). The book concludes with a detailed discussion of some examples from Land Dayak languages.

Concerning reduplication with sound alternation (65-86), Pott notes the usual *i-a* vowel alternation and gives numerous examples, such as English *jingle-jangle*, *bim bam*, *bum*, *piff paff*, *zigzag*, *gibble-gabble*, *knick-knack*, *slish-slash*, *thwick-thwack*. Pott includes examples from Romance languages, such as French *flic et flac*, *trictrac*, *bric-à-brac*; Italian *chichi bichiacchi* and from other European and non-European languages. In addition, he mentions examples with consonant alternation, such as English *hiddy-giddy*, *hussle-bussle*, *hodge-podge*, *rag-tag*, *hum-drum*; Hindi *damaçama* ‘patience’, *anga-sanga* ‘coitus’, *hilâ milâ* ‘amicable’, *nôk-côk* ‘talking in innuendos’, *râ'i-kâ'i* ‘broken to pieces’; Persian *bâyad-shayad* ‘as it should be’, *barâbar sarâbar* ‘equal, alike’, *sum-dum* ‘very corpulent’. Finally, Potts discusses the uses of sound repetition in poetry and prose (77-80).

## Duala

Bantu language of Cameroon spoken by approximately 90,000 people.

See BANTU IDEOPHONES

## Dutch

West Germanic language spoken by 22 million people mainly in the Netherlands and Belgium.

See, BIRD NAMES, *BOW-WOW*, *BUTTERFLY*, *BUZZ*, *CAKLE*, *CRACK*, *CUCKOO*, *CUCUMBER*, *DICCIONARIO DE VOCES NATURALES*, *ELEMENTARE WORTSCHÖPFUNG*, *ETYMOLOGY*, *GRUNT*, *MIM/MON/MUM*, *ONOMATOPOEIA*, *ONOMATOPOEIC EXPRESSION*, *PIP*, *SYMBOLIC VALUE OF THE VOWEL I*, {-WR-} IDEOPHONIC ROOT

## Dyirbal

Nearly extinct Australian language of northeast Queensland.

See AUSTRALIAN LANGUAGES, BIRD NAMES

## **Dysmorphy**

A use of grammatically uncanonical forms or devices typical of iconic expressions; for example in both Bini (an African language) and English some forms are reversible: Bini *kángìn* = *gúnkán* 'lean'; English *peep-bo* = *bo-peep* (Wescott 1975b: 28).

## **Dysphony**

A violation of the phonic canons of a language that can be permitted in certain iconic expressions (Wescott 1975b: 28).

## **Dzhek (Jek)**

A Northeast Caucasian language spoken by approximately 10,000 people in the village of Jek in Azerbaijan.

See *BUTTERFLY*

# E

## Ebwela Ideophones

Ebwela is the Bantu language (C42, Ngombe group) of the Bwela people (northwestern Democratic Republic of the Congo) in the province of Mongala.

Ideophones in Ebwela cover the following semantic fields: auditory impressions, visual impressions, movement, quantity, and psychological states. From a morphological point of view, they show the following properties: reduplication and final vowel lengthening.

Donzo-Bunza (2014: 6) lists the following Ebwela ideophones:

Psychological states: *wa* ‘melancholic’, *káká* ‘very angry’, *hópi* ‘feeling nauseous’, *ngéli* ‘brilliant’, *túnámí* ‘thoughtful’, *dégbéle* ‘weak, coward’, *góó* ‘silent, quiet’.

Movement: *mbete* ‘in a hurry’, *gbéku* ‘in jerky movements’, *dómbu* ‘bouncing’, *kudu* ‘of jerky movements’, *hédédu* ‘sliding’, *gbii*, *pwa* ‘suddenly’, *gbéké* ‘slowly’, *dza* ‘fast’.

Auditory impressions: *kwaka* ‘scraping noise’, *kpá* ‘sharp noise, popping noise’, *kubú* ‘splashing’, *hókí* ‘rallying cry’, *woo* ‘hubbub’, *túúú* ‘sound of a horn’.

Quantity: *má* ‘overloaded’, *límé* ‘overloaded’, *kópa* ‘overflow’, *ngoto* ‘sparsely, few’.

Some of these ideophones can be reduplicated: *kpákpá*, *dzadza*, *gbékugbéku*.

Ideophonic forms can present class-prefixes, as in: *túnámí* > *o-túnámí* (singular), *i-túnámí* (plural); *púdúpuđu* ‘in small pieces’ > *o-púdúpuđu*, *i-púdúpuđu*.

From a syntactic point of view, ideophones cannot be modified by adjectives, are usually used as adverbials, and can function as verbs when preceded by the aspectual auxiliary *-peka* conveying the progressive aspect: *-peka lófálofa* ‘being itchy’.



## Echoic palindromoids

A family of words in English phonetically characterized as {KAK} and iconically referring to some sort of vocalization: *cackle*, *cuckoo*, *quack*, *cluck*, *croak*, *squawk*, *screech*, *giggle*, *chuckle*, *shriek*, and *honk*. These expressions not only use vocalization to represent vocalization (as in *caw*, *coo*), but they repeat syllable onsets and codas and thus mimic themselves. (Wescott 1975b: 31).

See PENTESTHEMES

## Echo-words

An expression used by Jespersen (1922: 313, 398ss).

See ECHOIC WORDS

## Echoic words

Onomatopes or onomatopoeic words. Jespersen (1922: 398-402) classified echoic words into six types. The first type includes words directly mimicking a sound. For example, metallic sounds are suggested by words such as *clink*, *clank*, *ting*, *tinkle*; sounds produced by water are imitated by *splash*, *bubble*, *sizz*, *sizzle*. Jespersen includes the usual onomatopoeias of both animals (*bow-wow*, *bleat*, *roar*) and humans (*snort*, *sneeze*, *snigger*, *smack*, *whisper*, *grunt*, *grumble*). The second type of echoic word designates the being that produces the sound: *cuckoo* and *peewit* are of this type. Jespersen also includes those names given to nations from words occurring frequently in their speech. For example, in Hungary, German visitors are called *vigéc* from German *wie geht's* 'how are you doing?' and customs officers are called *vartapiszli* from German *wart' a bissl* 'wait a little bit!' In Yokohama, an English or American sailor is called *damuraisu* from 'damn your eyes' (Jespersen 1922: 399).

The third type of echoic word refers to a movement that causes a sound, as in English *bubble*, *splash*, *clash*, *crack*, *peck*, *bang the door*, *tap at the door*. In some cases, the movement is more characteristic than the sound. Given as an example here are some words with *l*-combinations: *flow*, *flag*, *flake*, *flutter*, *flicker*, *fling*.

The fourth type of echoic word includes words that denote the visible characteristics of an object, such as English *knap* 'a thick stick, a knot of wood, a bit of food, a protuberance, a small hill'. Jespersen refers to the

numerous examples given by Hilmer in his 1914 book (see *Schallnachahmung, Wortschöpfung und Bedeutungswandel* 1914\*). There is also a natural association between high tones and light; and low tones and darkness. As a result, the vowel [i] is felt to be more appropriate for light and [u] for dark: *gleam, glimmer, glitter* vs. *gloom*.

The fifth type of echoic word includes words denoting states of mind that are associated with certain sounds. For example, *grumble* is used to express a mental state of dissatisfaction by mimicking the sound produced when in such a mood (also *mumble* and *grunt, grundle*). Other examples are: *blunder, bungle, bung, clumsy, humdrum, strum, slum, sluch, sloven*.

The sixth type of echoic word has to do with size and distance. Jespersen argued that the vowel [i] is particularly appropriate to express what is small, weak, insignificant (see *Symbolic value of the vowel i*) in many different languages: English *little*, French *petit*, Italian *piccolo*, Hungarian *kis*, Latin *minor*. Jespersen also observed that the vowel [i] frequently indicates what is nearby and other vowels, especially [a] or [u], what is farther off: French *cil/là*; English *here/there*; German *dies/das*; Hungarian *ez* 'this'/*az* 'that', *itt* 'here'/*ott* 'there'; Malay *iki* 'this'/*ika* 'that'/*iku* 'yon, farther away'.

See *SCHALLNACHAHMUNG, SYMBOLIC VALUE OF THE VOWEL I, WORTSCHÖPFUNG UND BEDEUTUNGSWANDEL*

## Echoism

Jespersen (1922: 135) used this term to denote the fact that children echo what is said to them and also to denote words of onomatopoeic origin (Jespersen 1922: 313).

## Edo

See BINI, *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## *Elementare Wortschöpfung* (W. Oehl 1917-1924)

The Austrian linguist Wilhelm Oehl (1881-1950) was a professor of Germanic languages at Freiburg University (Switzerland). Beginning in 1917, he published a series of papers in *Anthropos* entitled *Elementare Wortschöpfung* [Elementary word creation]. Oehl states in the introduction to the first paper that there are some universal words based on sound imitation (*Schallwörter*) and on children babbling (*Lallwörtern*) that can be

attested in different unrelated linguistic families. The bird name *cuckoo* is an example of the former type and *papa* and *mama* are examples of the latter. In 1922, he also proposed the new term *Bildwort*\* (Picture word) in order to recognise the linguistic imitation of visual properties (Oehl 1933a: 2). He wrote an entire monograph devoted to the study of this type of iconic word (Oehl 1933b).

In this series of papers, Oehl deals with words mimicking the actions of the human throat in relation to breathing and swallowing. He did not complete the investigation (only 11 of the intended 30 parts were published). The first paper (Oehl 1917) is devoted to investigating the iconic words related to coughing. These words contain a guttural consonant noted by *K* followed by a vowel, symbolized as *KO*. He gives the following examples from Indo-European languages (Oehl 1917: 600): Ancient Indian *kash* ‘cough’, Old Slavic *kash* ‘cough’, Lithuanian *kōs* ‘cough’, Latvian *kās* ‘cough’, Albanian *kul* ‘cough’, Old Irish *cas* ‘cough’. A general root, *k<sup>w</sup>ās/k<sup>w</sup>ōs*, can be proposed for Indo-European. This iconic word mimicking a cough occurs in other language families (Oehl 1917: 615): Hungarian *kōh*, Finnish *kahja*, Estonian *kōhi*, Ewe *kpekpe*, Dinka *ghol*, Oromo *kufa*, Arabic *qahaba*, Somali *quffa*, Chinese *kai*, Chinook *hoho*, Maku *hoho*, Navaho *kos*.

On pages 618-620 of this first paper, Oehl gives various examples of this mimetic word attested in Bantu languages (31 examples), such as Mbundu *kohona*, Fang *kogi*, Monjombo *koko*; in the languages of Sudan (18 examples), such as Bare *ahus*, Kunama *kos*; in Afro-Asiatic languages (10 examples), such as Amharic *hasasa*, Amazigh *koh*; in Uralic languages (19 examples), such as Mordvin *koz*, Livonian *kev*, Norwegian Sami *gosatak*, Udmurt *kizo*; in Sino-Tibetan and Austro-Asiatic languages (13 examples), such as Khmer *kaak*, Nicobarese *hooa*; in the Austronesian family (15 examples), such as Motu *hua*, Bauro *huu*; in Papuan and Australian languages (3 examples), such as Nasioi *kou*; in South American Indian languages (9 examples), such as Kayapo *kak*, Shipibo *huko*; and in North American Indian languages (13 examples), such as Biloxi *xoxo*, Otomi *hehe*. On pages 620-624, Oehl discusses words in Indo-European languages genetically related to the *k<sup>w</sup>ās/k<sup>w</sup>ōs* I.-E. root.

In the second paper (Oehl 1918), the author discusses some palatalized variants of the mimetic cough word in several languages: *ko* > *cho*, *ka* > *cha*, *ku* > *chu*, *ki* > *chi*. As an example, he mentions English *chincough* (Oehl 1918: 1047), directly related to the dialectal *to kink* ‘to cough’ and to Dutch *kinkhoest*, Swedish *kikhosta* and Danish *kighoste*. Oehl also discusses Latin *tussis* ‘cough’, attested in Romance languages: Spanish, Catalan and

Provençal *tos* ‘cough’. Oehl believes that this root is an imitation of a human cough and is also present in other linguistic families: Mandingo *toto* ‘to cough’, Mende *tohe*, Tuareg *tasu*, Bribri *to*, with the same meaning. Oehl also discusses mimetic words for vomiting and belching, which are similar to coughing. For example, Wolof *gix* ‘to belch’, Sotho *sema* ‘to belch’, Dinka *ngok* ‘to vomit’, Arabic *qa’a* ‘to vomit’, Estonian *kugistama* ‘to belch’, Nasioi *kurin* ‘to vomit’, Manchu *kekere* ‘to belch’ (Oehl 1918: 154).

In the third section of this paper, Oehl notes that the guttural consonant can appear at the beginning and/or at the end of the mimetic words denoting coughing, vomiting and belching. Elaborating on this observation, he proposes the following classification of mimetic KO words based on the position of the guttural consonant (Oehl 1918: 1056-1057): the onset type (*Anlauttypus*) KO; the doubling type (*Doppeltypus*) KOK; the inner type (*Binnentypus*), a mirror-image of the onset type, OK. When this type has an initial guttural consonant, the onset type is obtained; when it has a different consonant, a mixed type (*Mischtypus*) is obtained, notated as xOK. In addition, these words can have an additional liquid or nasal consonant: KRO, KLO for the onset type; ORK, OLK, ONK for the inner type; KROK, KLOK, KORK, KOLK, KRONK for the doubling type; and xROK, xORK for the mixed type. These types can be seen in the words given above as examples. Oehl thinks (1918: 1065) that the sequence guttural + labial (K+P, K+F), such as Arabic *qahaba* ‘to cough’ or English *cough* mimics, the natural direction of the air when coughing and belching or of the stomach contents in vomiting.

The rest of the papers analyse mimetic words for swallowing, throat clearing, slime, spitting, spittle, snoring, hoarseness, groaning, wheezing, breathing, puffing, panting, blowing, whistling, smelling, smell, scent, smoking, steam and mist in different languages families.

The ensuing papers originally devoted to sneezing, yawning, laughing, grunting, sighing, stuttering, gargling, were not published in *Anthropos*.

See *FANGEN-FINGER-FÜNF*, *URSCHÖPFUNG*

## Elvish sound symbolism

Elvish languages were created by the novelist J. R. R. Tolkien for his Elves. They include: Quenya, Telerin, Sindarin, Nandorin and Avarin. R. Rausch (2014) gives the following data for Ancient and Modern Quenya.

The following examples show size-sound symbolism ([i] ‘small’/[a], [o], [u] ‘big’): *inya* ‘tiny’, *migin* ‘little’, *minwa* ‘small’, *titta* ‘little’, *pia*, *pikina*, *pitya* ‘little’; diminutive suffixes: *-ine*, *-inea*, *-itse*; *alta* ‘large, great in size’, *fauka* ‘fat, large’, *hoa* ‘large, big’, *molda* ‘big, large’, *pol* ‘large, big (strong)’, *úmea* ‘large’, *úra* ‘wide, large, great’; augmentative suffixes: *-on*, *-ume*, *-(y/v)ando*.

The following examples show distance sound symbolism: *ike* ‘this’, *qi* ‘this’, *sina* ‘this’, *sisse* ‘here’, *sa (ta)* ‘that (there)’, *tande*, *tanna* ‘thither’, *tanya* ‘that’, *tasse* ‘there’.

The following are nursery words in Quenya: *ama* ‘childish words for mother’, *atta* ‘child’s word for father’, *(a)taryo* ‘daddy’, *(a)milye* ‘mommy’.

Concerning chromaesthetic symbolism, Rausch gives the following generalizations: the vowel [i] is associated with pale and grey colours; the vowel [a] conveys saturated bright colours, shining white, brightness, day, and sun; the vowels [o], [u] mimic sombre colours, black, blue, darkness/gloom and night. The following examples illustrate these observations: *rilma* ‘glittering light’, *sili* ‘gleam, glint’, *wimpele* ‘a twinkling’, *winwinoite* ‘glittering’, *itila* ‘twinkling, glinting’, *lóme* ‘night’, *luurea* ‘dark, overcast’, *more* ‘darkness, black night’, *moori* ‘night’, *nulla* ‘dark, obscure’, *tumna* ‘deep, profound, dark or hidden’.

## Emai ideophones

Emai is a Benue-Congo language of the Edoid group spoken in Nigeria by approximately 100,000 people. Egbokhare (2001) gives a brief survey of ideophones in this language. From a phonological point of view, they present a rigid tonal structure with a constant high tone; stops, but not fricatives, can co-occur in an ideophone; and they usually show univocalism. Reduplication is frequent: *rírírí* ‘red’, *títítí* ‘(time) prolonged’, *kútúkútú* ‘(water) boiling’, *wɔ́ɔ́wɔ́ɔ́* ‘(body) obese’, *yúyúyú* ‘(flow) gushing’, *yeyeghe* ‘undersized’.

Other Emai ideophones include: *kpútú* ‘stumpy’ (small, compact and round, disproportional); *gbúkú* ‘bulging’ (big, compact and round, short); *heghe* ‘very light’ (light, flat, delicate); *kpíríkpírí* ‘prickly’ (small, compact, interspersed); *gbíkí* ‘stocky’ (big, compact, short); *gbúkú* ‘bulging’ (big, compact and round, short); *gbókó* ‘oval’ (big, circular and hollow, short); *gbáká* ‘bogus’ (big, very flat, short); *tíkí* ‘highly viscous’ (abnormal, thick, not distended); *tɔkɔ* ‘mushy’ (abnormal, circular and supple, not mouldy); *teke* ‘runty’ (disproportional, thin, short).

On the basis of these and other examples, Egbokhare (2011: 92) proposes the following sound-meaning pairs in Emai ideophones: a. Vowels: [i] ≈ ‘compact, dense’, [u] ≈ ‘compact and round’, [e] ≈ ‘tight, firm’, [o] ≈ ‘circular, fat’, [a] ≈ ‘very faint, diffuse’; b. Consonants: [p] ≈ ‘narrow’, [b] ≈ ‘broad’, [t] ≈ ‘disproportional’, [d] ≈ ‘proportional’, [k] ≈ ‘short, low’, [g] ≈ ‘long, high’, [kp] ≈ ‘small’, [gb] ≈ ‘big’, [f] ≈ ‘fine’, [z] ≈ ‘creasy’, [v] ≈ ‘fused, clumped’, [y] ≈ ‘particulate, strung up’, [w] ≈ ‘loose, chunky’, [h] ≈ ‘light’, [l] ≈ ‘straight, erect’, nasal consonants ≈ ‘abnormal, crooked, (pejorative)’. For the syntactic aspects of Emai ideophones see Schaefer 2001.

## Endophoric iconicity

Nöth (2001: 22) says that this type of iconicity is one the major principles of miming in language and can be defined as: form miming form. A linguistic sign can be iconically mapped within language in two directions: along the paradigmatic axis and along the syntagmatic axis. In the first case, there is iconicity within the language system. For example, the singular/plural opposition, as in *cow/cows*, is the result of an iconic mapping of a form prescribed by a morphological rule to hundreds of nouns (Nöth 2001: 23). In the second case, the iconicity holds within a discourse or text. In reduplication, the second syllable is similar or identical to the first as in *zigzag* or *mama*. In general, repetition, parallelism, alliteration or rhyme are examples of syntagmatic iconicity (Nöth 2001: 23).

See EXOPHORIC ICONICITY, *SHE SELLS SEA SHELLS...*

## English

Like other Germanic languages, English is very rich in iconic expressions. The iconic aspects of English monosyllables have attracted the attention of a number of researchers. Jespersen (1928: 621) pointed out that one of the sources of monosyllabism in English is the feeling of a natural connection between sound and meaning, as in echo words\* or onomatopoeias: *swish, switch, swirl, squirm, squeal, squark, squawk, hug, pun, jib* (‘refuse to go on’), *fuss, blur, hoax, gloat, toss, dude, dud, stunt*, among many others. Besides, Jespersen saw a very significant iconic difference between “words of one syllable, expressive of sounds and movements which occur once, and words of two syllables which mean continuous sounds and movements” (1928: 640). He compares words such as *rap, tap, smash*, on the one hand with *rattle, babble, tinkle, clatter*, on the other. In addition, he notices iconic

pairs such as *nod/noddle*, *jog/joggle*, *sniff/sniffle*, *drip/dribble*, *whiff/whiffle*, *toot/tootle*, in which the longer word is a frequentative of the shorter one.

Rhodes and Lawler (1981) investigated the semantic import of initial consonant clusters in English. They discovered a rudimentary classificatory system in English based on initial consonant clusters: *st-* ‘one dimensional objects’: *stick*, *staff*, *stem*; *str-* ‘flexible one dimensional objects’: *string*, *strand*, *strip*; *fl-* ‘two dimensional objects’: *flap*, *flat*, *floor*; *sh-/sk-* ‘flexible two dimensional objects’: *sheet*, *scarf*, *skin*; *n-* ‘three dimensional objects’: *knob*, *knot*, *node*, *nut*; *sp-* ‘cylindrical objects’: *spool*, *spine*, *spike*; *dr-/tr-* ‘liquids’: *drink*, *drain*, *trickle*, *trough*. Other initial consonant clusters refer to paths: *tr-/dr-* ‘simple path’: *track*, *trip*, *drive*, *drag*; *p-/b-* ‘anchored paths’: *push*, *pop*, *bump*, *bounce*; *j-/ch-* ‘short paths’: *jerk*, *jiggle*, *jagged*, *chop*, *w-* ‘back and forth’: *wag*, *wiggle*, *wobble*.

These authors also identify the following iconic sound-meaning associations concerning initial consonants and consonant clusters: *p-* ‘abrupt onset’: *pop*, *ping*, *peep*; *b-* ‘abrupt, loud onset’: *boom\**, *bang\**, *beep*; *bl-* ‘loud, air-induced sound’: *blat*, *blast*, *blab*; *kl-* ‘abrupt onset’: *clank*, *click*, *clip*, *clap*; *r-* ‘irregular onset’: *rip*, *roar*, *roll*; *y-* ‘loud, vocal tract noise’: *yell*, *yap*, *yak*.

Rhodes (1994) classifies English words into three categories: onomatopoeic (*arf*, *meow*, *moo*, *baa*, *hoot*; bird names\*: *bobwhite*, *whippoorwill*, *killdeer*, *chickadee*), sound-symbolic and arbitrary.

This author notes that some of the sound-symbolic words are typically introduced by the verb ‘to go’, as in: *it goes ping*, *it went creak*, *creak*; *I went smack against the wall*; *it went wham on the floor*. Rhodes calls the class of iconic words that can appear in this syntactic context *wild words*, since they are more or less based on a direct imitation or on an immediate aural or visual impression. Expressions, such as *go rattle*, *go groan* or *go smash* are weird, since the implicated iconic expressions are not pure imitations and are more phonologically and morphologically integrated or “tamed”. These iconic expressions are called semi-wild by Rhodes. This author observes some iconic sound-meaning associations in final consonants: extended decays: *-ng* (*ding*, *ring*, *clang*, *bong*, *bang*), *-m* (*boom\**, *wham*, *blam*), *-ch* (*crunch*, *screech*); *-sh* (*crash*, *splash*, *whoosh*); abrupt decays: *-p* (*pop*, *plop*, *thump*, *whap*), *-t* (*tweet*, *zot*, *splat*), *-k* (*clack*, *thack*, *thunk*, *zak*). See also Oswald (1994).

English is also rich in iconically motivated reduplicative words. In his thesis on these words, N. Thun (1963) collects and analyses about 1,700 examples. Thun (1963: 227) proposes the following morphological classification of reduplicative words in English:

- A. Symmetrical words (no element in the word other than the members of the reduplication). 1. Identical reduplication: *tick-tick, pattle-pattle, girly-girly, tum-tum*. Common meanings: sense impressions, exaggeration, nursery words. 2. Varied reduplication: 2a. Different initial consonants: *hubble-bubble, helter-skelter, rag-tag*. Common meanings: words for strife, deception, mental instability, high degree, hypocoristic terms; 2b. Stem vowels different: *bing-bang, jingle-jangle, titter-totter, slip-slap, blish-blash*. Common meanings: alternating sound and movement, depreciatory words. 2c. One member begins with a consonant, the other begins with a vowel: *argle-bargle, unky-dunky, tiddy-iddy*.
- B. Asymmetrical words (there is another element besides the members involved in reduplication). 1. Identical reduplication: *clinkety-clink, mimpetty-mimp*. 2. Non-identical reduplication: 2a. Different initial consonants: *hub-a-dub, crackerjack, frill-de-dills, razz-ma-tazz*. 2b. Stem vowels different: *clickety-clack, clink-to-clank, twiddle-cum-twaddle*.

See ABLAUT REDUPLICATION, ALLITERATION, ALLOLANGUAGE, APOPHONY, ARTICULATORY ICONICITY, ASSOCIATIVE ICONICITY, AUDITORY ICONICITY, BIRD CALLS, BIRD NAMES, BLENDING, *BOW-WOW*, BOW-WOW THEORY, *BUTTERFLY*, *CAKLE*, *CRACK*, *CUCUMBER*, CREOLES, DE-ICONIZATION, DIAGRAMMATIC ICONICITY, *DICCIONARIO DE VOCES NATURALES*, *DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES*, *DOPPELUNG (REDUPLICATION, GEMINATION)*, DYSMORPHY, ECHOIC PALINDROMOIDS, ECHOIC WORDS, *ELEMENTARE WORTSCHÖPFUNG*, EXPRESSIVE MORPHOLOGY, EXPRESSIVE SYMBOLISM, *FANGEN-FINGER-FÜNF*, *GARGLE*, GENERATIVE GRAMMAR, GERMANIC LANGUAGES, *GRAMMATICA LINGVAE ANGLICANAE*, ICONIC INDEX, ICONIC MOTIVATION, ICONIC TREADMILL HYPOTHESIS ICONICITY, ICONICITY OF COMPLEXITY, ICONICITY OF LEXICAL CATEGORIES PRINCIPLE, IMITATIVE ROOTS, KINAESTHETIC ICONICITY, MASS-NOUNS, MATRIX AND ETYMON THEORY, *MIM/MON/MUM*, MIMICKING, ONOMATOPOEIA, ONOMATOPOEIC EXPRESSION,



ONOMATOPOEIC ICONICITY, *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI, PALIMPHONY, OSNOVY FONOSEMANTIKI*, PARADIGMATIC ICONICITY, PENTESTHEME, PHONAESTHEME, *PIP, PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE, PSYCHOPHONETIK, PUFF, QUEST FOR THE ESSENCE OF LANGUAGE*, REDUPLICATION, RELATIVE ICONICITY, *SCHALLNACHAHMUNG, WORTSCHÖPFUNG UND BEDEUTUNGSWANDEL, SEE-SAW, SHE SELLS SEA SHELLS...*, SIZE-SOUND SYMBOLISM, SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I, THE SIGN IS NOT ARBITRARY, TICK-TOCK, URSCHÖPFUNG, {-WR-}* IDEOPHONIC ROOT

## **Eskimo**

Language family of Alaska, Canadian Arctic and Greenland.

See NURSERY WORDS, SIZE-SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I*, {-WR-} IDEOPHONIC ROOT

## **Estonian**

See ABLAUT REDUPLICATION, *BUTTERFLY, ELEMENTARE WORTSCHÖPFUNG*, FINNO-UGRIC LANGUAGES, NURSERY WORDS, ONOMATOPOEIC EXPRESSION, *SYMBOLIC VALUE OF THE VOWEL I*

## **Ethiopic [Ge'ez]**

Ancient south Semitic language of Ethiopia.

See NURSERY WORDS

## **Etymology**

Iconic words can, generally, be inherited from a mother tongue. For example, the iconic Latin verb *pipio* 'to chirp' shows an onomatopoeia that has been inherited by the Romance languages: Spanish and Portuguese *piar*, Catalan *piular*, Italian *pigolare*, French *piauler*.

But in some instances, a non-iconic etymon can be iconically reinterpreted. For instance, Anscombe (1986: 171) discusses the French word *micmac* 'jiggery-pokery, mix-up'. In its origin, this is not an iconic word, since it

comes from Medieval Dutch *muithmaken* ‘to rebel’, but has been integrated into the French vocabulary following the sound-symbolic pattern of iconic expressions, such as *tic-tac* and *zigzag*. See Durkin (2009: 123-131) and Liberman (2010).

## Ewe ideophones

Ewe is a Niger-Congo language spoken in southeastern Ghana by approximately 6 million people. The following data are taken from Ameka (2001).

Ideophones in Ewe can show non-canonical syllable structure, as in *kpóó* ‘quietly’, *kéng* ‘completely’ or *kpam* ‘sound of a collision between surfaces’, *prrrr* ‘sound of a whistle’, *gbrrr* ‘sound of thunder’. In addition, tonal differences can convey opposed meanings. For example, a high tone symbolizes something nice, pleasant, sweet, good or small and a low tone is used to convey something bad, unpleasant, sour or big: *pótópótó* ‘sound of a small drum’/*pòtòpòtò* ‘sound of a big drum’.

Ideophones can be permuted: *tsaklii/klitsa* ‘rough surface’, *nyadrii/drinyaa* ‘tough’, *nogoo/gonoo* ‘round’.

Repetition is also common: *nyanyaanya* ‘trembling’, *blewuu blewuu* ‘in a calm and soft way’, *gbùdùgbùdù* ‘tumultuously’, *miámiamiámíá* ‘soothing’.

There are also ideophonic adjectives in Ewe that can function as verbs or adverbs: *kányá* ‘early’, *yéye* ‘new’, *legbee* ‘long’, *lúbúí* ‘narrow’, *gbadzaa* ‘flat/wide’, *bada* ‘bad’, *ngánángáná* ‘sweet’, *blibo* ‘whole’, *nyadrii* ‘tough, hard’, *nogoo* ‘round’, *kpata* ‘sudden’.

There are also ideophones representing colours: *kpííí* ‘gray’, *títítítí* ‘white’, *gbánágbáná* ‘red’, *kpékpékpé* ‘black’.

See *BUTTERFLY*, *CACKLE*, *CREOLES*, *ELEMENTARE WORTSCHÖPFUNG*, *FREQUENCY CODE HYPOTHESIS*, *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## Exophoric iconicity

Nöth (2001: 22) says that this type of iconicity is one the major principles of miming in language and can be defined as: form miming meaning. In this case, a linguistic sign has a certain relation of similarity to something

beyond language. For example, an onomatopoeia is a linguistic sound resembling a non-linguistic sound, as in *cuckoo*\*.

## Experimental approaches to linguistic iconicity

In order to check the general validity of iconic form-meaning relationships from an empirical point of view, several experiments have been devised and conducted. In some of these experiments, word-meaning pairings in different languages are presented to individuals who do not know these languages in order to check whether they are able to guess the appropriate meaning on the basis of natural form-meaning associations. In order to avoid language bias, invented words have been used in other experiments. To explore the pure iconic relations between form and meaning in both spoken and sign languages, in some other experiments the subjects are asked to assign a meaning to a visual or an auditory stimulus.

[Elsen 2016: 56-117]

See *A STUDY IN PHONETIC SYMBOLISM*, BOUBA-KIKI EFFECT, ITALIAN SIGN LANGUAGE, *PSYCHOPHONETIK*, *RECHERCHES EXPÉRIMENTALES SUR LE SYMBOLISME PHONÉTIQUE*, SIZE-SOUND SYMBOLISM

## Expressive

A term for ideophone; see, for example, Emeneau and Hart (1993), Klamer (2001).

See *NOTES ON EXPRESSIVE MEANING*

## Expressive morphology

Zwicky and Pullum (1987) distinguish between plain morphology and expressive morphology. Expressive morphology has the following characteristics (Zwicky and Pullum 1987: 335ff): a) it is associated with an expressive, playful, poetic or simply ostentatious effect of some kind; b) its rules have variable and peculiar effects on syntactic categories and apply to different linguistic elements including compound construction and syntactic phrases; c) not all speakers have productive control of its rules; d) the results of the application of its rules can be variable; e) variation between speakers can be observed; f) expressive words and constructions have special syntax.

These properties are exemplified by Zwicky and Pullum with examples such as *fan-fuckin-tastic*, *abso-blooming-lutely*, *caketeria*, *luncheteria* (cfr. *cafeteria*), but they note that they are, in a significant way, shared by ideophones\* and other expressive words and phrases. As an example, the authors mention the use of ideophones in Hixkaryana (Derbyshire 1979: 190-191) that have a variable number of syllables in different occasions of use: *shek shek shek shek* ‘washing (clothes on body)”; *sik sik sik sik sik sik* ‘sharpening (knife on stone)”; *shik shik shik shik shik shik shik shik shik shik shik* ‘pulling in fishing line’.

[Skoda 1983]

See ALLOLANGUAGE

## Expressive symbolism

This expression is used by E. Sapir to refer to cases in which a phonetic difference “is undoubtedly felt as somehow directly expressive of the difference of meaning in a sense in which the contrast between say ‘boy’ and ‘man’ is not” (Sapir 1929: 226). As an example, he proposes the contrast between *teeny* and *tiny*, with a *normal* “i”. The arbitrary contrast shown by pairs like *man* and *boy* is called *referential symbolism*.

## Expressiveness

Iconicity at the phonological and morphophonemic levels having an acoustic, articulatory, or morpho-structural basis. All onomatopes are expressives and are also icons. The syntactic iconicity of expressions such as *veni, vidi, vici*\* would not be described as expressive (Anderson 1998: 44).

See ICONIC TREADMILL HYPOTHESIS

# F

## Fa D'Ambu

Portuguese-based creole of the Annobon and Bioko Islands spoken by approximately 6,000 people.

See CREOLES

## Fang

Central African language of the Bantu family spoken by 3,000,000 people in Cameroon, Gabon, Equatorial Guinea and the Congo.

See *ELEMENTARE WORTSCHÖPFUNG*

***Fangen-Finger-Fünf. Studien über elementar-parallele Sprachschöpfung*** [To catch-finger-five. Studies in elementary-parallel language creation] (Oehl 1933b)

This monograph, written by the Austrian linguist Wilhelm Oehl (1881-1950), is entirely devoted to the study of *Bildwort*\*: a picture-word mimicking the movement of the hand when grabbing. In Oehl's opinion, the act of grabbing can be accompanied by a *kap* or *pak* interjection. From this interjection, an iconic phenomimetic\* root *pak/kap* is produced in many languages of the world.

The two consonants in this phenomimetic\* root can appear in the initial (*Typus* 'type') or final (*Gegentypus* 'countertype') syllable position. The main forms of this mimetic root are: *kap, kam, kat, kar, kal, kas/pak, mak, tak, rak, lak, sak; pat, pal, par/tap, lap, rap; and rat, ta, ma/tar, at, am* (Oehl 1933b: 12-13).

The following are some examples of this iconic root in Indo-European languages. Some of them present consonantal extensions (Oehl 1933b: 17-18): Latin *capere* 'to grab', *carpere* 'to pick, pluck', *scalpere* 'to scratch'; Sanskrit *kapati* 'double handful', *grbhñati* 'he grabs'; Greek *skapto* 'I grab', *karpós* 'wrist', Spanish *gafar* 'to grab', *escarbar* 'to dig'; Gothic *haban* 'to have', *skaban* 'to scrape', *greipan* 'to take', *graban* 'to dig'.

In addition, the *kap* root with the meaning ‘to touch, grab, take, hold’ is also attested in Semitic, Altaic, Uralic, Bantu, Austric and other linguistic families all over the world. As we have seen, this root can be extended with additional consonants and can also develop related meanings. Concerning this point Oehl (1933b: 20-83) includes in his survey the following meaning derivations or extensions (named *Brücken* ‘bridges’): (1) to grab, take > to have, hold (German *haben* ‘to have’, Oromo *kabe* ‘I have, I take’, Tamil *kol* ‘to take, have’); (2) to have, hold > to give (German *geben* ‘to give’); (3) to have, hold > to bring, carry, lead (Sanskrit *bharati* ‘he brings, carries’); (4) to grab, scratch, touch > ‘to grope, feel’ (Dayak *kakap* ‘to grope’); (5) to take > to start, begin (Norwegian *tage til* ‘to start’); (6) to take > handle, grip, shaft (Dutch *vat* ‘handle, grip’, Finnish *kampi* ‘handle, grip’); (7) to take > handful, bundle (Swiss German *grams* ‘handful’, Norwegian *klype* ‘handful, *kjerv* ‘bundle’, Russian *khvatka* ‘bundle’); (8) to grab, cling > to climb (German *krageln* ‘to climb’, English *scramble*, Italian *rampare* ‘to climb’); (9) to scratch > to dig, plough (Greek *lakhaino* ‘I dig’, Sanskrit *khanati* ‘he digs’); (10) to take > to draw (Serbian *za-hvatiti* ‘to draw’, Italian *attignere* ‘to draw water from a well’); (11) to grab, take > to delete, remove, paint, strip, wipe, rub, wash, caress (Latin *tergere* ‘to wipe, rub’, Lithuanian *gesti* ‘to rub’); (12) to scratch, rub > to milk (French *traire* ‘to milk’, Chagatay *sagmaq* ‘to milk’); (13) to press > to knead, dough (Lithuanian *minkyti* ‘to knead’, Finnish *takellan* ‘to knead’, Shona *kana* ‘to knead’); (14) to grab, take > to make (German *Machen* ‘to make’, Greek *tekhne* ‘handwork, art’, Latin *texere* ‘to weave, braid, build’); (15) to grab, take > ‘to tear, rip, break, split’ (Albanian *tshjer* ‘to tear’, Greek *ereikein* ‘to tear up’, Czech *trhati* ‘to tear’); (16) to grab, take > to cut, shear, carve (German *scheren* ‘to shear’, Swahili *kata* ‘to cut’, Khmer *chhak* ‘to cut with a knife’, Maori *kato* ‘to pluck’); (17) to grab, take > ‘to mow, harvest’ (Latin *carpere* ‘to pick, pluck, gather’, Anglo-Saxon *ripan* ‘to harvest’); (18) to grab, take > parts (English *share*, Latin *pars* ‘part’, Sanskrit *kalá* ‘small part’); (19) to grab, take > to bind (Latin *ligare* ‘to bind, tie, fasten’ *vincire* ‘to bind, fetter’, English *clinch*, *clench*); (20) to grab, take > to braid, weave, sew (Latin *texere* ‘to weave’); (21) to close one’s hand > to close, gird, hide > fence (English *lock*, German *Gatter* ‘fence’, Latin *claudere* ‘to close’, Uyghur *qaruruq* ‘fence’); (22) to grab, take > to stretch, pull (English *span*, Sanskrit *tanóti* ‘to stretch, expand’, Finnish *nihko* ‘to pull’, *niehä* ‘to pluck, pick, pull’); (23) to grab, take > to buy (French *acheter* ‘to buy’, Latin *emere* ‘to buy’); (24) to grab, take > to steal, rob, plunder, thief (German *rauben* ‘to rob’, Latin *fur* ‘thief’, Greek *arpadoso* ‘I take, rob, plunder’); (25) to scratch > to write (Latin *scribo*, Greek *gráfo* ‘I write’, Germanic \*writan, English *scrawl*, *scribble*, Spanish *garabatear* ‘scribble’); (26) to take > to understand (German *begreifen* ‘to understand’, Italian *capire* ‘to understand’, French *comprendre* ‘to

understand', European Spanish *coger* 'to understand (of a joke, innuendo); (27) to grab > hand: the different nouns for 'hand' in Indo-European languages seem to come from a root meaning 'to grab, take, gather'. For example, Latin *manus* 'hand' seems to be related to an I. E. root *\*man* 'to grab'; the same can be said for the other hand words: Germanic *Hand*, Slavic *ruka*, Greek *kheir* (Oehl 1933: 73).

Oehl admits (1933b: 79-80) that some of his examples could prove to be incorrect or inaccurate and that this depends on the reliability of the sources used (mainly, the etymological dictionaries to hand at that time). Nevertheless, he thought that the remaining correct examples would suffice to prove his point ("*Aber auch wenn man ein gut Teil der obigen Brücken als bedenklich oder falsch weglässt, so bleibt dennoch so viel zuverlässiges Beweismaterial, dass die Tragfähigkeit dieser unserer Brücken nicht beeinträchtigt wird*", p.79).

The rest of the book (83-247) is devoted to investigating the linguistic manifestations of the 22 principal forms of the phenomimetic root for 'grab' in the language families of the world: (1) KAP 'to grab' (83-104). (2) The palatalized versions of (1): *CHAP*, *TSAP*, *SHAP*, *SAP* (104-108). (3) The reverse root (*Umkehrtypus*) PAK (108-114). (4) The rhotic extensions of (1) KRAP/KARP (114-159). In this section, Oehl gives hundreds of examples from different language families of the world, notably from the Bantu languages. (5) The rhotic extensions of (3): PRAK/PARK (160-169). (6) The root KAM 'to grab' (169-176). (7) The palatalized versions of the preceding root: CHAM, SAM (176-179). (8) The reverse version of (6) MAK (179-182). (9-10) The rhotic extensions of (6) KRAM (182-186) and MRAK/MARK (186-188). (11) The root KAT (188-194). (12) The reverse version of (11) TAK (195-201). (12) The rhotic extensions of (11) KRAT/KART (201-209). (12) The rhotic extensions of (11) TRAK/TARK (209-213). (13) The root KAN (214-216). (14) The reverse version of (13) NAK (216-219). (15) The root KAS (219-222). (16) The reverse version of (15) SAK (222-223). (17) The root KAR (224-230). (18) The reverse and nasally extended versions of (17) RAK/RANK (230-233). (19) The root KAL (233-237). (20) The reverse version of (19) LAK (237-240). (21) The nasal extension of (19) LANK (241-242). (22) The root KAK (242-247).

The book ends abruptly with this section and there is no chapter dealing with conclusions and prospects.

See *BILDWORT, ELEMENTARE SPRACHSCHÖPFUNG*

## Fijian

An Austronesian language of the Malayo-Polynesian family spoken in Fiji by approximately 400,000 people.

See *BUTTERFLY, PRIMITIVE CULTURE, VÖLKERPSYCHOLOGIE*

## Finnish

The main language of Finland spoken by more than 5,000,000 people. It belongs to the Finnic branch of the Uralic language family.

See, *BIRD NAMES, BOW-WOW, BUTTERFLY, CACKLE, CROAK, CUCKOO, ELEMENTARE WORTSCHÖPFUNG FANGEN-FINGER-FÜNF, FINNO-UGRIC LANGUAGES, ICONICITY, NURSERY WORDS, ONOMATOPOEIC EXPRESSION, PRIMITIVE CULTURE, SYMBOLIC VALUE OF THE VOWEL I, VÖLKERPSYCHOLOGIE*

## Fino-Ugric languages

In Finnish there are several onomatopoeic verbs denoting the different noises made by dogs, such as *haukkua* ‘to bark’, *ärhennellä* ‘to bluster’, *äristä* ‘to growl’, *ärjyä* ‘to roar (of dogs, lions, bears, tigers)’, *räksyttää* ‘to bark with a high pitch’, *murista* ‘to growl (of dogs, wolves, bears, boars, lions)’, *urista* ‘to growl (of dogs, wolves)’, *ulvoa* ‘to howl’, *ulista* ‘to howl’. Some of these verbs can be used derogatively to refer to humans. For example, *murista* can be used to denote babbling or gurgling (Shapiro and Stenin 2017: 140). The onomatopes *maukua*, *miukua*, *naukua*, ‘to meow’ and *mouruta* ‘caterwaul’ are used to refer to cats. The verbs *sähistä* ‘to hiss’ and *säksättää* ‘to whistle, hiss’ can also be applied to humans in the sense of ‘to speak with malice or irritation’ (Shapiro and Stenin 2017: 143). *Ammua* ‘to moo’ and *mylviä* ‘to bellow’ are used for cows and other bovines. For horses and donkeys we have *hirnua* ‘to neigh’, *hörähtää* ‘to chortle’ and *korskua* ‘to snort, to snore’ and *pärskähdellä*: this last verb can be used to denote a roar of laughter (Shapiro and Stenin 2017: 144). Sounds made by insects are mimicked by *inistä* ‘to buzz (of mosquitos)’, *hyristä* ‘to hum (of flies)’, *sirittää* ‘to chirr (of grasshoppers, crickets)’, *siristä* ‘to buzz’. These verbs can also be used to convey unpleasant feelings and noises (Shapiro and Stenin 2017: 145). For birds we have *sirkuttaa*, *livertää* ‘to chirp’, *kujertaa* ‘to coo’, *rakkua* ‘to caw (crow or raven)’, *piipittää* ‘to peep, tweet’, *huhuilla* ‘to hoot (owl)’. These verbs can also be applied to humans



in order to convey the speech of children (*sirkutaa*), gentle singing (*livertää*), or to objects in order to convey the ringing of an alarm clock (*piipittää*) (Niklas-Salminen 2017: 154-157).

*Kukko kiekku* ‘the rooster crows’ is an example where both the subject and the verb seem to have an onomatopoeic character. In addition, in Finnish there is a compound verbal construction in which an onomatopoeic verb can be used to convey specific nuances. For example, from *nauraa* ‘to laugh’ the following onomatopoeic compound verbs can be produced in order to denote certain types of laughter: *nauraa piipittää* ‘to giggle’, *nauraa hirmua* ‘hee-haw’, *nauraa kiekua* ‘to cackle’, *nauraa sirkuttaa* ‘to titter’ (Niklas-Salminen 2017: 161).

Finnish is very rich in expressive vocabulary. There is a large number of onomatopoeic words of the type *k-lk* mimicking the noise of a hard object hitting or striking something: *kalkuttaa* ‘clatter’, *kilkutta* ‘tingle, jingle’, *kolkutta* ‘to knock’. The mimetic pattern *k-k-r* is used to refer to small roundish objects: *kokare* ‘lump, clod of earth or clay’, *kikkara* ‘curly’, *kukkaro* ‘purse’. In dialectal Finnish, the mimetic root *k-lk-r* suggests bells, sleigh bells, or twisted bunches of fur or hair. Examples: *kalkkarokäärme* ‘rattle snake’, *kalkkara* ‘bell’, *kilkkaro* ‘small, quiet bell’ (Jarva 2001: 113-116).

Estonian is also very rich in iconic words and expressions. As in Finnish, Estonian ideophones can show many vowel-consonant alternations, such as in the ideophone *koperdama* ‘to fumble, grope about’, which has many variants: *kaperdama*, *köperdama*, *koberdama*, *koomerdama*, *poperdama*, *pökerdämä*, *tokerdama*; *lomisema*; ‘to speak quietly, to mutter’: *momisema*, *nomisema*, *pomisama*, *pomisema*, *põmisema*, *somisema*, *tõmisemä*. Other Estonian ideophones include: *prahkeldama* ‘bustle about’, *plahvima* ‘gobble, gulp’, *tragam* ‘bluster, flurry’, *tsibõrdama* ‘flounder’. Ablaut reduplication\* is also widely used in Estonian ideophones: *tipa-tapa* ‘quick and short steps’, *kips-kõps* ‘quick and short steps in high heels’, *nika-naka* ‘the monotonous, regular and rhythmic sound of wagons’, *hiroh-haroh* ‘scattered, confused’, *kriima-kraama* ‘carelessly, sloppy’, *liga-loga* ‘confused, sloppy, bad’ (Mikone 2001).

In Hungarian we have onomatopoeic verbs, such as *bőg* ‘to moo’, *morog* ‘to grunt, growl’, *sziszeg* ‘to hiss’, *nyerít* ‘to neigh’, *ordít* ‘to roar, bray, howl’, *nyikkan* ‘to squeak’, *csicsereg* ‘to twitter’, *csiripel* ‘to tweet’, *brummog* ‘to grunt’, *morog* ‘to grunt, growl’, *hápog* ‘to quack’, *nyávog* ‘to meow, caterwaul’, *huhot* ‘to hoot’, *kuruttyol* ‘to croak’, *cincog* ‘to squeak,

peep', *kukorékol* 'to crow', *turbékol* 'to coo', *bömböl* 'to howl', *zümmög* 'to whirr, reel, hum, buzz', *pattog* 'to pop, crackle' (Ladygina and Vassilyéva 2017)

In Khanty (Ostjak), an Ugric language, there are also onomatopoeic verbs such as *ömii-* 'to moo', *marii-*, *pängii-* 'to buzz, hum', *s'äliti* 'to yelp', *n'angash-* 'to moan, wail, whine', *khora-* 'to bark', *örtatli* 'to howl, scream, shout', *orá-* 'to roar', *wokh-* 'to bellow', *engi-* 'to neigh' (Pavlova 2017).

See BIRD NAMES

## Firstness

A category in Peircean semiotics defined by Peirce in the following way:

“Firstness is the mode of being of that which is such as it is, positively and without reference to anything else” (Peirce CP 8.328).

See HYPOICON, HYPOICONIC DIAGRAMMATICITY, ICON, ICONIC DIAGRAM, ICONIC INDEX, ICONICITY IN PEIRCE'S SEMIOTICS, INDEX, SECONDNESS, SYMBOL, THIRDNESS

## Flemish

Variety of the Dutch language spoken in Flanders (the northern part of Belgium) by approximately 60 % of the Belgian population.

See *BUTTERFLY*

## French

The official language of 29 countries used by approximately 150,000,000 speakers. It is a member of the Romance language family.

In his study on the etymology of the French lexicon, Guiraud (1986) includes a chapter entitled 'onomatopoeic structures' (*structures onomatopéiques*, 92-127). In this chapter, he discusses two onomatopoeic roots: first, a labial root B...B, with the variants B...F..., P...P, P...F... associated with lip movements and with actions such as *to speak*, *to eat*, *to grimace* and several metaphorical senses; second, a lingual T...K... root with variants P...K..., CH...K..., F...K... associated with the idea of a movement or a strike produced by that movement. As in the first root, its articulation is iconically linked to this general meaning, since it involves a forward-backward

movement of the tongue and contact of the tip and back of the tongue with the anterior and posterior part of the hard palate.

Guiraud lists 148 French words derived from the T...K... iconic root, including: *tac* 'tock', *attaque* 'attack', *taquet* 'cleat, tappet', *tacot* 'jalopy', *taquin* 'tease', *attacher* 'attach', *tic* 'tic', *tique* 'tick', *toc* 'tick', *toquer* 'to strike', *stocque* 'stick', *toucher* 'to touch', *tracasser* 'to worry, to bother, hassle', *tric-trac* 'a play', *trique* 'stick, club', *tricoter* 'to knit', *troquer* 'to swap, barter', *truc* 'trick, tip'.

On page 109, Guiraud gives the following general scheme for this iconic root:

		T...K... = blow, stroke	
Actions	tiquer	toquer (toucher)	taquer (tacher)
Movements	tic	toqué	tac
Instruments	tiquet	toque	taquet
Actions	triquet	truquer, troquer	traquer
Movements	tric	truc, troc	trac
Instruments	trique	truc	traquet

In addition, he notices the following sound-symbolic associations: (a) the vowel alternation *i/o/a* is associated with something small, big and flat respectively; (b) the alternation between K and CH suggests the contrast between a strong stroke and a drop stroke; in the alternation R/Ø, *r* has a frequentative meaning; (b) Suffixes *-etter*, *-otter*, *-asser*, *-iner*, *-onner*, *-eller* have a frequentative meaning.

Concerning the labial root B...B..., Guiraud lists many French words related to activities involving the lips and the mouth, including BAB: *babine* 'big lips', *babiner* 'to chat', *babouin* 'grotesque face, monkey, child'. BOB: *bobiner*, *débobiner*, *boboter*, *bobilloner* 'to chat', *bobine* 'coil, spool, reel', *bobe*, *bober* 'to deceive', *bobant* 'arrogant', *bobèche*, *bobe* 'chip'. BOUF: *bufo*, *buffette* 'play', *bouffer* 'to eat, to stuff oneself', *bouffarder* 'to smoke', *bouffir* 'to inflate', *bufa* 'to make fun'. PAPPARE (Latin *pappare* 'to eat'): *pappe* 'lips', *pampine* 'mouth with big lips', *papeter*, *papoter*, *papier* 'to chat', *paper*, *papeter*, *papelocher* 'to eat'. PUPPA (Latin *pupa* 'little girl'): *poupon*, *poupart*, *poupelin* 'small child', *poupée* 'toy, doll'. POMPE: *pompe* 'pump', *pomper* 'to pump', *pomper* 'overdrink'. PAFF/PUFF: *paf* 'slap', *épaffer* 'to suffocate, to discourage', *empaffer*, 'to fatten, to fill sb. up', *pouffer* 'to blow', *poufir* 'to swell'. BIB: *bibie* 'toy', *bibelot* 'trinket,

ornament, knick-knack’, *biba*, *bebel*, *bibaille* ‘chip’, *bibi* ‘small women’s hat’, *bibi* ‘stupid, fool, dummy’. PIPPARE: *piper* ‘to chirp’, *pipa* ‘gasp, pant’, *pipe* ‘keg, barrel’, *piper* ‘to lure into a trap, to deceive’. PIP/PIMP: *pimponer*, *pimpeloter*, *pimplocher* ‘to decorate, to dress up’, *pimpon* ‘adornment, ornament’, *pimpure* ‘bathroom, washroom’, *pipant* ‘lazy’.

See ARBITRARINESS, BIRD NAMES, *BOW-WOW*, BOW-WOW THEORY, *BUTTERFLY*, *CAKLE*, *CRACK*, *CROAK*, *CUCKOO*, *CUCUMBER*, *DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES*, *DOPPELUNG (REDUPLIKATION, GEMINATION)*, ECHOIC WORDS, ETYMOLOGY, *FANGEN-FINGER-FÜNF*, *GARGLE*, *GRUNT*, MATRIX AND ETYMON THEORY, NURSERY WORDS, *ONOMATOPÉES ET MOTS EXPRESSIFS*, ONOMATOPOEIA, ONOMATOPOEIC EXPRESSION, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL’IDIOMI*, *PIP*, *PRIMITIVE CULTURE*, *PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*, *PUFF*, *QUEST FOR THE ESSENCE OF LANGUAGE*, *SYMBOLIC VALUE OF THE VOWEL I*, *TICK-TOCK*, *TRAITÉ DE LA FORMATION MÉCANIQUE DES LANGUES*

## French Sign Language

Cuxac and Sallandre (2007) distinguish three types of iconic expressions in French Sign Language: highly iconic structures, ‘degenerated’ iconic structures and diagrammatic iconic structures.

Concerning the first type, its iconicity is imagic and originates in the “deliberate intent to show, illustrate and demonstrate while telling” (Cuxac and Sallandre 2007: 15). There are three basic types of cognitive operation underlying this intent: transfer of size, transfer of situation and transfer of person. Concerning size transfer, in order to convey the different sizes of a tree, the trunk sign accompanied with inflated cheeks makes reference to a big tree trunk, and the tree sign accompanied with puckered lips and squinting eyes indicates that its branches are skinny.

A transfer of situation obtains when the signer “uses the space in front of him to reproduce iconically the scenes representing the spatial movement of an actant in relation to a stable locative functioning as a point of reference” (Cuxac and Sallandre 2007: 17). In order to refer to a fence-jumping horse, the non-dominant signer’s hand represents the fence reference point, while the dominant hand portrays the agent (the horse) with an X or V hand shape

to depict the animal's forelegs; in addition, the facial expression and eye gaze depict those of the horse.

Concerning the transfer of person, the signer's body reproduces one or more actions carried out by an agent. The narrator *becomes* the person or animal referred to.

An example of a 'degenerated' iconic expression is the sign for *Friday* in the French Sign Language of the Metz region. In this dialect, the sign for *Friday* is derived from the sign for *fish*, since this a typical Friday meal. The sign for *fish* is performed with the dominant hand flat on edge and a wavy movement of the wrist in the sagittal axis from back to front, whereas the sign for *Friday* is performed with the elbow raised and a flat hand oriented toward the left and moving straight toward the right with a slight bending-extension of the fingers repeated quickly several times. Thus, the iconic sign for fish has been modified for *Friday* and, therefore, it is now a non-iconic sign derived from an iconic sign.

For these authors, the signing space turns into a sort of diagram where space, time and actant references can be built. For example the signs indicating the future (TOMORROW, LATER, AFTER), are performed with a straight movement toward the front of the signer's body; those indicating the past (YESTERDAY, IN THE PAST, BEFORE) are executed with a movement directed toward the back of the signer's body.

See ICONICITY IN SIGNED LANGUAGES

## Frequency Code Hypothesis

"The frequency code is a cross-species association of high pitch vocalizations with smallness (of the vocalizer), lack of threat, and of low pitch vocalizations with the vocalizer's largeness and threatening intent" (Ohala 1983: 1).

Examples: Ewe *kitsikitsik* [high tone] 'small', *gbàgbàgbà* [low tone] 'large'; Yoruba *biri* 'be small', *biri* 'be large'; Cantonese *to*<sup>21</sup> 'terrace, stage', *to*<sup>215</sup> 'table' (Ohala 1984: 4).

[Childs 1994: 191; Downing and Stiebels 2012: 381]

*See A STUDY IN PHONETIC SYMBOLISM, PHONO-SYMBOLISM, SIZE-SOUND SYMBOLISM, SOUND-SHAPE SYMBOLISM, SOUND SYMBOLISM, SYMBOLIC VALUE OF THE VOWEL I*

**Fulani**

An African language of the Atlantic-Congo family spoken by more than 20 million people in 20 countries of West and Central Africa.

See *MATRIX AND ETYMON THEORY, VÖLKERPSYCHOLOGIE*

**Fur**

Nilo-Saharan language spoken in Sudan and Chad by approximately 900,000 people.

See *CROW*

# G

## **Galician**

Ibero-Romance language, closely related to Portuguese, spoken by 3 million people in Galicia (northwestern Spain).

See *DICCIONARIO DE VOCES NATURALES*

## **Galla (Oromo)**

Oromo, formerly known as Galla, is an Afro-asiatic language spoken in the Horn of Africa by approximately 34 million people.

See *BUTTERFLY*

## **Gan Chinese ideophones**

See *RUIHONG IDEOPHONES*

## **Ganda (Luganda)**

Bantu language spoken by more than 4 million people in Uganda.

See *BANTU IDEOPHONES*

## **Gargle**

This iconic word can be seen as a reduplicated variant of the phonomimetic root {guttural, back vowel, sonorant (l/r)}. It mimics the sound made when moving a liquid around in one's throat, and also the throat itself or, in general, the sound produced by a water current flowing in a broken, irregular, noisy way. In English, we find *gurgle*, *gargle*, *gargoyle*, *gorge*, *gorget*, *gurge*, *gullet*, *gully*, *gulp*; in French *gargouille* 'throat'; in Spanish *gargajo* 'sputum', *garganta* 'throat', *gargamello*, *garguero* 'gullet', *gárgara* 'gargle', *gorgotear* 'to gurgle', *gorguera* 'gorget', *gola* 'gorget', *gorgoritear* 'to trill, warble' (García de Diego: 348-351); in Ancient Greek *gargaridsō* 'gargle', *gargareón* 'trachea, uvula'.

The following onomatopes, derived from a variant of the same phonomimetic root, are common in comics: *glorp*, *glup* (a bubble sound such as is made when a head is held under water against its owner's will): *The adventures of Bayou Billy*, 4, 1990, *The Captain and the Kids*, Rudolph Dirks, 1956; *glub* (the sound made by a person blowing a bubble under water): *Betty Boop*, Max Fleischer, 1936, *The adventures of Bayou Billy*, 2, 1989; *glug* (a gurgling sound): *Darkhold: Pages From the Book of Sins* vol. 1, 7, 1993; *glug-glug* (a drinking sound): *Madballs* vol. 1, 1987; *glump* (a swallowing sound): *Rom*, 34, 1982, *glurge-lurgle* 'gargle': *Fester Bester Tester*, Don Martin, 1971. In French comics *glou* (sound made when drinking): *Beauté, mon beau souci*, Claire Brétecher, 1974, *Asterix, René Goscinny and Albert Uderzo*, 1969 (Taylor (ed.) 2000; Gasca and Gubern 2008: 154-159).

## Gbaya ideophones

Gbaya refers to a linguistic family comprising a dozen languages spoken in the western part of the Central African Republic and the Democratic Republic of Congo by more than a million people. It belongs to the Atlantic-Congo branch of the Niger-Congo languages.

The following data are taken from Roulon-Doko (2001) and are found in the Bodòè dialect of Gbáyá Kàrà, which is spoken in the western region of the Central African Republic and in the central and eastern part of Cameroon.

Bodòè ideophones have an adverbial/adjectival function and are frequently reduplicated: *ñèèñèè* 'open mouth (as a sign of thirst)', *kòròng kòròng* 'long and horizontal', *póp-póp* 'large and thick', *díkó díkó* 'shut mouth', *lók lók* 'dripping water'.

In some cases, there is an alternation between a reduplicated and a fused form: *kéng-kéng/kéng* 'very stiff', *pál-pál/páál* 'very clean', *pà-pà/pàà* 'streaming', *vái-vái/váái* 'completely', *wiyó-wiyó/wiyóó* 'entirely', *púmbé-púmbé/púmbéé* 'emptied place', *fùp-fùp/fùfùp* 'spongy', *pùndàng-pùndàng/pùpùndàng* 'full of feathers'.

There is also tonal iconicity: a high tone conveys small size, something seen from afar, nuance, tendency or extreme degree; a low tone symbolizes big size, something near the speaker, quality. For example, *bótó-bótó* 'narrow', *bòtò-bòtò* 'gropingly'.

Vowel alternation in reduplicated ideophones is possible. For example, the pattern *kVng-kVtVng*, where V is an unspecified vowel, can appear in the



following forms: *kèng-kètèng* ‘curved, bent (by accident)’, *keng-keteng* ‘hook-shaped’, *kàng-kàtàng* ‘off-hook’, *kòng-kòtòng* ‘hook which juts out’, *kùngkùtùng* ‘unmarried (temporal state)’.

See AFRICAN LANGUAGES, ICONIC LENGTHENING, IDEOPHONES IN VERBAL ART

## Generative grammar

In his influential work *Aspects of the Theory of Syntax*, N. Chomsky refers in passing to the iconic aspects of the acceptability of grammatical sentences:

“The unacceptable grammatical sentences often cannot be used, for reasons having to do, not with grammar, but rather with memory limitations, intonational and stylistic factors, ‘iconic’ elements of discourse (for example, a tendency to place logical subject and object early rather than late)” (Chomsky 1965: 11).

Iconicity is also mentioned in note 9 of chapter 3:

“There are other examples that suggest something similar. For example, Grice has suggested that the temporal order implied in conjunction may be regarded as a feature of discourse rather than as part of the meaning of ‘and’, and Jakobson also discussed ‘iconic’ features of discourse involving relations between temporal order in surface structure and order of importance, etc.” (Chomsky 1965: 224-225).

F. Newmeyer (1992) has explored the iconic aspects of the Generative Extended Standard Theory of the 1970s. The following analyses are taken from Newmeyer’s paper. In this theory, the difference in meaning between *many men read few books* and *few books are read by many men* is captured by saying that in the first sentence the *few* quantifier is within the scope of *many*, but in the second the scope of the relationship is reversed. This difference in scope is iconically expressed by the relative surface order of the quantifiers. Later, it was discovered that precedence is not the relevant factor here, but *c-command*. As a consequence, in the sentence *some reporters worship Kissinger in every town he visits*, there is a possible interpretation in which *some* falls within the *scope* of *every*, although the former precedes the latter. If *c-command* is taken into account instead of precedence, then the two scope-relationships are possible, since the two quantifiers *c-command* each other. These two logical possibilities are iconically expressed by a corresponding double *c-command* relationship. The deep/surface structure dichotomy can be used to preserve grammatical

iconicity. For example, in *it seems that John won the race* vs. *John seems to have won the race*, it is postulated that the deep syntactic structure of the second sentence is similar to that of the first sentence in which the contiguity of *John* and *won the race* expresses iconically the direct implication of the individual referred to by *John* in the event denoted by *won the race*. The view that grammatical structure is an iconic reflection of conceptual structure was “literally being built into standard versions of generative grammar, as is revealed by an examination of the properties of the levels of D-structure, S-structure and logical form” (Newmeyer 1992: 790).

See REFERENTIAL ASSOCIATION BINDING

## Georgian

Georgian (*kartuli ena*) is a Kartvelian language spoken in Georgia. It has many iconic words and expressions. In this language, certain consonant contrasts can convey sound-symbolically a particular nuance in meaning. For example: *bluqunebs* ‘(he/she) mutters’ conveys a lower sound pitch vs. *bluk’unebs*, which suggests a higher pitch; *dgrialebs* ‘make noise, thunder’ vs. *tkrialebs* ‘rattle, rush, make noise of horses’ hooves’ vs. *t’k’rialebs* ‘laugh (of someone full of emotion, like a young girl)’; *dzhghavis* ‘(he/she) cries’ conveys the loudest, lowest (not piercing) sound-production vs. *chkhavis*, which stands between the former, and vs. *chqavis*, which is highest, being piercing and sharp. The following examples show a sound-symbolic vowel alternation: *dzhudzhghunebs* ‘(he/she) speaks nasally, is peevish’ suggests the lowest, softest sound-production vs. *dzhidzhghinebs*, which is higher and louder and *dzhadzhghanebs*, which is the loudest of the set and with the angriest subject (Hewitt 1995: 30-31).

There are also plenty of onomatopoeic words. The following mimic animal and human sounds: *bghavili* ‘bleating, groaning, roaring’, *qmuili* ‘howl(ing), baying’, *qmuquni* ‘bleating (sheep)’, *k’ivk’ivi* ‘quacking of ducks, geese’, *k’ivk’ivobs* ‘cackles’, *qiqini* ‘croak(ing) (frog), quack(ing) (duck), *qiqliqo* ‘cock-a-doodle-doo’, *ch’khavili* ‘cawing’, *qepa* ‘barking’, *k’rut’uni* ‘(cat’s) purring, (dove’s) cooing’, *ts’rip’ini* ‘squeaking, (bat) peeping, sobbing noise’, *ts’rip’ ts’rip’* ‘peep-peep, squeak-squeak’, *ghriali* ‘roar, bellowing, wailing, howling’, *ghrial-ghriali* ‘howling and wailing’, *st’vena* ‘whistling’, *ch’ik’ch’ik’i* ‘chirruping, twittering’, *churchuli* ‘whisper(ing), whispered conversation’, *khvnesha* ‘sighing, panting’, *ts’k’lap’uni* ‘(sound of) puffing on cigarette, lip-smacking’, *sisini* ‘hissing (goose, wind), shushing (noisy child), saying “psst” (to get sb.’s attention)’, *bzuili* ‘buzzing, humming, droning’.

Other words mimic natural sounds: *kukhili* ‘thunder’, *rak’rak’i* ‘ripple, babble’, *tkapuni* ‘splash’, *t’qap’uni* ‘clatter, patter’, *shriali* ‘rustling (of foliage, silk)’, *grukhuni* ‘loud noise, roar, thunder(ing)’, *rek’va* ‘ringing, tolling, striking’, *chkharuni* ‘jingling, tinkling’, *ghrch’iali* ‘screeching, scraping (of metal on metal), gnashing (of teeth)’, *ch’riala* ‘creaking/rattling’, *k’ak’uni* ‘tapping, knocking noise’, *khrashunebs* ‘crunches (snow, sand), *t’k’atsani* ‘crack (of whip), crackle (of fire)’, *ts’ivili* ‘shrieking, screeching, ringing (in ears)’, *k’vili* ‘shriek(ing)’, *ch’khak’uni* ‘jangling (of metal on metal)’, *ts’k’riali* ‘ringing sound (striking glass, metal)’.

There is also consistent morpho-symbolic use of reduplication: *t’k’atsat’k’utsi* ‘crack(l)ing’, *batkabutki* ‘banging (guns), jingling (keys)’, *ts’ivil-k’ivili* ‘loud shrieks, uproar’, *k’ivil-ts’ivili* ‘shrieking and yelling’, *ch’khap’a-ch’khup’i* ‘patter (of rain)’, *ts’rup’-ts’rup’i* ‘puffing sound (of pipe-smoker)’, *ts’k’urts’k’uri* ‘dripping (of sweat)’, *bzuil-bzuilit* ‘buzzing, humming, droning’, *auk’atsk’atsebs* ‘will make sb.’s (teeth/glasses) chatter/rattle’, *butbuti* ‘mumbling, muttering, murmur(ing)’, *gizgizi* ‘crackling, roar (of fire)’, *t’ivt’ivi* ‘floating, bobbing’, *k’ank’ali* ‘shuddering, shivering’, *tsimtsimi* ‘flickering, shimmering’ (Kachurina 2015: 58-59; Rayfield (editor-in-chief) 2006).

See BIRD NAMES, BUTTERFLY, CROAK, CUCKOO, NURSERY WORDS, SIZE-SOUND SYMBOLISM

## German

West Germanic language mainly spoken in Central Europe by more than 90 million people.

See *DICZIONARIO DE VOCES NATURALES*, BIRD NAMES, BOOM, BOW-WOW, BUTTERFLY, BUZZ, CACKLE, CRACK, CRASH, CROAK, CROW, CUCUMBER, *DICZIONARIO DE VOCES NATURALES*, *DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES*, ECHOIC WORDS, FANGEN-FINGER-FÜNF, GERMANIC LANGUAGES, GRUNT, NURSERY WORDS, *ONOMATOPÉES ET MOTS EXPRESSIFS*, ONOMATOPOEIA, ONOMATOPOEIC EXPRESSION, *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL’IDIOMI*, PIP, PRIMITIVE CULTURE, SCHALLNACHAHMUNG, WORTSCHÖPFUNG UND BEDEUTUNGSWANDEL, SYMBOLIC VALUE OF THE VOWEL I, *URSCHÖPFUNG, VOCES VARIAE ANIMANTIIUM*

## German Sign Language

Perniss (2007) refers to some of the iconic aspects of German Sign Language (DGS). Classifier predicates, typical of many sign languages, have clear iconic properties in DGS, as in other sign languages. In these predicates, the handshape conveys information about the size and shape of the referents. Entity classifiers represent a whole entity and handling classifiers convey the manipulation of a referent. In DGS, the upright index finger is used to represent an upright entity, for instance, a tree. In order to convey a two-legged entity (for example, a human) the index and middle fingers are extended and held apart pointing downward.

Perniss (2007: 247) distinguishes between *scale iconicity*, which demands that the different parts of the representation should have the same size; *temporal iconicity*, which requires that simultaneously occurring things should be represented as such; and *iconicity of perception*, which holds that the perception of an event space should match its representation. In addition, DGS and other sign languages show imagistic and diagrammatic iconicity.

One of the main conclusions of Perniss concerning iconicity in DGS is expressed in the following:

“The results showed that DGS signers do rely to a large extent on the iconic properties of classifier predicates to encode location, orientation, and number of referents, and on the properties of sign space to create ‘isomorphic’ representations of real-space scenes in sign space. In this, DGS descriptions conform to general assumptions about how iconicity shapes spatial language in the visual-spatial modality” (240).

## Germanic languages

Germanic languages are very rich in iconic words and expressions. In English, animal sounds are conveyed by several mimetic words, such as *bark* (dog), *squeal* (mouse), *bellow* (bull, ox), *moo* (cow), *hee-haw*, *bray* (donkey), *growl* (bear, dog), *purr* (cats), *hoot* (owl), *clatter* (stork, crane), *buzz* (insect). These words can also be used to characterize certain human behaviours as in: *He gave a squeal of delight, he barked something at the woman, the chief bellowed a few words, she growled something, he barked that he was tired of answering the same questions about hotels, the boy hee-hawed like a donkey* (Merle 2017).

German also has plenty of mimetic words denoting animal sounds. The sounds made by dogs include: *bellen* ‘to bark’, *belfern* ‘to bark’,

*blaffen/bläffen* ‘to yelp’, *fiepen* ‘whimper’, *jaulen* ‘to howl’, *kläffen* ‘to yap’, *knurren* ‘to growl, snarl’, *winseln* ‘whimper’. For other animals: *brüllen* ‘to roar’ (lion), *schnauben* ‘to snort’ (horse, hippopotamus), *bähen* ‘to bleat’, *gackern* ‘to cackle’, *meckern* ‘to bleat’, *miauen* ‘to miaow’, *muhen* ‘to moo’, *quaken* ‘to quack’. The following verbs mimic the sound produced by insects: *brummen* ‘buzz, hum’, *summen* ‘to buzz, hum’, *sirren* ‘to buzz, whirr’, *surren* ‘to buzz, whizz’. There are also some verbs that mimic bird calls and other sounds produced by birds: *flöten* ‘to warble’, *piepsen* ‘squeak’, *schlagen* ‘to flap’, *singen* ‘to sing’, *tirilieren* ‘to trill’, *trillern* ‘to trill, warble’, *zwitschern* ‘to twitter, chirp’ (Balnat 2017: 88).

The vowel [i(:)] mimics sharp animal sounds: *fiepen* ‘to whimper, cheep’, *piepsen* ‘to squeak’, *quieken* ‘to squeal’, *tschilpen* ‘to chirp, tweet’, *wiehern* ‘to neigh’, *zwitschern* ‘to twitter, chirp’, *kreischen* ‘to shriek, squeal’, *pfeifen* ‘to whistle’. The vowels [u] and [o] mimic low animal sounds: *brummen* ‘buzz, hum’, *grunzen* ‘to grunt’, *schnurren* ‘to purr’, *summen* ‘to buzz’, *brüllen* ‘to roar’, *orgeln* ‘to roar, howl’, *kollern* ‘to roar, coo’ (Balnat 2017: 89). Some of these verbs can also be applied to humans and objects, as in English.

Germanic languages have several phonaesthemes\*. For example, English *gl-* is analysed in Sadowski 2001. This phonaestheme contains a guttural consonant [g] suggesting an energy, explosive quality and a lateral consonant [l] suggesting light movement (*flow, flake, flutter, flicker, fling, flurry, slide, slip, glide*). On the basis of the combination of these two consonants *gl-* is obtained as a combination of an abrupt beginning followed by a light, smooth movement. As a result, this combination is well suited to being a mimetic representation of immaterial light shining away from its source. The following examples are provided by Sadowski (2001: 76): (1) Light, brightness: *glad, glade, glance, glare, glass, gleam, glee, gleg, glent, glimmer, glisten, glitter, glow*. (2) Looking, seeing: *glance, glare, glent, glint, gloat, gloom, glower, glut*. (3) Moving lightly: *glace, glaive, glance, glent, glide, glint, glissade*. (4) Deceiving: *glaik, glaver, gleek, glib, gloze*. (5) Dark light: *gloaming, gloom, glower, glum*. (6) Smoothness: *glaborous, gleg, glib, glossy*. (7) Slimy substance: *glair, gleet, glue*. (8) Joy: *glad, glee*. (9) Splendour: *glamour, glory*. (10) Miscellaneous: *glack, glen, gladiator, gland, glean, gelebe, gleg* (prudence), *gloss, glove, gluttony*.

The same phonaestheme can be found in Icelandic: *glampa* ‘glisten, shine’, *glampi* ‘flash, glimpse’, *glit* ‘gleam’, *glitra* ‘glitter, glint’, *gljá* ‘shine, glitter, glisten’, *gljái* ‘glitter’, *gljár* ‘bright, splendid’, *glóa* ‘glow, shine’, *glaumur*

noisy merriment’, *glæsa* ‘illumine’, *glæta* ‘faint light, glittering’, *glögt* ‘clearly’ (Sadowski 2001: 82; Zoëga 1922).

In Norwegian, we have *glatt* ‘smooth’, *gli* ‘glide, flow’, *glimmer* ‘glitter’, *glimre* ‘glitter, sparkle’, *glimte* ‘gleam, flash, twinkle’, *glinse* ‘glisten, shine’, *glitter* ‘glitter’, *glo* ‘light, fire, glowing coal’, *glor* ‘glitter’, *glød* ‘glow’ (Eek 2002).

This phonaestheme is also operative in Swedish: *glana* ‘stare’, *glo* ‘stare’, *glutta* ‘take a glance’, *glimt* ‘glimpse’, *glans* ‘lustre’, *glimma* ‘gleam’, *glindra* ‘gleam’, *glisa* ‘shine’, *glittra* ‘glitter’, *glänsa* ‘shine’, *glöd* ‘glow’, *glatt* ‘smooth’, *glimmer* ‘gleaming’, *glida* ‘glide’ (Abelin 1999: 134-136).

Also in Danish *glans* ‘to shine’, *glimre* ‘to shine’, *glimt* ‘to flash’, *glimte* ‘to shine, flash’, *glød* ‘ember, fire, glow’.

In Swedish, as in other Germanic languages, there are plenty of phonesthemes. Another example is the phonaestheme *fl-*, which mimics a quick or strong movement: *fladdra* ‘flutter’, *flagga* ‘flame’, *flaxa* ‘flutter’, *flimra* ‘flicker’, *fluga* ‘fly’, *flyga* ‘fly’, *fly* (flee), *flyta* (float), *flytta* ‘move’, *flåsa* ‘puff’, *fläkta* ‘fan’, *flämta* ‘pant’, *flänga* ‘be dashing about’, *flöda* ‘flow’ (Abelin 1999: 108).

English is very rich in reduplicative expressions. Examples with consonant alternation include: *airy-fairy* ‘unrealistic; light and delicate’, *argy-bargy* ‘verbal dispute’, *boogie-woogie* ‘piano jazz style’, *easy-peasy* ‘very easy’, *fuddy-duddy* ‘conservative or dull person’, *hanky-panky* ‘suspicious behaviour’, *heebie-jeebies* ‘nervousness’, *helter-skelter* ‘haphazard’, *higgledy-piggledy* ‘muddled’, *hocus-pocus* ‘trickery, a magician’s incantation’, *hodge-podge* ‘a confused mixture’, *jeepers creepers* ‘exclamation of surprise’, *mumbo-jumbo* ‘derogatory reference to a religious or spiritual ritual’, *namby-pamby* ‘feeble, weak’, *willy-nilly* ‘whether it’s wanted or not’. Examples with vowel alternation (Ablaut Reduplication\*): *chit-chat* ‘gossipy talk’, *clip clop* ‘sound of a horse’s hooves’, *criss-cross* ‘a pattern of lines that cross each other’, *ding-dong* ‘the sound of a bell’, *hip-hop* ‘type of music’, *knick-knack* ‘trinket’, *mish-mash* ‘a confused mixture’, *pitter-patter* ‘a light, tapping sound’, *riff-raff* ‘rabble; people who are worthless’, *see-saw* ‘a piece of wood with a central balance allowing it to move up and down’, *tick tock* ‘sound of a clock’, *tittle-tattle* ‘chat, gossip’.

German presents a similar picture. H. Paul (1891: 181) gives many examples of reduplicative expressions, such as: *gickgack* ‘cackle’, *krim-*

*krams* ‘knick-knack’, *schnickschnack* ‘chit-chat’, *schnippschnapp(schnurr)* ‘snipsnapnorum’, *ticktack* ‘tick tock’, *bimbambum* ‘dingdong’, *Tingeltangle* ‘second-rate nightclub, cheap variety of entertainment’, *Klingklang* ‘ding dong’, *Singsang* ‘singsong’, *Hickhack* ‘wrangling’, *Mischmasch* ‘hotchpotch, hodgepodge’, *Wirrwarr* ‘mess, jumble’, *Wischiwaschi* ‘wish-wash’, *Zickzack* ‘zigzag’. See J. Haiman (2018: 159-181) for a detailed review of Paul’s reduplicative expressions.

See DANISH, DUTCH, ENGLISH, GERMAN, GOTHIC, NORWEGIAN, SWEDISH, *URSCHÖPFUNG*

## Gestalt iconicity

A type of diagrammatic iconicity in which the structure of a word resembles the spatio-temporal structure of the events denoted. In general, in Gestalt iconicity a relation between forms has a resemblance to a relation between meanings (Dingemanse 2011a: 167). A typical example is the reduplication of a word conveying iterated or distributing events, as in the following example of Katuena: *fififi* ‘running’ (L. Smoll 2015: 115).

See KATUENA IDEOPHONES

## Ghanaian Pidgin English

This pidgin, also known as Kru English, is spoken in Ghana (in the southern towns and the capital) by approximately 5 million people.

See CREOLES

## Global etymologies (GE)

GEs are roots that seem to be attested in most language families across the world. They were proposed in the early 1990s by Ruhlen and Bengtson (1994). In their paper, the authors reconstruct 27 etymologies on the basis of an extensive comparison of the language families of the world. Here is the complete list:

AJA ‘mother, older female relative’, BU(N)KA ‘knee, to bend’, BUR ‘ashes, dust’, CHUN(G)A ‘nose; to smell’, KAMA ‘hold (in the hand)’, KANO ‘arm’, KATI ‘bone’, K’OLO ‘hole’, KUAN ‘dog’, KU(N) ‘who?’, KUNA ‘woman’, MAKO ‘child’, MALIQ’A ‘to suck(le), nurse; breast’, MANA ‘to stay (in a place)’, MANO ‘man’, MENA ‘to think (about)’, MI(N) ‘what?’, PAL ‘2’, PAR ‘to fly’, POKO ‘arm’, PUTI ‘vulva’, TEKU

‘leg, foot’, TIK ‘finger; one’, TIKA ‘earth’, TSAKU ‘leg, foot’, TSUMA ‘hair’, AQ’WA ‘water’.

These reconstructions are based on words from languages belonging to different linguistic stocks and presenting clear resemblances both in form and meaning. Campbell (2008: 88-90) reinterprets some of the global etymologies as instances of sound-symbolic associations. In particular, this author thinks that a few of the proposed global etymologies could be interpreted as onomatopoeic words. As onomatopoeia is based on sound-imitation, it is to be expected that different languages present a similar phonetic rendition of the same natural sound. Campbell notes that H. H. Hock (1993) interprets in this way the *\*maliq’a* ‘breast, suckle, nurse’ global etymology proposed by Bengtson and Ruhlen. The natural sounds mimicked in this case are the noises children make when nursing and sucking. In addition, many of the words given by Bengtson and Ruhlen to underpin the concept of global etymology “mean ‘swallow’, ‘food’, ‘chew’, ‘eat’, ‘throat’, ‘neck’ and ‘chest’, and thus have no particular motivation to mimic sucking/nursing noises, but, then, this only means that onomatopoeia and accidental similarities are both involved, since many of the forms compared do mean ‘nurse’, or ‘suck’ or ‘breast’ or ‘milk’” (Campbell and Poser 2008: 377). In addition, Campbell argues that the GE *\*kuan* ‘dog’ can be explained as an onomatopoeia mimicking a dog barking and growling or howling, “perhaps coupled with an affective, nursery component, since so often dogs were and are household pets with which children have affective associations” (Campbell and Poser 2008: 377). In general, the original word for ‘dog’ in Indo-European languages was replaced by words with initial *ku-*, mimicking a dog barking. The GE *\*par* ‘to fly’ may be based on a sound-symbolic association concerning the imitation of movements and sounds of ‘flapping’, ‘fluttering’ made by birds’ wings. Bengtson and Ruhlen include several nouns meaning ‘butterfly’ to prove this GE, but these nouns are clearly mimetic in many languages of the world (see *butterfly\**). The GE *\*chuna, chungu* (with *sun, sina, sna, chona...* as variations of this GE) ‘smell/nose’ suggests an imitation of the sounds of ‘sniffing’, ‘snuffling’ and ‘smelling’ related to runny noses associated with children and their illnesses (as in the English phonaesthetic forms *sneer, sneeze, sniff, sniffle, snivel, snot, snort...*). The GE *\*aq’wa* ‘water’ could be based on the imitation of the sound of swallowing water or of the gurgling of running water.

Other GEs proposed by Bengtson and Ruhlen can also be provided with an iconic explanation; for example *\*puti* ‘vulva’ and *\*tik* ‘finger, one’. The *\*puti* GE has a labial stop followed by a velar labialized vowel. Labial stops,



such as [p] or [m], are pronounced by putting together the lips and the velar vowel [u] is usually pronounced by protruding the lips. Therefore, there seems to be a sound-symbolic association between syllables, such as [pu] and [mu] and the human mouth. Indeed, we can find several etyma in different language families with the meaning ‘mouth’ or ‘lip’ and with that phonetic configuration, such as Germanic *\*munba* ‘mouth’, Indo-European *\*bu* ‘lip, to kiss’, proto-Bantu *\*-mùà* ‘mouth’. In Telugu, a Dravidian language (southern India), we have *muti* ‘mouth’ and in Indonesian we have *mulut* ‘mouth’. All these coincidences point to a sound-symbolic association *pu/mu* with ‘mouth’ and ‘lip’. Now, the use of the *\*puti* word to denote the female outer sexual organ, could be seen as a metonymic derivation of the basic sound-symbolic relation *pu/lips* plus an analogical relation between *vulva* and *mouth*. Swadesh (1972: 208) proposed that dentals ([t] and [n]) give the effect of contact to a point. Therefore, the phonetic configuration of the *\*puti* global etymology can be interpreted as a sound-symbolic representation of an abstract pointed schematic image symbolizing the feminine sex: an inverted triangle with a middle vertical line. In addition, the phonetic configuration of the *\*tik* global etymon can be accounted for in the same sound-symbolic terms. Swadesh proposed that *tek* suggests ‘from pointed to blunt (or the opposite)’. This is the form of a fist with an extended index finger, usually used for pointing (Moreno Cabrera 2012: 120-123).

In addition, some of these etymologies resemble the statistically reconstructed sound-meaning pairings proposed by Wichmann, Holman and C. H. Brown (2010).

See BASIC VOCABULARY, *BUTTERFLY*, IMITATIVE ROOTS

## Gola

Atlantic-Congo language of Liberia and Sierra Leone spoken by about 100,000 people.

See *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## Gooniyandi

Australian aboriginal language used by approximately 100 speakers in or near Fitzroy Crossing in Western Australia.

See AUSTRALIAN LANGUAGES

## Gothic

Extinct East Germanic language attested by partial translations of the Bible from the second half of the fourth century A.D.

See *DICCIONARIO DE VOCES NATURALES, FANGEN-FINGER-FÜNFF, SYMBOLIC VALUE OF THE VOWEL I*

### *Grammatica Linguae Anglicanae* [A Grammar of the English language] (J. Wallis 1653)

John Wallis (1616-1703) was a mathematician, logician, theologian, and grammarian, and considered by N. Beauzée to be one of the founders of general grammar (Genette 1995: 345). The *Grammatica Linguae Anglicanae* (1653) was one of his early works. It is one of the first analyses of English grammar that did not try to adjust to the established patterns of Latin grammar.

Chapter 14 is devoted to *etymology* (*De Etymologia*) and the final part of section II contains a series of considerations under the title *soni rerum indices* (the sounds as the marks of things), constituting one of the first systematic accounts of sound symbolism in English.

Wallis includes detailed explanations of several English phonaesthemes (Genette 1995: 37):

*Str-* indicates force or effort: *strong, strength, to strike, to struggle, to stretch, straight, to strip, to stride*. *St-* suggests a weaker force needed to hold on to what one has, rather than to acquire something: *to stand, to stop, to stamp, still, stone*. *Thr-* indicates a violent movement: *to throw, through*.

*Wr-* suggests obliquity or twisting: *wry, wrong, wreck, wrist*. *Br-* indicates to breach, violent and generally loud splitting apart: *to break, breech*. *Cr-* suggests something broken up, generally with a crash, at the very least caved in or twisted: *to crack, to crake, to cry, to crush, to crash, creek* (where through a fissure in the ground, a stream or a river carves out a path towards the sea). *Shr-* suggests a strong contraction: *to shrink, shrimp* (a minuscule and as though shrunken fish), *to shrive, shroud*. *Gr-* indicates something rough or hard, painful and completely unpleasant: *to grate, to grind, to grip, greedy, to grasp*. *Sw-* suggests an almost still agitation, or a slight lateral movement: *to sway, to swim, to swing, swift, sweet*. *Cl-* indicates adherence or retention: *to cleave, clay, to climb, close*. *Sp-* suggests a certain dispersion or expansion, preferably rapid: *to spread, to spit*. *Sl-* is a silent gliding: *to*

*slide, sly, slow. Sq-, sk-, scr-* suggest a violent compression: *to squeeze, to screw*.

Wallis also considers final consonant clusters and syllables (Genette 1995: 38): *-ash* indicates something bright and high pitched (*crash, flash*) and *-ush* something dim and quiet (*to crunch, to blush*). Both suggest a rapid or sudden movement that gradually breaks off, because of the continuous sound *sh*. In *-ing*, the high vowel suggests something like the prolongation of a tiny movement or of a vibration that ends by disappearing, but without an abrupt breaking off (*ding, to swing*), whereas *-ink* indicates a sudden finish (*to clink, to think*). An *l* can be added, as in *jingle, sprinkle, twinkle*; this conveys a frequent repetition of very faint movements. In the syllable *-umble* the back vowel *u* suggests something dark and dull and the piling up of consonants in *mbl* indicates something like a confused agglomeration (*to mumble, to scramble*).

As Genette (1995: 41) points out, this section of Wallis's grammar offers speculation on a phenomenon believed to be exceptional and typically English: the expressive monosyllable (see Jespersen 1928). The conclusion of this part of the grammar contains a powerful statement of the mimetic aspects of the English lexicon (Genette 1995: 42):

“In the same way, in *squeek, squeak, squele, squall, brawl, wrawl, yawl, spawl, screek, shrill, sharp, shriv'l wrinkle, crack, crake, crick, creak, creek, croke. Crash, clash, gnash, splash, huff, buff, crush, hush, tush, push, hisse, sisse, whist, soft, jarr, hurl, curl, whirl, buz, bustle, spindle, dwindle, twine, twist* [here we truly have the canonical English vocables], and countless other words, one can observe a similar adequation of sound to sense; and that, in a manner truly so frequent that I know of no other natural language able to rival ours in this regard: in such a way that in a single word, often monosyllabic (as nearly all of ours are, if the inflection is removed), one designates expressively what other languages can only explain by means of compound or derivative words, or perhaps accompanied by a great many periphrases, and this not without difficulty, even when they do succeed. And definitely, the greatest part of our native vocables are indeed formed in this manner; and I have no doubt that there were quite a few more of this kind before the intrusion into our language of an enormous *fatras* (jumble) of French words condemned such a great number of our original vocables to exile and oblivion”.

## Grammatical iconicity

Iconically motivated variation in syntax and morphology. Ablaut reduplication mimicking alternating movement, as in *zigzag*, or word

ordering mimicking event ordering, as in *veni, vidi, vici*\* (Rohdenburg 2003).

See ABLAUT REDUPLICATION, AUTOICONISM, AUTOMORPHISM, DIAGRAMMATIC ICONICITY, DIAGRAMMATIC LEGISIGN, *DOPPELUNG* (*REDUPLIKATION*, *GEMINATION*), DYSMORPHY, ENDOPHORIC ICONICITY, EXPRESSIVE MORPHOLOGY, HYPOICONIC DIAGRAMMATICITY, ICONIC DIAGRAM, ICONIC MOTIVATION, ICONICITY META-PRINCIPLE, JANUS-FACED ICONICITY, LINEAR ORDER PRINCIPLE, META-ICONIC MARKEDNESS PRINCIPLE, META-ICONIC PRINCIPLE OF UNIVERSALITY, MIRROR PRINCIPLE, MORPHOLOGICAL ICONICITY, MORPHOSYMBOLISM, NAÏVE ICONISM, PARADIGMATIC ICONICITY, POLYSYNTHESIS PARAMETER, PROXIMITY PRINCIPLE, QUANTITY PRINCIPLE, REDUPLICATION, SYNTACTIC ICONICITY, SYNTAGMATIC ICONICITY, STRUCTURAL ICONICITY, TEXTUAL ICONICITY, *ZIG-ZAG*, *VENI, VIDI, VICI*

## Grammaticalization

The process by which a lexical item changes into a grammatical marker. For example, in Spanish the future verbal form *iré* ‘I will go’ originated in a verbal periphrasis *ir + he* ([to] go + (I) have). This combination resulted in the grammaticalization of the *he* ‘(I) have’ verbal form into a marker of future tense. This process causes a decrease of transparency and iconicity. Lehmann (2002: 78) mentions English adverbs in *-ly* and the Romance ones in *-mente*. Both of these suffixes are grammaticalizations of nouns that formerly served as the heads of underlying adjectives: Vulgar Latin *x-mente* meant ‘in x-sense’ and Proto-Germanic *x-liko* meant ‘with x-appearance’. Both of these nouns were in the ablative. The Spanish adverbial ending *-mente* comes from the ablative form of Latin *mens* ‘mind’; in Spanish *lentamente* ‘slowly’ does not mean something like ‘with a slow mind’ in spite of the fact that in this language *mente* means ‘mind’. This use of *mente* is less transparent and motivated than the original Latin use and is much less iconic from a grammatical point of view. See Haiman (2011a) for Hua and Khmer examples of these de-iconization processes.

## Graphic radicals

Expression used by W. Bennie (1953) to refer to ideophones in Xhosa.

## Graphological iconicity

Iconic use of the written or printed word. It is widely used in advertising. A. Fischer (1999b) has observed the following cases: (a) A change in direction: reversed letters, words or phrases signify change, reversal or return; (b) Writing from bottom to top (vertically or diagonally) iconically indicates upward movement and is usually associated with positive notions; (c) Double or multiple letters indicate great length or volume; (d) The omission of spaces between words or of punctuation marks signifies uninterrupted, smooth progression.

## Greek (Ancient and Modern)

An Indo-European language attested since the fifteenth century B.C.E. as Mycenaean Greek and then as Ancient Greek, Koine Greek, and Mediaeval Greek. It is spoken today in its modern form (Modern Greek) by more than 13 million people, primarily in Greece.

See *BABBLE*, BIRD NAMES, BOW-WOW THEORY, *BUZZ*, *CACKLE*, *CRACK*, *CRATYLUS*, *CROAK*, *CROW*, *CUCKOO*, *DICCIONARIO DE VOCES NATURALES*, *DOPPELUNG*, *FANGEN-FINGER-FÜNF*, *GARGLE*, *MIM/MON/MUM*, *VOCES VARIAE ANIMANTIUM*, *ONOMATOPÉES ET MOTS EXPRESSIFS*, *ONOMATOPOEIA*, *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI*, *PIP*, *PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*, *SYMBOLIC VALUE OF THE VOWEL I*, *VOCES VARIAE ANIMANTIUM*, *VÖLKERPSYCHOLOGIE*

## Greenlandic

Eskimo-Aleut language spoken by about 65,000 people in Greenland.

See NURSERY WORDS

## Grunt

The phonomimetic root {guttural consonant, back vowel, liquid/nasal consonant} is used to mimic a deep guttural sound. English *grunt*, *growl*; German *grunzen* 'to grunt', *knurren* 'to growl'; Dutch *knorren* 'to grunt', *grommen* 'to howl'; Norwegian *grynte* 'to grunt'; French *grogner* 'to growl, grunt'; Italian *grugnire* 'to grunt'; Spanish *gruñir* 'to grunt', Russian *khryukat* 'to grunt'; Basque *kurrinkatu* 'to grunt', *ulu (egin)* 'to howl'.

In comics, *grrr* (also *groarr*, *grrarr*) is used to convey a howling sound: *Boob McNutt*, Rube Golberg, 1919; *Felix the Cat*, Otto Messmer, 1934; *Henry*, John Liney, 1973; *Hagar the Horrible*, Dik Browne, 1986 (Gasca and Gubern 2011: 165-166).

## Guadeloupean French Creole

A French-based creole spoken on the Caribbean island of Guadeloupe by approximately 400,000 people.

See CREOLES, IDEOPHONE

## Guang

Group of languages of the Kwa family spoken in Ghana and Togo.

See *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## Guarani

A member of the Tupi-Guarani family spoken in Paraguay, Bolivia, Argentina and Brazil by approximately 5 million people. Along with Spanish, it is one of the official languages of Paraguay.

See *CAKLE, ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI*

## Guatuso

Indigenous language of the Chibchan family spoken by approximately 500 people in the north-central part of Costa Rica.

See *BUTTERFLY*

## Guyanese Creole

English based creole spoken in Guyana by about 600,000 people.

See CREOLES

**Gwari**

Nupoid (Niger-Congo Phylum) language spoken by over a million people in Nigeria.

See DIAGRAMMATIC ICONICITY

# H

## Haitian

French-based creole spoken by approximately 10 million people in Haiti.

See CREOLES

## Harari

Afro-Asiatic language spoken in Ethiopia (Harari Region) by 20,000 people.

See BIRD NAMES

## Hausa

Chadic language spoken in Niger, Nigeria, Ghana, Benin, Cameroon, Ivory Coast, Togo and Sudan by approximately 27 million people.

See AFRICAN LANGUAGES, *CACKLE*, *DOPPELUNG* (*REDUPLIKATION*, *GEMINATION*), HAUSA IDEOPHONES, NURSERY WORDS

## Hausa ideophones

Paul Newman (2000) compiled a database of over 500 ideophones in the Hausa language. The typical syllabic structure of a Hausa ideophone is closed (CVC), whereas non-iconic patrimonial Hausa words have a simpler syllabic structure (CV). Here are some examples from Newman: *dùngum* ‘entirely, completely’, *tàtul* ‘be full with a drink’, *tsaf* ‘neatly, completely’, *tukuf* ‘very old’, *tsit* ‘in complete silence’, *wulik* ‘shiny black or deep blue’. In addition, ideophones present a final low tone and a long final vowel: *butsuu-bùtsùù* ‘untidy (hair, clothes, arrangement of teeth)’, *dòòsòòsòò* ‘ugliness of face’, *shèèkèèkèè* ‘comptentuously’ (Newman 2000: 243). Additional examples include (Newman 2000: 246): *bùrdùndùn* (emphasizes swelling), *bàngwàlgwàl* (describes the appearance of a solid, round and fleshy thing), *kùrsùnsùn* (describes the touch of a hard object), *ràmàsbàs* (describes bare and huge of appearance), *sàmàlbàl* (emphasizes the straight figure of a tall and slender person).



Many of these ideophones are used as adverbials: *Audù yaa taashi farat* ‘Audu got up suddenly’, *taa zaunàà rasha-rasha* ‘she sat all sprawled out’, *naa gàji tikis* ‘I’m completely exhausted’, *yaa rufè koofar ruf* ‘he closed the door tight’, *fàraashii yaa faadi wànwàr* ‘the price has tumbled’, *wani kùreegee yaa wucèè sùmùmù* ‘a squirrel passed by silently’ (Newman 2000: 250).

They can also be used as specifiers/intensifiers, as in: *zaafii zau* ‘red hot’, *kaurii kirtif* ‘very thick’, *saaboo gàrandàn* ‘brand new’, *tsoohoo tukuf* ‘a very old person’ (Newman 2000: 251).

Other ideophones function as nouns, usually denoting an action: *baa nàà sôn wàndàr-wandar* ‘I dislike zigzagging’, *naa ji wani bàmbaràkwài à jikiinaa* ‘I felt a very strange feeling’, *màganàrsà wata bàmbaràkwài cee* ‘his talk was something unexpected’, *sùlùlù din shigôwarsà* ‘the silence of his entering’ (Newman 2000: 253).

Hausa also has sound-symbolic nouns (different from ideophones) denoting sounds, movements and related activities. They are formed by adding a suffix *-niyaa*: *bàlbàlniyaa* ‘boiling rapidly’, *gàgààniyaa* ‘struggling with someone or something’, *mùtsùùniyaa* ‘giggling, fidgeting by children’, *wàtsàlniyaa* ‘wriggling, squirming’ (Newman 2000: 258).

## Hawaiian

Malayo-Polynesian language spoken in Hawai’i by approximately 2,000 people.

See *BUTTERFLY*

## Haya (Bantu)

Bantu language spoken by one million people in Tanzania (south and southwest coast of lake Victoria).

See *DIAGRAMMATIC ICONICITY*

## Hebrew

Like other Semitic languages, Hebrew is very rich in iconic words. The following data on Hebrew iconic expressions are taken from P. Kirtchuk (2013).

Many Hebrew roots have an iconic character. Kirtchuk includes the following sound-mimicking roots:

1. *b/p-z/s* sound made by a swift movement (*cf.* Eng. *buzz\**): *bzz* ‘spoil, plunder’ (*cf.* *baz* ‘falcon’), *bzbz* ‘waste’, *bzy* ‘despise’, *bwz* ‘despise’, *nbz* ‘despise’, *pzz* ‘be agile, excited’, *h pz* ‘be in a hurry’, *phz* ‘be excited > reckless’, *tpa* ‘[move swiftly and] seize’.
2. *b-h* sound made by a frightened person or meant to cause that effect: *bhl* ‘dismay’, *bhy* ‘chaos’, *bhh* ‘contemplate with dismay’.
3. *b/p-h/š/w/y* sound made by a springing/ boiling/ inflating fluid: *bwš/bšš/wš* ‘boil, bubble’, *nbs* ‘spring’, *bšr* ‘sound made by burning matter’, *bšy* ‘cause to swell or boil up’, *pwš* ‘inflate, blossom’, *nph* ‘inflate’, *yph*, *phy*, *phš* ‘deflate’, *tpš*, ‘blow, inflate, deflate’, *py* ‘[inflate by] cooking (dough and the like)’.
4. *p/b-g/q* sound made by an explosion or a violent movement outwards, including a fluid (liquid or gas) stirring up, flowing, blowing, gurgling or whirling intermittently: *bky* ‘cry’, *bwk/bwq* ‘(stir up water or spring >) be confused’, *nbk* ‘spring’, *ʔbk* ‘whirl’, *ʔbq* ‘dust’, *pk y* ‘trickle’, *hpk* ‘overturn, make into a shambles’, *pgl* ‘reject’, *pgš* ‘hit (> get in contact with, *cf.* Eng. ‘hit the road’), *pgm* ‘hit, wound’, *pgr* ‘[hit > faint >] die’, *pgš* ‘[hit > get in contact with >] meet’, *pwg* ‘[be hit >] go numb’, *pyg* ‘bloom of the fig’, *pqqq* ‘[go out of certainty >] doubt’.
5. *p/b-š/t/š* sound made by a burst/breaking of a solid: *pšš* ‘break’, *pšpš* ‘break into pieces’, *pys* ‘scatter’, *npš* ‘shatter’, *pšh* ‘cause to break’, *pšl* ‘split, press’, *pšr* ‘press’, *pšš* ‘break, wound’.
6. *p/b-r/l* sound made by iterative or sudden separating, dismantling, scattering: *prd* ‘divide’, *plg* ‘split’, *pry* ‘burst in fruit’, *ply* ‘be separated’, *prr* ‘split, divide’, *prh* ‘bud, sprout, shoot/fly away’, *plh* ‘cleave’, *prt* ‘break off’, *prk* ‘display violence’, *plk* ‘territorial subdivision’, *prm* ‘unsew’, *prš* ‘become loose’, *prp* ‘unbind’, *prs* ‘divide’, *plš* ‘[break through and] invade’, *plš* ‘shudder’, *prq* ‘dismantle’, *brh* ‘escape’, *brq* ‘lightning separating the sky’, *brr* ‘separate’, *bdr* ‘district, *pzr* ‘scatter’, *bzr* ‘distribute’, *prz* ‘open’, *brz* ‘appear, burst, divide’.
7. *d-š* sound made by hitting an object: *dš?* ‘that which is marched upon > grass’, *dšn* ‘[smear with] oil or greasy matter’, *ʔdš* ‘beaten into apathy’.
8. *t/š-q/h* sound made by hitting a hard object: *btq* ‘cut’, *ntq* ‘separate by cutting’, *štq* ‘[cut and] transfer’, *rtq* ‘seize’, *štq* ‘cut (stop) talking’, *th y/twš* ‘shoot’, *thr* ‘eject’, *thN* ‘grind’, *tyh* ‘besmearing a wall’.
9. *š-p* sound made by a dripping liquid: *špp* ‘drip’, *špšp* ‘drip’, *štp* ‘spill’, *šwp* ‘drip’, *špp* ‘march as if dripping’, *šnp* ‘dirt’, *štp* ‘overflow’, *ššp* ‘overflow furiously’.
10. *g/k/q-z/š/š* sound made by tearing or stripping apart: *gzz* ‘shear’, *gwz* ‘vanish’, *gzy* ‘cut stone’, *gzl* ‘steal’, *gzm* ‘cut’, *gZR* ‘cut’, *qšš* ‘cut off’, *qzz* ‘cut off’, *qss* ‘strip off’, *kss* ‘divide up > compute’, *qsm* ‘distribute’, *qšy* ‘cut off’, *yqš* ‘awake’, *qwš* ‘thorn’, *qšb* ‘cut off, shear’, *qšp* ‘splinter’.

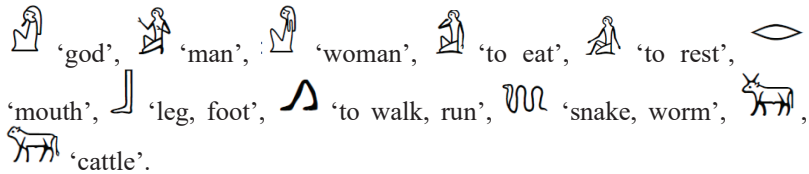
11. *g/k/q-l/r* sound made by rolling or flowing, a 'round' sound: *gll/glg/* 'roll', *gly* 'move/wave/discover', *grr* 'drag away', *grm* 'erode', *grp* 'take away', *gwr* 'sojourn for a while (then moving away)', *grš* 'expel', *grš* 'diminish', *grs* 'grind', *ngr* 'flow'.
12. *q-b* sound made by hitting something in order to make a hole in it, tapping: *qbb* 'vaulted tent, utter curse against', *nqb* 'pierce, hit, curse', *qby* 'stomach', *yqb* 'hollow, cavity', *qbl* 'opposite > attack > take > get > receive', *qbr* '[dig a] grave', *qbf* '[hollow] cup', *rqb* '[become hollow by] rotting'.
13. *k/q/h-t/t* sound made by cutting or striking: *ktt* 'strike', *ktš* 'bray', *ktl* 'cut into blocks > wall', *ktb* 'lisrot > write', *ktr* 'cut around > crown', *ktp* 'shoulder', *lqt* 'pick', *qwt* 'break', *qtb* 'destroy', *qtl* 'kill', *qtm* 'amputate', *qtn* 'belittle', *qts* 'cut', *qtp* 'pluck off', *htt* 'break', *htht* '[break through] obstacle in path', *htk* 'cut', *htl* 'wrap', *htm* 'cut short > seal'.
14. *q-r* sound made by shivering: *qrr* 'cold', *qrh* 'ice', *qwr* 'bore, dig', *qry* 'befall', *qr?* 'befall', *dqr* 'pierce', *nqr* 'bore, dig', *qrn* 'horn', *yqr* 'hard > dear', *qrs* 'tear', *qrb* 'battle'.
15. *š/s/-f* sound made by whistling or hissing: *spr* 'peep > bird > cover or call by noise > fly over', *spp/spsp* 'chirp, peep', *spš* 'offspring; snake's hiss', *špp* 'horned snake'.
16. *m-h/g/k/q* sound made by striking: *mhy* 'strike', *mh?* 'strike', *mhq* 'erase', *mhs* 'smite', *mht* 'squeeze', *mwg* 'vanish, be afraid, weak', *mwk* 'be poor, weak', *mkk* 'weaken', *mwq* 'mock', *mqq* 'rot'.
17. *m-l/r* sound made by parting one's lips: *mwl* 'cut', *mll* 'articulate, utter', *mlml* 'utter', *mlq* 'nip off', *mrh* 'rub', *mrq* 'scour, polish', *mrt* 'scour, polish', *mwr* 'move to and fro > change', *ʔmr* 'say', *ymr* 'pretend', *mry* 'be contentious, refractory, rebel'.
18. *l-š/q* sound made by chewing and swallowing: *lšš* 'swallow', *hwš* 'speak', *blš* 'swallow', *lšt* 'swallow greedily', *lšs* 'chew', *lšz* 'talk unintelligibly', *lš-tlš* 'jaw', *lšb* 'jest', *šlg* 'speak strangely', *lšg* 'mock', *lglg* 'mock', *lhg* 'speak much'.
19. *r-q/g/k* sound of feet tapping on the ground: *rqd* 'dance', *rqš* 'stamp, beat', *rqh* 'beat and mix', *hrq* 'kill', *rqm* 'variegated', *rgz* 'agitate', *rgl* 'go about', *rgm* 'lapidate'.
20. *š-k/q* sound made when charging a heavy object: *šks* 'rattle, tinkle', *škr* 'disturbing, noise', *šwq* 'totter', *šqy* 'press', *yšq* 'distress', *šgm* 'be aggrieved', *šgn* 'strain'.
21. *h/š-m* sound made in reaction to or desire of sensual (gustative, tactile...) pleasure: *hmm* 'warmth', *yhm* 'sexual heat', *hmm* 'protect', *hmd* 'desire', *hwm* 'auburn', *hmr* 'red', *hml* 'pity, human warmth', *rhm* 'mercy, womb', *hms* 'treat violently', *nšm* 'arouse by words, be agreeable', *n?m* 'deliver a speech', *nhm* 'soothe by words, console'.
22. *h-r* sound of piercing or engraving by metal or fire: *hrt* 'engrave', *hrsš* 'plow/forge', *hrs* 'scratch', *hrs* 'trench', *hrk* 'shades', *hrr* 'make a hole',

*hry* ‘burn’, *hrk* ‘set in motion’, *hrl* ‘dry’, *hrm* ‘exterminate, forbid’, *hrs* ‘sun’ *hrš* ‘gold’, *hrp* ‘blush’.

See NURSERY WORDS, *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## Hieroglyph

This term was coined to describe the supposedly sacred nature of the Ancient Egyptian writing system. Most hieroglyphs are iconic representations of objects, animals or people. Here are some examples (Coulmas 1996: 202-203).



## Hindi ideophones

The thesis by V. Diatka (2014) offers a detailed study of ideophones in Hindi, from which the following data and analyses are taken.

Ideophones are usually reduplicated in Hindi: there are three types of reduplication. Total reduplication, as in *sarsar* ‘hissing’; total reduplication with an inserted element, as in *saraasar* ‘totally’; total reduplication with an added final element, as in *chaRbaRiyaa* ‘chattering’; and practical reduplication as in *lat<sup>h</sup>pat<sup>h</sup>* ‘soaked’, *kulbulaahaT* ‘wriggling’. These ideophones have an adverbial character. There are also ideophonic verbs such as *t<sup>h</sup>apt<sup>h</sup>apaanaa* ‘to tap’, adjectives such as *chipchipaa* ‘greasy’, and nouns such as *gaRgaRaahaT* ‘rumble’. In Diatka’s opinion, the suffix *-ahaaT* derives nouns from verbs and is also used to derive verbal nouns from bare ideophonic roots; this explains the high frequency of this suffix in ideophones

From a semantic point of view, Hindi ideophones cover the following domains: (1) visual perceptions: *chamchamaahaT* ‘gloss’; (2) auditory perceptions: *sarsaraHaT* ‘rustling’, *chupchaap* ‘silently’; (3) gustatory perceptions: *chaTpaTaa* ‘spicy’; (4) olfactory perceptions: *mahmah* ‘smelling’; (5) tactile perceptions: *chipchipaahaT* ‘adhesiveness’, *gudgudaa* ‘soft, silky, smooth, plump’, *chipchipaa* ‘sticky, clinging, slimy or greasy’; (6) kinaesthetic perceptions *laRk<sup>h</sup>aRaataa* ‘staggering’; (7)

emotional interoception: *hichkichahaT* ‘hesitation’, *bok<sup>h</sup>laanaa* ‘getting angry for no reason’, *hakkaa bakkaa* ‘perplexed’; (8) high intensity: *chakaachak* ‘absolutely’; (9) high speed: *p<sup>h</sup>arp<sup>h</sup>ar* ‘immediately, quickly’.

See *DOPPELUNG (REDUPLIKATION, GEMINATION), PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*

## Hindustani

*Lingua franca* of North India and Pakistan, encompassing both Hindi and Urdu. It has 368 million speakers.

See NURSERY WORDS

## Hixkaryana ideophones

Hixkaryana is a Carib language spoken by approximately 600 people on the Nhamunda River, a tributary of the Amazon River in Brazil.

Derbyshire (1979: 190-191) notes that ideophones are frequently used in both everyday conversation and in storytelling. The following list includes ideophones taken from Derbyshire’s 1979 descriptive grammar: *dey* ‘kicking’, *besmesme* ‘licking with tongue’, *bîtyow-bîtyow* ‘water smashing against boats in rapids’, *dyama* ‘collapsing’, *dye* ‘touching’, *karara* ‘splitting wood’, *krow* ‘being hurled through the air’, *kryay* ‘breaking (of tooth, bone...)', *kura* ‘passing through a narrow passage’, *kway kway* ‘paddling’, *ofu ofu* ‘blowing, breathing out heavily’, *peryem peryem peryem perye* ‘buzzing of flies’, *purum purum purum purum puru* ‘bubbling of water (in river or when boiling)’, *sik sik sik sik sik sik* ‘sharpening (knife or stone)’, *xeryerye* ‘dragging, sliding’, *xoko xoko xoko* ‘cutting up flesh’, *xuh xuh xuh xu* ‘swimming’, *takeh takeh take* ‘shaking loose’, *tuhturu turu* ‘tottering steps’, *tyufa* ‘spitting’, *txetow* ‘piercing’, *txarax* ‘cutting (with scissors, knife...)', *txee* ‘canoe pulling into the river bank’, *txetay* ‘picking fruit from tree’, *wih wi* ‘shaking the head’, *tok* ‘grasping hold of’.

These ideophones can be combined in the same sentence: *tok xeryeyey* ‘grasping hold of something and taking it away’, *tok txuu* ‘embracing and kissing’, *say say say say say pow* ‘climbing, then descending’, *totuhtay txetay txetay txeta* ‘reaching up and picking fruit from a tree’.

See EXPRESSIVE MORPHOLOGY

## Hmong

See White Hmong

## Hopi

Uto-Aztecan language spoken by the Hopi people of northeastern California. It is used by approximately 6,000 people. Most of them are bilingual in English.

See *CACKLE*

## Hottentot [Khoisan]

Language family of the Kalahari Desert (across southern Africa and central Tanzania).

See NURSERY WORDS

## Hua (Yagaria)

Papuan language of the Eastern Highlands (Goroka District, Papua New Guinea) spoken by approximately 20,000 people.

See *PUFF*

## Hungarian

Finno-Ugric language spoken by approximately 13 million people in Hungary, Romania, Austria, Croatia, Poland, Serbia, Slovakia, Slovenia and Ukraine.

See BIRD NAMES, *BOW-WOW*, *BUTTERFLY*, *BUZZ*, *CACKLE*, *CRACK*, *CROAK*, *CUCKOO*, *DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES*, ECHOIC WORDS, *ELEMENTARE WORTSCHÖPFUNG*, FINNO-UGRIC LANGUAGES, ICONICITY OF COMPLEXITY, NURSERY WORDS, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL'IDIOMI*, *PRIMITIVE CULTURE*, *PUFF*, *SYMBOLIC VALUE OF THE VOWEL I*, *VÖLKERPSYCHOLOGIE*, {-WR-} IDEOPHONIC ROOT

## Hypoicon

Hypoicons, the most typical examples of icons, are introduced by Peirce in the following paragraph:

“An Icon is a Representamen whose Representative Quality is a Firstness of it as a First. That is, a quality that it has qua thing renders it fit to be a Representamen . . . But a sign may be iconic, that is, may represent its object mainly by its similarity, no matter what its mode of being. If a substantive be wanted, an iconic Representamen may be termed a hypoicon. Any material image, as a painting, is largely conventional in its mode of representation; but in itself, without legend or label it may be called a hypoicon” (CP 2.276).

They are classified as follows:

“Hypoicons may be roughly divided according to the mode of Firstness of which they partake. Those which partake of simple qualities, or First Firstnesses, are *images*; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen by representing a parallelism in something else, are *metaphors*” (Peirce 1931-1958 2.277).

[De Cuyper 2008: 62-77; Sonesson 2008: 49; Colapietro 2011: 160-164; Jappy 2014; Nöth 2015]

See FIRSTNESS, ICON, ICONICITY, ICONICITY IN PEIRCE’S SEMIOTICS, SECONDNESS, THIRDNESS

## Hypoiconic diagrammaticity

A form of iconicity in connection with a strong element of indexicality: “*Cain kills Abel* is a hypoiconic diagram: the two proper nouns are indices referring to individuals of biblical mythology. The verb *kill*, by contrast, evinces diagrammatic iconicity insofar as its valency conveys the image of an agent and a patient” (Nöth 2008: 91).

*Veni, vidi, vici*\* is another example of this type of diagrammaticity, since the verbal forms indicate deictic elements: first person and past tense.

See DIAGRAMMATIC ICONICITY, HYPOICON, *VENI, VIDI, VICI*

# I

## **Ibibio**

Benue-Congo Language spoken by approximately 2 million people in Southern Nigeria.

See AFRICAN LANGUAGES

## **Ibo**

One of the primary languages of Nigeria with 24 million speakers. It belongs to the Atlantic-Congo branch of the Niger-Congo family.

See ALLITERATION, *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## **Ibu**

Nearly extinct West Papuan language spoken in Halmahera (Maluku Islands, Indonesia).

See *BUTTERFLY*

## **Icelandic**

A North Germanic language spoken by 350,000 people in Iceland. See Müller (2004) for the iconic aspects of Icelandic noun declensions.

See *BUTTERFLY, DICCIONARIO DE VOCES NATURALES*, GERMANIC LANGUAGES

## **Icelandic Sign Language**

See ICONICITY IN SIGNED LANGUAGES



## Icon

A category in Peircean semiotics defined by Peirce in the following terms:

“But, I had observed that the most frequently useful division of signs is by trichotomy into firstly Likenesses, or, as I prefer to say, Icons, which serve to represent their objects only in so far as they resemble them in themselves; secondly, Indices, which represent their objects independently of any resemblance to them, only by virtue of real connections with them, and thirdly Symbols, which represent their objects, independently alike of any resemblance or any real connection, because dispositions or factitious habits of their interpreters insure their being so understood” (Peirce 1911: 460-461).

A more accessible definition is:

“An *icon* expresses mainly formal, factual similarity between the meaning and the meaning carrier; that is, there is a physical resemblance between the shape of the sign and the referent. Thus a photo is an icon of what it represents. Also many sounds by which one tries to imitate sounds of nature are highly iconic, because the simple qualities of the meaning are contained in the form (e.g. English *peep*, *thump*, *gulp*, and so on)” (Anttila 1989: 13).

## Iconic diagram

“A systematic arrangement of signs, none of which resembles its referent, but whose relationships to each other mirror the relationships of their referents” (Haiman 1980: 515).

See DIAGRAMMATIC ICONICITY

## Iconic imperative

“All other things being equal, a coded experience is easier to store, retrieve and communicate if the code *is maximally isomorphic* to the experience” (Givón 1989: 97).

This is a version of the principle of *one form one meaning* or a *one-to-one correlation* between form and meaning.

## Iconic index

“Objects and organisms leave imprints, or iconic indexes, in their environment. A rattlesnake leaves a record of its twirlings in sand. [...] Footprints iconically show the agent (e.g. a polar bear, arctic hare) that left them” (Anttila and Embleton 1995: 89).

Examples of iconic indexes in historical linguistics are provided by conditional sound changes. For instance, in pre-Old-English *\*mūs-I* ‘mice’ the *ū* adapts to the frontness of the following plural marker *\*-I*, ending up as *ȳ*. The frontness in [ȳ] is an iconic index of the frontness of [i] (Anttila and Embleton 1995: 91). Another example is provided by affective vocabulary. The hypocoristic versions of proper and common nouns are considered by Anttila and Embleton as iconic indices of them: *professor* > *prof*, *doctor* > *doc*, *Edward* > *Ed*. Agreement in the noun phrase is also seen by these authors as an example of iconic indexicality: in the Latin *illum bonum dominum* ‘that good master (acc.)’, the marker *-um* indicates parts that go together, so this index is iconic.

### Iconic lengthening

Expressive lengthening can be used to suggest a lengthy or repeated action or state. It is frequently used in ideophones\*: Gbaya *fee* ‘a breath of air’, *fee* ‘a long breath or air’, *dirr* ‘a rumble like thunder’, *dirrr* ‘a long rolling rumble like thunder or like an earthquake’; Vai *còdò* ‘descriptive of liquid pouring in a steady stream’ (Childs 1994: 193).

### Iconic motivation

A grammatical structure reflecting its meaning directly evinces this type of motivation (Haiman 1980: 516, 1983).

Categories that are marked morphologically and syntactically are also marked semantically; for example, the plural *books* versus the singular *book*. Reduplication\* is another case in point. Conceptual distance can be expressed by syntactic distance, as in *I caused the tree to fall* vs. *I felled the tree*; in the second sentence, the agent is more directly implicated in the denoted action (Haiman 1983: 784).

### Iconic sign

A sign that resembles its referent in some aspect. For example, a picture of a horse and the horse depicted.

In his treaty on semiotics, U. Eco (1976: 191) enumerates four simple notions that can be used to characterize an iconic sign: 1) it has the same properties as its referent; 2) it is similar to its referent; 3) it is analogous to its referent; 4) it is motivated by its referent.

The first notion must be relativized, since an iconic sign can have some of the properties of its referent but not all: it must be different from its referent to be a sign. Eco qualifies this notion in the following way:

“The solution will then be to propose that iconic signs do not possess the ‘same’ physical properties as do their objects but they rely on the ‘same’ perceptual ‘structure’ or the same system of relations (one could say that they possess the same perceptual sense but not the same perceptual physical support)” (Eco 1976: 193).

Concerning the second notion, Eco (1976: 195) points out that saying that a sign is similar to its referent is not the same as saying that it possesses some of its properties. Concerning the similarity between a real horse and its corresponding drawing, Eco argues:

“Thus even the continuous line tracing the profile of the horse may be considered as the institution of a relation of similitude by a transformed correspondence point to a point between the abstract visual content model of a horse and an image drawn on a given surface. The image is motivated by the abstract representation of the horse, but it is nevertheless the effect of a cultural decision and as such requires a trained eye in order to be detected as a horse’s profile. Similitude is *produced* and must be *learned*” (Eco 1976: 200, emphasis in original).

Concerning the analogical relation between the iconic sign and its referent, Eco says that “even analogy, like similarity, does not exclude cultural convention; on the contrary it requires it as an operational starting-point” (Eco 1976: 201).

In addition, Eco underlines the textual character of an iconic sign “for its verbal equivalent is not a word but a phrase or indeed a whole story” (Eco 1976: 215). The picture of a horse does not correspond to the word *horse*, but rather to a description, to a mention or to some other speech act.

## Iconic treadmill hypothesis

This hypothesis is proposed and stated by M. Flaksman (2017) as follows:

“Iconic words lose their iconicity over time and evolve into words with a purely arbitrary sound-meaning correlation, and this process predetermines new iconic coinage” (Flaksman 2017: 18).

“It is important to note that there seems to be a strikingly steady balance between de-iconization and new iconic coinages, which on the large scale makes the treadmill visible. [...] [I]t can be illustrated by the following

examples: the gradual [...] change of OE *hlehhan* is likely to have predetermined the later coinage of such onomatopoeic words as *ha-ha*, *chuckle*, *giggle*, and others denoting laughter; new *baa*, *blart* exist alongside the de-iconized *bleat*; and when it is necessary to underline the rumbling nature of *purring*, a simple, laconic iconic interjection *rrr!* is applied in affective speech” (Flaksman 2017: 32).

“I suggest that it is the need for expressivity that triggers new iconic coinage in the first place. The very need for expressivity is the hidden driving-force behind the iconic treadmill” (Flaksman 2017: 33).

See DE-ICONIZATION, EXPRESSIVENESS

## Iconicity

Iconicity in language refers to the similarity or analogy between the form of a linguistic sign and its meaning.

One of the main characteristics of the relationship of form and meaning in linguistic signs is arbitrariness: there is a purely conventional relationship between the two sides of a linguistic sign. Nevertheless, in certain special cases, a certain similarity or analogy between the two aspects of linguistic signs can be found. The most popular case is onomatopoeia, as in English *cuckoo*, Spanish *cuco*, and Finnish *kukkuu*. Iconicity can also be found in morphology and syntax: in some languages the pluralization of a noun is formed by reduplicating it, as in Malay *orang orang* ‘human beings’ from *orang* ‘human being’; in syntax, the order of phrases reflects the order of the events referred to as in English *He stood up and spoke* and *He spoke and stood up*; this type of iconicity is usually called diagrammatic. In grammar, the particle signaling the relation between two words is normally put between them: *Peter and Mary*; in Spanish *la casa de Pedro* ‘Peter’s house’, the preposition *de* ‘of’ relating *Pedro* and *casa* ‘house’ is placed between the two related nouns. All these cases are examples of primary iconicity.

There is also secondary iconicity: in this type of iconicity “the sign function is already known before the iconic ground is discovered” (De Cuyper 2008: 71). For example, consonant alliteration: *The buzz of voices resounding in the stuffy auditorium*. The use of fricatives does not determine the meaning of the sentence, but also reflects the meaning that is already there on the level of the utterance form (De Cuyper 2008: 81). In writing, the form of the letters *i* and *o* can be said to reflect something thin and small and something round and big on the basis of words such as Spanish *chiquitín* ‘tiny (familiar)’ and *orondo* ‘fat, potbelly’. This is a case of secondary

iconicity since, in their origin, the corresponding letters have nothing to do with these visual properties.

## Iconicity chain

Iconicity chains have been described for sign languages by D. J. Napoli (2017). These chains are needed to express iconically abstract meanings through associations based on the human somatosensory system. In order to illustrate iconicity chains, Napoli (2017: 527) describes the ASL sign for *happy*. The hands hit the chest, then circle away before repeatedly hitting again. Napoli conjectures that “this sign is built on the fact that physical activity correlates with happiness and with a heartbeat that we are conscious of” (2017: 527). In these cases, there is an iconicity chain from a skipping heart to an external representation of that heart and then to the abstract meaning of ‘happy’. This iconicity chain can be represented as follows (Napoli 2017: 528):

### ICONICITY CHAIN OF THE *HAPPY* ASL SIGN

Internal sensation of excited heartbeat  $\Rightarrow$  hands on chest to give visual representation of that heartbeat  $\Rightarrow$  sense ‘happy’.

In her study on iconicity chains, Napoli (2017) analyzes some examples of these chains involving mappings from texture (530-531), temperature (531), weight (532), taste (532-533), smell (533) in several sign languages (Turkish, Romanian, Polish, Austrian, and Brazilian).

## Iconicity of complexity

Iconicity of complexity reflects the generalization that more complex meanings are expressed by more complex forms. Downing and Stiebels (2012: 392) propose the following diagrams:

A. Iconic complexity	B. Non-iconic complexity
M1 (a) ----- F1 /X/	M2 (a-b) ----- F1 /X/
M2 (a-b) ----- F2 /X+z/	M1 (a) ----- F2 /X+z/

“If two forms F1 and F2 differ in terms of extra (supra-)segmental material z and two semantic representations M1 and M2 differ in terms of an extra meaning component  $\alpha$ , then M1 should be assigned to F1 and M2 to F2 as in [A]; the inverse assignment (M1 to F2 and M2 to F1) as in [(B)] would be non-iconic; it would imply that the meaning component  $\alpha$  is associated

with a truncation operation that eliminates the segmental material *z* from the base” (Downing and Stiebels 2012: 392).

As an example of iconic complexity, the authors give the encoding of the comparative/superlative in some languages: English *large/larger/largest*, Hungarian *nagy* ‘big’/*nagyobb* ‘bigger’/*legnagyobb* ‘biggest’ (Downing and Stiebels 2012: 392).

[Mayerthaler 1981; Dressler (ed.) 1987]

## Iconicity of the Lexical Category Principle

This principle was proposed by P. J. Hopper and S. A. Thompson in the following terms:

“The more a form refers to a discrete discourse entity or reports a discrete discourse event, the more distinct will be its linguistic form from neighboring forms, both paradigmatically and syntagmatically” (Hopper and Thompson 1985: 151).

“The less a linguistic element is required by the discourse to either report a discrete discourse event or introduce a discrete entity for potential discourse manipulation, the less saliently it will be marked as a member of the category which languages universally designate to carry that function” (Hopper and Thompson 1985: 179).

This principle accounts for the grammatical differentiation between nouns and verbs as imposed by discourse. Concerning nouns, the authors propose that “the extent to which prototypical nounhood is achieved, as manifested in morphosyntactic features, is iconically a function of the degree to which the form in question serves to introduce a discrete participant into the discourse” (Hopper and Thompson 1983: 156).

Concerning verbs:

“Here, too, as with nouns, the semantic feature [reference to a discrete event] is not sufficient for prototypicality. In order to qualify as a prototypical verb, a form must assert the occurrence of an event of the discourse. Hence a verb stem which has the appropriate semantic features for a prototypical verb, such as *travel*, is less than prototypical in contexts such as *to travel from Sweden to Greece takes a lot of time, we know a travelling salesman*. [...] Prototypically in a verb is achieved only when an event of travelling is actually observed: *we traveled from Sweden to Greece*. It seems [...] that there is a direct iconic relationship between the morphosyntactic appearance of a prototypical verb and the degree to

which it serves to report a discourse event” (Hopper and Thompson 1983: 156-157).

## Iconicity in invented languages

J. Podhorodecka (2007) compared the languages invented by J. R. Tolkien, Quenya, Sindarin, and Black Speech, from an iconic point of view. Black Speech is a negatively charged language spoken by the evil servants of the Dark Lord Sauron in *The Lord of the Rings*. J. Podhorodecka (2007: 107) quotes the following characterization of this language made by Tolkien: “so full of harsh and hideous sounds and vile words that other mouths found it difficult to encompass, and few indeed were willing to make the attempt”. On the other hand, Quenya and Sindarin are the languages of the Elves and are normally associated with positive emotions. The following two examples are from two of the mentioned languages (Podhorodecka 2007: 107):

Quenya: *Yéni ve linte yuldar avánier*

Black Speech: *ash nazg thrakatulúk agh burzum-ishi krimpatul*

This author observes that Black Speech has a more consonantal nature than Quenya and Sindarin. In the analysed texts, the consonant / vowel proportion is 1.08 for Quenya and 1.7 for Black Speech. In general, aggressive emotions lengthen the consonants and shorten the vowels in speech. Concerning consonants, Podhorodecka notes that the consonants most affected by aggressive speech are stops and fricatives and that non-obstructive sounds, such as nasals and liquids, are less affected by emotive distortions. Accordingly, in Quenya texts the obstructives /b, p, t, d, k, g/ constitute 5.8 % of the consonants; but in Black Speech 24 % are plosives. The figures of non-obstructive sounds are reversed: 46.1 % for Quenya and 20 % for the Black Speech. As the author of this study says: “Generally speaking, the articulation in Black Speech is quite violent. Diphthongs are practically absent and due to the relatively small number of sonorants, the transitions between particular sounds are sharp and abrupt. Many sounds are articulated at the back of the mouth” (Podhorodecka 2007: 109).

In a similar vein, the Klingon language (Okrand, Adams, Hendriks-Hermans and Kroon 2011), invented for the Star Trek Films, has a guttural character. In the official Star Trek Encyclopaedia, it is said that “the aggressive Klingon culture has made them an interstellar military power to be respected and feared” (Okuda (eds.) 2016: 430). The Klingonese language is characterized as a harsh, guttural tongue with 80 polyguttural

dialects. This language was invented by the American linguist M. Okrand and contains several guttural plosives: an *H* voiceless velar fricative (articulated with a very coarse, strong rasp); a glottal stop ('); a *Q* voiceless uvular affricate (very guttural and raspy, and strongly articulated); and a voiced velar fricative (*gh*), plus a voiceless lateral fricative written as *tlh* and produced with a great deal of friction (Okrand 1992: 14-15). Concerning the pronunciation of this sound and of the bilabial plosive *p*, the following advice is given in the official Klingon dictionary: "It is always articulated with a strong puff or pop, never laxly. Speakers of English may want to exercise care to avoid discharging saliva while articulating this sound. It should be noted, however, that Klingons do not worry about this" (Okrand 1992: 14-15). The guttural character of the language can be appreciated in the following examples (Okrand 1992: 65, 68): *pa'DajDaq ghHtaH la''e'* 'the commander is in his quarters'; *jagh luHoHmeH ghaH lunejtaH* 'they are searching for the enemy in order to kill him/her'.

V. A. Davydova (2016) has examined various fictional languages from the point of view of the sound-symbolic expression of proximity and distance. She collected deictic words in three fictional languages (Klingon, Na'vi, Quenya), including personal pronouns, demonstratives, deictic verbs and nouns, and locative affixes. It has been proposed that front vowels iconically denote proximity, back vowels are iconically associated with distance, and pointing vocal gestures (lip and tongue pointing) tend to be iconically associated with distance (spatial deixis\*). The lip pointing gesture is characteristic of labial consonants, and the tongue pointing gesture occurs in palatal, apical, dental and liquid consonants.

The data from the invented languages mentioned are consistent with these iconic relations. 21 % of deictic words with front vowels indicate proximity, and only 10 % signal distance. The deictic words with back vowels indicating distance (31 %) outnumber the deictic words with front vowels indicating proximity (21 %). In addition, lip pointing is much more used to signal distance (24 %) than to signal proximity (12 %), while tongue pointing is also more frequently used to denote distance (31.9 % vs. 19.6 %). See the table in Davydova (2016: 117).

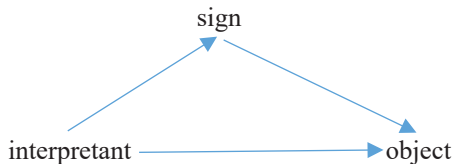
[Elsen 2016: 166-175]

See ELVISH SOUND SYMBOLISM, *LÁMATYÁVĚ*, SPATIAL DEIXIS



## Iconicity in Peirce's semiotics

In Peirce's semiotics, the sign is analyzed as a complex relationship between three basic components: the sign itself (S), that which represents; the object (O), that which is represented; and the interpretant (I), the subject in which and for which the relationship between S and O occurs. These relationships can be graphically represented as:



Caterina and Gangle (2016: 29) quote the following paragraph from a letter in which Peirce explains his conception of the sign:

“A Sign is a Cognizable that, on the one hand, is so determined (i.e., specialized, *bestimmt*) by something *other than itself*, called its Object (or, in some cases, as if the Sign be the sentence ‘Cain killed Abel’, in which Cain and Abel are equally Partial Objects, it may be more convenient to say that which determines the Sign is the Complexus, or Totality, of Partial Objects. And in every case the Object is accurately the Universe of which the Special Object is member, or part), while, on the other hand, it so determines some actual or potential Mind, the determination whereof I term the Interpretant created by the Sign, that Interpreting Mind is therein determined mediately by the Object”.

On the basis of this trichotomy, Peirce proposes a taxonomy of three additional trichotomies determined by the different types of objects, signs and interpretants.

From the point of view of signs, Peirce distinguishes three types: a *qualisign* is a quality which is a sign; a *sinsign* is an actual existent thing or event which is a sign; finally, a *legisign* is a law that is a sign. Every conventional sign is a *legisign*.

From the point of view of the relations between the sign and the object, a new trichotomy is posited by Peirce: an *icon* is a sign that refers to the object that it denotes by virtue of characters of its own and which it possesses; an *index* is a sign that refers to the object it denotes by virtue of being really affected by that object; and a *symbol* is a sign that refers to the object it denotes by virtue of a law, usually an association of general ideas.

From the point of view of the relations between the interpretant and the relations between sign and object, Peirce establishes a third trichotomy: a *rheme* is a sign that is understood to merely represent its object in its characters. A *dicent sign* is a sign that is understood to represent its object in respect of actual existence. An *argument* is a sign that is understood to represent its object in its character as a sign.

If we consider the three fundamental categories of Firstness\*, Secondness\*, and Thirdness\*, the following overall schema of Peircean semiotics obtains (De Cuyper 2008: 61):

	<b>Sign</b>	<b>Object</b>	<b>Interpretant</b>
Firstness	Qualisign	Icon	Rheme
Secondness	Sinsign	Index	Dicent Sign
Thirdness	Legisign	Symbol	Argument

There are three main conceptions of iconicity in Peirce's semiotics of iconic signs: as a pure quality (the sign in itself), as a relational structure (a relation between the sign and their object), and as an epistemically determined support for abductive reasoning (a relation between the sign and the interpretant).

As pure quality, iconic signs mean what they do independently of any question of the real existence of their objects. They are an immanent series of relations. As a relational structure, an iconic sign shares with its object a qualitative or structural homology. The third more elaborated notion of iconicity is a relation between a sign and its object, having a heuristic potential: by investigating the properties and relations of the sign, new knowledge of the sign's object can be obtained (Caterina and Gangle 2016: 33-38).

[Pharies 1985; De Cuyper 2008: 47-82; Caterina and Gangle 2016: 27-56; Nöth 2015; Stjernfelt 2015]

See FIRSTNESS, HYPOICON, ICON, INDEX, SECONDNESS, SYMBOL, THIRDNESS

## Iconicity in sign languages

In sign languages, an iconic relation between the sign and its referent is frequently found, but, from a cross-linguistic point of view, this relation does not in any way determine the actual form that the sign has in different

sign languages. To prove this, Pizzuto and Volterra (2000: 262) mention an example given by Klima and Bellugi 1979. The American Sign Language\* sign for TREE is made with the forearm upright, the hand spread wide, and a twisting of the wrist and forearm. The forearm represents the trunk, while the outstretched hand represents the branches and the twisting motion the branches moving in the wind. The Danish Sign Language sign for TREE is instead made with two symmetrical hands that outline in the air the rounded shape of a tree's top and then move down to sketch the shape of its trunk. In Chinese Sign Language, the sign for TREE is made with both hands symmetrically encompassing the shape of a tree's trunk and then, moving upward, maintaining the same form. T. Schermer (2016: 176) gives another example of this phenomenon. In Icelandic Sign Language, the sign for *drink* is articulated in front of the mouth, the handshape indicates that a glass is being held and the movement is towards the mouth; in contrast, in Brazilian Sign Language the sign is also articulated in front of the mouth and the movement is the same, but the handshape is different: the thumb and the small finger are extended iconically mimicking the shape of a water jar. Both signs are iconic, but they use different iconic strategies based on different conventional gestures.

In general, sign languages seem to be more iconically-based than spoken languages. This may be because the visual-gestural modality provides a richer source for iconic properties than the spoken modality.

S. Taub defines iconicity in sign languages from a cognitive point of view:

“A set of correspondences between two entities is often called ‘mapping’. Thus, linguistic iconicity can be redefined as the existence of a structure-preserving mapping between mental models of linguistic form and meaning” (Taub 2001: 23).

This definition implies that iconicity is always based on conceptual metaphors. Metaphors are usually characterized as the consistent use of one basic conceptual area to describe another less clearly structured area. Taub (2001: 10) maintains that signed languages use the same kind of conceptual motivations that spoken languages do. The main difference is that many of the basic word roots and inflections are iconically motivated.

Iconicity characterizes both spoken and sign languages and goes beyond a mere imitation or mimicking:

“Iconicity is common in both signed and spoken languages, and it is present in all levels of linguistic structure, including morphology and syntax as well

as individual words. It is not a *simple* matter of resemblance between form and meaning but a sophisticated process in which the allowable phonetic resources of a language are built up into an *analogue* of an image associated with the referent. This process involves a substantial amount of conceptual work, including *image selection*, *conceptual mapping*, and *schematization* of items to fit the constraints of the language” (Taub 2001: 20).

The three processes mentioned constitute the fundamentals of the Analogue-Building Model of Linguistic Iconicity\* proposed by S. F. Taub (2001).

On the basis of the hypotheses by Ch. Cuxac (2000), concerning the study of iconicity in French Sign Language, the following analysis of iconicity in sign languages has been proposed. Cuxac characterizes the iconic intent that produces highly iconic structures (HIS) contrasting them with conventionalized or frozen signs. In the first case, an intentional transfer of form has been carried out; in the second case, there is no intention of describing iconically a referent. For example, in order to refer to a horse, a signer of the French sign language can choose between the conventional sign HORSE (iconically representing the animal’s ears) with no illustrative intent and a transfer of form by describing with his or her hands the form the ears, muzzle and tail. In the first case, the signer gazes towards the interlocutor and in the second case, towards the signer’s hands (Sallandre 2007: 106).

HIS’s give an imagistic reconstruction of experience by three basic mental transfer operations (Sallandre 2007: 107):

1. Transfers of form and size (TF): describe entities according to their size and form.
2. Situational transfers (ST): describe movement of an entity relative to a stable locative point of reference.
3. Transfers of persons (TP): involve a role and a process.

In TP, the signer *disappears* and *becomes* a protagonist in the discourse. This uses a sort of role-play allowing the expression of different points of view, so that the signer can embody, for instance, a little horse, a boy, a tree, and so on. Cuxac (Sallandre 2007: 108) distinguishes many subtypes, the most usual being: *personal transfer* (a complete role-play); *double transfer* (simultaneously combining a personal transfer and a situational transfer); and *semipersonal transfer* (partial role-play accompanied by brief frozen signs).

[Pizzuto and Volterra 2000; Taub 2001; Sallandre and Cuxac 2001; Herlofsky 2003; Grote and Linz 2003; Adam, Iversen, Wilkinson and Morford 2007; Sallandre 2007; Demey, Herreweghe and Vermeerbergen 2008; Perniss, Thompson and Vigliocco 2010]

See AMERICAN SIGN LANGUAGE, ANALOGUE-BUILDING MODEL OF LINGUISTIC ICONICITY, AUSTRALIAN SIGN LANGUAGE, BRITISH SIGN LANGUAGE

## **Iconicity meta-principle**

The one-to-one correlation between form and meaning has been posited as one of the principles of language formation and change. It was considered by D. Bolinger (1977: x) as the natural condition of language. For T. Givón, this is a basic hypothesis of cognitive-communicative motivation for iconicity and isomorphism in language and can be defined as follows:

“All other things being equal, a coded experience is easier to store, retrieve and communicate if the code is maximally isomorphic to the experience” (Givón 1985: 189).

## **Iconicity principle**

This principle was proposed by G. Müller (2004: 238) in the following terms:

“Similarity of form implies similarity of function (within a certain domain and unless there is evidence to the contrary)”.

[Downing and Stiebels 2012: 405-409]

See SYNCRETISM PRINCIPLE

## **Iconism**

Word or expression showing iconic properties: onomatopoeias, ideophones and mimetic expressions are iconisms.

## **Iconophone**

A term used by N. Levy (2016) to denote the iconic aspects of the interpretation of linguistic sounds in literary texts. In her monograph, Levy carries out an iconic analysis of the literary use of four English phonemes in James Joyce's *Ulysses*. As stated on the back cover of the monograph:

“Four English phonemes are examined, each in several contexts in *Ulysses*. A systematic association of resemblance is found between the manner and effort involved in the articulation of each phoneme relative to other phonemes and sounds, and the manner in which semantic content is arranged in the scenes and themes of the book”.

[Anderson 1998; Elsen 2016: 148-164]

## **Ideomimography** [*Idéomimographie*]

The iconic interpretation of graphemes, in which a grapheme is said to represent an object or idea. For example, the letter O symbolizes the infinite circle of time and space (Gennette 1976: 77, 1995: 53). G. Zhang and H. Yang (2014: 6) state that the English letter O represents the sun.

See CHINESE CHARACTERS, GRAPHOLOGICAL ICONICITY, MULTIMODAL ICONICITY, HIEROGLYPH, JAPANESE WRITING, KOREAN ALPHABET, LETTER-ICONICITY, *MIMOGRAPHIE*, PICTO-PHONETIC ICONICITY, PICTOGRAPHIC ICONICITY, PICTO-PHONETIC-GRAPHIC ICONICITY

## **Ideophone**

The following is the traditional definition of this term:

“A vivid representation of an idea in sound. A word, often onomatopoeic, which describes a predicate, qualificative or adverb in respect to manner, colour, sound, smell, action, state or intensity” (Doke 1935: 118).

Voeltz and Kilian-Hatz (2001) point out an important characteristic of ideophones concerning their function:

“As for the function of ideophones, there was a general consensus that ideophones and similar words have a special dramaturgical function that differs from all other word classes: Ideophones simulate an event, an emotion, a perception through language” (Voeltz and Kilian-Hatz 2001: 3).

This depictive nature of ideophones is explicitly stated by M. Dingemase in his dissertation on Siwu ideophones:

“Part I develops a typologically informed view of ideophones as *marked words that depict sensory imagery*, taking special care to show that the depictive mode of representation of ideophones is fundamental to their meaning and use” (Dingemase 2011a: 3).

In addition, Dingemans (2011a: 29) emphasizes that ideophones do not simply depict events ‘out there’ so much as they aim to recreate perceptions grounded in bodily experience:

“To say that ideophones are DEPICTIVE means that they employ a depictive mode of representation which invites people to experience them as performances and which lends them their imagistic semantics. Finally, to say that ideophones depict SENSORY IMAGERY means that they draw on perceptual knowledge derived from events of sensory perception” (Dingemans 2011a: 29, emphasis in the original).

Following Doke (1935: 118), the ideophone in Bantu languages is a special part of speech resembling, to a certain extent, the adverb in function. This phenomenon is not only found in African languages; it is also frequent in languages from other parts of the world (Voelt and Kilian-Hatz (eds.) 2001). For example, in Basque\* there are many ideophones related to movement: *taka-taka* ‘toddling’, *tipi-tapa* ‘pitter patter’, *kriskiti-kraskata* ‘tumble’, *firri-farraka* ‘rolling’ (Ibarretxe-Antuñano 2006: 26-27); see Ablaut Reduplication\*.

Following Bartens (2000: 19-20), there are three types of ideophone. Type 1 includes intensifying ideophones corresponding to grade adverbs in European languages, usually in the sense of positive identification. In the Atlantic creole Krio the ideophone *fitifata* means ‘completely’ and *cep* ‘very (sweet)’; in Saramaccan *kakaka* means ‘very, completely’ (Bartens 2000: 52, 54).

Type 2 ideophones are used in quotative constructions with or without an auxiliary, for example, *frufru* ‘sound of leaving/going out’ in popular Brazilian Portuguese expressions, such as *Ele saiu fez frufru* ‘when he went out, it went *frufru*’ (Bartens 2000: 66-67); in Guadeloupean French Creole *kenheng-kenheng* ‘of dry spasmodic cough’ as in *I ka toussé kenheng-kenheng, kenheng-kenheng...* (Bartens 2000: 69-70).

Type 3 ideophones have an independent meaning; they are usually onomatopoeic or they can present sound-symbolic features. They correspond to nouns, verbs, adjectives or adverbs of European languages. For example, Atlantic Creole Krio *batabata* ‘nonsense’, *bolobolo* ‘slime, slimy’, *fukfuk* ‘lungs’, *vuguvaga* ‘hurriedly and wildly, in an energetic or rough manner’ can be assigned to this type (Bartens 2000: 84-91).

The following paragraph by Dingemans establishes the importance of ideophones for theoretical and empirical linguistics:

“The sheer ubiquity of ideophones in the worlds’ languages, from Japan and South-East Asia to Africa and from India and Turkey to South America, should make it abundantly clear that depiction in speech, and in particular, a class of marked words that depict sensory imagery, is a common feature of human language” (Dingemanse 2011a: 160).

[Fortune, G., 1962; Samarin, W. J. 1971; Childs, G. T. 1994; Bartens 2000; Voeltz, F. K. E. and Ch. Kilian-Katz 2001; Jendraschek, G. 2002; Urdze, A. M. 2010; Dingemanse, 2011a, 2012, 2015, 2018, 2019; Smoll, L. 2015; Haiman, J. 2018, Ibarretxe-Antuñano 2019]

See BAKA, BANTU, BINI, CANTONESE, CHINTANG, CILUBÀ, DIDINGA, EBWELA, EDO, EMAI, EWE, GBAYA, HAUSA, HINDI, HIXKARYANA, KARO, KATUENA, KHMER (CAMBODIAN), KILBA, KOLOKUMA IJO, MUNDANG, NIGERIAN PIDGIN, *NOTES ON EXPRESSIVE MEANINGS*, PASTAZA QUECHUA, RUIHONG, SETSWANA, SHONA, SIWU, SOMALI, SOTHO, SOULETIN BASQUE, SWEDISH SIGN LANGUAGE, TAMIL, TETELA, THAI, TOMMO-SO, TOTONAC, TSONGA, TURKISH, VIETNAMESE, WOLAITTA, YIR-YORONT, ZULU

## **Ideophones in verbal art**

Ideophones show both natural iconicity in every-day normal conversation and cultivated iconicity in the formulaic language of myths, traditions, riddles and proverbs. Ph. A. Noss (2001) analyses ideophones in the artistic oral discourse of the Gbaya language community, notably in folktales and poetry. M. Dingemanse (2011a: 249-354) explores the use of ideophones in Sawu greetings and funeral dirges. In both cases, ideophones are also used in common daily conversation.

See CULTIVATED ICONICITY, ICONOPHONE

## **Ifumu**

A Bantu language spoken in Congo by approximately 8,000 people.

See *BUTTERFLY*

## **Ijo**

A group of languages of the Niger-Congo family spoken in southern Nigeria.

See KOLOKUMA IJO IDEOPHONES



## Ik (Nilo-Saharan)

Nilo-Saharan language spoken in Uganda by approximately 7,000 people.

See *CROW*

## Ilocano

Ilocano is a Northern Philippine language spoken by about 10 million people on Luzon Island.

Rubino (2001) includes the following data in his comprehensive survey of the iconic aspects of this language.

There are words mimicking animal sounds: *gokgok* 'short cry a of a hog', *ngurisngis* 'cry of hungry pigs', *taul* 'barking', *ngernger* 'growling', *arakiak* 'sound of many hens', *kakak* 'cry of a hen', *kekkek* 'cry of a hen when calling its chicks', *kokkok* 'clucking sound of chickens', *ngiaw* 'meow of a cat', *emmak* 'bleating sound of a sheep', *garraigi* 'neighing of horses', *sayengseng* 'buzzing sound of mosquitoes'.

There is also a generalized use of sound-symbolism in this language. For example, the sounds of breaking, splitting or cracking are represented by the low vowel [a] for high pitched sounds or the back vowel [o] for low pitched sounds followed by the velar stop [k]: *litak* 'sound of splitting bamboo', *litok* 'sound of a cracking joint', *pakpak* 'sound of a wooden club beating the laundry', *ripak* 'sound of a slammed door', *toktok* 'sound of knocking on something hard'.

The velar nasal in the coda position is associated with buzzing, resonant sounds: *wengweng* 'buzz', *baeng* 'sneeze', *ing-ing* 'sound of a violin', *kiling* 'sound of a bell', *kutibeng* 'sound of a guitar', *kalangiking* 'jingling sound of coins', *kalangokong* 'resonant sound of a coconut shell jar'. The high vowel [i] is used to denote high pitched sounds: *singgit* 'high pitched voice', *sultip* 'whistle', *riri* 'whimper'.

Words conveying repetitive actions or processes frequently show consonantal gemination: *saiddek* 'hiccup', *saibbe* 'sob', *tarttat* 'sound of typing'. Words denoting abrupt or instantaneous actions frequently have a glottal stop on the second syllable of the root: *dol'ok* 'burp', *kur'it* 'sound of striking a match', *dir'i* 'shriek', *say'a* 'clear one's throat', *ug'ug* 'weep with a closed mouth'.

Partial reduplication has iconic uses in Ilocano: *bitog* ‘thump’ < *babtuog* ‘thumping sounds’, *kitol* ‘click’ < *kaktuol* ‘clicking sounds’, *kireb* ‘wave crash’ < *kakreeb* ‘sound of crashing waves’. Full reduplication is also iconically used: *kiring* ‘ring’ < *agkiringkiring* ‘to ring continually’, *padak* ‘trot’ < *agpadakpadak* ‘to trot (horses)’, *libong* ‘bang’ < *aglibonglibong* ‘to explode continually’.

In Ilocano there is a reduplicative syllabic pattern  $C_1 V_1 C_1 - V_2 - C_1 V_1$  with an iconic or expressive interpretation: *bukibuk* ‘scatter’, *gusugus* ‘scrub, rub hard’, *pidipid* ‘closely set together’, *watiwat* ‘long, extended (roads)’, *wingiwing* ‘to shake the head’, *payapay* ‘summon with the hand, wave the hand at’, *gulagul* ‘struggle’, *yubuyub* ‘billow’, *yugayug* ‘tremble’.

See REDUPLICATION

## Imagic iconicity

This type of iconicity occurs when the sounds of a word mimic the sounds of the real world (Dingemans 2011a: 165). Onomatopoeias are examples of this type of iconicity. In Siwu, *tòlontòlontòlon* mimics water dripping (Dingemans 2011a: 166).

See ONOMATOPOEIA, IMITATIVE ROOTS, PHONOMIMETIC ICONICITY, PHONOMIMETIC ROOT, ECHO WORDS, ECHOIC WORDS, *VERBA SONANDI*

## Imitative roots

In his posthumous book on the origin of language, Swadesh (1972) argues that the most significant growth of vocabulary in human proto-language was based on imitative roots. Beginning with pure sound imitation, the sounds were used “not only to portray the noise in question, but also to symbolize the action that produced it and the shape and makeup of the object or objects involved” (Swadesh 1972: 208). Swadesh made the following suggestions concerning sound imitation in the first stages of human language (Swadesh 1972: 208):

1. Stops represent hard impact, nasals soft impact or resonant vibration, continuants free vibration.
2. Vowels indicate shape, presumably in accordance with the kind of vibration that goes with each form of resonance space.
3. Labials (*p*, *m*) give the effect of flat surfaces slapping together, dentals (*t*, *n*) the contact of a point, velars (*k*, *ng*) that of blunt objects,

labiovelars (*kp, ngm*) hollow or cupped contact, sibilant (*ch*) liquid or sliding contact.

4. The two consonants of a vocable permit the definition of a complex sound, from first contact to final fading, the shape of each of two colliding objects, or a three-dimensional shape defined by its form at each end.

In order to exemplify and illustrate these imitative relationships, Swadesh (1972: 209-210) enumerates the following general imitative roots:

- a. *Pek*. Flat base to blunt point, impact of flat on blunt (or the opposite). Examples: *pack, peck, pick, bicker, fight, fickle, patch, pact, face, speck, back, fang*.
- b. *Mek*. Soft and broad set on something hard, associated with buttocks, belly, cheek, big. Examples: *mackle (spot), main, magnanimous, mega-, might, mass, match* (to pair).
- c. *Pet*. Flat base to pointed tip, flat contact against something pointed or stiff. Examples: *pat, pad, pet, pit* (as of fruit), *bat, foot, feather, pintle*.
- d. *Pen, pel, per*. Broad base tapering to soft point, broad and soft, movement from a firm base into vibrating motion, flat touching soft. Examples: *fen, penis, pin, fly, flit, fall, flame, prod, press, prop, bribe*.
- e. *Tek*. From pointed to blunt (or the opposite). Examples: *stick, tack, toggle, dog* (because of a pointed snout), *dig, dagger, tag, tick, tickle, touch*.
- f. *Nek, lek, rek*. Soft point against something hard, soft point placed on something hard, and extended: tongue, nose, eye, see, light, hearth, inside. Examples: *nose, nick, lick, next, night* (sun in inside, or neutral light), *latch, lingual, in*.
- g. *Kep*. Blunt against flat, opening out from narrow to wide, taking in open hand or mouth and closing together flatly, and derived: fist, ball, head. Examples: *gable, cabin, ship* (Old English *skip*), *capture, keep, give* (cause to keep), *heft, haft, cap, cape, cabbage, capitol, shape*.
- h. *Kew*. Narrow at base and opening wide: curved or vaulted. Examples: *curve, cave, cove, cup, excavate*.
- i. *Kem*. Sounding with closed lips, blunt against soft, narrow at mouth and closing softly, blunt to broad and soft, together. Examples: *hum, hammer, hem, comb, hump, camel, com-* (prefix, “together”, as in *com-press*).

The editor of this posthumous book added a brief list of examples of each imitative root in European, Asian and American languages taken from different publications by the author. This list can be found on page 210 of Swadesh (1972).

## Incopyfixation

A self-iconic term referring to the reduplicative process in which a copy of the final consonant of the stem is infixated at an earlier position in the word: Temiar *səɓɔg* < *səglɔg* ‘to lie down’ (G. Benjamin 2014: 47). This term was originally proposed by Matisoff (2003: 28).

See TEMIAR

## Index

A category in Peircean semiotics defined by Peirce in the following terms:

“But, I had observed that the most frequently useful division of signs is by trichotomy into firstly Likenesses, or, as I prefer to say, Icons, which serve to represent their objects only in so far as they resemble them in themselves; secondly, Indices, which represent their objects independently of any resemblance to them, only by virtue of real connections with them, and thirdly Symbols, which represent their objects, independently alike of any resemblance or any real connection, because dispositions or factitious habits of their interpreters insure their being so understood” (Peirce 1911: 460-461).

The following is a more reader-friendly definition:

“An *index* expresses mainly material relation (factual, existential contiguity) between meaning and form. It is based on psychological association and/or physical juxtaposition of different events or things. For example, the cause-and-effect relation is indexical; smoke is a sign of fire, or footsteps in snow are a sign of a walker. The index-like features of language include relational concepts of time and place, the deictic elements or shifters (e.g. *now*, *where*, *I*, and *this*, which all depend on other elements in the discourse)” (Anttila 1989: 13).

## Indo-European roots

Kozlova (2013) studied the iconic aspects of Proto-Indo-European roots. The following is a brief summary of some of her conclusions. The author observes that vowel lengthening mimes distancing in the reconstructed roots *\*k<sup>w</sup>el* ‘far in space and time’ vs. *\*k<sup>w</sup>əl* ‘far off, the very last’, as attested in

Greek *tele*. In addition, vowel shortening mimics narrowing, approaching and shrinking: *\*siū* ‘sew, bind’/*\*siu* ‘very thin’. Reduplication seems also to show many iconic aspects in Proto-Indo-European roots. Kozlova notes that reduplication can be used to mimic bird calls and natural sounds: *\*ghagha* ‘cackle (of geese)’, human speech: *\*der-der* ‘murmur, chat’, circular movement or curvature: *\*k<sup>w</sup>ek<sup>w</sup>lo* ‘a machine having a wheel as its essential part’, movement from side to side or up and down: *\*rei-rei* ‘tremble’, emotional state accompanied by trembling: *\*mormo* ‘fear, terror’, *\*balbal* ‘shake, dance’, togetherness: *\*duidumo* ‘bind in two, two’.

See *ELEMENTARE WORTSCHÖPFUNG*, {-WR-} IDEOPHONIC ROOT

## Indo-Pakistani Sign Language

In Indo-Pakistani Sign Language, as described by Zeshan (2000) there are many iconic signs, as with other sign languages. For example, in the sign meaning ‘car, drive’ the hands move as if turning a steering wheel. In addition, there is also diagrammatic iconicity in this language: to convey the iterative aspect, the sign movements are repeated; to convey distributive aspects the sign is repeated at various points in space.

Zeshan observes that in narrative discourses in this sign language a pantomimic modification of signs takes place in order to convey the intended meaning more closely in terms of iconicity. For example, the word for ‘car, drive’ can be signed with quicker and larger movements in order to depict ‘drive ruthlessly’; the word for *shoot* can be signed with a tense facial expression, miming quick repeated *shots* and leaning back in order to signify ‘fire mercilessly’.

## Indonesian

Malayo-Polynesian language spoken by more than 100 million people in Indonesia.

See BIRD NAMES, *OSNOVY FONOSEMANTIKI*, REDUPLICATION

## Intonation

Intonation has a clear symptomatic function. It can express emotions, but it also has interesting iconic uses, as explained by Bolinger (1985: 99): in the course of an action we are up and moving and at the end we sit or lie down to rest. In oral discourses, this is translated in high pitches while the utterance is in progress and a fall at the end. When an utterance is about to

close, intonation falls down and when something is expected, such as an unfinished enumeration or the answer to a question, intonation rises in pitch. Concerning emphasis, a rising pitch marks the focal point of an utterance. Bolinger concludes his brief study on the iconicity of intonation with this summary:

“I hope I have shown that whether we look at it from the grammatical or the morphological standpoint, intonation is a part of a gestural complex, a relatively autonomous system with attitudinal effects that depend on the metaphorical associations of up and down—an elaborate scheme of iconism” (Bolinger 1985: 106).

[Hancil and Hirst (eds.) 2013]

See PROSODIC ICONICITY, TONE ICONICITY

## Irish

Goidelic (Celtic) language spoken in Ireland and Northern Ireland by more than one million people (including L2 speakers).

See *BOW-WOW*, *BUTTERFLY*, *CACKLE*, *CUCKOO*, *DICZIONARIO DE VOCES NATURALES*, *NURSERY WORDS*, *ONOMATOPÉES ET MOTS EXPRESSIFS*, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL'IDIOMI*

## Isomorphism

A one-to-one correspondence between the *signans* and the *signatum* (Haiman 1980: 515), i.e. between meaning and form.

From a purely theoretical point of view, it can be also understood as a one-to-one correspondence between various levels of linguistic representation.

[Downing and Stiebels 2012: 405-409]

See ICONICITY META-PRINCIPLE, MIRROR PRINCIPLE

## *Ištiktukai* ‘eventives’

The term *ištiktukai* ‘eventives’ was coined in 1922 by the grammarian Jonas Jablonskis to refer to Lithuanian ideophones (Wächli 2015: 492). Wächli (2015: 494) includes several examples in the following Lithuanian narration:

“In the end all jumped on the wolf, **čiupt** grasped it well, **brūkš** pulled it, **benc** knocked it down, and began to beat it **takš takš**. The wolf first **cypt** squeaked, then **vau vau** howled and in the end got up **strapt** and escaped **tabalai tabalai**, without leaving a tail”.

*čiupt* ‘quick seizing’, related verb *čiupti* ‘grasp, seize’.

*brūkš(t)* = *briaukš(t)* ‘quick pulling away, cutting off’.

*benc* ‘intensive falling on the ground’, no related verb.

*takš(t)* ‘heavy beating’, related to *taškyti* ‘splash’, iterative of *tėkšti* (pres. *teškiu*) ‘hit, splash’.

*cypt* ‘squeaking’, related verb *cypti* ‘squeak’.

*strapt* ‘sudden end or beginning of a movement’, no related verb.

*tabalai* ‘staggering’, no related verb.

Wälchli gives the following general characterization of Lithuanian *ištiktukai*:

“Most properties of Lithuanian *ištiktukai* are well in line with the characterization of ideophones in the modern literature (and many of them have long been described by Leskien, Senn, and others). The interaction with tone is of particular interest (Section 3.3) and likewise a tendency to grammaticalize reduplication as event number (Section 3.2). There are, however, some rather specific characteristics, notably the pseudo-morphological ‘formants’ (Section 3.4) and the lack of (bleached) combinations with ‘say’ and ‘do’ light verbs. The complete lack of compound verb constructions with ‘do’ and ‘say’ makes Lithuanian ideophones important for the study of the relationship of ideophones and verbs. There is no evidence in Lithuanian for a cyclic development of verbs from compound verb constructions. Rather verbs can be derived directly from ideophones by productive processes of word formation. Comparative evidence suggests that derivations from ideophones have contributed considerably to the inventory of verbs in Baltic, Slavic, and Germanic, even though reconstruction is particularly difficult in this domain due to the dynamic nature of ideophones” (Wälchli 2015: 518).

See BALTO-SLAVIC LANGUAGES, *SCHALLNACHAHMUNGEN UND SCHALLVERBA IN LITAUISCHEN*

## Italian

A major Romance language spoken mainly in Italy and Switzerland by 70 million people.

See ARTICULATORY ICONICITY, *BOW-WOW*, *BUTTERFLY*, *CAKLE*, *CRACK*, *CROAK*, *CUCKOO*, *CUCUMBER*, *DOPPELUNG* (*REDUPLIKATION*, *GEMINATION*), ECHOIC WORDS, ETYMOLOGY,

*FANGEN-FINGER-FÜNF. STUDIEN ÜBER ELEMENTAR-PARALLELE SPRACHSCHÖPFUNG, GRUNT, NURSERY WORDS, ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI, PUFF, SYMBOLIC VALUE OF THE VOWEL I*

## Italian Sign Language

Pizzuto and Volterra (2000: 269) report the results of a study on iconicity in Italian Sign Language (LIS), based on an experiment in which 92 signs were presented to 24 Italian hearing people with no knowledge of this sign language (Grosso 1993). It was observed that 22 signs were clearly iconic, since they were guessed by all or most of the participants in the experiment. These signs had a perceptual resemblance to the action or object they represented. For example, to sign *hear* the index finger points to the ear, the organ used for hearing; to sign *break* the signer makes a lateral twist motion with two closed fists, resembling the action made when holding and breaking a stick or a tree branch. In addition, some of the transparent signs are similar to or even identical with conventional gestures that are commonly used by Italian hearing people (Pizzuto and Volterra 2000: 270).

Pizzuto and Volterra (2000) carried out another experiment to check the results obtained by Grosso. They used 40 signs of Italian Sign Language (20 clearly iconic and 20 non-transparent signs) and extended the number and countries of the participants (72), including both deaf and hearing people from Denmark, the Netherlands, England, Switzerland, Spain and Portugal. The majority of the iconic signs were guessed correctly by non-Italian participants: BREAK, MOTORBIKE, EAT, LISTEN, DRINKING-GLASS, SKI, HUSBAND/WIFE, REMEMBER, SAY, CAR, HEAR, DRINK and SPRING/AIR. In addition, five iconic signs exhibiting more culture-related features (ASTUTE, BEAUTIFUL, HUNGER, PAY and WELL/GOOD), were guessed correctly by a smaller number of participants. The authors reach the following conclusions:

“We found that a subset of LIS signs hypothesized to be comprehensible across languages and cultures was comprehended by the majority of our European non-Italian participants, hearing and Deaf alike. These data confirm and extend the results of previous studies and indicate that there are some language- and culture-free, presumably universal iconic-transparent features of signs that may be perceived in the same manner by both speakers and signers” (Pizzuto and Volterra 2000: 283).

The experiment also showed that European deaf signers have greater skills in understanding both iconic and non-transparent LIS signs compared to



both non-Italian and Italian hearing participants: “These data suggests the existence of potential universals across sign languages” (Pizzuto and Volterra 2000: 283).

In another study of LIS, Pietrandrea (2002: 300) notices the following facts concerning iconicity:

- 50 percent of the occurrences of handshapes are motivated by an iconic association between their form and the portion of meaning they convey.
- 67 percent of the occurrences of body locations are motivated by an iconic association between the locations and the portion of meaning they convey.
- No occurrences of neutral space are motivated by an iconic association between that portion of space and the portion of meaning it conveys.

Concerning handshapes, in the TABLE sign, the flatness of the handshape conveys the meaning of flatness and in the AIRPLANE sign, the extensions of the fingers depict two symmetrically extended, protruding elements. Concerning body locations, in the sign TOOTHBRUSH the location (mouth) conveys the meaning of the mouth, being the place where one brushes one’s teeth. In the sign HEARING AID, the location (ear) refers to the place where one wears a hearing aid.

## **Itelmen**

A Chukotko-Kamchatkan language spoken on the Kamchatka Peninsula (Russia) by less than a hundred people.

See *CUCKOO*, NURSERY WORDS

## J

### **Jamaican**

English-based creole language spoken in Jamaica, Panama, Costa Rica and Colombia by approximately 3 million people.

See CREOLES, JANUS-FACED ICONICITY

### **Jaminjung**

Language of the Victoria River District (Australia) with less than a hundred speakers.

See AUSTRALIAN LANGUAGES

### **Janus-faced iconicity**

A type of iconicity shown by reduplication. Generally, reduplicative constructions trigger some concept of increased quantity, as in Japanese *yama yama* 'mountains'; but at the same time they can be used to convey a decrease in quantity or intensity, as in Jamaican *redi-redi* 'reddish, red-spotted'. In the first case, there is a formal increase corresponding to a referential increase, called a *directly proportional iconistic increase*; but in the second case, the formal increase is associated with diminutives and approximatives, called *inverse-proportional iconistic increase* (Abraham 2005: 549).

See *DOPPELUNG*, REDUPLICATION

### **Japanese**

Japanese is known for its large inventory of sound-symbolic and mimetic words. These are usually grouped into three main types: *phonomimes* (words that mimic sounds); *phenomimes* (phonetic representations of phenomena perceptible to non-auditory senses); and *psychomimes* (phonetic representations of human psychological states).

An ideophone or mimetic word in Japanese usually consists of a reduplicated root functioning as an adverb, which can be followed by the quotative marker *to*, since sound symbolism is perceived as a quotation. These ideophones also show sound-symbolic or onomatopoeic features.

The following examples and interpretations are taken from the brief and basic survey in Makino and Tsutsui (1986: 50-56).

- Voiced consonants represent something big, heavy, dull or dirty and voiceless consonants represent something small, light, sharp or pretty: *kirakira (to hikaru)* ‘(shine) sparkingly’/*giragira (to hikaru)* ‘(shine) dazzlingly’, *korokoro (to korogaru)* ‘(small object) rolls’/*gorogoro (to korogaru)* ‘(heavy object) rolls’.
- The velar consonants [k] and [g] represent hardness, sharpness, clear-cutness, separation, detachment or sudden change: *kippari (to wakareru)* ‘(separate from people) once and for all’, *gut (to hiku)* ‘(pull) with a jerk’, *pokkuri (to shinu)* ‘(die) suddenly’.
- The sibilant consonants [s]/[sh] represent a quiet state, or a quiet and quick motion, or some quiet human emotion: *surusuru (to suberu)* ‘(slide) smoothly’, *shitoshito (to furu)* ‘(it rains) quietly’, *shonbori (to suru)* ‘(be) despondent’.
- The rhotic consonant [r] conveys fluidity, smoothness or slipperiness: *tsurutsuru (shite iru)* ‘(be) slippery’, *nurunuru (shite iru)* ‘(be) slimy’, *sarasara (to nagareru)* ‘(flow) smoothly’.
- Nasal sounds express tactility, warmth and softness: *muchimuchi (shite iru)* ‘(be) plump’, *nyurunyuru (shite iru)* ‘(be) slimy’, *nichanicha (suru)* ‘(be) sticky’, *nurunuru (shite iru)* ‘(be) slimy’.
- The plosive consonant [p] conveys explosiveness, crispiness, strength and suddenness: *pui (to deke itu)* ‘(leave) suddenly’, *perapera (to shaberu)* ‘gibber, speak fluently’, *putsut (to kireru)* ‘(break) suddenly’.
- The semi-consonant [y] represents weakness, slowness and softness: *yoboyobo (ni naru)* ‘(become) senile’, *yoreyore (ni naru)* ‘(become) worn-out’, *yochiyochi (to aruku)* ‘(walk) totteringly’.
- The back high vowel [u] is related to human physiology and psychology: *uzuuzu (suru)* ‘itch for action’, *usuusu (kanzuku)* ‘(perceive) dimly’, *utsurautsura (suru)* ‘doze’.
- Vowel [o] conveys something negative with respect to human psychology: *ozuozu (shite iru)* ‘(be) nervous and timid’, *odoodo (shite iru)* ‘(be) very nervous’, *otaota (suru)* ‘don’t know what to do’.
- Vowel [e] represents something vulgar: *hebereke (ni naru)* ‘(become) dead drunk’, *herahera (to warau)* ‘(laugh) meaninglessly when embarrassed’, *mesomeso (to naku)* ‘sob’.

The glottal stop (represented by doubling the adjacent consonant) also plays a significant role in mimetic words; it is generally used to produce a more

emphatic or more emotive version of a given word: *pitari/pittari* ‘tightly’, *yahari/yappari* ‘as expected’, *bakari/bakkari* ‘only’, *yohodo/yoppodo* ‘to a great extent’.

The following are two actual examples of the use of two of these mimetic words: *guzuguzu* ‘to vacillate, procrastinate, and waste time’ and *mesomeso* ‘whimpering’ (Fukuda 2012: 128, 130):

- *Guzuguzu shite iru to gakkoo ni okuremasu yo* ‘If you keep dawdling (fooling around), you’re going to be late for school’.
- *Shitsuren gurai de itsu made mo mesomeso suru na yo* ‘Just because you have a broken heart, don’t keep moaning and groaning about it forever’.

[Hamano 1986; Kakehi, Tamori and Schourup 1996; Akita 2009; Iwasaki, N., P. Sells and K. Akita (eds.) 2017; Sasamoto 2019]

See ALLITERATION, BIRD NAMES, *BOW-WOW*, *CACKLE*, *CROW*, *CUCKOO*, IDEOPHONES, JANUS-FACED ICONICITY, ONOMATOPOEIC EXPRESSION, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL’IDIOMI*, PHENOMINE, PHONOMIME, *PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*, PSYCHOMIME, SIZE-SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I*, *VÖLKERPSYCHOLOGIE*, {-WR-} IDEOPHONIC ROOT

## Japanese Writing

Japanese uses a complex writing system consisting of Chinese characters (*kanji*) and two Kana syllabaries: hiragana and katakana.

Concerning Chinese characters, the same type of iconicity seen in Chinese writing applies in this case as well:

協力 *kyōryoku* ‘cooperate’, 結晶 *kesshō* ‘crystal, sparkle’, 森林 *shinrin* ‘forest’, 炎 *honō* ‘flames’, 羽毛 *umō* ‘feathers’.

In these *kanji* the reduplication or triplication of radicals (力 *chikara* ‘force’, 日 *hi* ‘day’, 木 *ki* ‘tree’, 火 *hi* ‘fire’) iconically conveys the duality or multiplicity of the denoted object or action; 羽 *hane* ‘feather’ is itself reduplicated.

The *katakana* and *hiragana* syllabaries were derived from Chinese characters through a process of simplification. *Hiragana* is a cursive script that is used to write the purely grammatical elements of a Japanese sentence (subject, object and topic markers, verb endings, adverbial and sentential particles). *Katakana* is used, among other functions, to write words borrowed from other languages. The Chinese characters are used to write lexical elements.

There is a clear iconic relation between lexical items and kanji and grammatical items and hiragana syllabograms. Lexical items have a complex non-grammatical meaning and are written with complex kanji characters; grammatical elements have only a grammatical function and are written in a simplified version of Chinese characters (*hiragana*). Japanese mimetic words are usually written in hiragana. The *katakana* script is used for foreign words. The following sentence (taken from Makino and Tsutsui 1986: 162) illustrates all these aspects:

日本人は自分の国の文化をユニークだと思っています

Nihonjin wa jibun no kuni no bunka o yuniku da to omotte imasu

‘The Japanese think that their country’s culture is unique’

- 日本人 *nihonjin* ‘Japanese person’: 日本 *nihon* ‘Japanese’ (kanji)  
人 *jin* ‘person’ (kanji)
- は *wa*, topic marker (hiragana)
- 自分 *jibun* ‘self’ (kanji)
- の *no*, relational particle (hiragana)
- 国 *kuni* ‘country’ (kanji)
- 文化 *bunka* ‘culture’ (kanji)
- を *o*, object particle (hiragana)
- ユニーク *yuniiku* ‘unique’ (an English loan) (katakana)
- だ *da* ‘to be’, と *to*, subordinating particle (hiragana)
- 思 *omo* ‘think’ (kanji), って *tte*, verbal particle (hiragana)
- います *imasu* ‘to be’

## Javanese

Malayo-Polynesian language spoken in Java (Indonesia) by 94 million people.

See *PRIMITIVE CULTURE, VÖLKERPSYCHOLOGIE*

## **Ju/'hoan**

A Khoisan language spoken in Namibia and Botswana by approximately 4,000 people.

See *CROW*

# K

## **Kabi**

Australian language of the Pama-Nyungan family spoken in South East Queensland.

See *BUTTERFLY*

## **Kahita**

Endangered Uto-Aztec language spoken in Mexico and also known as Mayo.

See *BUTTERFLY*

## **Kalmyk**

Mongolic language of Kalmykia (Russia) spoken by approximately 80,000 people.

See BIRD NAMES, *CUCKOO*

## **Kaluli *Gɔnɔ To***

Kaluli is a Trans-New-Guinea language spoken in Papua New Guinea (in the rain forests of the Great Papuan Plateau) by approximately 3,000 people.

In chapter three of his interesting book on the Kaluli culture, entitled “Weeping that Moves Women to Song”, S. Feld (2012) discusses *gɔnɔ to* ‘sound words’, which are used to refer to the sound-symbolic interpretation of vowels. This author observed the following associations:

- [i] and [ɛ] mark sounds that are continuous; they are sounds that are “around” and “in the air”. Vowel [i] suggests “hum” sounds and [ɛ] conveys “buzz” sounds. Examples: *gi* ‘the call of coucals’, *ti* ‘the sound of rain sprinkling, spraying through the entire forest’, *dɛ* ‘puckering and sucking sounds of bat eating’, *sɛ* ‘the sounds of shellfish claws snapping’, *hɛ* ‘wheezing sounds people make when

they are ill’, *sele* ‘sound of sharpening axes on stone’, *elele* ‘swarms of insects’ (Feld 2012: 146).

- [u] and [ɔ] signal patterns of directionality in the movement of a sound away from its source; [u] for sounds that originate above and dissipate below; and [ɔ] for sounds that radiate in a horizontal direction or concentrically outwards from the source. Examples: *gu* is used for thunder; *sagu*, *gugu*, *gululu* for the sounds of a waterfall; *gudu* denotes trees cracking under pressure from high wind; *kubu* is used for the splashing sound of large waterfalls dropping off into small water pools; *dugu* is the sound of water pouring into or out of bamboo tubes. The expression *gɔgɔ* is the sound of earth rumbling or the floor of a house rumbling when people dance or drum; *gɔlɔ* is the sound produced by banging two objects together; *sɔlɔ* is the sound of insects and birds at daybreak; *hɔgu* denotes the sound of wind; *gugu-gɔgɔ* ‘bush echo’ marks both the continuousness of downward dissipating sound and the continuousness of concentrically radiating sound (Feld 2012: 146-147).
- [o] and [e] suggest sounds that stay at the source of their making: the [e] sounds are at ground level and the [o] sounds move with the source. Examples: *bobo* ‘wing-beating sounds’, *boto* ‘pop sounds in cooking’, *idɔ boto* ‘fart (lit. shit pop)’, *gololo* ‘belch’, *godo* ‘sound of an axe cutting into a tree’, *godo-godo-gugɔ-gugɔ* ‘sounds of many axes cutting many trees and many trees falling and thumping the ground and resonating across the land’. *Gele*, *kele* are used for the crunch and crackle underfoot of people walking through the bush or pigs stamping around in sago plantations (Feld 2012: 148).

Iconic words, such as *fɛsɛ* ‘pressure cooker’, *teke-teke* ‘typewriter’, *dolo-gili* (lit. ‘whistling sound of bird plus continuous direction ambiguous sky hum’) ‘jet airplane’ show that new words can be created from the sound symbolic associations seen above (Feld 2012: 148).

These *gɔnɔ to* words stand out from other word classes and have distinct functions in both everyday and poetic speech:

“There are clear differences between *gɔnɔ to* and other word classes. *Gɔnɔ to* can stand alone as a complete utterance, but it cannot be negated. It is clearly not a trivial word class, because it has pattern and a high degree of use, and the elements can be decomposed to generate creative words. The major difference between phonaesthesia in conversation and in song poetics is syntactic. In speech syntax a sentence follows the *gɔnɔ to* and contexts it. In song the *gɔnɔ to* is line final, in verbal position. As such it functions as an



image verb, marking that the preceding element ‘is sounding X’ or that some unstated source ‘is sounding X’ at the preceding element” (Feld 2012: 150).

## Kaluli bird names

In his splendid book on Kaluli culture, S. Feld (2012) reports on Kaluli bird names in chapter 2, eloquently entitled “To You They Are Birds, to Me They Are Voices in the Forest” (Feld 2012: 44-85).

In Kaluli, bird names are based on the sounds they make. As such, when trying to elicit bird names, the Kaluli people respond by saying “It sounds like X”. Kaluli bird names can be grouped into seven classes (Feld 2012: 72): 1) *Ene wi salan* ‘those that say their names’; 2) *Mada ganafodan* ‘(those that) make a lot of noise’; 3) *Imilisi ganadan* ‘(those that) only sound’; 4) *Bosavi to salan* ‘(those that) speak the Bosavi [Kaluli] language’; 5) *Holan* ‘(those that) whistle’; 6) *Yelan* ‘(those that) weep’; 7) *Gisalo molan* ‘(those that) sing *gisalo* song’.

The first group is the largest and has a clear onomatopoeic character: *bas*, *kəgə*, *gubogubo*, *susulubi*, *tibodai*, *sələləbe*. These words can also function as verbs when adding the suffix *elema*, a fusion of *ele* ‘like this’ and *sama* ‘speak’: *sələləlema* ‘trill’, *yelema* ‘weep’, *holema* ‘pant’.

The fourth class is especially interesting, as it includes the basis of delocutive ornithonyms\*. A bird’s call is interpreted as a set phrase or is claimed to say several different things. The raucous calls of the *Bolo* (New Guinea Friarbird and Brown Oriole) are interpreted as sexual insults about erections: *ku genelə!* ‘red cock’, *ku halaidə!* ‘hard cock’ (Feld 2012: 78). The *Tifen* (Black-throated Warbler), says *siyo gogo bayo*: *gogo* is onomatopoeic for the sounds of a pig burrowing, and the rest of the phrase means ‘I’m really staying right here’. The *Bideli-ano*, (White-crowned Koel), calls out *ne fəs ən* ‘my back hurts’ and this “is supposed to be an indication of the pain it feels from not sitting down, just flying around constantly” (Feld 2012: 79).

See BIRD CALLS, BIRD NAMES, DELOCUTIVE ORNITHONYMS, KALULI *GONTO*

## Kammu (Khmu)

Austroasiatic language spoken in northern Laos by about 700,000 people.

See ASIAN LANGUAGES

## **Kannada**

Dravidian language spoken in Karnataka (India) by approximately 43 million people.

See *CACKLE*, *CUCKOO*

## **Kanuri**

Nilo-Saharan language spoken by some 4 million people in Nigeria, Niger, Chad and Cameroon.

See *PRIMITIVE CULTURE*

## **KAP**

See *FANGEN-FINGER-FÜNF. STUDIEN ÜBER ELEMENTAR-PARALLELE SPRACHSCHÖPFUNG*

## **Kapampangan**

Malayo-Polynesian language of the Philippines (Central Luzon) spoken by approximately 2 million people.

See *BUTTERFLY*

## **Kapaur**

Papuan language, also known as Iha, spoken on the tip of the Bomberay Peninsula (Western New Guinea) by about 5,000 people.

See *BUTTERFLY*

## **Kapiekräm**

Also known as Ramcocamecra and Canela, is a Ge language spoken in Brazil (Maranhão) by approximately 2,000 people.

See *BUTTERFLY*

## Karitiâna

Tupian language spoken in Brazil (Rondônia) by about 200 people.

See BIRD NAMES

## Karo Ideophones

The Karo language is spoken by approximately a hundred Arara people in the western part of the Amazon region of Brazil (Rondônia State). It belongs to the Ramarama family of Tupi. The following data are taken from Gabas Jr. and van der Auwera (2004).

Karo ideophones can be reduplicated in order to convey iteration or the continuative aspect: *tuy tuy* ‘pull, pull’, *kãy kãy* ‘scratch scratch’, *pung pung* ‘shoot shoot’, *wen wen* ‘write write’, *ué ué* ‘vomit vomit’, *cok cok* ‘grind grind’.

Other non-reduplicated examples include: *wéy* ‘stretch’, *muturum* ‘jump’, *ngit* ‘stand up’, *círup* ‘run’, *ohyung* ‘dive’, *ohyurung* ‘come suddenly’, *omuw* ‘fall’, *tpu* jump’.

Ideophones can appear in simple clauses, in yes-no questions, in information questions, in negative clauses, in imperative clauses and in future clauses. They do not behave like verbs and, in general, do not have an onomatopoeic nature. Their meaning can be very specific: *círup* ‘walk fast’, *kap* ‘shoot arrow’, *kot* ‘swallow liquid’, *morap* ‘touch/shuffle things’, *omuw* ‘fall (heavy object)’, *oton* ‘fall (light object)’, *weret* ‘cut hair’, *yok* ‘copulate’, *ka’curung* ‘get in smoothly’, *e’miyãm* ‘blow baby’s nose’, *paramu* ‘sit down’.

## Katuena Ideophones

Katuena is a Cariban language spoken by approximately 1,000 people in Surinam and Brazil. The following data are taken from L. Smoll (2015). This scholar studied the ideophones of the language, which are used both in everyday conversations and in narratives. Katuena ideophones display two types of iconicity (Smoll 2015: 112ff.):

- Imagic iconicity: *sarachuchu*, ‘plane landing’, *fuhchow* ‘throw on woodpile’;
- Diagrammatic iconicity: *fififi* ‘running’, *sam* ‘bite down’, *meeruru* ‘scattered’, *fufufu* ‘deer walking’.

Concerning the ideophone *sam*, Smoll (2015: 115) points out that closed syllables iconically suggest closure or boundedness.

The following ideophones refer to human sounds and actions (Smoll 2015: 119): *wi* ‘talking’, *ha* ‘chatting’, *hahaha* ‘laugh’, *kap* ‘bite off’, *kraw* ‘chew’, *foo* ‘whistle with hand’, *fuu* ‘blow’, *kroo* ‘snore’, *sho* ‘slurp’.

These ideophones convey manners of walking, running or jumping (Smoll 2015: 119): *feetutu* ‘walk tiredly’, *chuku* ‘walking with a walking stick’, *sererere* ‘descend to creek’, *fuhtuchu* ‘jump’, *fuhtaj* ‘climbing’, *ti* ‘step’, *tu* ‘heavy step’.

There are many ideophones related to water (Smoll 2015: 120-121): *shee* ‘rain’, *shii* ‘heavy rain’, *chitovish* ‘pouring rain’, *taariariaria* ‘rain hitting a surface’, *shuu* ‘flowing water’, *so* ‘water evaporates on fire’, *forio* ‘boiling water bubbling’.

The following ideophones convey different types of impact (Smoll 2015: 122): *tow* ‘clap hands’, *chaj* ‘cut’, *krow* ‘jerk’, *tuchu* ‘hit ground from height’, *shik* ‘grate’, *dow* ‘strike’, *taï* ‘chop’.

Ideophones related to visual properties (Smoll 2015: 124ff.): *wow* ‘curved’, *foku* ‘winding river’, *krajfee* ‘clear space’, *tukururu* ‘engulf’, *chikîninî* ‘shine’, *tuuku* ‘red’, *fefe* ‘flash of lightning’.

Ideophones in Katuena usually occur in quotation constructions followed by *ka* ‘to say’.

See AMERICAN INDIAN LANGUAGES

## Kayapo

Ge language of Brazil used in the eastern part of the Amazon, north of Mato Grosso and Para by about 8,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Ket

Yeniseian language spoken in Krasnoyarsk (Russia) by about 200 people.

See *CUCKOO*

## Khakas

Turkic language spoken by the Khakas people in the southern Siberian Republic of Khakassia in Russia. It has about 40,000 speakers.

See ABLAUT REDUPLICATION

## Khanty (Ostyak)

Uralic language spoken by the Khanty people in the Khanty-Mansi Autonomous Region in Russia. It has about 10,000 speakers.

See FINNO-UGRIC LANGUAGES

## Khmer (Cambodian) Ideophones

Official language of Cambodia belonging to the Austroasiatic family and spoken by about 16 million people.

The following data on Khmer ideophones are taken from the grammar by J. Haiman (2011b: 370-373).

The majority of Khmer ideophones reduplicate. Examples of partial reduplication: *crw:c-craw:c* ‘sound of spitting’, *kakreu:m-kakrau:m* ‘sound of moaning’, *kakreuk-kakree:ng* ‘noise, bustle, commotion, ado’. Examples of total reduplication: *chang chang* ‘zap (sound of lightning)’, *cha:v cha:v* ‘sound of raindrops, or of many birds taking flight at once’, *cheuk cheuk* ‘sound of knocking; of a cigarette lighter being flicked’, *craok craok* ‘sound of dripping’, *cro:c cro:c* ‘sound of dripping water’, *kru:p kru:p* ‘crunch’, *kreul kreul* ‘sound of thunder’, *ktaw:t ktaw:t* ‘cluck of a hen’, *keup keup* ‘click clack’, *kdu:ng kdu:ng* ‘sound of trampling feet’, *preh prawh preh prawh* ‘rustle, stir’, *lu:ng lu:ng* ‘impression of dog vomiting’.

Partially reduplicated ideophones can be seen as a special case of symmetrical compounds, whose characteristic function is decorative and non-referential: the contribution they make to an utterance is not to its meaning, but its elegance (Haiman 2014: 62). The following are examples of these decorative compounds (Haiman 2011b: 95, 104): *laoc psa:* ‘burn’, *pruaj barium* ‘worry’, *deuk canjcu:n* ‘transport’, *baeu praseun* ‘if’, *teang amba:l* ‘all’, *psah psa:* ‘heal’, *kliang kliat* ‘separate’, *kamlang kamhaeng* ‘force, energy’, *tnak tnaw:m* ‘handle carefully’, *psaw:p psa:j* ‘disseminate, propagate, spread’.

See ASIAN LANGUAGES, *CAKLE*, *ELEMENTARE WORTSCHÖPFUNG*, *FANGEN-FINGER-FÜNF. STUDIEN ÜBER ELEMENTAR-PARALLELE SPRACHSCHÖPFUNG*

## Khumi

Tibeto-Burman language of the Kuki-Chin branch spoken by approximately 2,000 people in southeastern Bangladesh. The following data and analyses are taken from Peterson 2014.

This language is rich in mimetic words and expressions. They can be grouped in the following classes:

Animal sounds and calls: *vang<sup>1</sup> vang<sup>1</sup> vang<sup>1</sup>* ‘mosquito or fly sound’; *o<sup>1</sup>wa<sup>2</sup> o<sup>1</sup>wa<sup>2</sup>* ‘sound made by crow or raven’; *bě<sup>1</sup>trě<sup>1</sup>bě<sup>2</sup>* ‘sound made by a nightingale’; *ng(y)e<sup>1</sup> ng(y)e<sup>2</sup>* ‘sound of barking’. Human sounds: *hüng<sup>1</sup> hüng<sup>5</sup>* ‘sound of irregular breathing’, *thuy<sup>5</sup>* ‘spitting sound’. Sounds of nature: *bu<sup>1</sup>bu<sup>2</sup>* ‘sound of bubbling water’; *rewng<sup>1</sup>rewng<sup>5</sup>* ‘sound of a rolling rock’, *püng* ‘sound of wind blowing’. Sounds associated with falling, hitting or breaking: *tlöyng<sup>1</sup> thöyng<sup>1</sup>* ‘clattering sound’, *thla<sup>2</sup>* ‘breaking sound’, *pha<sup>5</sup>* ‘sound of a large object breaking’, *phe<sup>5</sup>* ‘sound of a small object breaking’, *khang<sup>1</sup>* ‘sound of beating’, *thi<sup>1</sup>thu<sup>2</sup> thi<sup>1</sup>thu<sup>2</sup>* ‘sound of rope breaking’, *piwng<sup>5</sup>* ‘sound of a large object falling’, *kriwng<sup>1</sup> kriwng<sup>1</sup> kriwng<sup>1</sup>* ‘sound of bamboo hitting something’, *paw<sup>5</sup>* ‘sound of something (fruit, dead bird) falling’. Quick motions: *yü<sup>2</sup>* ‘motion of something passing quickly (including time)’, *pruy<sup>1</sup>pruy<sup>1</sup>pruy<sup>2</sup>* ‘quick motion’, *sö<sup>2</sup>* ‘motion which is direct, without stopping’, *phrü<sup>2</sup>* ‘quick climbing motion’. Other specific motions: *li<sup>1</sup>lang<sup>5</sup> li<sup>1</sup>lang<sup>5</sup>* ‘waving motion of bamboo’, *phrang<sup>5</sup> phrang<sup>5</sup>* ‘motion of many sparks flying from a fire, leaves falling from a tree, scattering motion’, *dě<sup>1</sup>dě<sup>2</sup>* ‘fluttering flight motion’, *t<sup>1</sup>khew<sup>1</sup>vew<sup>1</sup> t<sup>1</sup>khew<sup>1</sup>vew<sup>1</sup>* ‘running motion of a bear, porcupine, cow, large human’, *hiw<sup>1</sup> hiw<sup>1</sup> hiw<sup>1</sup>* ‘motion of flames, feeling of getting angry’, *prew<sup>1</sup> prew<sup>1</sup> prew<sup>5</sup>* ‘motion of small creatures (e.g. mice).

## Kilba (Huba)

Chadic (Afro-Asiatic) language of Nigeria spoken by 300,000 people.

See AFRICAN LANGUAGES

## Kilba Ideophones

Kilba, also known as Huba, is a Chadic (Afro-Asiatic) language of Nigeria spoken by 300,000 people.

M. A. Muazu (2009) includes a brief survey of Kilba ideophones; the following data are taken from this source.

Ideophones in Kilba can function as noun, adjective and verb qualifiers.

The ideophone *kəkəsú* can function as an adjective intensifier, as in *dàngwàng kəkəsú* ‘very fat’. The ideophone *bwothəu* qualifies the adjective *dəgál* ‘big’ in *dəgál bwothəu* ‘very big’. In a similar way, the ideophone *tùkùtlùbù* intensifies the adjective *tàshəu* ‘short’ in *tàshəu tùkùtlùbù* ‘very short’.

Colour adjectives have their own ideophones, which can be reduplicated: *pèrtù* ‘white’ < *pèrtù tél* ‘snow white’, *kyàkyà* ‘black’ < *kyàkyà shìtù-shìtù/pít-pít* ‘very coal black’.

Nouns can also be qualified by ideophones, as in *lùkùtù* ‘cloth’ < *lùkùtù kəkələtsəu* ‘big cloth’; *ndù* ‘person’ < *ndù kùtùbù* ‘healthy/fat looking person’; *mbò* ‘place’ < *mbò tùdùmù* ‘dark place’; *bitì* ‘water’ < *bitì pòr-pòrù* ‘very hot/boiling water’.

Some ideophones have an adverbial function: *hyàtəù* ‘to stand’ < *hyàtəù fwàtù* ‘stand up immediately’; *hùì* ‘to run’ < *hùì tsàtsà,ù* ‘run faster’; *bwànyà* ‘to talk’ < *bwànyà fāt-fātù* ‘to talk friendly’; *təkəbìyà* ‘to divide it’ < *təkəbìyà tàtàsù* ‘to divide it into parts’.

## Kimbundu

Bantu language spoken in Angola (Luanda and Bengo provinces) by approximately 4 million people.

See *BUTTERFLY*

## Kinaesthetic iconicity

Iconicity in which meaning is analogised through the physical attributes of articulation, as in words with labial rounding suggesting curvilinearity (e.g. *round, mound, mouth, world*) (Sadowski 2003: 418).

## Kinomorphomimetic iconicity

“The articulatory gesture or posture resembles, via synaesthesia and metaphor the motion or posture [shape] of the referent” (Abondolo 2007: 9).

### Kisi

Bantu language of Tanzania spoken by about 10,000 people.

See AFRICAN LANGUAGES, *CACKLE*

### *Kiskadee*

The great kiskadee (*Pitangus sulphuratus*) is a bird species mainly found in Belize, Mexico, Uruguay, Brazil, Paraguay, Argentina, and other adjacent countries. The interesting thing about this small and noisy bird is that its name derives from a meaningful interpretation of its characteristic call. This call can be *interpreted* or *understood* as similar to a particular phrase or expression of a natural language: in Brazil its popular name is *bem-te-vi* (well-you-saw) and in Spanish-speaking countries it is often called *bien-te-veo* (‘I see you well’), which is sometimes shortened to *benteveo*.

To refer to these bird names, the expression *delocutive ornithonyms\** (DO) is considered appropriate. The linguistic interpretation of birdcalls that produce DOs can be very different in the countries where they can be found, even though these countries share the same language. This is due to the fact that there can be several linguistic expressions that sound more or less like the birdcall. Since these meaningful interpretations are based on an approximation to an animal sound, a certain amount of variation in DOs is indeed expected.

The following Spanish interpretations of the call of the great kiskadee have been attested: Argentina, Bolivia: *ben-te-ve-o* (well-you-see-1sg.); México, Perú: *bien-te-ve-o* (well-you-see-1sg.); Argentina: *quit-a-fé* (takes-it-faith), *gente-ve-o* (people-see-I), *bicho-feo* (bug-ugly); Colombia: *bicho-fu-é* (bug-was-3sg.); Honduras, Venezuela: *cristo-fu-é* (Christ-was-3sg.). Interestingly, the English name *kiskadee* derives from a French DO denoting this bird. Its call is interpreted by the French expression *qu’est-ce qui’l dit* (‘what is he saying?’), so in this language we have the DO *quesquidi*; the English noun *kiskadee* has been derived from this French expression (Moreno Cabrera 2016a).



See BIRD CALLS, BIRD NAMES, DELOCUTIVE ORNITHONYM  
KALULI BIRD NAMES

### **Klingon(ese)**

An invented language spoken by the fictional Klingon people of the Star Trek Universe.

See ICONICITY IN INVENTED LANGUAGES

### **Koasati**

Muskogean language spoken in the United States (Elton, Louisiana and Livingston by Texas) by about 200 people.

See *CACKLE*

### **Kobon**

Trans-New Guinea language spoken in the Madang Province of Papua New Guinea by approximately 10,000 people.

See *PUFF*

### **Kololokuma Ijo ideophones**

In her grammar of the Kolokuma dialect of the Ijo language group, K. Williamson (1969: 23-25) offers a brief sketch of ideophones in this language. The majority of Kolokuma Ijo ideophones show reduplication: *geengeen* 'shrill', in addition, many of them contain the same vowel throughout.

They also exhibit sound symbolic vowel alternations:

- *geen*, of an even unblinking light;
- *geen*, a steady light brighter than *geen*;
- *gɔɔn*, of a light that is brighter than *geen*, but that does not bother one like *geen*;
- *goon* of a light that is brighter than *geen* or *geen*.

In general, closed vowels mimic large objects and open vowels mimic small objects. For example, the ideophone *gbegberee* refers to people who are

taller than *gbegberee* or *gbigbirii*; while *gbogboroo* refers to people who are fatter than *gbegberee*.

## Komi-Zyrian

Uralic language spoken in the Komi Republic (Russia) by approximately 160,000 people.

See BIRD NAMES

## Kongo

Bantu language spoken in Angola, the Democratic Republic of the Congo and the Republic of the Congo by approximately 6 million people.

See BANTU IDEOPHONES, CREOLES

## Korean

National language of the two Koreas spoken by more than 70 million people. This language has a significant number of mimetic words or ideophones. Chapter 4 of Sohn's comprehensive grammar of Korean (Sohn 1994: 495-526) is entirely devoted to describing ideophones and interjections in this language. The following examples and interpretations are taken from this work.

It has been estimated that there are about 4,000 ideophones in Korean. The trichotomy *phonomimes*\*, *phenomimes*\* and *psychomimes*\*, operative in Japanese, is also valid in Korean:

- Phonomimes: *khwung* 'boom', *ummey* 'moo', *meng-meng* 'bow-wow';
- Phenomimes: *hotutuk-hotutuk* 'popping, cracking, snapping', *ttwuk-ttwuk* 'dripping';
- Psychomimes: *maysuk-maysuk* 'nauseated', *salccak* 'stealthily', *cilkis-cilkis* 'tenacious', *yecis-yecis* 'hesitating to speak'.

There are many sound-symbolic aspects in Korean ideophones. Aspirated (kh) and tensed (kk) consonants are related to greater intensity, or tightness, compared to lax consonants: *pelttek* 'pitapat (relatively slow and deep)', *phelttek* 'pitapat (faster and agile)', *ppelttek* 'pitapat (fastest and most violent)'. Ideophones ending in a plosive sound tend to mimic the sudden cessation or intermittence of action: *chelssek* 'with a slap', *ttalkak-ttalkak*

‘rattling’; those ending in a nasal sound mimic prolonged resonance, flexibility, roundness, or openness: *khwung-khwung* ‘banging, pounding’, *ping-ping* ‘round and round’; those ending in a fricative sound convey softness, smallness, or gentleness: *kaphus-i* ‘flapping’, *pangkus-i* ‘smiling with joy’, *slamyes-i* ‘with repeated stealth’; and those ending in a liquid consonant suggest the flowing of a liquid or smoothness of action: *col-col* ‘trickling’, *mikkul-mikul* ‘slippery’, *posul-posul* ‘in a drizzle’.

In Korean ideophones, iconic consonant and vowel alternations can be observed. For example, *cwul-cwul/chwul-chwul/ccwul-ccwul* mimic trickling or flowing persistently; but the second and third variants denote an increasingly smaller quantity of liquid and a faster action. Something similar applies to *ping-ping/phing-phing/pping-pping* ‘round and round (spinning, turning, whirling)’ in which consonant alternation mimics a gradually faster movement.

Vowel alternations also have sound-symbolic value in Korean ideophones. Bright vowels suggest brightness, lightness, sharpness, thinness, slowness, and smallness, as opposed to dark vowels, which tend to suggest darkness, heaviness, dullness, thickness, quickness, and bigness. For example, crispness is mimicked by *phasak-phasak/phosak-phosak/phesek-phesek/phwusek-phwusek*, but with different nuances. The first ideophone can be used to mimic the breaking of glass or the crispness of biscuits, while the fourth mimics the dull crispness of soil. A light and small cough may be mimicked using *khollok* and a heavy and big cough by *khwulluk*.

Ideophonic words in Korean function mostly as adverbs, as shown in the following examples: *sangcaka khwung tteliciessta* ‘a box (*sangcaka*) fell (*tteliciessta*) with a bang (*khwung*, ideophone)’; *sinays mwuli col-col hulunta* ‘a brook murmurs along’ [*sinays* (brook), *mwuli* (water), *col-col* (ideophone) *hulunta* ‘flow’].

In addition, many ideophonic terms combine with the verbal suffix *-kelita* ‘keep doing’: *allun-kelita* ‘glitter, glisten’, *pithul-kelita* ‘stagger, totter’, *thwutel-kelita* ‘grumble’. The verb *hata* ‘do, be’ can also be used in this context: *callang-callang-hata* ‘clink, jingle’, *pithul-pithul-hata* ‘stagger’, *twukun-twukun-hata* ‘palpitate’.

See *BOW-WOW*, JAPANESE, PHONOMIME, PHENOMIME, PSYCHOMIME, ONOMATOPOEIC EXPRESSION, PHENOMINE, PHONOMIME, SIZE-SOUND SYMBOLISM, VOWEL HARMONY, {-WR-} IDEOPHONIC ROOT.

## Korean alphabet

The 28-letter Korean alphabet was created in the XVth century by King Sejong (1418-1450). The forms of the basic letters of the alphabet were created keeping in mind the position of the speech organs when pronouncing the corresponding sound. For this reason, there is an intentional diagrammatic iconicity between the letter-shapes and the articulatory features of the represented phonemes. P.-H. Ahn (1997: 91) summarizes these iconic relationships as follows:

Letter	Phoneme	EXPLANATION
ㄱ	/k/	Root of the tongue closing the epiglottis
ㄴ	/n/	The tongue touching the hard palate
ㅁ	/m/	Mouth
ㅇ	/s/	Teeth
ㅇ		Throat [originally a laryngeal consonant; used in vowel initial syllables as a place-holder for a null consonant].

in addition, when a consonant is aspirated, an additional stroke is added: ㅋ /k<sup>h</sup>/, ㅌ /t<sup>h</sup>/, ㅎ /h/, and tense consonants are written by duplicating their corresponding non-tense counterparts: ㄲ /kk/, ㄸ /tt/, ㅆ /ss/, ㅃ /pp/. A horizontal stroke mimics aspiration while reduplication signals ‘tenseness’.

The horizontal stroke was also used to create new letters from the basic letters presented above, transcribing stronger consonants (Kim-Renaud 1997: 164):

- ㄹ /n/ < ㄺ /t/ < ㅍ /t<sup>h</sup>/
- ㅂ /m/ < ㅃ /p/ < ㅍ /p<sup>h</sup>/
- ㄷ /s/ < ㅌ /ch/ < ㅊ /ch<sup>h</sup>/
- ㅇ /h/ < ㅎ /ʔ/ < ㅎ /h/

In Korean writing (*hangŭl*), the letters are grouped together vertically and horizontally to form syllable blocks. For example, the Korean name of the alphabet is written thus:

## 한글

한 = *han* (ㅎ + ㅏ + ㄴ); 글 = *kûl* (ㄱ + ㅡ + ㄹ)

This consists of two syllable blocks formed by arranging the correspondent letters in this way: vowel letters with a perpendicular main stroke have the consonant letter attached to the left side and vowel letters with a horizontal main stroke have the consonant letter on top (Coulmas 2003: 163); consonants in the syllabic coda are written at the bottom, under the vowel. The above example illustrates these three rules.

Concerning the influence of Chinese writing in the Korean writing system, Coulmas states:

“The idea of constructing a writing system on the basis of iconically representing articulatory traits and phonological alternations is entirely original, owing nothing to Chinese concepts of writing. Only in one respect did the designers of Hang’ûl honour the Chinese literary tradition, they decided to write in syllable blocks” (Coulmas 2003: 161).

### **Koryak**

Chukotko-Kamchatkan language spoken in the Koryak Okrug by approximately 1,000 speakers (Russia).

See NURSERY WORDS

### **Krio**

English-based creole language spoken as a *lingua franca* in Sierra Leone by approximately 4 million people.

See CREOLES, IDEOPHONE

### **Kriyôl**

Portuguese-based creole spoken in Senegal and Guinea-Bissau spoken by 600,000 people.

See CREOLES

**Kru**

Group of languages of the Atlantic-Congo family spoken in Ivory Coast, Liberia and Burkina Faso.

See *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

**Kunama**

Nilo-Saharan language spoken by the Kunama people of western Eritrea by about 200,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*

**Kurdish**

Iranian language spoken in Turkey, Iran, Syria, Armenia, Azerbaijan and Georgia by approximately 30 million people.

See *CUCKOO*

**Kuri**

Also known as Lezgian, Kuri is a Northeast Caucasian language spoken in Russia, Azerbaijan and Georgia by more than 600,000 people.

See *BUTTERFLY*

**Kuskokwim**

Nearly extinct Athabaskan language of Alaska.

See *NURSERY WORDS*

# L

## **Lámatyávë (pl. lámatyáver)**

A noun in Quenya that refers to phonaesthesia among the Elves. It means “sound-taste” and refers to the individual pleasure taken in the sounds and forms of words. Lámatyávë was practiced when Elves named their children (<http://tolkiengateway.net/wiki/Lámatyávë>).

See ICONICITY IN INVENTED LANGUAGES, *QUENYA*

## **Lamba**

Bantu language spoken in Zambia by approximately 200,000 people.

See AFRICAN LANGUAGES, BANTU IDEOPHONES, *BUTTERFLY*

***Language. Its nature, development and origin*** (Jespersen 1922).

Chapter XX (396-411) of this famous handbook is entirely devoted to sound symbolism. It is considered to have been the best overview of the field in its time. The first section of this chapter mentions the views of Plato, W. von Humboldt and K. Nyrop concerning sound symbolism. Section two mentions an instinctive feeling characterized by Jespersen as follows:

“There is no denying, however, that there are words which we feel instinctively to be adequate to express the ideas they stand for, and others the sounds of which are felt to be more or less incongruous with their signification” (398).

Jespersen proposes the following classification of echoic words\*: (1) Direct imitation of sound (§3), as with *bow-wow*, *clink*, *clank* (metallic sounds) etc... (2) Denotation of the originator of the imitated sound (§4), as in *cuckoo*\*. (3) Denotation of the movement that originates the mimicked sound (§5), as in *to tap* or *rap at the door*, *to flow*, *flag*, *flutter*, *flicker*... (4) Imitation of visual properties by means of sound (§6), as in the association between [i] and light (*glimmer*, *glitter*) and [u] and dark (*gloom*), Jespersen

mentions here the work of H. Hilmer (*Schallnachahmung, Wortschöpfung und Bedeutungswandel\**), (5) The sound imitation of states of mind (§7):

“If *grumble* comes to mean the expression of a mental state of dissatisfaction, the connexion between the sound of the word and its sense is even more direct, for the verb is imitative of the sound produced in such moods, cf. *mumble* and *grunt, grundle*” (401).

(6) Denotation of sound and distance (§8).

Jespersen points out that the vowel [i] is particularly appropriate to express what is small, weak, or insignificant (*Symbolic value of the vowel I\**). In addition, he also points out that the vowel [i] frequently indicates what is nearer, and other vowels, especially [a] or [u], what is farther off: French *ci, là*; English *here, there*; German *dies, das*; Low German *dit, dat*; Hungarian *ez* ‘this’, *az* ‘that’, *itt* ‘here’, *ott* ‘there’; Malay *iki* ‘this’, *ika* ‘that’.

The following section (§9) includes a discussion on the sound-symbolic import of the length and strength of words and sounds: shorter and more abrupt forms are more appropriate to certain states of mind and longer ones to others (403). For example, the short forms of the imperative are used for command and the longer forms for entreaty, as in the Hungarian *dolgozz* ‘work!’ vs. *dolgozzál*. Jespersen also mentions the lengthening of some words with stylistic effects, such as the Slang English *splendiferous, splendidous*, or the Danish *langsommelig, kedsommelig* ‘lengthy, tiresome’. Jespersen also refers to consonant gemination, as in the Arabic *Daraba* ‘to strike’ vs. *Darraba* ‘beat violently or repeatedly’.

In section §10, Jespersen states three main general conclusions: (1) No language exploits sound symbolism to its full extent: not all words containing the vowel [i] mean something small, as in English *big, thick*. (2) Historical development can distort the sound symbolic nature of words. For example, the name of the bird *crow* is now not as good an imitation of the sound made by the bird as was the Old English *crawe*. (3) Some words can become, over the course of time, more sound-symbolic than they were previously. Jespersen calls this *secondary echoism* or *symbolism*. For example, the verb *patter* comes from *pater* (= *paternoster*). At first this meant to repeat the prayer; it then acquired a sound symbolic character influenced by the homophonous verb *patter* and other verbs like *prattle, chatter, jabber*.

In the closing sections of the chapter, Jespersen criticizes the idea of sound symbolism as a surviving primitive feature of human language, concluding:



“So far from believing in a golden primitive age, in which everything in language was expressive and immediately intelligible on account of the significative value of each group of sounds, we arrive rather, here as in other domains, at the conception of a slow progressive development towards a greater number of easy and adequate expressions—expressions in which sound and sense are united in a marriage-union closer than was ever known to our remote ancestors” (411).

See *SCHALLNACHAHMUNG, WORTSCHÖPFUNG UND BEDEUTUNGSWANDEL*, SYMBOLIC VALUE OF THE VOWEL I

## Latin

Classical language belonging to the Italic branch of the Indo-European languages. It is the mother tongue of all Romance languages.

See *BABBLE, BUTTERFLY, CAESAR'S LAW, CROW, CUCUMBER, DIAGRAMMATIC ICONICITY, DICCIONARIO DE VOCES NATURALES, DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES, DOPPELUNG (REDUPLIKATION, GEMINATION), ECHOIC WORDS, ELEMENTARE WORTSCHÖPFUNG, ETYMOLOGY, EXPRESSIVENESS, FANGEN-FINGER-FÜNF, ICONIC INDEX, MIM/MON/MUM, NURSERY WORDS, PHONAESTHEME, VOCES VARIAE ANIMANTIUM, ONOMATOPÉES ET MOTS EXPRESSIFS, ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI, PHONAESTHEME, PIP, PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE, PUFF, QUEST FOR THE ESSENCE OF LANGUAGE, REDUPLICATION, SYMBOLIC VALUE OF THE VOWEL I, TRAITÉ DE LA FORMATION MÉCANIQUE DES LANGUES ET DES PRINCIPES PHYSIQUES DE L'ÉTYMOLOGIE, VOCES VARIAE ANIMANTIUM, VÖLKERPSYCHOLOGIE*

## Latvian

Baltic language spoken in Latvia by almost 2 million people.

See *BALTO-SLAVIC LANGUAGES, BIRD NAMES, CRACK, CROAK, ELEMENTARE WORTSCHÖPFUNG, SCHALLNACHAHMUNGEN UND SCHALLVERBA IN LITAUISCHEN, {-WR-} IDEOPHONIC ROOT*

***Laut, Ton und Sinn in Westafrikanischer Sudansprachen***  
[Sound, Tone and Sense in the Sudanic Languages of West Africa] (Westermann 1927).

This early pioneering work discusses sound symbolism in African languages. Westermann analyzed *Lautbilder*, picture-words, which involve associations between certain sounds and certain sense impressions. As an example, Westermann mentions the picture-word *de* suggesting 'slow, quiet': Ewe *dèdè* 'slow'; Mende *lèlè* 'slow'; Adele *dede* 'quiet'; Ibo *de* 'soft'; Gola *dèdè* 'slow, quiet'.

Verbs can also be picture-words, Ewe *blù* 'to stir, muddle, obscure', as well as nouns, as the names for 'duck' in different West African languages show: Ewe *dàbòdàbò*, *kpákpa*, Kru *dabedabe*, Guang *kpakpa*, Yoruba *kpékpéye*, Edo *kpekpe*, Boviri *kpokpo*.

Westermann also observed that some picture-words present syllabic metathesis: Ewe *lokho/kholo* 'raw, rough', *kedze/dzeke* 'shaggy', *nadri/drina* 'tough', *modzo/dzomo* 'protruding', *kaya/yaka* 'useless, pointless'.

These words exploit reduplication, tone pitch, vowel quantity and quality, and consonant sonority in order to suggest certain meanings.

As examples of reduplication in picture-words, Westermann mentions Bambara *piripara* 'worthless', *yikiyaka* 'to balance', *niminama* 'concern, worry', *sisisara* 'dawdle', *biribara* 'dispel', *figifaga* 'waver', *milikimalaka* 'to zigzag'. Concerning tone, Westermann found that a low tone suggests something big, large, as in Ewe *gbàgbàgbà* 'big' (also something bulky, blunt, loose, confused, dark, weak, ill, dumb, bad tasting or smelling) and that a high tone conveys something small, as in Ewe *túkútúkúí* 'small' (also something narrow, quiet, careful, quick, strong, fresh, exact, right, bright (color), sour, pleasant smell or taste). With respect to vowel quantity, Westermann observed that long vowels suggest something big and short vowels something small. In addition, dark (back) vowels suggest something massive, thick, plump, bloated, turbid, dark; while light (front) vowels convey something thin, long, extended, fine, bright.

Concerning consonants, Westermann observed that voiced consonants, such as [b], suggest something soft, rotten: Ewe *badabramba* 'muddy', *bihibihi* 'soft', *bolobolo* 'soft'. Voiceless consonants such as [k] and [kp] convey something hard, stiff, strong: Ewe *kako* 'fixed, thick', *kpaladza* 'stiff', *kpatsakla* 'hard', *kpoto* 'hard', *kputu* 'hard'.

Consonant [f] suggests something loose, thin, fragile, brittle: Ewe *flofloflo* ‘loose’, *fatrofatro* ‘thin’, *frama* ‘flat, narrow’, *fala* ‘slight’.

Westermann proposed, in the conclusion of his investigation, the following two series of associations:

High tone, short vowel, bright vowel, voiceless consonant  $\approx$  small, clear, bright, quick, pleasant (taste or smell), light, fresh.

Low tone, long vowel, dark vowel, voiced consonant  $\approx$  big, bulky, dark, slow, insipid, bad smell, faded, dull, blunt, confused.

Ten years later, Westermann (1937) published an additional paper of the same structure as this article, which contained many additional examples from the same West African languages.

## See AFRICAN LANGUAGES

### Letter-iconicity

The exploitation of the iconic aspects of the letters or graphemes of a writing system.

M. Nänny (1999) distinguishes three categories of letter-icons. *Transparent letter-icons*: these graphic icons are immediately recognizable, such as *O* for conveying roundedness. *Translucent letter-icons*: these seem conventional at first sight, but reveal their iconic basis when a similarity relation between meaning and form is pointed out. In *zigzag\**, there are two *Z*'s representing the typical change of direction conveyed by this ideophone. This letter-iconicity is unintentional, but once explained it is quite evident. As an additional example, Nänny (1999: 176) mentions the following typographical mistake attested in *The Sunday Times*: “For the rest of this year, in the hope that the prime minister is right and we are *worng*”. The wrong spelling of the word *wrong* mirrors its meaning.

*Subliminal letter-icons* (Nänny 1999: 176) constitute the third type. These icons are hardly perceivable to the reader and are in general unintended or even unsuspected by the author. One example of this type of iconicity can be seen in the painting by Magritte entitled “Le trahison des images”. It contains the painted sentence *ceci n'est pas une pipe* below the image of a pipe. In this sentence, there are three instances of the letter *p* (two of them in the word *pipe*). The shape of this letter can be interpreted as mimicking the image of the pipe.



FIGURE L1

[Nänny 1999; White 2013]

## Lexical Iconicity

A resemblance between the form of a lexical item and its meaning.

[Marttila 2011: 54-94]

## Lexical iconicity hierarchy

A universal hierarchy for lexical items proposed by K. Akita (2013). It is schematized as follows:

Animal mimicry > innovative > voice-phonomimic > noise-phonomimic > phenomimic > psychomimic > non-iconic.

The high end of the hierarchy is represented by lexical items that closely mimic animal cries. Innovative sound-symbolic words are nonce forms created for a particular purpose, such as *kaboom*. Voice-phonomimic words mimic sounds by means of the phonological systems of the corresponding language. The word *cuckoo*\* could be an example of this type. Noise-phonomimic words mimic a sound emitted by an inanimate object, such as *slam*. Phenomimic words, such as *zigzag*, are less iconic, since they visually mimic textural stimuli synaesthetically. Psychomimes\* are iconic words that represent bodily or emotional feelings in a more indirect and less physical way.

This hierarchy is shown by Akita (2013) to be lexically, morphologically, syntactically and semantically relevant.

From a cross-linguistic point of view, this hierarchy implies that if a language has psychomimes it will also have phenomimic and phonomimic

words. Furthermore, it implies that a language can have phenomimic words without using psychomimic words.

### **Lexical symbolism**

Iconic nature of certain lexical items. For example, the bird name *cuckoo* exemplifies lexical symbolism or *lexosymbolism* (Moreno Cabrera 2018).

See LOGOSYMBOLISM, PHONOSYMBOLISM, MORPHOSYMBOLISM

### **Lexosymbolism**

See LEXICAL SYMBOLISM

### **Lezgian**

Northeast Caucasian language spoken in Russian, Azerbaijan and Georgia by approximately 700,000 people.

See *CUCKOO*

### **Linear order principle**

The order of clauses in coherent discourse will tend to correspond to the temporal order of the occurrence of the events depicted:

Sequential order and topicality:

- (a) More important or urgent information tends to be placed first in the string;
- (b) Less accessible information tends to be placed first in the string.

The second principle could be subsumed under the first if we follow this reasoning: “Unpredictable, less accessible information, surprising information is likely to be more urgent than predictable, accessible information” (Givón 1990: 971).

### **Lithuanian**

Baltic language spoken in Lithuania by approximately 3 million people.

See *BABBLE*, BALTO-SLAVIC LANGUAGES, BIRD NAMES, *BUTTERFLY*, *CAKLE*, *CRACK*, *CROAK*, *CUCKOO*, *DICCIONARIO DE*

*VOCES NATURALES*, *IŠTIKTUKAI*, *SCHALLNACHAHMUNGEN UND SCHALLVERBA IN LITAUISCHEM* (LESKIEN 1902), *ELEMENTARE WORTSCHÖPFUNG*, *FANGEN-FINGER-FÜNF*, *ONOMATOPÉES ET MOTS EXPRESSIFS*, PHONOMIMETIC ROOT, *PIP*, *PRIMITIVE CULTURE*, {-WR-} IDEOPHONIC ROOT

## **Livonian**

An extinct Finnic language closely related to Estonian and formerly spoken in Latvia.

See *ELEMENTARE WORTSCHÖPFUNG*

## **Logosymbolism**

Iconic nature of syntax and discourse (Moreno Cabrera 2018). The Greek word *logos* means ‘word, speech, discourse’, among other readings.

See LEXICAL SYMBOLISM, LEXOSYMBOLISM, PHONOSYMBOLISM, MORPHOSYMBOLISM

## **Louisiannais**

French-based creole spoken in Louisiana (United States of America).

See *CREOLES*

## **Löyöp (Ureparapara)**

Malayo-Polynesian language spoken on the east coast of Ureparapara Island (Vanuatu) by approximately 200 people.

See *BUTTERFLY*

## **Lule**

Indigenous language of northern Argentina, possibly extinct.

See NURSERY WORDS

## **Luvale**

Bantu language spoken by the Lovale people of Angola and Zambia. It has more than 600,000 speakers.

See BANTU IDEOPHONES

# M

## **Maasai**

Eastern Nilotic language spoken by more than one million people in Kenya and Tanzania.

See *CROW*, NURSERY WORDS

## **Maba**

Nilo-Saharan language group spoken in Chad and Sudan by approximately 300,000 people.

See *CROW*, NURSERY WORDS

## **Madhi Madhi**

Extinct Australian language once spoken in New South Wales.

See ANTI-ICONIC SUFFIX ORDERING

## **Madurese**

Malayo-Polynesian language spoken by more than 6 million people on the islands of Madura, Sapudi and Java.

See *BUTTERFLY*

## **Maisin**

Language of the Oro Province (Papua New Guinea) spoken by 2,000 people. It has Austronesian and Papuan grammatical features.

See *BUTTERFLY*

## **Maku**

Unclassified extinct language of the Brazilian-Venezuelan border.

See *ELEMENTARE WORTSCHÖPFUNG*

## **Makua**

Bantu language spoken by more than 6 million people in Mozambique, Tanzania and Malawi.

See *CROW*

## **Malagasy**

Austronesian language of Madagascar. It has 18 million speakers.

See *CAKLE*, *DOPPELUNG (REDUPLIKATION, GEMINATION)*, *NURSERY WORDS*, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL'IDIOMI*, *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## **Malay**

Austronesian language spoken in Malaysia and Indonesia (as Indonesian) by approximately 80 million people.

See *BOW-WOW*, *BUTTERFLY*, *DIAGRAMMATIC ICONICITY*, *DOPPELUNG (REDUPLIKATION, GEMINATION)*, *ECHOIC WORDS*, *ICONICITY*, *NURSERY WORDS*, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL'IDIOMI*, *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## **Malayalam**

Dravidian language of Kerala (India) spoken by approximately 38 million people.

See *NURSERY WORDS*, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL'IDIOMI*



## **Manchu**

Tungusic language spoken by more than 10 million people in Manchuria (China).

See *CUCKOO*, *ELEMENTARE WORTSCHÖPFUNG*, *NURSERY WORDS*

## **Mande**

Group of languages spoken in West Africa by the Mande peoples.

See *VÖLKERPSYCHOLOGIE*

## **Mandingo**

Mande language spoken in Senegal, the Gambia and Guinea-Bissau by about one million people

See *BUTTERFLY*, *CREOLES*, *ELEMENTARE WORTSCHÖPFUNG*, *NURSERY WORDS*

## **Maori**

Polynesian language spoken by the Maori people of New Zealand. It has more than 160,000 speakers.

See *BUTTERFLY*, *FANGEN-FINGER-FÜNF. STUDIEN ÜBER ELEMENTAR-PARALLELE SPRACHSCHÖPFUNG*, *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## **Marathi**

Indo-Aryan language of Maharashtra State (India) spoken by 83 million people.

See *DOPPELUNG (REDUPLIKATION, GEMINATION)*

## **Marshallese**

Malayo-Polynesian language spoken on the Marshall Islands by approximately 50,000 people.

See *BUTTERFLY*

## Martiniquais

French-based creole of the French Antilles (also known as Antillean creole) and spoken by more than one million people.

See *CREOLES*

## Mass-nouns

Wierzbicka (1985) observed that “the grammar of mass-nouns reflects iconically the way in which different classes of things and ‘stuffs’ are conceptualized. [...] The system of formal distinctions and the systems of conceptual distinctions are mutually isomorphic. The fact that *oats* patterns grammatically just like *hundreds-and-thousands* does signal that the two are conceptualized in the same way; the fact that *scissors* shares some, but not all, of the grammatical properties of *oats* signals a partial overlap in conceptualization” (Wierzbicka 1985: 334-335).

Wierzbicka (1985: 313-314) proposes the following general iconic principle: “other things being equal, stuffs consisting of bigger, more conspicuous individual entities are more likely to be viewed as ‘multiplicities’ and designated by plural nouns than stuffs consisting of smaller, less conspicuous entities” (Wierzbicka 1985: 313-314).

For example, *rice* vs. *peas* or *flour* vs. *noodles*. But size is not the only relevant factor. Differences in eating habits can also be decisive in this respect: *pumpkin* is singular and *carrots* is plural as names of a foodstuff, because one can see several carrots, (as well as several Brussels sprouts, several noodles or several beans) on one’s plate, but not several pumpkins (or several cabbages).

Wierzbicka (1985: 337-341) proposes the following 14 class-meanings that are iconically expressed in the morphosyntactic behaviour of the corresponding mass and countable nouns: I. Countables only—names of non-divisible individual objects (*bottle, chair, books* etc.); II. Singularia only—names of homogeneous substances (*butter, wine, water* etc.); III. Countables mostly—names of divisible (edible) individual objects (*apples, egg* etc.); IV. Nouns with a double status—names of solid substances which can occur in the form of individual objects (*chocolate, cake* etc.); V. Singularia mostly—names of large collections of small things, normally thought of as too many to count (*hair, clover* etc.); VI. Pluralia only—names of substances composed of particles not too many for anyone to be able to

count, but too many for anyone to want to count (*oats, curds, coffee grounds* etc.); VII. Pluralia mostly—names of small collections of small things, possible to count but normally not counted (*noodles, peas* etc.); VIII. Singularia only—names of substances with a minimal unit (*rice, sand* etc.); IX. Pluralia only—names of places, stretched out but without clear internal boundaries (*plains, steppes, woodlands* etc.); X. Pluralia only—names of multiple objects fixed in place (*stairs, catacombs, bleachers, bowels* etc.); XI. Pluralia only occurring in the frame ‘a pair of X’—names of dual objects (*scissors, goggles* etc.); XII. Singularia only—names of heterogeneous classes of objects (*furniture, cutlery*, etc.); XIII. Pluralia only—names of heterogeneous groups of objects and/or ‘stuffs’ (*leftovers, groceries* etc.); XIV. Pseudo-countables—names of heterogeneous classes of substances and choppable things (*vegetables, narcotics, cosmetics* etc.).

### **Matrix and Etymon Theory [Théorie des Matrices et Étymons (TME)]**

This theory was proposed and developed by G. Bohas (Bohas 1997, 2000, 2002, 2016; Bohas and Dat 2007) and was originally based on an iconic analysis of Semitic roots.

TME distinguishes three key concepts (Bohas 2016: 40):

- Matrix ( $\mu$ ): a non-linear combination of a pair of phonemic features linked to a generic notion. Example: Arabic {[labial], [-sonorant] [pharyngeal]}; generic notion: ‘tightening, narrowing, constriction’ (Bohas and Dat 2007: 117).
- Etymon ( $\epsilon$ ): a non-linear combination of phonemes having the phonemic features of a matrix and developing its generic notion. Example: Arabic {b,s} is an etymon of the preceding matrix (Bohas and Dat 2007: 117).
- Radical (R): a consonantly extended etymon comprising at least one vowel, listed in the lexicon and elaborating on the notional invariant linked to the corresponding matrix/etymon. Example: Arabic *Sabara* ‘to link, bind, attach’, *aSaba* ‘to link, tighten’ (Bohas and Dat 2007: 117).

In order to illustrate this theory, Boas (2016: 41-49) proposes the following classification of sound-symbolic uses of the *sm*- English onset:

- (1) To strike violently: *smash* ‘to break in pieces violently’, *smite* ‘to administer a blow with the hand’, *smatter* ‘to break into small pieces’.
- (2)

Actions and processes involving the functions of the nasal organ: *smell, smoke, smod* ‘to suffocate’, *smother* ‘to suffocate’, *smoor* ‘to smother, suffocate’. (3) Actions carried out by the labial zone: *smack, smile, smirk*.

Bohas distinguishes three different matrices corresponding to each one of the three uses of the analysed phonaestheme\*:

Matrix A: {[labial], [coronal]}. Notional invariant: to strike. Examples: *smash, smite, matter*; Matrix B: {[+nasal], [+continuant]}. Notional invariant: nasality. Examples: *smell, smoke, smod, smother, smoor*; Matrix C: {[labial, [+continuant]}. Notional invariant: labiality. Examples: *smack, smile, smirk*.

Bohas proposes that the phonemic feature [dorsal] (articulated with the convex upper surface of the tongue) is phono-symbolically linked to the curved line in Arabic, as well as in other non-related languages.

The matrix {[labial], [dorsal]} is iconically associated with curvature and roundness in Arabic due to the curved position of the tongue when articulating dorsal phonemes. The following are some examples from Arabic: A. Entities having a convex shape: *ku’bun* ‘breast’, *kafalun* ‘buttocks’, *qiHfun* ‘skull’, *baTnun* ‘belly’, *hijafun* ‘having a big belly’, *Dabbun* ‘obesity’, *afqamu* ‘curved’, *aTafa* ‘to curve, arch’. B. Entities having a concave shape: *jubbun* ‘well, tank’, *jawfun* ‘hollow’, *kafana* ‘to bury’, *Safrun* ‘empty glass’, *ibTun* ‘armpit’, *kahfun* ‘cave’. C. A combination of convex and concave shapes, roundness: *jabâjibun* ‘drum’, *kanifun* ‘shield’, *falakun* ‘globe, sphere’, *bayDatun* ‘egg’, *Tâfa* ‘to rotate, spin’.

Bohas (2016: 73-100) gives examples of this matrix from other languages (in these cases, the author does not use bold letters to signal the relevant consonants).

Turkish: A. Convex shape: *koyun* ‘breast’, *kulak* ‘ear’, *gebe* ‘pregnant’, *kabarmak* ‘inflate’, *tak* ‘arch’, *kaplamak* ‘cover’. B. Concave shape: *delik* ‘hole’, *kazmak* ‘to dig’, *kuyu* ‘well’, *kova* ‘bucket’, *tekne* ‘tank’, *kof* ‘hollow, empty’. Rounded shape: *göz* ‘eye’, *toka* ‘loop, buckle’, *kavun* ‘melon’, *kartopu* ‘snowball’, *gülle* ‘cannonball’, *gezi* ‘circuit’.

Fulani: A. Convex shape: *kinal* ‘nose’, *kunkuuru* ‘back, spine’, *memeki* ‘eyebrow’, *teege* ‘belly’, *tekka* ‘to be thick’, *tekkeendi* ‘thickness’, *gelooba* ‘camel’, *kalawal* ‘arch’, *kunkuruwa* ‘turtle’, *kunndulal* ‘nipple’; to place a lid, cover: *kippu* ‘roof’, *koufounere* ‘hat’, *gam-buguru* ‘box’. B. Concave

shape: *gayka* 'hole', *jogorgal* 'cove', *kunki* 'boat', *kaakol* 'deep dish', *rannga* 'uterus'. C. Rounded shape: *tekkare* 'wheel', *nokkere* 'handle', *kurunwol* 'circle', *kurunde* 'ring'.

Songhay: A. Convex shape: *gongon* 'to be curved', *gungum* 'to curve', *gornu* 'bow legs'. B. Concave shape: *botigo* 'bucket', *gaasi* 'calabash', *kolli* 'funnel', *kulba* 'bottle', *bongo* 'head', *kana* 'melon', *kaney* 'watermelon', *kunkuni* 'hedgehog', *gungurey* 'to roll', *kankankuli* 'snail'.

French A. Convex shape: *crâne* 'skull', *clitoris*, *cul* 'ass', *groin* 'snout', *gros* 'large', *graisse* 'fat', *colline* 'hill', *cône* 'cone', *coupole* 'dome', *capuche* 'hood', *casque* 'helmet', *coiffe* 'cap'. B. Concave shape: *cave* 'cellar', *creux* 'hollow', *golfe* 'gulf', *cabas* 'bag', *concave* 'concave', *corbeille* 'basket', *cuvette* 'toilet', *sac* 'bag'. C. Rounded shape: *gorge* 'throat', *calcul* '(biliary) stone', *boucle* 'loop, buckle', *globe* 'globe', *grenade* 'grenade', *couronne* 'crown', *circuit* 'circuit'.

## Maxakali

Macro-Ge language spoken by 1,000 people in Minas Gerais (Brazil).

See BIRD NAMES, *NURSERY WORDS*

## Mayan Sound Symbolism

The following data on sound symbolism in Mayan languages are taken from M. E. Durbin (1973). This author, argues in favour of an explanation of sound symbolism in Modern Yucatec Maya based on phonological features, rather than phonemes.

One of these features is palatality. Durbin observes (1973: 35) that in Modern Yucatec Mayan, on the one hand palatality implies a lack of specification of the physical properties of sense stimuli, or the relative plasticity of the physical properties of sense stimuli, or concepts which present no observable physical properties. On the other hand, non-palatality implies a concentration on the (knowledge of) observable physical properties of sense stimuli. The following is a selection of examples of Yucatec illustrating this feature opposition (Durbin lists more than 50):

## NON-PALATAL

*bis* ‘to make a hole (by insect or worm)’

*'us* ‘to blow’

*he'es* ‘to rest’

*ha'as* ‘banana’

*kus* ‘golondrina (bird)’

*k'as* ‘to spoil, to ruin’

*tos* ‘to sprinkle’

*mas* ‘to be barely visible at a distance’

*táas* ‘to line up, to extend’

*náaz'* ‘to approach’

*nuz* ‘to close an opening’

## PALATAL

*bix* ‘mature and ready to sprout’

*'ux* ‘to pick fruits or vegetables’

*he'ex* ‘to make elastic’

*ha'ax* ‘to roll something with the hands’

*kux* ‘to live, life’

*k'ax* ‘to tie’

*tox* ‘to toss’

*max* ‘to mash’

*táax* ‘to make smooth, slick, plain’

*náac'* ‘to congeal, freeze’

*nuc* ‘to neck, to unite, to bring together’

This opposition is only operative in the coda position.

In addition, Durbin observed the following sound-meaning correlations of final consonants in Yucatec Maya: velarity is associated with rounding, curving; alveolarity is associated with directionality, rectilinearity, narrowness, and directional cracks or breaks; glottalization suggests completion, finishing a cycle, arriving at a conclusion, taking a definite action, liveness, or quickness; labiality conveys long, narrow, round objects; high tone is associated with qualities. In the initial position, alveolarity is associated with long, narrow objects and labiality is associated with long, narrow, round objects.

Some consonant combinations are iconically linked to specific semantic areas (V = vowel):

- [bVt'] ≈ opening by cutting, slitting long objects: *báat* ‘axe’;
- [bVs/x] ≈ mashing or pounding, grinding, vibration or movement of long objects: *bax* ‘to hammer’, *bis* ‘to make a hole’;

- [bVvk] ≈ long, narrow, objects: *béek* ‘oak tree’, *búuk* ‘clothing’;
- [bVvkʼ] ≈ processes completing the rounding or elongation of objects: *bok* ‘to stir or beat food or liquids’, *bik* ‘to go far away’;
- [sVt] ≈ slitting, cracking, breaking, long, narrow objects: *siiit* ‘a cane plant used for flutes’, *sut* ‘to whirl, to make a thing go round’.

See AMERICAN INDIAN LANGUAGES, BIRD NAMES, *CACKLE*

## Mbay

Nilo-Saharan language spoken in Chad and the Central African Republic by approximately 90,000 people.

See *CACKLE*

## Mbundu

Bantu language (with northern and southern variants) spoken in Angola by approximately 10 million people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Mende

Mande language spoken in Sierra Leone and Liberia by 1.5 million people.

See BIRD NAMES, *CACKLE*, CREOLES, *ELEMENTARE WORTSCHÖPFUNG*, *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*

## Melariپی

A dialect of the Toaripi language, a Trans-New Guinea language spoken in the Gulf Province of Papua New Guinea. Toaripi has more than 20,000 speakers.

See *BUTTERFLY*

## Merelava

Oceanic language spoken on the Mere Lava Island of northern Vanuatu by about 600 people.

See *BUTTERFLY*

## Meta-iconic markedness principle

“Categories that are structurally more marked are also substantively more marked” (Givón 1990: 965).

This principle is a reflection of the traditional belief in some idealized one-to-one correlation between form (the code) and meaning (what is coded). This belief is expressed by D. Bolinger thus:

“The natural condition of language is to preserve one form for one meaning, and one meaning for one form” (Bolinger 1977, x).

## Meta-iconic principle of universality

“The more concrete and cognitively transparent a coding principle is, the more it is likely to be universally manifest in the grammars of all languages” (Givón 1989: 121).

## Miao

See *WHITE HMONG*

## Micmac

Eastern Algonkian language spoken in Canada and the United States by approximately 160,000 people.

See *BUTTERFLY*

## *MIM/MOM/MUM*

This mimetic root was associated with mumbling and babbling by García de Diego (1968: 502-505). This author mentions Sanskrit *minminah* ‘speaking through the nose’, *mimayat* ‘to bleat’, *mimami* ‘to ring out’ and Old Slavic *mimak* ‘to stutter’. In Greek, *mimos* is an actor, a comedian or writer of spoken mimes (Beekes 2010: 954); the etymology of this Greek word is not known and it may be a loan from another unknown language. It was borrowed into Latin as *mimus*. A sound symbolic origin for this word is therefore possible. The form *mum* of this mimetic root appears in English *mum*, and with an additional liquid consonant in Dutch *mummelen* ‘mumble’ and English *mumble*; English *mump* and Dutch *mompelen* ‘mumble, mutter’ seem also to belong to this mimetic root.



English *mime*, *mimic* refer to gestural imitation. The sense of imitation could be derived from the original meaning of the mimetic root proposed by García de Diego if we have in mind the jocular imitation by a mime of human talk through mumbling or babbling.

See *PRIMITIVE CULTURE*

## Mimetic

Ideophone (Usuki and Akita 2015).

## Mimic nouns

Expression used by Wanger (1927) to refer to ideophones\* in Zulu.

## Mimicking

A grammatical process by which a grammatical structure is inserted in its typical form into another without integrating it into its immediate context. It is a superficial process in which a structure represents itself directly without adapting grammatically to its syntactic context. For example, in the plant name *forget-me-not*, a verb phrase is lexicalised without compromising its phrasal characteristics: a syntactic structure behaves like a morphological unit. This plant name is therefore a mimicked structure: a verbal phrase mimics the behaviour of a noun (Conradie 2013).

## Mimography [*Mimographie*]

Iconic aspects of graphemes. There are two types: ideomimography\* and phonomimography\* (Genette 1976: 77, 1995: 53).

***Mimologiques. Voyage en Cratylie*** [Mimologies. Voyage in Cratylusland] (G. Genette 1976).

This book gives the first comprehensive history of sound symbolic research. It begins by examining Plato's *Cratylus*\* and discusses proposals and analyses by Nigidius Figulus, Saint Augustin, J. Wallis\*, G. W. Leibniz\*, F. M. van Helmont, Rowland Jones, Ch. de Brosse\*, An. Court de Gébelin, Ch. Nodier\*, E. B. de Condillac, N. Beauzée, J.-P. Brisset, E. Renan, S. Mallarmé, P. Valéry, R. Jakobson\*, M. Proust, and P. Claudel, among many others. There is an excellent English translation by Thaïs E. Morgan (Genette 1995).

## Mingrelian

Kartvelian language spoken in Georgia by about 340,000 people.

See *BUTTERFLY*

## Mirror Principle

This principle, proposed by M. Baker (1985), accounts for the isomorphic aspects of the relation between the morphological and syntactic components of a natural language. Baker states the principle as follows: “Morphological derivations must directly reflect syntactic derivations (and vice versa)” (Baker 1985: 375). This is a case of internal diagrammatic iconicity: a property of the syntactic component is expressed iconically by a property of the morphological component: the latter mimics the former.

The following exemplification of the Mirror Principle is given in Baker (1987: 14). In the Chichewa sentence *Mbidzi zinaperek-er-a mtsikana mpiringidzo* ‘the zebras (*mbidzi*) handed (*zinaperekera*) the girl (*mtsikana*) the crowbar (*mpiringidzo*)’, the verbal affix *-er-* is an applicative morpheme indicating that the indirect object (*mtsikana*) has been promoted to the position of direct object. This sentence can be passivized to obtain *mtsikana anapereke-er-edw-a mpiringidzo ndi mbidzi* ‘the girl was handed the crowbar by the zebras’. An *-edw-* affix indicates that the passive has been added, so we obtain the *anapereke-er-edw-a* verbal form. If the order of the affixes is reversed (*anaperek-edw-er-a*), the sentence becomes ungrammatical. The order of the affixes (applicative + passive) is an iconic reflection of the order in which the two syntactic operations have taken place: first, the promotion of the indirect object (*mtsikana*) to direct object and then passivization, that is, the promotion of the direct object (*mtsikana*) to subject in the passive sentence. These two syntactic operations are strictly ordered and this ordering is preserved in the corresponding affixes in the verbal morphology.

See POLYSYNTHESIS PARAMETER

## Miwok

Group of Yok-Utian languages spoken in California (Sierra Nevada). The languages of this group are extinct or nearly extinct.

See BIRD NAMES

**Mlabri**

Austroasiatic language spoken in Thailand and Laos by approximately 100 people.

See *PUFF*

**Mokilese**

Malayo-Polynesian language spoken in Micronesia (United States) by approximately 1,500 people.

See REDUPLICATION

**Mokilko**

East Chadic language spoken by more than 10,000 people in central Chad.

See *CAKLE*

**Mongolian**

Mongolic language of Mongolia and China spoken by more than 5 million people.

See *VÖLKERPSYCHOLOGIE*, {-WR-} IDEOPHONIC ROOT

**Monjombo**

Adamawa-Ubangi language spoken in the Central African Republic and the Democratic Republic of the Congo by approximately 6,000 people.

See *BUTTERFLY, ELEMENTARE WORTSCHÖPFUNG*

**Monumbo**

Papuan language of Papua New Guinea spoken in Madang Province by less than 500 people.

See *BUTTERFLY*

**Mordvin**

Language group (comprising Erzya and Moksha) of the Uralic family spoken in southwestern and southeastern Russia by approximately 40,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*, NURSERY WORDS

**Morphological iconicity**

See MORPHOSYMBOLISM

**Morphosymbolism**

Iconic aspects of morphology (Malkiel 1990; Moreno Cabrera 2018).

[Malkiel 1990; Dressler, W. (ed.) 1987; Mayerthaler, W. 1981]

See LEXICAL SYMBOLISM, LOGOSYMBOLISM, PHONOSYMBOLISM

**Moseten**

An indigenous language of Bolivia spoken by approximately 500 people.

See *BUTTERFLY*

**Motu**

Malayo-Polynesian language spoken in Central Province, Papua New Guinea, by approximately 40,000 people.

See *BUTTERFLY*, *ELEMENTARE WORTSCHÖPFUNG*

**Mpongwe [Myene]**

Dialect of the Myene language, a Bantu language of Gabon spoken by the Mpongwe people. It has approximately 45,000 speakers.

See *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## Muinane

Indigenous American language spoken by approximately 100 people in Colombia along the upper Cahuinari River (Department of Amazonas).

See *BIRD NAMES*

## Multimodal iconicity

L. Elleström (2013) maintains that “iconicity must be analysed not only in terms of different sensory qualities of *representamen* and object, but also in terms of different spatiotemporal traits” (Elleström 2013: 108). This is easily seen in multimodal iconicity including: “a) images based on visual and two dimensional spatial representations that iconically represent visual and spatial three-dimensional objects (a photograph, representing a sculpture); b) diagrams based on auditory and temporal representamens that iconically represent visual and spatiotemporal objects (for example, a sequence of descending tones representing a falling body); c) diagrams based on cognitive and spatiotemporal representamens that iconically represent cognitive and spatiotemporal objects (for instance, the notion of a person travelling home representing the notion of mankind resolving a major problem); d) metaphors based on visual and spatial representamens that iconically represent cognitive and temporal objects (for instance, a circle representing eternity)” (Elleström 2013: 109).

The letter O as a visual iconic interpretation of the sun discussed under ideomimography\* is interpreted by Elleström (2013: 107) as follows. The resemblance between the letter and the sun is indirect and requires a cultural context to be interpreted; in addition, the link of similarity between the letter and the object is weak and the connection between the two implies a highly sophisticated interpretation. What we have in this case is a visual metaphor based not just on sensory qualities, but also on a complex conceptual elaboration.

See IDEOMIMOGRAPHY

## Mundang Ideophones

Mundang is an African language of the Adamawa-Ubangi branch of the Niger-Congo Family. It is spoken in the border area of Cameroon and Chad by approximately 250,000 people. The following data from this language are taken from Elders’ (2001) study on Mundang ideophones.

The majority of Mundang ideophones are adverbs and many of them present partial or total reduplication: *súúsààk* ‘drive a bicycle slowly’, *bàbíyò* ‘shake the body to dry oneself’, *géréré* ‘walk in a crooked way’, *ηηη* ‘sound of a bee, humming’, *’yá’yá* ‘walk without making a noise’, *hìhòò hìhòò* ‘sound of a donkey, braying’, *lákáy lákáy* ‘walk unsteadily’, *pláp pláp pláp* ‘sound of sandals’.

Some ideophones are derived from verbs. For example, *kém kém* ‘in a begging way’ is derived from *kém* ‘beg’. Both the verb and the deverbal ideophone can appear in the same sentence: *mè kém-ko kém* ‘I have begged him’. Other examples: *twàs* ‘throwing sand’ > *twàs twàs* ‘throwing sand’, *vík* ‘shake’ > *vík vík vík* ‘sound of broom being waved in the air’.

Additionally, in Mundang there are also ideophonic verbs and nouns: they behave as regular verbs and nouns, but have a clear sound symbolic nature. The following words are ideophonic verbs: *gàl* ‘cackle’, *hèl* ‘cough’, *yí yí* ‘cry, lament’, *yì yíirI* ‘snore’, *lwàb* ‘flog’, *gèvà* ‘lean forward, wither’, *vIdyàk* ‘wave to someone’. The following are ideophonic nouns: *bèbèdáà* ‘frog species’, *bèrèmtèl* ‘mason wasp’, *bèrbér* ‘horsefly’, *sársèliè* ‘slowworm’, *kpáà* ‘anger, unrest, thunder’, *kl’* ‘vomit’, *làmlàmà* ‘bald eagle’, *mèmámí* ‘wave’, *gìnggìng* ‘fish species with a hard skull and stinging fins’.

## Mwera

Bantu language of the Mwera People of Tanzania. It has approximately 470,000 speakers.

See AFRICAN LANGUAGES, BANTU IDEOPHONES

# N

## Na'vi

Constructed language of the Na'vi people used in the Avatar film and games.

See **ICONICITY IN INVENTED LANGUAGES**

## Nahuatl

Uto-Aztec language spoken in central Mexico by 1.7 million people.

See *BUTTERFLY, DOPPELUNG (REDUPLIKATION, GEMINATION), NURSERY WORDS, ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI*

## Naive iconism

“The naive iconist [...] assumes that substantive markedness—distributional, cognitive—*always* goes along with structural markedness. But the facts turn out to always be more complex. [...] [A]s noted above the various aspects of markedness—structural complexity, frequency distribution and substantive markedness—must be examined independent of each other, in order for their ‘correlation’ to be real rather than circular. Their correlations must then be noted as a matter of empirical fact rather than ideological faith” (Givón 1995: 59).

“[...] [T]he ideal iconicity (‘fidelity’) between the linguistic code and its *designatum* is subject to corrosive diachronic pressures from both ends of the diachronic cycle of grammaticalization. First, the code is constantly eroded by phonological attrition. And second, the message is constantly modified by creative elaboration. Thus, the general tendency toward iconicity is undeniable, but it is not an absolute tendency; it is strongly mitigated by diachronic change” (Givón 1995: 59).

See **META-ICONIC MARKEDNESS PRINCIPLE, SECONDARY CRATYLISM**

## **Namau [Purari]**

Papuan language of New Guinea spoken by approximately 7,000 people along the Purari River (Gulf Province).

See *BUTTERFLY*

## **Nambikuara**

Indigenous language of Brazil spoken in Mato Grosso by about 700 people.

See BIRD NAMES

## **Nasioi**

East Papuan language spoken in the Kieta District, Bougainville Province, Papua New Guinea by 20,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*

## **Natural Iconicity**

This expression refers to the iconic aspects of natural, spontaneous language, as opposed to the intentional exploitation and elaboration of these aspects in cultivated language, notably in literary language (Moreno and Mendívil-Giró 2014: 87-100).

See CULTIVATED ICONICITY

## **Navaho**

Southern Athabascan Language spoken by 170,000 people in Arizona, New Mexico, Utah and Colorado (USA).

See BIRD NAMES, *CAKLE*, *ELEMENTARE WORTSCHÖPFUNG*, NURSERY WORDS

## **Ndyuka**

English based creole of Surinam spoken by approximately 30,000 people.

See CREOLES



## **Negerhollands**

A Dutch-based creole once spoken in the Danish West Indies (US Virgin Islands).

See CREOLES

## **Nepali**

Indo-Aryan language spoken in Nepal by approximately 20 million people.

See BIRD NAMES, *CUCKOO*

## **Nez Perce**

Nearly extinct Sahaptian (Plateau Penutian) language spoken in Idaho (USA).

See BIRD NAMES, SIZE-SOUND SYMBOLISM

## **Ngiti (Nilo-Saharan)**

Nilo-Saharan language spoken in Ituri Province of the Democratic Republic of the Congo by approximately 100,000 people.

See *CROW*

## **Ngombe**

Bantu language spoken by about 150,000 people in the Democratic Republic of the Congo.

See *BANTU IDEOPHONES*

## **Nhanda**

Australian language from the Midwest region of Western Australia and spoken by only a handful of people.

See *PRIMITIVE CULTURE*.

## Nicobarese

Austroasiatic language spoken by the majority of the population (about 30,000 people) of the Nicobar Islands (India).

See *CAKLE*, *ELEMENTARE WORTSCHÖPFUNG*

## Nigerian Pidgin Ideophones

Nigerian Pidgin is an Atlantic Creole. It is spoken as a *lingua franca* in Nigeria. C. I. Ofulue (2012) offers an overview of ideophones in this language. All the following data are taken from this paper.

In this language, ideophonic creation is a productive process. Repetition is common in ideophones: *chùkùchùkù* ‘thorny’, *jábùrátá* ‘plenty’, *kàtàkátá* ‘disorganised’, *kòrókòró* ‘eyeball to eyeball’. In addition, ideophones show consonant and vowel clusters that are not permitted in non-ideophonic words: *àwíf* ‘free item’, *ígbàm* ‘sound of a heavy item falling’, *kpàmgbá* ‘excellent, in perfect condition’, *kámkpé* ‘real good’, *jàgbàjàgbá* ‘disorderly’, *gbàmgbàm* ‘sound of a heavy beat e.g. heart beat’. The phonemes /gb/, /kp/, and /z/ are almost entirely restricted in their use to ideophones. In addition, voiced plosives are usually associated with the sound of falling and the impact of a hard or heavy object on a hard surface, as well as the sound of musical instruments such as drums and guitars: *jìgìjìgì gbàmgbàm* ‘very fast heart beat’, *dìgbem* ‘fall of hard object on a hard surface’, *zàwà’y* ‘sound of a hard slap’, *gìdìgìdì/gìdìgbà gìdìgbà* ‘sound of people running up and down, sound of drums and guitar’, *ígbàm* ‘sound of heavy metal object crashing onto a hard surface’. The voiceless consonant /f/ occurs in ideophones depicting light, swift, and blowing sounds: *fia/fiam* ‘sound of light swift movement’, *fu fu* ‘sound of blowing of air’. The approximant /j/ occurs in ideophones that suggest spreading out sounds: *yàkàta* ‘sprawling fall’, *yaa* ‘spread out’. The voiceless plosive /k/ is found in ideophones mimicking hard, sharp, cracking or breaking sounds: *kákaraka* ‘unbreakably strong’, *kpékere* ‘plantain chips’, *chùkùchùkù* ‘thorny’. The voiceless alveolar /s/ and palato-alveolar /ʃ/ consonants are found in ideophones that depict a smooth, gliding movement: *sélénsé* ‘smooth and flowing’, *shélénké* ‘expert in a skill’.

Nigerian Pidgin Creole has adjectival ideophones: *Yu bi yeye man* ‘you are a foolish man’, *Si in jàgajàga moto* ‘look at this/her ragged car’; adverbial ideophones: *Dem finish di fud fià* ‘they finished the food very fast/quickly’, *I de spre moni yàa* ‘he is spraying money about with great abandon’.

## Nominalization

In nominalization, a noun denoting an entity is derived from a verb denoting an event-type. From a semantic point of view, an event-type is seen as an individual or entity that can play a semantic role in another event-type. This semantic conversion is iconically expressed in different languages by transforming a verbal form into a nominal form. In Basque, a verbal noun *ikuste-* ‘seeing’ can be derived from the verb *ikusi* ‘to see’; as a regular noun, it can be inflected for case, as in: *Zu hemen ikuste-a-k harritzen nau* ‘seeing (*ikuste-a-k*) you (*zu*) here (*hemen*) surprises me (*harritzen nau*)’. In this sentence, the nominalized verbal form denoting the act of seeing (*ikuste-a-k*) is inflected for the ergative case (*-k*), since it is conceived as the entity causing a particular reaction, and is provided with the definite suffix (*-a*), corresponding to the English definite article *the*.

[Koptjevsakja-Tamm, M. 1993]

## Nootka

Wakashan language spoken in the Pacific Northwest of North America by about 7,000 people.

See AMERICAN INDIAN LANGUAGES, *DOPPELUNG (REDUPLIKATION, GEMINATION)*

## Norwegian

North Germanic Language spoken in Norway by about 5 million people.

See *CACKLE, DICCIONARIO DE VOCES NATURALES*, BIRD NAMES, *CROAK, CUCKOO, FANGEN-FINGER-FÜNF*, GERMANIC LANGUAGES, *GRUNT, SYMBOLIC VALUE OF THE VOWEL I*

## *Notes on Expressive Meanings (G. Diffloth 1972)*

This important and influential paper extends the study of ideophones, originally noticed in African languages, to other parts of the world, notably to Asian languages. In this sense, it can be considered a ground-breaking study. Diffloth discusses Korean, Semai and Bahnar ideophones and points out the problems they pose for current linguistic theory. Some of these problems (related to the generative theory of the 1970s) are characterized in the following passage, which remains relevant even for today’s linguistic theory:

“The difficulty of ideophones in that framework [generative grammar] is not simply that it would require a semantic component reaching directly into the late rules of the phonological component; the problem is that sound symbolism implies an identity between elements of meaning and elements of sound, identity which the device of *rewrite rule* necessarily destroys. This fact about ideophones could be incorporated in generative theory by postulating that language has, in addition to the cognitive mode of meaning—which has been the sole subject of study so far—an expressive mode of meaning, and formally represented by some device other than a rewrite rule” (444-445).

The author continues this paragraph with a useful general characterization of the nature of ideophones:

“Postulating this could also explain various other oddities about ideophones; for instance, ideophones belong to the spoken styles of language and are practically never used in the impersonal, informational style which typifies written statements. It could also explain why ideophones have unusual properties in negative sentences and do not have true opposites as most adverbs have. The apparent syntactic redundancy of ideophones also begins to make sense: we have here a translation pattern from the expressive meaning of the ideophone to the cognitive meaning of the rest of the sentence. It could also explain the paraphrase difficulties and resorts to mimicry noted at the beginning of this paper” (445).

The concluding paragraph of the paper offers a challenging research program, one that has been undertaken by many scholars across the world since then:

“It is also tempting to look for wider extensions of the concept, for instance in the realm of morphology and syntax; global constraints in syntax could be examined for possible expressive, symbolic properties; even lexicalization, the fact that certain logical configurations and not others are expressed with a single morpheme is not necessarily accidental, but perhaps, in some way, symbolic. Let the spirit of Whorf and a hundred others bloom” (445).

See EXPRESSIVE, IDEOPHONE

### ***Nouveaux essais sur l'entendement humain* [New Essays on Human Understanding] (G. W. Leibniz 1765)**

This work is a detailed and systematic criticism of John Locke's *An Essay Concerning Human Understanding* (1690). The third book of this volume is devoted to the study of words and comprises a philosophical explanation

of sound symbolism in natural languages. The following paragraphs are taken from the translation by Alfred Gideon Langley published in London in 1896.

Leibniz (as Theophilus in the book) interprets the semantic value of the consonant [r] as follows:

“For it seems that the ancient Germans, Kelts, and other peoples allied to them have employed by a natural instinct the letter R to signify a violent movement and a noise like that of this letter. It appears in *réo*, *fluo*, *rinnen*, *rüren* (*fluere*), *rutir* (*fluxion*), the *Rhine*, *Rhone*, *Roer* (*Rhenus*, *Rhodanus*, *Eridanus*, *Rura*) *rauben* (*rapere*, *ravir*), *Radt* (*rota*), *radere* (*raser*), *rauschen* a word difficult to translate into French; it signifies a noise like that which the wind or a passing animal stirs up in the leaves or trees, or is made by a trailing dress; *reckken* (to stretch with violence)” (299).

The lateral consonant [l] is also interpreted from an imitative point of view:

“Now as the letter R signifies naturally a violent movement, the letter L designates a gentler one. [...] This gentle movement appears in *leben* (*vivre*—live), *laben* (*conforter*—comfort, *fair vivre*—make live), *lind*, *lenis*, *lentus* (*lent*—slow), *lieben* (*aimer*—love), *lauffen* (*glisser promptement comme l'eau qui coule*—to glide quickly like flowing water), *labi* (*glisser*—to touch lightly, *labitur uncta vadis abies*), *legen* (*mettre doucement*—to place gently)” (300).

In his conclusion, Theophilus ends his observations on the iconic values of [l] with a general statement and a reaction to possible criticisms:

“[N]ot to speak of an infinite number of other similar appellations, which prove that there is something natural in the origin of words which indicates a relation between things and the sounds and movements of the vocal organs; and it is furthermore for that reason that the letter L join to other nouns makes their diminutives with the Latins, the Semi-Latins, and the High Germans. But it must not be pretended that this reason can be noticed everywhere, for the lion, the lynx, the wolf are anything but gentle. But it may be attached to another accident, the speed (*lauf*), which makes them feared or compels flight; as if the one who sees such an animal coming should cry to the others: *lauf* (*fuyez!*—fly!); besides by many accidents and changes the majority of words are very much altered and diverted from their pronunciation and original signification” (301).

An unpublished note by Leibniz entitled “On the connection between things and words or rather on the origin of languages”, contains the following general statement:

“Nevertheless, languages have a certain natural source, namely the harmony between sounds and affections which the sight of things excites in the mind. And I think that such a source is not to be found only in the primitive language, but also in later languages, born partly out of the primitive language and partly out of the new needs of men dispersed all over the world. And of course, an onomatopoeia manifestly imitates nature, as when we attribute ‘croaking’ to frogs, or when ‘st’ means for us a demand for silence or rest, and ‘r’ a running, or when ‘hahaha’ designates laughing, and ‘vae’ pain” (Dascal 1987:189).

## Nubian

Language group of the Eastern Sudanic Family (Nilo-Saharan stock) spoken in Sudan and Egypt.

See NURSERY WORDS

## Nursery Words

Words and expressions made by babbling children, such as *mama*, *papa*. Campbell and Mixco (2007: 144) state that, in fact, nursery words are coined by adults to imitate children’s babbling or to address small children. Buschmann (1853) made a survey of the *mama-papa* words around the world, which he called *natural words*. He stated that the similarity of these words in many different languages is due to adult imitation of children’s babbling (“*von den Kindeslippen etnahmen die Völker diese Laute und führten sie als Wörter in die Sprache ein*” (Buschmann 1853: 1). This author found four syllable types for *father* in the languages of the world: *pa*, *ta*, *ap*, *at*; and four for *mother*: *ma*, *na*, *am*, *an*. He also observed that these types can be interchangeable and some of them can alternate between *father* and *mother* in different languages. He also noted that these eight natural words present several semantic extensions in the languages of the world to other kinship words: they can also be used to refer to grandfather, grandmother, uncle or aunt, among others. Buschmann gives examples of each of the eight natural words. These include: PA (‘father’ and in some cases ‘mother’): *pa* (Malay), *ba* (Hottentot), *mba* (Bambara), *mfa* (Mandingo), *pe* (Lule), *piu* (Punjabi), *bab* (Arabic), *papa* (French), *bapa* (Balinese), *baba* (Bengali). AP (‘father’ and in some cases ‘mother’): *ab* (Ethiopic), *appa* (Chukchi), *epe* (Koryak), *appaa* (Sinhalese), *ipip* (Itelmen), *appen* (Malayalam). TA (‘father’ and in some cases ‘mother’): *ta* (Mandingo), *tatai* (Mordvin), *tate* (Vilela), *tatli* (Nahuatl), *tota* (Nez Perce), *atoteh* (Cherokee), *deda* (Georgian), *tammei* (Tongan), *taas* (Cornish), *tatna* (Maxakali). AT (‘father’

and in some cases ‘mother’): *at* (Celtic), *atya* (Hungarian), *aita* (Basque), *atag* (Dakota), *atotuh* (Cherokee), *ataatak* (Greenlandic), *athair* (Irish).

MA (‘mother’ and in some cases ‘father’): *ma* (Bengali), *mama* (Hindustani), *mamma* (Finnish), *māme* (Albanian), *memme* (Koryak), *moma* (Lithuanian), *mama* (Georgian), *man* (Hindustani). AM (‘mother’ and sometimes ‘father’): *em* (Hebrew), *ama* (Basque), *amma* (Tamil), *amia* (Yukaghir), *emma* (Estonian). NA (‘mother’ and in some cases ‘father’): *nanna* (Potawatomi), *nane* (Vilela), *naana* (Chechen), *noyeh* (Seneca), *nohah* (Cayuga), *nantli* (Nahuatl), *nine* (Turkish). AN (‘mother’ and in some cases ‘father’): *anah* (Tuscarora), *anni* (Kuskokwim), *anna* (Potawatomi), *inihan* (Tagalog), *anya* (Hungarian), *angnan* (Koryak), *ananak* (Greenlandic).

W. Oehl devoted a study to the analysis of *Lallwörter* ‘Nursery words’ (Oehl 1933a) in which he elaborates on the proposals of Buschmann. Most of his paper discusses the meaning extensions of the nursery words denoting *father* and *mother*. The first extension concerns the meaning *close relative*, as in Bahnar *bok* ‘grandparent’ or Czech *ded* ‘grandfather’ (Oehl 1933a: 14). These words can also denote ‘small child’ and ‘small, little’ as in Hungarian *apró* ‘small’, Nubian *butaan* ‘boy’ (Oehl 1933a: 16). From this meaning a *sleep* verb or noun can be derived: Tepehuano *boyni* ‘to sleep’, Chiapanec *pi* ‘to sleep’, Tahitian, Samoan *moe* ‘to sleep’ (Oehl 1933a: 17); also, a verb meaning *to rock* and *lullaby*: Spanish *nana* ‘lullaby’, Georgian *iavnana* ‘lullaby’, and *doll*: German *Puppe* ‘doll’, Latin *puppa* ‘girl, doll’, Italian *ninnolo* ‘toy’, (Oehl 1933a: 18-19). The words for *tickle* also belong to this group: Galla (Oromo) *kikirs*, Basque *kilika*, Maasai *ikitikit*, Finnish *kutina*, Quechua *cullay*, Malagasy *hikililika*, Spanish (*hacer*) *cosquillas*, Latin *titillare* (Oehl 1933a: 20).

Some nursery words mean *milk*, *breast* and *suck*: Hausa: *noono* ‘breast, nipple, milk’, Manchu *huhun* ‘breast, nipple’, Botocudo *porak* ‘breast, milk’, Tarasco (Purépecha) *izuqua* ‘breast, milk’, Quechua *ñuñu* ‘breast, milk’, Navaho *abé* ‘breast, nipple, milk’ (Oehl 1933a: 21).

Other semantic extensions discussed by Oehl include: *armpit*, *to drink*, *rain*, *river*, *sea*: Maba *kabkabee* ‘armpit’, Maasai *engidigidi* ‘armpit’, Dakota *mini* ‘water, to drink’, Eskimo *imu* ‘water’, *imutko* ‘to drink’, Bonari *tuna* ‘water, river’, Nubian *amuur* ‘rain’, Tungusic *amu* ‘sea’.

R. Jakobson (1959) argued that the relation between the oral stops with paternal terms and the nasal stop with maternal terms is well founded, both phonetically and semantically:

“Often the sucking activities of a child are accompanied by a slight nasal murmur, the only phonation which can be produced when the lips are pressed to the mother’s breast. [...] When the mouth is free from nutrition, the nasal murmur may be supplied with an oral, particularly labial release; it may also obtain an optional vocalic support.

Since the mother is [...] *the great provider*, most of the infant’s longings are addressed to her, and children being prompted and instigated by the extant nursery words, gradually turn the nasal interjection into a parental term and adapt its expressive makeup to their regular phonemic pattern” (Jakobson 1959: 309-310).

Jakobson (1959: 310) mentions a transitional period where *papa* points to the present parent, while *mama* signals a request for the fulfilment of some need or for the absent fulfiller of childish needs, first and foremost, but not necessarily, for the mother.



# O

## **Occitan**

Romance language spoken in southern France by less than a million people.

See *CUCUMBER*

## **Old Irish**

Oldest form of the Goidelic (Celtic) languages (600-900 A.D.) of Ireland.

See *ELEMENTARE WORTSCHÖPFUNG*

## **Old Slavic [Old Church Slavonic]**

First Slavic literary language (9th-11th centuries).

See *ELEMENTARE WORTSCHÖPFUNG, MIM/MON/MUM*

## **Omagua**

Nearly extinct Tupi-Guaraní language spoken in Peru.

See *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI*

## **Onomasiological iconicity**

This type of iconicity obtains when a linguistic meaning provokes an elaborated iconic interpretation of a linguistic form, so we get a *meaning miming form* (MMF). Letter-iconicity is a typical example. In Spanish, the written word *ojos* 'eyes' has two letters <o> suggesting two ocular globes; *zigzag* has two letters <z> that present a zigzagging shape.

See LETTER-ICONICITY, PHONAESTHEMES, SEMASIOLOGICAL ICONICITY

## Onomatope

An onomatopoeic word or expression.

*Onomatopées et mots expressifs* [Onomatopoeias and Expressive words] (Grammont 1901)

This is one of the first modern surveys of iconic words. Grammont defines onomatopoeias as those words whose sounds mimic the object that they refer to, as in *glouglou* or *tictac* (97).

The first section of the paper discusses general properties of onomatopoeias. First, it is stated that onomatopoeic imitation is an approximation and not an exact reproduction of a natural sound. Grammont sees onomatopoeias as translations of sounds into language in a double sense: there is an approximate articulatory reproduction of a sound by means of the speech organs and there is also a perceptual interpretation of the auditory impression of the corresponding natural sounds.

The first example discussed by Grammont is *coucou* ‘cuckoo’. Although this word quite well reproduces the typical call of this bird, it cannot articulate a [k] or a [u] sound. It can only produce an inarticulate sound that can be perceived and analysed by humans as consisting of the repetition of one syllable. In addition, we have learned since early infancy that these birds produce the sound [*coucou*]. This fact makes it very difficult not to perceive the cuckoo’s call as *coucou*.

Grammont also discusses the expression *tic-tac*, which mimics the sound made by a pendulum. He observes that for many people *tac-tic* does not seem to be a good imitation of that sound. In G.’s opinion, this means that *tic-tac* is not an exact reproduction of a pendulum sound. In fact, we perceive *tic-tac* because we expect this sound when listening to a swinging pendulum. When swinging, the pendulum produces two different sounds that are not totally identical to each other: this is mimicked by the vowel alternation of the reduplicated syllable, typical of ablaut reduplication\* (on page 128 Grammont speaks about *apofonie onomatopéique* ‘onomatopoeic apophony) of which Grammont gives some examples (100): French *pif-paf*, *bim-boum*, *flic-flac*, *crac-crac*, *clic-clac*; German *pim-pam-pum*, *piff-paff-puff*, *flick-flack*, *klippklapp*, *klitschklatzsch*; English *criddle-craddle*, *widdle-waddle*. In the *tic-tac* case, the reduplication mimics the repetition of the pendulum’s movement.

In the second section, G. discusses the iconic expression of repetition through total and partial reduplication. In the third section of the paper, G. discusses vowel alternation in reduplication. Front high vowels are said to mimic sharp sounds and back low vowels are said to mimic low-pitched sounds. The mimetic expression *pif-paf-pouf* ‘sound of a blow or an explosion’ contains a modulation induced by the vowel alternation. G. gives examples of these iconic associations in different languages and provides some literary examples showing the iconic use of vowels. In addition, he explains the influence of co-occurring consonants on the sound symbolic nature of vowels. The fourth section is devoted to the sound-symbolic value of consonants. It is discussed from two points of view: their manner of articulation and their place of articulation. Plosive sounds suggest a sharp impact and the accompanying vowels convey the tone of the sound (as in *tic-tac*). Nasal consonants suggest nasal sounds or sounds perceived as nasal (French *nasiller* ‘speak through the nose’); preceded by a vowel, they suggest a resounding noise (*bim-bam-bum*, Latin *tintinnabulum* ‘call-bell’). The [l] sound suggests fluidity and, in general, a clear or limpid sound produced by a flowing liquid or by a metallic impact, such as German *klingel* ‘bell’ or French *clic-clac*. Concerning the [r] sound, when accompanied by high vowels, a creaking sound is suggested, as in French *grincer* ‘to creak, to squeak’; when accompanied by a low vowel, it suggests a scratching or a roaring depending on the quality of the vowel, as in French *craquer* ‘to break, to crack’, *croquer* ‘to crunch, to grind, to chew’. The sibilant sounds suggest blowing, whistling or rustling, as in French *chuchoter* ‘to whisper’. Labial spirants [f] and [v] suggest a muffled blowing, as in German *Wind* ‘wind’, *wehen* ‘to blow’. Dental spirants [s] and [z] suggest a whistling blow.

In section five, some of the proposals stated in the preceding section are analysed in greater detail and additional examples from different European languages are examined. In section six, the subjective aspects of onomatopoeias are discussed. The main idea is this: for a word to be an onomatopoeia it must be understood as such. This means that a speaker/hearer must interpret a word in an iconic way to produce/understand it as an onomatopoeia. For Grammont, onomatopoeias are a matter of interpretation. As an example, G. refers to the Sanskrit word *bhramaras* ‘bee’. The sound combination *bhr* can be associated with buzzing; however, in actuality Indians associate the buzzing of a bee with the two [r] sounds, not with the *bhr*- initial consonant sequence. This is easily seen when we notice that they also use the noun *dvirephas* ‘having two *repha* in its name’ to denote bees. In this section, G. briefly discusses onomatopoeic apophony and distinguishes three degrees: high vowel (i), low vowel (a) and dark

vowel (o). As a clear example of this gradation, G. gives the German verbs *knirren*, *knarren* ‘to creak’ and *knurren* ‘to growl’. In section seven, G. criticizes the idea that originally all languages were onomatopoeic and that language evolution gradually made languages less and less onomatopoeic and much more conventional. A related idea is that onomatopoeias are immune to phonetic laws. G. argues that, in general, onomatopoeias abide by phonetic laws. In fact, phonetic laws can destroy or blur onomatopoeias and expressive words, but linguistic change is sensitive to onomatopoeic and expressive word formation and, therefore, these words are continually created. In addition, phonetic laws can distort iconic sound-meaning relationships, but linguistic change can restore them. In order to prove this point, G. refers to the history of the word for *cuckoo* in Indo-European languages. Sanskrit *kókas*, Latin *cucus* (?), Irish *cúach* point to a common IE root \**qeu* directly attested in Greek (*kōkýō*) and Sanskrit (*kauti*, *kaunāti*, *kavate*), Latin (*cucūlus*) and Lithuanian (*kaukti*, *kukuti*). The Greek word *kókkiks* cannot be directly related to this common root, but it could if we see the consonant reduplication as an expressive formation. G. thinks that French *coucou* and English *cuckoo* are direct imitations of the call of this bird. Section eight is devoted to expressive words, defined by Grammont as words mimicking non-auditory impressions, such as movements, actions, states or other material or psychological qualities. G. states that the human mind is capable of associating sounds with all sort of impressions, sensations or ideas; he says that the human mind is able to *translate* them into sound. First, G. observes that consonant alliteration can also suggest the repetition of a movement or action. High vowels can suggest object sharpness; in fact, sharpness words have a high vowel in some languages: German *spitzig* ‘pointed’, *Witz* ‘joke’, French *piquer* ‘to sting’, *épine* ‘thorn’. In addition, front high vowels convey smallness and lightness, as in the French words *petit* ‘little, small’, *léger* ‘light’, *menu* ‘small, little’, *débile* ‘flimsy, frail’. Low back vowels suggest something big, strong, powerful, potent. G. mentions the French words *splendour* ‘splendour’, *orgueil* ‘pride’, *courage* ‘courage’, *vaillance* ‘valour, courage’, *gloire* ‘glory’, *ampleur* ‘extent, magnitude’, *grandeur* ‘greatness, size’. High back vowels convey darkness, as in the German words *dampf* ‘dull’, *dunkel* ‘dark, dim’.

Vowel apophony is used to mimic movement diversity or irregularity: French: *zigzag*, *Micmac*; German *mischmasch*, *wirrwarr*.

Nasal consonants convey softness, as in French *mollesse* ‘softness’, *mou* ‘soft’. The consonant [l] suggests a sliding, gliding movement, as in *couler* ‘to flow’, *laver* ‘to wash’, *voler* ‘to fly’, *glisser* ‘to slide’. A rhotic consonant accompanied by a back vowel suggests cracking or scraping, as in *croquer*

‘to crunch’; with a dental stop it suggests trembling, as in Latin *tremo* ‘I tremble’. Other iconic consonant combinations include: *fl* for fluidity, *fr* for friction, *tr* for sadness and sorrow, as in French *triste* ‘sad’. G. also examines the expressive meanings related to the places of articulation. For example, when uttering the verb *baiser* ‘to kiss’, the bilabial stop [b] is produced by a lip contact similar to that characteristic of a kissing action. Section nine includes some additional thoughts concerning onomatopoeia and expressive words. The main conclusion is that onomatopoeic and expressive words are more widespread in languages than usually thought. In addition, the boundaries between onomatopoeic and expressive words are rather fluid, since it is not always possible to distinguish onomatopoeias from expressive words: many onomatopoeias show expressive features.

## Onomatopoeia

This is a traditional term in linguistics. Here are some definitions found in standard linguistic dictionaries:

“The formation of words through the imitation of sounds from nature, e.g. *cock-a-doodle-doo*, *meow*, *splash*. The same sound may be represented differently in other languages, e.g. *cock-a-doodle-doo* is *kikeriki* in German and *cocorico* in French. The natural motivation of such words is an exception to the basic **arbitrariness** of the linguistic symbol and should not be understood as evidence of the onomatopoeic origin of language” (Bussmann 1996: 836).

“The phenomenon of words, said to be onomatopoeic, which imitate or echo the sound produced by some process or creature. The imitations are not completely natural but vary across languages and conform to the phonology of the language they belong to. Thus, dogs produce *woof woof* in English but *wau wau* in German and *haf haf* in Czech. Leaves rustle or susurrate in English but *shurshat* in Russian. (Greek *onoma* ‘a name’, *poiein* ‘to make’)” (Brown and Miller 2013: 320).

“A word or process of forming words whose phonetic form is perceived as imitating a sound, or sound associated with something, that they denote. E. g. *peewit* or Dutch *kievit* are onomatopoeic words for a lapwing whose cry they mimic” (P. H. Matthews 2014: 277-278).

The etymological meaning of this term (name ‘onomato-’, making ‘-poeia’) has nothing to do with sound and imitation. This word was coined by the Greeks, but was not used by Dyonisius Thrax (170-90 BC) in his influential *Art of Grammar*:

“πεποιημένον δέ ἐστι τὸ παρὰ τὰς τῶν ἤχων ιδιότητος μιμητικῶς εἰρημένον, οἷον φλοῖσβος ροῖζος +ὄρυγμαδός+ (Book 2 (η’))”.

“An onomatopoeic noun is one formed imitatively from the peculiarities of sounds as φλοῖσβος ‘dashing’, ροῖζος ‘whistling’, ὄρυγμαδός ‘rattle’” (translated by Thomas Davidson, 1874).

Dyionisus uses the expression *pepoiéménon* (*ónoma*) ‘made (noun)’. Liddel and Scott (1882: 1057) note that Aristotle (Categ 7, 11; Eth. N. 2, 7, 11) used the verb *onomatopoíeo* in the sense of ‘to coin names’ and in the sense of ‘to form words expressive of natural sounds’ (Top. I, 9). In this same sense it is used by Sextus Empiricus (M. I, 314). The first attested occurrence of ὀνομαῖτο-ποιία is in Strabo 14.2.28.

The etymological meaning of the word was partially translated into German in words such as Hermann Paul’s *Urschöpfung*\* and Oehl’s *Wortschöpfung*\*.

[Kloe, D. R. 1977; Enckell, P. and P. Rézeau 2003; Nobile, L. and L. Vallauri 2016; Melnikienė 2016; Sasamoto 2019]

## Onomatopoeic expression

A linguistic expression can be said to be onomatopoeic when it denotes a particular sound or sound type and its phonetic configuration shows a certain degree of similarity or likeness to that sound.

The linguistic expressions imitating animal calls are typical examples of this phenomenon. A list of some onomatopoeic expressions imitating animal calls are presented in the following table (Abelin 1999: 203):

Language	Goat/sheep	Dog
Korean	mææ:	kengkeng
Japanese	me:me:	wangwang
Chinese	mimi:	wəwəwə
Finnish	mæ:mæ:	hauhau
Urdu	me:	bongbong
Arabic	me:	habhab
Polish	me:	hauhau
English	ba:	bauwau, wofwof
Swedish	bæ:	vuv:vuv
Spanish	be:	gau

The onomatopoeic expressions mimicking the sound made by the cuckoo are rather uniform across languages (Abelin 1999: 203-204): Finnish *kukkuu*, Urdu *kokoko*, Estonian *kuku*, Japanese *kakkoo*, Persian *hoho*, Polish *kuku*, Swedish *kuku*, Spanish *cucú*.

There are also many onomatopoeic expressions imitating different types of sound. The onomatopoeic expressions *krak* and *brak* convey the sound of breaking and cracking in different languages (García de Diego 1968: 188, 447-449): Basque *krak*, English *crack*, Catalan *crac*, French *crac*, Sanskrit *kraksa*, Swedish *bräcka*, Dutch *braken*, German *brechen*. Other cross-linguistic onomatopoeic expressions include *blab*, *barb* ‘babbling’, *marm* ‘murmuring’, *chapl* ‘splashing’, *gorg/gurg* ‘gargling’, *bamb* ‘bursting, exploding’, *kling* ‘metallic sound’, *barbl* ‘boiling’, *trot* ‘treading’, *strid* ‘friction’ (García de Diego 1968).

See *BABBLE*, *BANG*, *BOOM*, *BUZZ*, *BOW-WOW*, *CACKLE*, *CLICK*, *CRACK*, *CRASH*, *CRICKET*, *CROAK*, *CROW*, *CUCKOO*, *CUCUMBER*, *GARGLE*, *GRUNT*, *MIM/MOM/MUM*, *PIP*, *PUFF*

## Onomatopoeic iconicity

A resemblance relation between the phonetic form of a word and some non-linguistic sound involved in the denotation of that word. For example, English *cock-a-doodle-doo*, Spanish *qui-quiri-quí*.

[Sadowski 2003: 417-18; Hu 2011: 90-91]

## ***Origine, formazione, meccanismo, ed armonia degl'idiomi*** [Origin, formation, mechanics and harmony of languages] (L. Hervás y Panduro 1785)

Lorenzo Hervás y Panduro (1735-1809) was a Spanish Jesuit and a great philologist: he was the author of *Catálogo de las lenguas de las naciones conocidas y numeración, división y clase de éstas según la diversidad de sus idiomas y dialectos* [A catalogue of the languages of the known nations, with a class division and numbering according to the diversity of its languages and dialects] (Madrid, 1800-1805, 6 vols.), the most comprehensive and linguistically sophisticated book on language classification of his time. When Charles III expelled the Jesuits from Spain, he moved to Italy and wrote, in Italian, *Origine, formazione, meccanismo ed armonia degl'idiomi* [Origin, formation, mechanics and harmony of languages], 1785; *Vocabolario poliglotta, con prolegomeni sopra più de CL lingue* [Multilingual

vocabulary, with an introduction to more than 150 languages], 1787; *Saggio practico delle Lingue con prolegomeni e una raccolta di orazioni dominicali in più di trecento lingue e dialetti* [Wise language practice with introduction and a collection of dominical prayers in more than three hundred languages and dialects], 1787. He also wrote in Spanish *Escuela Española de Sordo-mudos ó Arte para enseñarles á escribir y hablar el idioma español* [The Spanish School for deaf-mutes or the art of teaching to write and speak the Spanish language] (Madrid, 1795). In this significant work, Hervás characterized sign languages as natural (i.e. iconic) and spoken languages as both natural (i.e. iconic) and artificial (i.e. conventional); in addition, he spoke for the first time about the grammatical ideas and mental grammar of sign language users and carried out a systematic comparison between spoken and sign languages.

In *Origine, formazione, meccanismo ed armonia degl'idiomi* he proposed natural iconic relationships between certain sounds and things referred to by the words that contain them.

In chapter III, Hervás examines words denoting the organs of speech. He saw a natural articulatory association between certain sounds and the speech organs intervening in their production. As such, the nasal consonant [n] is included in the word for *nose* in different languages of America, Asia, Europe, Africa and Oceania. Hervás mentions several examples: Spanish *nariz*, French *narine* 'nostril', English *nostril*, German *Nase*, Japanese *hana*, Peruvian Quechua *cenka*, Cora *nusiri*. In these languages *to sneeze* also contains a nasal consonant: Spanish *estornudar*, French *éternuer*, German *niesen*, Japanese *kushami* (*suru*), Quechua *acchini*, Cora *nuaschocò*.

Hervás observes that the jaw is necessary for articulating speech sounds and that the consonant [m] is naturally associated with the noun for *jaw* and with the verbs for *chewing* and *eating*; the consonants [g] and [h] are also naturally present in these verbs. Hervás gives some examples for chewing, eating and swallowing that have the mentioned consonants, including (29): Latin *mandere/manducare/glutire*; Spanish *mascar/comer/tragar*; German *kauen/essen/schlucken*; Quechua *mucuni/micuni/millpuni*; Guarani *guabö/okarupii/omokong*.

In a similar way, dental consonants [t/d] appear in the word for *tooth* in many different languages of the world across America, Europe, Asia and Africa. In addition, the [k/g] sounds are very common in words related to the human throat and the sounds produced by it. The labial consonants [b/p] appear in words denoting the *lips*, such as the Italian *labbro*. In addition, the



lingual consonant [l] is present in words such as Latin *lingua*, Italian *lingua*. He also notes (26-27) that in different languages the verb *to lick* contains this lingual consonant: Italian *leccare*, Latin *lingere*, *lambere*, Spanish *lamer*, German *lecken*, Turkish *yalamak*, Danish *slikke*, Malay *djilap*, Greek *leikho*, Polish *lizać*, Persian *lesä*, Malagasy *leleà*, Tagalog *dilai*, Quechua *llacuani*, Nahuatl *papaloa*.

In a similar vein, the sibilant [s] is very frequently found in words denoting blowing, sighing, sneezing, snorting, whistling, sipping and related sounds in different languages.

In chapter IV, Hervás analyses the natural or iconic relation between words and the objects denoted. This relation is characterized as “parole che vera pittura vocale sono delle cose significate” [words that are a genuine vocal picture of the things signified] (31). In this chapter, Hervás refers to Plato’s *Cratylus* as a seminal work about the natural origin of words and summarizes the sound symbolic interpretations of the Greek letter/sounds proposed in this dialogue (see *Cratylus\**). Then, he tries to confirm, refine and improve those interpretations by examining different languages of the world. Hervás states the principle that uttered words can be felt as representations of the things referred to, of their physical properties and of the impressions and sensations they provoke in humans (33).

Hervás first observes (35) that the vowels [a] and [o] are naturally associated with big, large, noisy objects and the vowels [e] and [i] with small, slender objects. He gives as an illustrative example the Latin words *magnus* ‘large’ and *minimus* ‘tiny’ and then gives a list of these words in several languages: French *grand/petit*; Spanish *grande/chico*; German *gross/klein*; English *great/little*; Irish *mor/beg*; Hungarian *nagy/kicsi*; Greek *megalos/mikros*; Japanese *ooki/chiisai*; Guarani *guazuoo/titi*; Cora *tebi/pitzica*. In addition, Hervás notes that the diminutive affix usually contains an [i], [e] vowel as in the Italian *ragazzo* ‘boy’/*ragazzino* ‘little boy’ or the Persian *ketab* ‘book’, *ketabek* ‘booklet’; in contrast, the augmentative suffix has the vowels [a] and [o], as in the Spanish *grande* ‘big’/*grandón* ‘quite big’. The Mexican (Nahuatl) language behaves in this respect in a similar way: *tzin*, *pil* and *tzintli* are diminutive suffixes and *pol* is an augmentative particle. In Guarani, the suffix *-i* marks diminution: *aba* ‘man’ < *abai* ‘little man’, *mitang* ‘child’ < *mitangi* ‘little child’.

In the prologue to his book *Vocabolario Poliglotta* (136-137), Hervás says that the vowel [u] and the consonant [v] are naturally associated with the sound produced by the blowing wind. In many different languages the word

for *wind* contains an [u] sound (Araucan, Guarani, Tupi, Quechua, Cayubaba, Maipuri, Betoï, Algonquin, Tagalog, Georgian, Japanese, Turkish, Hebrew, Arabic, Amharic, Kanarese, Hindi among others) or a [v] sound (Russian, Polish, Dalmatian, Gothic, Icelandic, Danish, Swedish, Dutch, Breton, German).

Concerning consonants, Hervás first notes (40) that the [r] sound can mimic movement, as in the Italian words *correre* ‘to run’, *rio* ‘river’, *girare* ‘to turn’, *rota* ‘wheel’, *rotolare* ‘to roll’, *rigare* ‘scratch’. He gives more examples from different languages including Greek, Japanese, Malay, Guarani and Croatian (*Dalmatian*). This sound is also iconically associated with *trembling* and *terror*, since it is produced by lingual vibrations, typically in the form of a trill or rolled [r]. To prove this point, Hervás gives translations of the verb *to tremble* in different languages: Latin *tremere*, Spanish *temblar*, German *zitteren*, English *shiver*, Greek *tremo*, Turkish *titremek*, Japanese *furu*, Malay *gomatar*, Guarani *ariri*, Omagua *arereca*.

The sound [s] is related by Hervás to the act of whistling and can be used to mimic the movement of the air or of fluids and the sounds produced by them. As examples he gives the translation of the Italian words *sibilare* ‘to whistle’, *soffiare* ‘to blow’, *sorbire* ‘to sip’ in different languages: Latin, French, Spanish, Basque, German, Flemish, English, Polish, Russian, Hungarian, Ancient Greek, Modern Greek, Georgian, Turkish, Persian, Hebrew, Arabic, Malagasy, Kanarese, Chinese, Japanese, Bisaya, Tagalog, Quechua, Vilela, Lule, Guarani, Cora, Nahuatl.

The sound [t] is iconically associated with stability and strength and, consequently, the word for *earth* includes this sound in many languages (Araucan, Nahuatl, Tagalog, Bisayan, Malay, Malagasy, Chinese, Japanese, Hebrew, Maltese, Gothic, English, Latin, Italian, French, Spanish, Portuguese among many others); likewise, the noun for *star* contains this consonant in different languages (Guarani, Otomi, Tagalog, Malay, Kanarese, Gothic, Sami, Swedish, Danish, English, German, Irish, Breton, Arabic, Latin, Italian, French, Spanish, Portuguese among many others). Other languages have the voiced version of [t] ([d]) in these words (for *earth* Cayubaba, Betoï, Turkish, Lezgian, Albanese, Hungarian, Icelandic, Breton; for *star* Saliba, Polish, Czech).

In the prologue to his book *Vocabolario poliglotta* (139), Hervás points out that the [p/b] sounds are iconically appropriate for expressing stability and permanence. Hervás says that this sound-symbolic association explains the fact that the word for *foot* contains these sounds in many languages (Guarani,

Tupi, Cora, Cochimi, Greek, Latin, Hindi, Tagalog, Tahitian); the sound [t], also associated with stability, appears in this word all over the world (Nahuatl, Bisaya, Malagasy, Breton, Icelandic).

Hervás also notes the existence of phonaesthemes\*. For example, on page 46 of his *Origine* he notes that the syllables [ka], [ko], [ku] can iconically convey concave objects, as in the Italian words *canale* ‘canal’, *caverna* ‘cavern’, *concavo* ‘concave’, *conca* ‘basin’, *canna* ‘barrel’, *scudo* ‘shield’, *scodella* ‘bowl’ and the corresponding words in Spanish. On the same page, Hervás points out that the initial sequence *st-* mimics breaking, destruction, as in the Italian words *estirpare* ‘to remove’, *stracciare* ‘to break’, *strangolare* ‘to strangle’, *strappare* ‘to pluck’, *strozzare* ‘to strangle’, *struggersi* ‘to pine away’, *stralciare* ‘extract’.

In addition, Hervás analyses the iconicity of the Italian verb *rompere* ‘to break’ by saying that the [r] sound mimics movement and the stops [m] and [p] convey a violent action or process. To prove that this iconic relation is general, Hervás gives the translation of this verb in many languages, including Latin (*rumpere*), Spanish (*romper*), German (*brechen*), English (*to break*), Hungarian (*eltörni*), Turkish (*kırmak*), Arabic (*kesr*), Malayalam (*tagertunu*), Tagalog (*sinira*).

On page 42 of his book, Hervás observes the use of repetition and reduplication to express frequency. He mentions the Tagalog words *maglalaro* ‘developer’, *mangagava* ‘doer, maker’, *magpapatavar* ‘forgiver’, *mangagavot* ‘physician’.

## Ornithonym

Bird name

See BIRD NAMES, DELOCUTIVE ORNITHONYMS, KALULI BIRD NAMES

## Oromo (Galla)

Cushitic (Afro-Asiatic) language spoken in Ethiopia and Kenya by approximately 40 million people.

See *DOPPELUNG (REDUPLIKATION, GEMINATION), ELEMENTARE WORTSCHÖPFUNG, FANGEN-FINGER-FÜNF, NURSERY WORDS, PRIMITIVE CULTURE, VÖLKERPSYCHOLOGIE*

## ***Osnovy fonosemantiki*** [Fundamentals of Phonosemantics] (Voronin 1982)

Stanislav Voronin (1935-2001) was a professor of English philology at Saint Petersburg University. His book *Osnovy fonosemantiki* [Fundamentals of phonosemantics] established the foundations of the St. Petersburg school of Phonosemantics. The book offers a detailed program for the study of sound-meaning correspondences in natural languages. It is structured into three main parts. The first, entitled *Phonosemantics as an autonomous discipline* (6-38), gives a general characterization of sound-symbolic research where some of the theoretical principles of language iconicity are stated and briefly explained.

The second constitutes the major part of the book (39-156). In this part, Voronin introduces and exemplifies a detailed typology of sound-meaning relationships. This typology constitutes the major contribution of the book.

The third part (157-197) contains some additional theoretical considerations concerning the general characterization of linguistic sound-symbolic systems from both synchronic and diachronic points of view.

In chapter 4, Voronin proposes a typology of sound-symbolic relations that he illustrates using English and other non-European languages. Onomatopes are classified into the following 18 classes: (1) *Instants* [инстанты] denoting pulse-like sounds: English *tap*, *click*, Indonesian *tuk* ‘knock’, *bobok* ‘sound produced by an empty bottle when thrown into water’. The general pattern for this type is PLOSIVE/AFFRICATE + SHORT LOW/HIGH VOWEL + PLOSIVE. (2) *Non-dissonant continuants* [тоновые континуанты]: English *hoot*, *toot*, *beep*, *bleep*, Indonesian *dengung*, *dengong* ‘sound of a siren, honking, buzzing, humming’; the general pattern for English seems to be [CONSONANT (+ LATERAL/LABIAL SONORANT) +] SHORT LOW/HIGH VOWEL (+ PLOSIVE). (3) *Pure dissonant continuants* [чисто шумовые континуанты]: English *whistle*, *hiss*, *swish*, *hush*. The general pattern of this type is VOICELESS FRICATIVE/CONSONANT + SHORT LOW/HIGH VOWEL + (CONSONANT)/VOICELESS FRICATIVE. (4) *Dissonant-non-dissonant continuants* [тоношумовые континуанты], these mimic sounds with both dissonant and non-dissonant perceptual aspects: English *buzz*, *whizz*, *hum*, Indonesian *lesing* ‘to buzz’, *bising* ‘buzzing’. The general pattern for this type is CONSONANT + SHORT LOW/HIGH VOWEL + VOICED FRICATIVE. (5) *Frequentative quasi-instants* [фреквентативы квазиинстанты]: English *crack*, *jerk*, *chirp*,

*crick*, Indonesian *kerak* ‘sound of a break in a joint’, *rik* ‘sound of breaking a stick, a bone’. The general pattern is (CONSONANT<sup>B</sup> +) R<sup>A</sup> + SHORT LOW/HIGH VOWEL<sup>A</sup> + PLOSIVE<sup>B</sup> (the super-indices signal interdependence). (6) *Pure frequentatives* [чистые фреквентативы]: English *jar*, *birr* ‘strong wind’, *chirr*, Indonesian *detar* ‘sound of trembling’, *rai* ‘sound of rain hitting glass’. The general pattern is CONSONANT + SHORT LOW/HIGH VOWEL + R. (7) *Frequentative non-dissonant quasi-continuant* [фреквентативы тоновые квазиконтинuantы]: English *yerr*, *creak*, *scroop*, Indonesian *raung* ‘to roar, bellow, growl’. (8) *Frequentative pure dissonant quasi-continuant* [фреквентативы чисто шумовые квазиконтинuantы]: English *whir(r)* ‘to hurry along with a rushing or vibratory sound’, *flurr* ‘to fly with whirring or fluttering wings’, Indonesian *ras* ‘to rustle’, *ger(i)sik* ‘sound made when walking on sand’. The general pattern is VOICES FRICATIVE + SHORT LOW/HIGH VOWEL + R. (9) *Frequentative dissonant-non-dissonant quasi-continuant* [фреквентативы тоношумовые квазиконтинuantы]: English *frizz* ‘to fry with a sputtering sound, cook with a sizzling noise’. The general pattern is (FRICATIVE<sup>A</sup> +) R + SHORT VOWEL + VOICED FRICATIVE<sup>A</sup>. (10) *Non-dissonant ‘post-pulse’ instants-continuant* [тоновые “последударные” инстанты-континuantы]; these sounds contain a pulse followed by a non-dissonant non-pulse: English *dump*, *plump*, *clank*, Indonesian *bang* ‘strong and noisy impact’, *tang* ‘low-pitched sound of bell’, *ting* ‘high-pitched sound of a bell’. The pattern is PLOSIVE/AFFRICATE + SHORT LOW/HIGH VOWEL + NASALIZED SONORANT. (11) *Pure dissonant ‘post-pulse’ instants-continuant* [чисто шумовые “последударные” инстанты-континuantы]: English *clash*, *plosh*, *piff*, Indonesian *letus* ‘sound of a shoot’: PLOSIVE/AFFRICATE + SHORT LOW/HIGH VOWEL + VOICELESS FRICATIVE. (12) *Pure dissonant ‘pre-pulse’ instants-continuant* [чисто шумовые “предударные” инстанты-континuantы]. Onomatopes of this type denote a pulse preceded by a pure dissonant non-pulse: English *whack*, *flap*, *whit* ‘the sound of a bullet whistling through the air and striking something hard’, Indonesian *sit* ‘whip sound’: VOICELESS FRICATIVE + SHORT LOW/HIGH VOWEL + PLOSIVE. (13) *Non-dissonant-dissonant ‘pre-pulse’ instants-continuant* [тоношумовые “предударные” инстанты-континuantы]: English *zip* ‘high-pitched abruptly terminating buzzing (as of a mosquito) or humming (as of a bullet) sound’: VOICED FRICATIVE/LABIAL SONORANT + SHORT VOWEL (+ VOICED FRICATIVE) + PLOSIVE. (14) *Pure dissonant-non-dissonant ‘pre-pulse-post-pulse’ instants-continuant* [чисто шумовые-тоновые “предударно-последударные” инстанты-континuantы]. This onomatope denotes a pulse preceded by a pure

dissonant non-pulse and followed by a non-dissonant non-pulse: English *thump* ‘to pound, producing a somewhat dull sound (not as dull as a thud), to thrash with a whip’, *whing* (an onomatopoeia expressing a high-pitched ringing sound caused by a swishing movement): VOICELESS FRICATIVE (LATERAL/LABIAL SONORANT) + SHORT LOW/HIGH VOWEL + NASAL SONORANT (+ PLOSIVE). (15) *Non-dissonant-dissonant-non-dissonant ‘pre-pulse-post-pulse’ instants-continuants* [моношумовые “предударно-послеударные” инстанты-континуанты]. The onomatopes of this type mimic a pulse preceded by a non-dissonant-dissonant non-pulse and followed by a non-dissonant non-pulse caused by the pulse: English *zong* ‘an imitation of a whizzing and ringing sound, abruptly terminated’, *zing* ‘to whizz by with a humming noise (as of a bullet): VOICED FRICATIVE + SHORT LOW/HIGH VOWEL + NASAL SONORANT (+ PLOSIVE). (16) *Non-dissonant post-pulse quasi-instants-continuants* [тоновые “послеударные” квазиинстанты-континуанты]: English *crink* ‘a sound in which cricking and chinking blend’, *ring*, *brrumm* ‘an imitation of the hollow rapping sound of a drum-beat’: CONSONANT + R + SHORT LOW/HIGH VOWEL + NASAL SONORANT. (17) *Pure dissonant ‘post-pulse’ quasi-instants-continuants* [чисто шумовые “послеударные” квазиинстанты-континуанты]: English *crash*, *thrash*, *thresh*, Indonesian *deras* ‘sound of walking on sand’, *deris* ‘sound of walking on dry grass’: (CONSONANT +) R<sup>A</sup> + SHORT VOWEL<sup>A</sup> + VOICELESS FRICATIVE. (18) *Pure dissonant ‘pre-pulse’ quasi-instants-continuants* [чисто шумовые “предударные” квазиинстанты-континуанты]: English *flirt* ‘to throw with a jerk, rap, flick, to practice coquetry’: VOICELESS FRICATIVE + LATERAL SONORANT + SHORT VOWEL + R + PLOSIVE.

Chapter five is devoted to onomatopes denoting non-acoustic entities. Voronin calls onomatopes mimicking movement *kinemes* [кинемы]. The onomatopes mimicking internal physiological and psychic movements are called *intrakinemes* [интракинемы]; when these onomatopes also involve some mimicking of a sound produced by a movement they are called *phonointrakinemes* [фоноинтракинемы]. Voronin distinguishes different types of *phonointrakinemes* depending on the nature of the mimicked sounds: nose breathing, snorting, snoring, whistling, sneezing, licking, sucking, suction, spitting, smacking one’s lips, tutting, flicking, champng, munching, puffing, sighing, whistling sound made when breathing, weeping, crying, howling, wailing, loud shout, yelling, roaring, piercing scream, laughter, biting, yawning, grumbling, moaning, groaning, whimpering, giggling, breathlessness, swallowing, hiccups, coughing, belching, vomiting.

Voronin also discusses *extrakinemes* [экстракинемы] (76, 98), which are onomatopes that mimic the shape, size and movements of non-acoustic objects outside the human body. Among them, he discusses onomatopes denoting roundness based on sound-symbolic associations. For example, labial consonants and vowels mimic round or bulging objects. Voronin mentions /b/, /p/ and /ʌ/, /ɔ/ in English and gives the following examples: *bale, ball, pumpkin, bomb, bob, pome, pot, boulder, bulb, pommel, cup, globe*. The corresponding English phonaestemes mimicking round objects are (101): (1) [bʌ-]/[bou-]/[bə]/[bu-]/[pə]; (2) [bob-]/[bʌb-]; (3) [-əb]/[ʌb].

English onomatopes mimicking effort, exertion are grouped into six types (103-104): (1) dental type: *nip*; (2) dental-guttural type: *grind*; (3) palato-alveolar type: *champ, chank, jot, jerk*; (4) medial type: *yum-yum, yerk*; (5) guttural-labial type: *squish, (s)quizzle, quirk*; (6) guttural-labial palato-alveolar type: *scquelch, squidge*. He also gives examples from Indonesian.

In chapter six, Voronin makes a general characterization of sound symbolic words [звукосимволические слова]. From a semantic point of view, he mentions their expressive, emotional, and figurative character. Concerning morphology and phonology, Voronin points out their frequent anomalous phonological and morphological nature, tendency of reduplication and frequent phonetic variability.

The second part of the book offers a general theoretical characterization of linguistic sound-symbolic systems. This is followed by a brief conclusion and bibliographical references to 431 works in Russian and other European languages.

[For an English summary of this book and some additional papers on linguistic iconicity by this author see Voronin 2005]

## Otomi

Oto-Manguan language spoken in Mexico by approximately 300,000 people.

See *DOPPELUNG (REDUPLIKATION, GEMINATION), ELEMENTARE WORTSCHÖPFUNG*

## **Oyampi**

Tupian language spoken in northeastern Brazil by approximately 1,000 people.

See *BUTTERFLY*



# P

## **Pacific Languages**

See *AUSTRALIAN LANGUAGES, ILOCANO, JAMINJUNG, KALULI*

## **Pacoh**

Austroasiatic language of Vietnam spoken by approximately 32,000 people

See *ASIAN LANGUAGES*

## **Palimphony**

Sound repetition in a word; it is as a case of autoiconism\*. Endosyllabic palimphony is usually called *palindromy\**; examples include: *mom, peep*. Cross-syllabic palimphones occur in alliteration (*hee-haw*), assonance (*humbug*) and reliteration (*kickback*). There are also different types of compound cross-syllabic palimphony: preliteration (alliteration plus assonance) as in *sad sack*; circumsonance (alliteration plus reliteration) as in *sing-song*; rhyme (assonance plus reliteration) as in *claptrap*; and reduplication\* (alliteration plus assonance plus reliteration) as in *bye-bye*. Other examples show even more complex combinations: *boob-tube* (palindromy and rhyme), *lollipop* (double palindromy and assonance) (Wescott 1975b: 22-23).

## **Papiamentu**

Portuguese-based creole spoken in Curaçao, Aruba and Bonaire (in the Caribbean) by approximately 300,000 people.

See *CREOLES*

## **Paradigmatic iconicity**

Iconicity within the language system. For example, “the singular/plural opposition that we find in *cat/cats* is the result of an iconic mapping of a form prescribed by a morphological rule to hundreds of nouns” (Nöth 2001: 23).

## Pastaza Quechua Ideophones

Lowland Ecuadorean Quechua includes a numbers of dialects, one of which is Pastaza Quechua. Nuckolls (1996) gives a detailed description of ideophones in this language. The following data are taken from this outstanding work. Nuckolls points out that ideophones in Pastaza Quechua have a clear performative nature through which an event is recreated by the speaker:

“Most sound-symbolic utterances are performative simulations of an action, event, or process. The distinction between a speech event and a narrated event is therefore collapsed in sound-symbolic performance, which uses the speech event to recreate the salient features of the narrated event rather than to report it or refer to it” (Nuckolls 1996: 114).

This author observes the following sound-symbolic associations among ideophones (Nuckolls 1996: 140): a closed final syllable can mimic a gesture of closure, the completion of an action, the cessation of movement or the abrupt contact of one surface with another. By contrast, the openness of a syllable iconically mimics a sound unfolding in time, a continuous movement or an absence of boundedness.

The contrast between the back rounded vowel [o] and the open vowel [a] mimics a closing and an opening respectively. In general, a lack of obstruction in the vocal tract iconically expresses an unimpeded movement through space, and an obstruction in the vocal tract is iconically expressive of contact with a surface, a gesture of closure, the completion of an action or the cessation of a movement. In addition, a lack of turbulence in the vocal tract, typical of the lateral liquid [l], mimics visual smoothness, an uninterrupted movement through space, or a movement that is light and lacking force.

The following adverbial ideophones accompany a verb and mimic sensible experiences: *sa* mimics an expanded or random movement from or within a locus, as in *sa tuksina* ‘to throw, scattering’, *sa ismana* ‘to defecate, scattering’; *dzawn* mimics an event that involves a clustering of individual agents, as in *dzawn tandarina* ‘to gather together’, *dzawn hatarina* ‘to rise in a swarm’; *ʔam* means ‘to revolve, roll, or turn in a complete revolution’, as in *ʔam voltiriana* ‘to turn round completely’, *ʔam tigrana* ‘to turn over (of a canoe)’; *toa* mimics turning from an upright position to an upside-down position, as in *toa churana* ‘to put something upside-down’, *toa talina* ‘to spill everything in a container by turning it upside down’; *polang* describes the moment of emergence from under the water to the surface, as

in *polang wamburina* ‘to emerge from underwater’, *polang rikuna* ‘to emerge from underwater to see something’; *tsupu* mimics the sound of falling into water, as in *supu saltana* ‘to leap and fall into water’, *tsuou rina* ‘to go into water by leaping, falling, or plunging’; *huy* ‘hanging, dangling’, as in *huy warkuna* ‘to be hanging or dangling’, *huy puñuna* ‘to sleep hanging’; *aki* ‘to move by deviating from and returning to a central axis’, as in *aki kushparina* ‘to tip or roll side to side’, *aki shamuna* ‘to come or arrive tottering because of drunkenness’; *Pu* ‘shine, glint, sparkle’, as in *Pu rikurina* ‘to shine or glitter’, *Pu rana* ‘to make shiny’; *wikang* ‘to stand or be positioned vertically in space’, as in *wikang mana* ‘to be positioned vertically in space’, *wikang Pukshina* ‘to emerge upward, in a vertical shape’.

The following adverbial ideophones mimic contact and penetration: *tak* mimics contact between two surfaces and the sound produced, such as *tak churana* ‘to purposely place some object in a position’, *tak tiyarina* ‘to sit down in a definite place (e.g. a bird alighting on a tree branch)’, *tak harkachina* ‘to impede completely by blocking off’, *tak kilabana* ‘to nail something completely shut’, *tak nanana* ‘to feel painful pressure all over a body part’; *P’api* mimics the moment of contact between two surfaces, as in *P’api P’utarina* ‘to attach oneself, or a part of oneself to a surface’, *P’api ana* ‘to be stuck to something’; *dzir* ‘to pull or slide an object across a surface’, as in *dzir P’uchuna* ‘to peel by scraping’, *dzir rana* ‘to slide’; *tsak* ‘to make a shallow puncture’, as in *task tuksina* ‘to prick, pierce, or puncture with a sharp implement’, *task rana* ‘to pierce something, to light a match’; *ling* ‘to insert into an enclosed space’, as in *ling satirina* ‘to insert oneself into a bounded space’, *ling tarpuna* ‘to plant by sticking a cutting into the ground’; *polo* ‘to pass completely through an object’, as in *polo pasana* ‘to pass through’, *polo mana* ‘to be burrowed or tunnelled’.

Adverbial ideophones mimicking opening and closing: *ang* ‘to open the mouth wide, completely’, as in *ang paskana* ‘to open (one’s, an animal’s) mouth as far as possible’, *ang spuñuna* ‘to sleep with the mouth open’; *ing* ‘to open in the shape of a slit or to split open’, as in *ing partina* ‘to divide lengthwise’, *ing asina* ‘to laugh with the mouth open in the shape of a slit’; *awing* ‘to open, uncover, or otherwise expose a space’, as in *awing paskana* ‘to open or uncover a space’, *awing tanagana* ‘to open by showing a barrier aside’; *tus* ‘to burst open’, as in *tus tavyana* ‘to burst open’, *tus pakina* ‘the sound of breaking something hard, such as bone’; *ping* ‘a complete change from light to darkness’, as in *ping tapana* ‘to shut the eyes’, *ping chapana* ‘to wait with one’s eyes closed’.

Adverbial ideophones of falling: *palay* ‘to fall rapidly’, as in *palay tamyana* ‘to rain peltingly’, *palay k<sup>w</sup>inana* ‘to vomit chunks of food’; *patang* describes the moment of contact, or an idea of the sound of contact made with a surface by falling upon or hitting against it, without any evident loss of wholeness or shape, as in *patang urmana* ‘to fall down, e.g. the tail of a snake, a tree struck by lightning’; *patang tuksina* ‘to throw or fling something down’; *ki* ‘to throw, spill, or sprinkle a collection of similar objects or entities’, as in *ki sirina* ‘to lie in a pile or group, e.g. the way eggs look lying in a nest’, *ki urmana* ‘to fall, spilling all over, e.g. a basket of fish’.

Adverbial ideophones mimicking deformation: *tsuk* an idea of the sound of removing something from its medium or of taking a portion of something away from its mass, as in *tsuk surkuna* ‘to pluck out, e. g. a tuberous vegetal, from the ground, or a limb from its body’, *tsuk aysana* ‘to pull out in one clean movement’; *waling* ‘to create empty space by eating or burning up a portion of something’, as in *waling sakirina* ‘to be left in a state of having been partially eaten or burned away’, *waling rupana* ‘to burn away flesh, leaving only bones’; *ch<sup>v</sup>u* ‘to create a clean break by deliberately chopping, cutting, or cleaving an object or entity, usually by means of a sharp tool’, as in *ch<sup>v</sup>u patina* ‘to cut off a portion of anything’, *ch<sup>v</sup>u pikana* ‘to chop something into pieces, to mince’.

Adverbial ideophones mimicking suddenness and completion: *dzing* ‘a sudden awareness or intuition, especially one that causes fright’, as in *dzing tukuna* ‘to become sharply or acutely aware of something’, *dzing yuyarina* ‘to suddenly realize or remember something important’; *dzas* ‘to do anything quickly or directly’, as in *dzas hatarina* ‘to rise, to get up quickly’, *dzas saltana* ‘to leap suddenly’; *tsung* ‘to absorb, cover, or drench with a liquid substance’, as in *tsung hukuna* ‘to be soaked’, *tsung humbina* ‘to be covered with sweat’; *saw* ‘a relatively brief, unbroken movement of a fluid substance or an idea of the sound made by such a movement’, as in *saw shamuna* ‘to come in a sweeping movement’, *saw chakirina* ‘to dry up quickly, suddenly’; *ton* ‘to fill or be filled to utmost capacity’, as in *ton hundachina* ‘to fill to the limit’, *ton apamuna* ‘to bring a full load of something, usually by canoe’; *tas* ‘any action, condition, or state, considered as accomplished and complete or extended in space’, as in *tas kanina* ‘to bite off’, *tas watana* ‘to tie something up’, *tas apana* ‘to take everything’, *tas upina* ‘to drink up all of a given quantity’, *tas pintana* ‘to paint a mark or line’.

## Pay

Trans-New Guinea language of Madang Province, Papua New Guinea.

See *BUTTERFLY*

## Pentestheme

An iconic word containing five phonemes: English *grasp*, *slurf* (a variant of *slurp*) and *swoop* ([swuwp]), *plunk*, *crimp*, *shrink* (Wescott 1975b: 29).

## Persian

Onomatopes in Persian are usually part of a verbal phrase with a light or support verb, such as *kardan* ‘to do’, *zadan* ‘to hit, strike’, *keshidan* ‘to draw, shoot’; in addition, onomatopes can be reduplicated. The following data are taken from Lessan Pezechki (2017)

To mimic the sounds of savage animals, the verb *qorridan* ‘to roar, growl’ is used. This verb is derived from the onomatopoeic word *qor* ‘roar’. Other onomatopes in this area include: *zuze keshidan* ‘to howl’, *khornash keshidan* ‘to growl, bawl’, *qorresh* ‘roar’, *fes fes/khes khes* ‘hiss’, *qur qur* ‘croak’, *qâr qâr* ‘squawk’, *jik jik* ‘tweet’. The expression *zuze keshidan* can be used metaphorically to convey moaning, yelping and whimpering.

The onomatope *khornash keshidan/khor khor kardan* can also be used to express snoring. The onomatope *qor qor kardan/qor kardan* can mean ‘to grumble’. The onomatope *fes fes kardan* can also mean ‘to drag, hang around’ and the variant *khes khes kardan* also mimics whistling respiration.

Common domestic animals have their identifying onomatopes: *vâq vâq/hâp hâp/ow ow* (dog), *ar ar* (donkey), *ba’ ba’* (sheep, goat), *xor xor* (pig), *miu miu* (cat), *qod qod* (hen, chicken), *mow mow* (cow), *ququququ* ‘rooster’, *sheyhe* (horse), *cahchahe* (nightingale), *baqbaqu* ‘pigeon, dove’.

The onomatope *qâr o qur* ‘stomach gurgle, make an unnecessary noise’ shows an iconic vowel alternation that also occurs in other words: *sâf-o suf* ‘smooth, polished’, in which *suf* is an auto-iconic meaningless imitation of the adjective.

See *DOPPELUNG (REDUPLIKATION, GEMINATION), ONOMATOPOEIC EXPRESSION, ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA*

*DEGL'IDIOMI, PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*

## Phenomime

A sound symbolic word mimicking a non-auditory (visual, textural, emotional) eventuality. Akita (2013: 342) gives examples from Japanese: *baribari* as in *kongetuwa baribari hatarita* 'I worked *very actively* this month' and Korean *ttokttok* as in *yenginun ttokttok hata* 'Yengi is *clever*'.

## Phenomimetic root

An iconic root mimicking a non-auditory property consisting of an unordered set of phonemes that can generate onomatopes in different languages through linearization, reduplication or vowel and consonant extension. The phenomimetic root {bilabial plosive, vowel, velar plosive} mimicking the act of grabbing can be realized as *pak* or *kap* and is found in many language families. It was studied in depth by W. Oehl.

See *FANGEN-FINGER-FÜNF*, PHONOMIMETIC ROOT

## Phonaesthetic iconicity

A type of iconicity in which certain sound patterns suggest emotions. For example, back vowels are often associated with aggression, extroversion, and energy, while front vowels are associated with kindness, honesty, prettiness, cheerfulness, and triviality (Sadowski 2003: 417-18).

## Phonaestheme

The term phonaestheme (or phonestheme) was coined in 1930 by the British linguist J. R. Firth to refer to a phonemic habit of verbalizing some type of sensorial experience. The following is the passage from his 1930 book in which Firth defined this term:

"But the whole of the *slack* etymeme belongs to a much bigger group of habits we may call the *sl* phonaestheme" (Firth 1930: 184).

Firth lists the following English words: *slack, slouch, slush, sludge, slime, slosh, slash, sloppy, slug, sluggard, slattern, slut, slang, sly, slither, slow, sloth, sleepy, sleet, slink, slip, slipshod, slope, slit, slay, sleek, slant, slovenly, slab, slap, slough, slum, slump, slobber, slaver, slur, slog, slate*. He concluded:

“But a group of words such as the above has a cumulative suggestive value that cannot be overlooked in any consideration of our habits of speech. All the above words are in varying degrees pejorative. There is nothing inherently pejorative in the sounds, though it has been suggested that *sl* is suggestive of salivation. It so happens that we hear and learn to make these sounds at present in what we may describe as pejorative contexts of experience. The more consistently similar sounds function in situations having a similar affective aspect, the clearer the function. In this way, then, *sl* can be said to be a pejorative habit. If there is anything at all in linguistic analogy by homophony, phonetic links such as *sl*, are experiential links” (Firth 1930: 184-185).

Firth also observed this phenomenon in syllabic rhymes, as can be seen by considering the English words *scoop*, *swoop*, *droop*, *stoop*, *loop*, *whoop*, or *brisk*, *frisk*, *whisk*, *risk*, *crisp*, *wisp*, *lisp*.

Bolinger (1940), discussing Jespersen (1922), noted some of these phonaesthemes in English: the rhyme *-ush* suggests something moist and oozy: *lush*, *slush*, *mush*, *gush*, and the rhyme *-ash* suggests breaking or fragments: *dash*, *crash*, *trash*, *slash*, *smash*, *bash*, *gash*, *ash*. In addition, *plop*, *lop*, *slop*, *flop* and *lap* suggest flaccidity and *babble*, *blab*, *gabble*, *bluster* and *blat* suggest garrulity; *to lurk*, *skulk* and *slink* share a creepy sense and *hustle*, *jostle*, *bustle*, *rustle* suggest a busy sound. Some words beginning with *sl-* mimic slowness or inertia: *slow*, *sluggish*, *slothful*, *slack*, *slush*, *slosh*, *slubber* and *slog*; *seep*, *sip*, *sap*, *sup*, *sop*, *soap*, and *soup* suggest liquid motion; while *gullet*, *gorge*, *gargle*, *guttural* mimic gurgling in the throat. Affixes can also have an iconic flavour: the *-cious* ending suggests lip smacking: *luscious*, *delicious*, *voluptuous*, *salacious*, *galuptious*, *scrumptious*, *voracious*. Sadowski (2001) studied the English phonaestheme *gl-*, suggesting an immaterial light shining away from its source: *glance*, *glare*, *glee*, *gleg*, *glent*, *glint*, *glimmer*, *glitter*, *gloat*, *gleam*, *glow*, *gloom*, *glower*, *gloaming*, *glum*, *glut*. Philps (2011) analysed the phonaestheme *sn-* in the English words *snaffle*, *sneeze*, *sniff*, *snivel*, *snore*, *snort*, *snot* and *snuff* (this had already been noted by Bolinger 1940: 68). This phonaestheme mimics or suggests nasality or something related to the human nose. Philps points out the related phonaestheme *sm-* suggesting referents that may be perceived olfactively: *smoke*, *smog*, *smoulder*. Philps relates phonaesthemes to the embodied meaning theory:

“If meaning is seen as embodied, i.e. determined and structured by the constant interaction of humans with their worldly environment, and if humans possess a shared neural substrate, as the results of recent research in neuroscience suggest, then it may be argued that a concept such as nasality first acquires its meaning through the natural human ability to perceive

nasally related phenomena, whether consciously or not. Lastly, if it is accepted that concepts are the elementary units of reason and linguistic then embodied meaning may conceivably have been transcoded into linguistic meaning at some early stage in human evolution, and embedded notably in those sound symbolic segments known as phonæstemes” (Philps 2011: 1129).

Philps points out that the motivated sound-symbolic relationship between a nasal consonant and something similar or related to the nose and to breathing can also be verified in Khoisan, Nilo-Saharan, Afro-Asiatic, Kartvelian, Sino-Tibetan and Japanese. The psychological reality of English phonaestemes has been studied by Bergen (2004). Leonardi (2015) has studied phonaestemes in Latin. He proposes, among others, the following: **gl-** ‘to swallow’: *glutire* ‘to swallow’, *gluttus* ‘greedy’, *gula* ‘throat’, *glattire* ‘to yelp’; **gr-** ‘bubbling’, ‘gargle’, ‘croak’: *gurgulio* ‘throat’, *gargala* ‘trachea’, *gurges* ‘whirlpool’, *graculus* ‘crow, raven’, *grillus* ‘cricket’, *grunitus* ‘grunt (of a pig)’; **cl-** ‘slope’: *clima* ‘inclination’, *climacis* ‘ramp, ladder’, *climax* ‘gradation’, *clinamen* ‘inclination’, *clinatus* ‘inclined’, *clivus* ‘slope, ramp’; **cr-** ‘crackle’, ‘noise’: *crepare* ‘to crackle’, *crepitare* ‘to crackle’, *crepitus* ‘crackling’, *crepundia* ‘rattle’, *crotalum* ‘rattle’, *crociare* ‘to croak’, *corvus* ‘raven’; **fl-** ‘to blow’, ‘to flow’: *flamen* ‘breath’, *flare*, *flatate* ‘to blow’, *flatus* ‘breath, breathing’, *flator* ‘flute player’, *flabellare* ‘to blow’, *flabellum* ‘fan’, *follicis* ‘bellows’, *follicare* ‘to pant’, *fluere* ‘to flow’, *fluidus* ‘fluid’, *fluctuare* ‘to float’, *flumen* ‘river’, *fluor* ‘flow’, *fluxus* ‘flow’; **fr-** ‘to break’: *frangere* ‘to break’, *fragmen* ‘fragment’, *fragilis* ‘fragile’, *friare* ‘to grind’, *frustum* ‘piece’, *frustrare* ‘to shatter’; **pl-** ‘to bend’: *plicare* ‘to bend’, *complex* ‘complicated, intricate’, *plectere* ‘to braid’; **sc-** ‘rough, to scratch, scrape’: *scaber* ‘rough, scabrous’, *scabere* ‘to scrape’, *scalpere* ‘to scratch’, *scalpellare* ‘to cut’, *scalprum* ‘knife, chisel, sickle’, *sculpere* ‘to sculpt’, *scelus* ‘scar’, *scission* ‘tear’, *scobina* ‘rasp’, *scriber* ‘to engrave’; **tr-** ‘to tremble’: *tremor* ‘tremble’, *trepidare* ‘to tremble’, *tritura* ‘rubbing’, *trux* ‘truce, cruel violent’, *truncare* ‘to saw, to cut’.

See *GRAMMATICA LINGUAE ANGLICANAE*

## Phonetic metaphors

Ivan Fónagy (1963, 1999: 19-25, 2001: 337-352) has observed that images, such as *dark and light vowels*, *hard, soft, moistened and dry consonants*, recur across languages and cultures. In his opinion, these phonetic metaphors may either be based on auditory or articulatory experience. In some cases, phonetic articulation seems to be involved in these metaphors:



“In view of the highly significant correlation between brightness and the /i/ vowel even in the case of deaf children (80 %), we cannot claim that front vowels are associated with brightness because they ‘sound brighter’. We have to recognise the existence of an analogy between vowel articulation and the sensation of brightness and darkness [...]. In pronouncing /i/ the tongue seems to point upward, i.e. toward light; in pronouncing /u/ the tongue retracts and seems to point backward toward the ‘dark recess’ of the pharyngeal cavity” (Fónagy 2001: 342).

In other cases, phonetic metaphors seem to be based on auditory stimuli:

“We have cogent reasons to suppose that metaphorical terms such as *Lautstärke* [lit. ‘sound force], *strong* syllable, the *male* and *female* vowels of Mongolian and Hungarian grammar, and *sharp*, *acute* vowels are essentially based on acoustic sensations. *Lautstärke* equates physical force with loud voice. *Female* sounds correspond to the vowel colour of female voices, back vowels to male voices. *Sharp*, *acute* sounds (such as *s* and *i/*) are the closest to the acoustic threshold of pain” (Fónagy 2001: 343).

See PHONOMETAPHORIC ICONICITY, PSYCHOPHONETIK

## Phonetic symbolism

The iconic relation between sound and meaning; sound symbolism.

See *A STUDY IN PHONETIC SYMBOLISM*

## Phonological iconicity

Following Fischer (1999a), *phonological iconicity* comprises: *auditory iconicity* (a speech sound representing non-speech sounds or noises, as in *miaow*); *articulatory iconicity* (an iconic relation between phoneme articulation and a non-linguistic property, for example the /i/-/a/ contrast can represent many non-linguistic contrasts, such as small-large, near-far, high-low, bright-dark, light-heavy, narrow-broad, thin-thick); and *associative iconicity* (a phonetic sequence shared by various words with related meanings is associated with a property common to all these meanings; phonaesthemes\* is the typical case of this type of iconicity).

Masuda (2007) distinguishes *direct phonological iconicity*, including onomatopoes and *indirect phonological iconicity*, in which non-auditory realities (sensation, movement, feeling, size, colour) are symbolized by linguistic sounds. Two subtypes can be differentiated: *associative indirect iconicity* (certain linguistic sounds seem to represent visual, tactile or

proprioceptive properties of objects, such as size or shape) and *phonaesthetic indirect iconicity* (a conventional submorphemic symbolic relation between a phoneme or cluster and particular meanings, as in *phonaesthemes\**).

## Phonometaphoric iconicity

“The sound of the name resembles, via the synaesthesia of metaphor, some non-auditory percept of the referent, for example relatively high amplitude in high frequency formants (of the name) correlating with relatively small size of the referent, or aspiration of voiceless stops correlating with ‘roughness’ or ‘hairiness’” (Abondolo 2007: 9).

See PHONETIC METAPHORS

## Phonomime

A sound symbolic word mimicking an auditory eventuality. Akita (2013) distinguishes two types: *voice-phonomimes*, for example animal onomatopoeias (*miaow*) and *noise-phonomimes* mimicking noises in general, for instance *slam*. Akita (2013: 343) gives several examples of these subtypes in Japanese (J) and Korean (K):

- Voice-phonomimes: *hisohiso* (J)/*ssoktokssoktok* (K) ‘whisper’; *petyapetya* (J)/*caycalcaycal* (K) ‘chatter’; *tyuntyun* (J)/*ccaykccayk* ‘chirp’; *hinhin* (J)/*hihing* (K) ‘neigh’.
- Noise-phonomimes: *dobodobo* (J)/*chempengchempeng* (K) ‘gurgle’; *potyapoty* (J)/*calpatang* (K) ‘splash’; *zakuzaku* (J)/*songsong* (K) ‘crunch’; *gorogoro* (J)/*twululu* (K) ‘growl’.

## Phonomimetic iconicity

An expression for onomatopoeia: the sound of the name sounds like the sound of the referent (Abondolo 2007: 9).

## Phonomimetic root

An iconic root mimicking a sound consisting of an unordered set of phonemes that can generate onomatopes in different languages through linearization, reduplication or vowel and consonant extension. For example, *babble*, *blah*, *blab*, *barbar* (Arabic); *blabaran* (Scottish Gaelic); *blablabla*, *balbucear* (Spanish); *brbljati* (Serbian); and *plepeti* (Lithuanian) are onomatopes\* derived from the phonomimetic root {bilabial plosive, /a/,

lateral/rhotic} whose components can be linearized and extended in different ways.

See *BABBLE, BANG, BOOM, BUZZ, CACKLE, CLICK, CRACK, CRASH, CRICKET, CROAK, CROW, CUCKOO, CUCUMBER, GARGLE, GRUNT, IMITATIVE ROOTS, KISKADEE, MIM/MOM/MUM, PIP, PHENOMIMETIC ROOT, PUFF, TICK-TOCK*

### ***Phonomimography*** [*Phonomimographie*]

A term proposed by Genette (1976: 78) to denote an iconic relation between speech and writing; for example, the form of the letter *o* can be seen as an imitation of the rounded shape of the mouth produced when articulating the vowel represented by that letter.

See IDEOMIMOGRAPHY

### **Phonosemantics**

The study of regular correlations between the phonetic form of a word and its meaning. In her dissertation on phonosemantics, Magnus states the following *phonosemantic hypothesis*:

“In every language of the world, every word containing a given phoneme has some specific element of meaning which is lacking in words not containing that phoneme. In this sense, we can say that every phoneme is meaning-bearing. The meaning that the phoneme bears is rooted in its articulation” (Magnus 2001: 4).

See *OSNOVY FONOSEMANTIKI*

### **Phonosymbolism**

This word covers the iconic aspects of linguistic sounds; sound symbolism (Malkiel 1990).

See LEXICAL SYMBOLISM, LOGOSYMBOLISM, MORPHOSYMBOLISM, SOUND SYMBOLISM

## Picto-phonetic iconicity

For Zh. Hu (2011: 90-94) picto-phonetic iconicity includes onomatopoeic iconicity (phonomimes\*) and phonaesthetic iconicity (sound symbolism).

See PICTOGRAPHIC ICONICITY, PICTO-PHONETIC-GRAPHIC ICONICITY

## Pictographic iconicity

This expression is proposed by Zh. Hu (2011: 94-95) to denote an iconic similarity between a logographic character and the entity referred to, as in Chinese 山 *shān* ‘mountain’ or 人 *rén* ‘human being’.

See CHINESE WRITING

## Picto-phonetic-graphic iconicity

This expression is used by Zh. Hu (2011: 95-96) to refer to the combined picto-phonetic and picto-graphic aspects of many Chinese characters. For example, the character 叉 *chā* ‘separate’ appears in the compound characters: 汊 *chà* ‘tributary’, 杈 *chà* ‘trunk’, and 衩 *chà* ‘underpants’. These three characters show picto-phonetic-graphic iconicity, since the left constituents have a generic meaning related to ‘water’, ‘tree’ and ‘clothes’ respectively, and the right constituents convey both the pronunciation (*cha*) and a meaning specification.

## Picture Theory of the Proposition

In his famous and influential *Tractatus Logico-Philosophicus* (1921), L. Wittgenstein (1889-1951) stated the so-called *picture theory of the proposition*: propositions that occur in speech are pictures of the reality that is to be conveyed; therefore, sentences are iconically motivated. Wittgenstein’s concept of pictorial representation is diagrammatic. For a sentence to be a picture of an event, two things are required: the words in the sentence must represent the entities taking part in the event and the syntactic relations between the words must represent the relations between the real entities participating in the event.

The following passages of the *Tractatus* present some of the constitutive elements of this theory:

2.131 In a picture the elements of the picture are the representatives of objects.

2.14 What constitutes a picture is that its elements are related to one another in a determinate way.

2.15 The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way.

3.14 What constitutes a propositional sign is that in it its elements (the words) stand in a determinate relation to one another. . . .

3.2 In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought.

4.021 The proposition is a picture of reality, for I know the state of affairs presented by it, if I understand the proposition. And I understand the proposition, without its sense having been explained to me.

4.023 The proposition determines reality to this extent that one only needs to say “Yes” or “No” to it to make it agree with reality.

Reality must therefore be completely described by the proposition.

A proposition is the description of a fact.

As the description of an object describes it by its external properties so propositions describe reality by its internal properties.

The proposition constructs a world with the help of a logical scaffolding, and therefore one can actually see in the proposition all the logical features possessed by reality *if* it is true. One can *draw conclusions* from a false proposition.

[Hülster 2015]

## Picture Words

Expression used by Westermann and Bickford-Smith (1965) to denote Ewe ideophones.

### *Pip*

This phonomimetic\* root is an onomatopoeic imitation of a bird chirping, following García de Diego (1968: 546). This author mentions some examples of this root: Sanskrit *pippaka*, *pippakah* ‘types of bird’; Czech

*pipat* ‘peep, cheep’, *pipáni* ‘peeping’; Lithuanian *pypti* ‘to peep, cheep’; Latin *pipire* ‘to chirp’, *pipio* ‘pigeon’, *pipizo* ‘the young of the crane’, *pipilum* ‘outcry, chatter, whimper, whine’; French *piauler* ‘to chirp’; Spanish *piar* ‘to chirp’; Greek *pipizo* ‘to chirp’; Dutch *piepen* ‘to twitter’; German *piep* ‘peep’, *piepen*, *piepsen* ‘to peep’. It is also used to denote a high pitched sound and instruments or objects that produce it: Spanish *pipa* and French *pipeau* ‘piccolo’, English *pipe*. This root can also be used to denote something small: English *pip* or Spanish *pepita* ‘pip’, French *pepin* ‘pip’. It can also denote a rapid movement: English *peep* ‘a quick or furtive look or glance’.

## Polish

West Slavic language spoken in Poland by approximately 55 million people.

See BALTO-SLAVIC LANGUAGES, BIRD NAMES *BOW-WOW*, *CACKLE*, *CRASH*, *CROAK*, *CUCKOO*, DIAGRAMMATIC ICONICITY, *FANGEN-FINGER-FÜNF.*, ONOMATOPOEIC EXPRESSION, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *E ARMONIA DEGL'IDIOMI*, *QUEST FOR THE ESSENCE OF LANGUAGE*

## Polysynthesis Parameter

The Polysynthesis Parameter was informally stated by M. C. Baker in the following terms: “Every argument of a head element must be related to a morpheme in the word containing that head” (Baker 1996: 14). For example, consider the Basque sentence *Nik liburua Koldori eman diot* ‘I have given the book to Koldo’. There are three participants in the denoted event: the agent I (*nik*), the patient book (*liburua*) and the recipient Koldo. These participants are referred to in the auxiliary form *d-i-o-t* (it-have-him-I): the morpheme *-t* conveys a first person singular agent, the morpheme *-o-* denotes a third person singular recipient and the morpheme *d-* is used when referring to a third person singular patient. All three participants are arguments of the verb *to give* (*eman*) and all of them are referred to in the auxiliary (*diot*). The participants in the event and the syntactic relations between the words referring to them and the verb are iconically mimicked through the different person morphemes in the auxiliary.

See MIRROR PRINCIPLE

## Portuguese

Western Romance language spoken by approximately 220 million people mainly in Portugal and Brazil.

See BIRD NAMES, *BOW-WOW*, *BUTTERFLY*, *CACKLE*, CREOLES, *CROAK*, *CUCKOO*, *DICCIONARIO DE VOCES NATURALES*, ETYMOLOGY, *SYMBOLIC VALUE OF THE VOWEL I*

## Potawatomi

Algonquin language of the Pottawatomi people (Michigan and Wisconsin, USA).

See NURSERY WORDS

## Primary iconicity

H. H. Meier (1999: 142) distinguishes a primary iconicity which includes onomatopes\* and echoic elements, and a secondary iconicity which includes phonaesthetic and sound-symbolic elements.

See ICONICITY

## ***Primitive Culture. Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom. Volume I (E. B. Tylor 1871)***

Chapters V and VI of this classic book are devoted to emotional and imitative language and present an interesting and accurate cross-linguistic survey of iconicity in language. At the beginning of Chapter V, Tylor states the following:

“Now all languages are found on inspection to contain some articulate sounds of a directly natural and directly intelligible kind. These are sounds of interjectional or imitative character, which have their meaning not by inheritance from parents or adoption from foreigners, but by being taken up directly from the world of sound into the world of sense” (160).

The author’s empirical and methodological approach is stated thus:

“In here examining interjectional and imitative sounds with their derivative words, as well as certain other parts of language of a more or less cognate character, I purpose to bring forward as far as possible new evidence derived

from the languages of savage and barbarous races. [...] By simply enlarging the survey of language, the province of the imagination is brought within narrower limits. If several languages, which cannot be classed as distinctly of the same family, unite in expressing some notion by a particular sound which may fairly claim to be interjectional or imitative, their combined authority will go far to prove the claim a just one. [...] If several languages have independently chosen like words to express like meanings, then we may reasonably suppose that we are not deluding ourselves in thinking such words highly appropriate to their purpose” (162).

Tylor considers that the iconic words mimicking sounds (sound-words) are the most perfect and convincing; nevertheless he also notes that “sound-words taken up into the general inventory of a language have to follow its organic changes, and in the course of phonetic transition, combination, decay, and mutilation to lose ever more and more their original shape” (201).

The author observes that words expressing human actions accompanied with sound form a considerable and intelligible part of the mimicking vocabulary. As examples he mentions the forms *pu*, *puf*, *bu*, *buf*, *fu*, *fuf*, with the meaning ‘puffing’ (see *puff\**): Malay *puput*, Tongan *buhi*, Maori *pupui*, Australian *bobun*, *bwa-bun*, Galla *bufa*, *afufa*, Zulu *futa*, *punga*, *pupuza*, Quiché *puba*, Quichua *puhuni*, Tupi *ypeú*, Finnish *puhkia*, Hebrew *puach*, Danish *puste*, Lithuanian *púciu*, Mpongwe *punchina*, Carib *phoubäe*, Arawak *appüdiün*. This mimetic root can also imitate the smoke blown out when shooting or blowing in general, and related phenomena such as: Australian *pu-yu* ‘smoke’; Quichua *puhukuni* ‘to light a fire’, *punquini* ‘to swell’, *puyu*, *puhuyu* ‘a cloud’; Maori *puku* ‘to pant’, *puka* ‘to swell’; Tupi *púpú*, *pupúre* ‘to boil’; Galla (Oromo) *bube* ‘wind’, *bubiza* ‘to cool by blowing’; Kanuri *fungin* ‘to blow, swell’, *furúdu* ‘a stuffed pad or bolster’, *bubute* ‘bellows’ (*bubute fungin* ‘I blow the bellows’); Zulu *-puku*, *-pukupuku* ‘frothing, foam’, *pupuma* ‘to bubble, boil’, *fu* ‘a cloud’, *fumfu* ‘blown about like high grass in the wind’, *futo* ‘bellows’, *fuba* ‘the breast, chest’.

The words *mum*, *mummy*, *mumble* (see *mim/mom/mum\**) are direct imitations of the closed lips and are by no means exclusive to European languages: Vai *mu mu* ‘dumb’; Mpongwe *imamu* ‘dumb’; Zulu *momata* ‘to move the mouth or lips’, *mumata* ‘to close the lips as with a mouthful of water’, *mumuta*, *mumuza* ‘to eat mouthfuls of corn etc., with the lips shut’; Tahitian *mamu* ‘to be silent’, *omomu* ‘to murmur’; Fijian *nomo*, *nomo-nomo* ‘to be silent’; Quiché *mem* ‘mute’; Quichua *amu* ‘dumb’, *amullini* ‘to have something in the mouth’, *amullayacuni simicta* ‘to mutter, to grumble’.



Other imitative words discussed by Tylor include: *tu* ‘the sound of spitting’, *nyam* ‘food, to eat’, as well as the usual onomatopoeias of the sounds made by domestic animals (dogs, cats, roosters, oxen, birds...). On page 210, Tylor also describes the use of *pip* to denote certain high-pitched musical instruments in different languages (see *pip*\*) and objects of similar shape, such as the English *pipe* ‘tube of wood used for smoking tobacco’. He also notes the use of *crack* to imitate the sound of breaking (see *crack*\*): German *krachen*, French *craquer*. The following examples are clear cases of imitative or mimetic words in Australian languages: *walle* ‘to wail’, *bung-bung-ween* ‘thunder’, *wirriti* ‘to blow, as wind’, *wirrirriti* ‘to storm, rage, as in fight’, *kurarriti* ‘to hum, buzz’, *kurrirurriri* ‘round about, unintelligible’, *pitata* ‘to knock’, *pitapitata* ‘to knock’, *wiiti* ‘to laugh’.

Other types of iconic words involving sound symbolism and reduplication are exemplified by some of the language data in Tylor’s book. For example, in Watjandie (Nhanda, an Australian Language) *jir-rie* ‘already or past’ > *jierrie jirrie* ‘an immense time ago’; *boorie* ‘small’ > *boorie boorie* ‘very small’ > *borie boorie* ‘exceedingly small’ (217); in Botocudo (Brazil) from *ouatou* ‘stream’ and *ijipakijjou* ‘great’ the expressions *ouatou-ijipakijjou* ‘a river’ and *ouatou-ijipakijjou-ou-ou-ou-ou* ‘ocean’ are derived (217). Some other examples showing reduplication include: Botocudo *hou-hou-hou-gitcha* ‘to suck’; Quichua *chiuiuiuiñichi* ‘wind whistling in the trees’; Maori *haruru* ‘noise of wind’, *hohoro* ‘hurry’; Dayak *kakakkaka* ‘to go on laughing loudly’; Ainu *shiriushiriukanni* ‘a rasp’; Tamil *murumuru* ‘to murmur’; Akra *ewiewiewiewie* ‘he spoke repeatedly and continually’ (219).

Tylor also noted the use of vowel alternation to denote deictic distinctions: Javanese *iki* ‘this’, *ika* ‘that’, *iku* ‘that (farther off)’; Malagasy *ao* ‘there (at a short distance)’, *eo* ‘there (at a shorter distance)’, *io* ‘there (close at hand)’; Tamil *î* ‘this’/*â* ‘that’; Abkhaz *abri* ‘this’/*ubri* ‘that’; Hungarian *ez* ‘this’/*az* ‘that’; Zulu *apa* ‘here’/*apo* ‘there’; Yoruba *na* ‘this’/*ni* ‘that’; Sahaptin *kina* ‘here’/*kuna* ‘there’ (220-221). Some data on nursery words in different languages, including *mama* and *papa*, are also discussed (nursery words\*).

***Primitive and universal laws of the formation and development of language. A rational and inductive system founded on the natural basis of onomatops (Augustus and F. Pincott 1874)***

This book contains an introduction (1-52) in which some previous ideas about the origins, evolution and acquisition of language are briefly

discussed, with references to M. Müller (on language origins), C. Lyell (laws of development), M. Maspero (on Egyptian grammar), H. Sweet (on onomatopoeia), and J. S. Mill (on the necessity of law). Brief notes on reduplication, intensives, grammatical inflexion, word-formation in Egyptian hieroglyphs, phonetic change, metastasis and metaphor, and a number of other topics are also given.

This introduction is followed by a short *præfaemen* (53-58), which includes some observations on the etymology of the word *onomatope*, as well as a general characterization of the scope of the book. The following paragraph states its goal:

“The special object of writing this first Dictionary of Onomatops is to show that we must look to nature only for the bonds uniting all languages together; and in adverting to the numerous affinities or analogies connecting languages, it is hoped that the proof of their true origin will be demonstrated” (55).

The authors state that these affinities can be recognized through the study of Sanskrit and that all the analysed words can be traced back to onomatopoeic roots.

The basic principles of their proposal are stated as follows (57-58): a) every abstract in language is evolved from a more primitive concrete; b) every concrete, originally, was expressive in all its parts; c) each part was a distinct expression of a separate material fact, or a phonetic modification of such an expression; d) each expression had a distinctly recognizable relationship with the fact described; e) it originated in the natural vocal utterances arising from the fact itself.

The bulk of the book consists of four sections and a conclusion. Section 1 (59-73) discusses previous uses and definitions of *onomatopoeia* (Herodotus, Aristides, Strabo, Epicurus, Lucretius, Varro, Quintilian, St. Augustin, Ch. Nodier, E. Renan, J. G. Herder, H. Steinthal, A. F. Pott, F. Bopp). Section 2 (*What onomatopes really are*, 74-100) is devoted to disclosing the true nature of onomatopes including a definition of *onomatope*\*. On page 82, the authors state what they consider the most apt way to describe an onomatope: *a sound consciously uttered for a purpose*. They also highlight the generative character of onomatopes and the onomatopoeic nature of language in general:

“One simple onomatop may underlie scores of words that grew out of the primal idea [...]. Simple onomatops are susceptible of indefinite development, insomuch as to become the grand and expressive vocables of

the most polished languages. Human language is, indeed, a mass of onomatops. Language does not consist of onomatops and something else, but of nothing else than developed onomatops” (87).

In addition, the authors use the concept of *root* in a special way:

“Every sound was at one time significative, save only those produced by phonetic corruption. Onomatops are, therefore, roots—the bases of words; but differ of what are ordinarily understood by roots in that they are *onomata* struck by nature or natural processes, whereas roots are the discoveries of the etymologist” (87).

The process of word creation from onomatops is characterized as follows:

“Sounds expressive of the simplest actions, *g*, gullet, swallow, *l*, lick, tongue, *p*, lip, suck, &c., gradually lost their spontaneous character by constant repetition, and so became the symbols of ideas” (94).

Section 3 (101-156) is entitled *Collective Analysis* and describes internal onomatopoeic relations between different roots illustrated by an in-depth study of the root corresponding to the word *law* (Latin *lex*) and all its linguistic onomatopoeic (not etymological) relatives in a number of languages (both Indo-European and Semitic) including a lateral sound [l] that denotes physical and mental attachment, binding, adhesiveness (Latin *ligare* ‘to attach’, English *link, love, lust, like, luck*, Hindi *lasnâ* ‘to embrace, adhere’). The articulatory basis for this onomatope is stated as follows:

“*The application of the tongue* may really be the idea underlying all the preceding derivatives. If so the origin of the connexion between sound and sense is patent, as the action of the tongue necessarily produces the sound which is represented by the lingual *l*. This liquid is clearly the onomatop of which thousands of words suggestive of the tongue and its operations are built; and the great probability that licking suggested the ideas of clamminess, adhesiveness, smearing, and other methods of applying, and so passed on to allying, binding, and aggregating, is not by any means so improbable as many of the changes of sense which words are known to have undoubtedly undergone” (141-142).

The Latin words *lingua, lingere, delingere, loquor, loquax* are given as examples of meanings close to the original *l* onomatope, among many examples from other languages, notably Sanskrit.

At the end of this section, their *Collective Analysis* is summarized as follows:

“This long examination of the word law and its associates is an illustration of what we call Collective Analysis, which it will be seen differs totally from the process of former etymologists, who take a single word with its meaning, and then seek its origin by help of other words of similar import from other languages; whereas by our method of analysis large numbers of words in the same language of similar, but not necessarily of identical import, are collected together and the feature common to all is eliminated. This common bond of union is taken to be the base, and if an identical phonic symbol with like import is found in any considerable number of words in other languages, we then feel sure that we have discovered a natural onomatop, more specifically when some common action, as the licking of the tongue, the puffing of the lips, &c., is found to correspond in both sound and sense with the derivatives that have led up to it” (156).

Section 4 (157-200) explores the etymology of several Latin and English words: *caelum* (157-158), *tonantem* (159-162), *credidimus* (163), *jovem* (163-165), *regnare* (165-167), *enarrant* (167-168), *gloriam* (168-169), *flower* (169-186), *bee* (187-189), *father* (189-192). To conclude this section, the equivalent of the English word *father* is given in more than 200 languages (192-200).

A conclusion (201-209) lays out the main proposals and ideas of the book.

There is an appendix (209-232) with additional data from the Dardic languages and a list of onomatopes (233-237), which is included below:

- The sound [g] is an onomatope of throat, swallow, eat, bite, incise, seize, drag, draw and engrave, as in English: *greedy*, *gorge*, *gnawing*, *disgust*, or Latin *gula*, *gustus*. In some languages this onomatope becomes voiceless ([k]): Sanskrit *krid*, *krad* ‘eat’; or aspirated: Sanskrit *khad*, ‘eat’, *khand*, ‘bite’; in addition, it can also become *ch* as in the English word *chew*.
- The sound [i] denotes that which is proximate, self, unity, motion towards the speaker or motion in general: Chinese *yi* ‘one’, English *I*, Latin *ibi*, *idem*. This onomatopoeia can also have an [e] instead of an [i], as in the Latin verb *eo* ‘I go’. There are also variants with consonantal extensions: Sanskrit *ri* ‘go’, English *river* or Sanskrit *vridh* ‘increase’.
- The sound [l] is an onomatope of the tongue and the tongue’s operations, licking, smearing, shining, brightening, liking, attaching and binding: Sanskrit *lih* ‘lick’, *lap* ‘speak’; Arabic *lu’ab* ‘viscosity’; English *lip*, *light*, *relish*, *leash*, *link*; Latin *lex* ‘law’; French *loi* ‘law’. A variant with [r] occurs in Sanskrit: *ruch* ‘shine’, *ranj* ‘attach’,

English *rub*. There are many variants with consonantal extensions: S+L (English *slime, sling, saliva*); S+P+L (English *splice, splayed*); G+L (Greek *glossa*, English *gloss, glide, glue, grip*, Latin *gelidus*, French *glisser, gelé*); K+L (English *cling, clew, clay, clamp, cramp*); P+L (English *plaster, pleat, plug, plot*); B+L (English *block, blot, braid, brace*); F+L (English *flag, fleece, flossy, fold, fail, fool, false*); V+L (English *vale, vile, wool*).

- The bilabial consonant [p] is an onomatopoe of puffing, blowing, motion forward, extending, filling, broadening: English *puff*, Sanskrit *phūt* ‘puff’, Persian *pufidan* ‘blow’, Latin *pulsum*, English *push*. A voiced variant is seen in English (*blow, breath*), and fricative variants are exemplified by the following words: English *fore, forth*, Arabic *fī* ‘for’, Scotch *fuff* ‘puff’, Sanskrit *vā, vīj* ‘blow’, English *wind*, French *vent*. There are also variants with several consonantal extensions: P+R+I (Latin *per, pro*, Sanskrit *pra* ‘forward’, *prā* ‘completed’, *pūr* ‘fill’, Persian *pār* ‘completed’); P+L (Latin *plus*, English *plump, pleasure, plank, pallet*); S+PRI (Sanskrit *spri* ‘please’, English *spread, spade, span, expand*); PRI >BL, BR (English *bloom, blossom, bulb, blade, boil, ball, belly, broad, board*); PRI > FL (English *fill, flower, floor, friend*).
- There is another [p] onomatopoe denoting sucking, drinking, nourishment, strengthening, power and lordship: Sanskrit *pī* ‘suck’, *payas* ‘milk’, Latin *pino*, Hindi *pīnā* ‘drink’, English *pasture, pastry*; S+P (English *spout*, Sanskrit *sphīti* ‘increase’, *sphāy* ‘swelling’); P > B (Latin *bibo* ‘drink, suck’, French *boire* ‘drink’, English *bee* ‘the sucking creature’, Japanese *batsi* ‘bee’); P > F (English *food, fodder, father*); and P > W (English *wine, water*).
- The onomatopoe [t] denotes that which is exterior to the self, the second person, the other, there, beyond and, as an intensifier, down: English *the, he, thee, thou, that, there two, twice, twisting, twinkling*; T > D (Sanskrit *dvi* ‘two’, Latin *duo* ‘two’, English *duality, duplicity, diverse*, Sanskrit *div* ‘twinkle’, English *day*); T > J (Sanskrit *jut* ‘shine’, *jīva* ‘life’, English *joy, jubility*, French *jour* ‘day’); T > Z (Persian *zīstan* ‘live’).

See ONOMATOPOEIA

## Prosodic iconicity

Iconic aspects of speech-rate, rhythm, tempo and other prosodic aspects of spoken language. For example, the coupling of tense voice and high pitch

with fast speech rate suggests tension, stress and lack of time, while a lax voice, a low pitch and a very slow speech rate suggests quietness and relaxation (Auchlin 2013: 21-22). Intonation is another prosodic feature having an inherent iconic nature (Bolinger 1985; Martin 2013; Hancil and Hirst (eds.) 2013).

See INTONATION, TONE ICONICITY

## **Proto-Bantu ideophones**

See BANTU IDEOPHONES

## **Provençal**

Variety of Occitan spoken in France, Italy and Monaco by some 300,000 people.

See *BUTTERFLY*, *DICCIONARIO DE VOCES NATURALES*, *ELEMENTARE WORTSCHÖPFUNG*

## **Proximity principle**

- (a) Entities that are closer together functionally, conceptually, or cognitively will be placed closer together, at the code level, i.e. temporally or spatially.
- (b) Functional operators will be placed closest, temporally or spatially at the code level, to the conceptual unit to which they are most relevant.

(Givón 1990: 970).

## **Psychomime**

A sound symbolic word mimicking bodily and emotional feelings, such as Japanese *hoQ* ‘relieved’ where the capital letter Q represents the first half of a geminate cluster: *hoQ-to* = *hotto* (Akita 2013: 332).

## **Psychomorph**

Term proposed by N. Markel and E. P. Hamp (1961) to refer to *phonaesthemes*\*.

***Psychophonetik. Untersuchungen über Lautsymbolik und Motivation*** [Psychophonetics. Investigations on sound symbolism and motivation] (Ertel 1969)

This book is one of the first comprehensive studies on sound-meaning correlations from an experimental and cross-linguistic perspective. Ertel reports on 18 experiments. The first seven experiments check the possible sound-symbolic relation between meaningless words and their suggested meanings. The following five experiments deal with meaningful words in several languages and their iconically suggested meanings. The rest of the experiments deal with consonants and their sound-symbolic interpretation.

From a semantic point of view, the experiments use three graded scale dimensions proposed by C. E. Osgood (1952): evaluation (E) with extremes such as *good-bad*, *nice-awful*, *sweet-sour*, *clean-dirty*; potency (P) with extremes such as *strong-weak*, *large-small*, *heavy-light*, *thick-thin*, *hard-soft*; activity (A) with extremes such as *fast-slow*, *active-passive*, *sharp-dull*.

The first experiment has to do with the sound symbolic associations of invented words. 25 pairs of invented meaningless words, contrasting in their phonetic components, were checked with respect to the E (*clear-dark*), P (*strong-weak*), and A (*movement-rest*) dimensions. These word-pairs were presented to 20 participants who estimated the position of each word of these pairs with respect to each of the three semantic dimensions. The results showed that vowels [a] and [o] (*karno*, *ramat*, *okar*, *takam*, *akant*, *tamos*) obtained higher values and [e] and [i] (*leli*, *nielee*, *elin*, *meilem*, *enegi*, *lindo*) lower values in the P dimension. The consonants [k], [r], [t] and [s] obtained higher values and [l], [m], [n], [g] and [d] lower values in the P dimension. With respect to A, longer words having short syllables were interpreted as suggesting movement (*hellello*, *ondennel*, *lodenno*, *mallano*, *dondonell*, *follannen*) and shorter words having long syllables were interpreted as suggesting rest (*sonem*, *soom*, *loto*, *pahl*, *telomo*, *falee*).

In addition, a comparison between these results and those obtained using existing meaningful words was carried out. It was observed that the scoring of these words with respect to the dimensions considered were caused not only by their denotative meanings, but also by the general phonological nature of their phonetic configuration. For example, the word *Dummheit* (foolishness) obtained a high score in the P dimension in spite of its “weak” meaning.

A main hypothesis of this work, suggested by the results of this comparison, is stated in the following:

“The meaningful and the meaningless words are related to each other. Our hypothesis was that there are original similarity relations of a general character between the general phonological nature of the invented words and the connotative meaning of the meaningful words” (54).

The author notes that this had already been observed by Ch. F. Hockett:

“The phonemic shape of the artificial word sets up reverberations, by virtue of its acoustic similarity to some other (real) words. These secondary associations will tend to be reinforced in the case of similar words... The inappropriateness of (artificial) *sugg* for the meaning ‘beauty’ can be accounted for within this framework... Its secondary associations with words like *plug*, *mug*, *jug*, *ugly*, *tug*, *suck* are too great: they overpower any effort we may make to accept the proper primacy association (*sugg*) with the assigned meaning (beauty)” (Hockett 1958: 297f.).

In order to check the influence of the associations between the invented and real words, a second experiment was carried out. In this experiment, the invented words of the first experiment were presented to 53 students. They had to associate each one of these words with two real words suggested by them. These real words were subjected to the first experiment. Then, the results of both experiments were compared in order to check the influence of the invented word-real word associations. This comparison did not support the invented word-real word association bias. For example, the invented words *linga* and *schniem* contrasted in the E dimension, but the real words suggested by the participants contrasted in the A dimension; the invented words *dondonell* and *telomo* contrasted in the A dimension, but the corresponding real words suggested by them did not contrast in that dimension. In 11 of the 15 relevant cases, non-correspondences of this sort were observed.

The fourth experiment is of the *malúma-takéte* type. It explored the association between invented words and abstract figures with different shapes in deaf individuals. This experiment was undertaken in order to check the following hypotheses: (a) hearing children associate the abstract figures with the invented words having similar values in one or more of the graded scales; (b) deaf children make the same associations as hearing children. These two hypotheses were confirmed by the results obtained. One of the reasons for this coincidence could be that the general phonetic nature of words in hearing individuals has both an auditory and an articulatory kinaesthetic basis (81).



Other experiments reported in this book have to do with the sound-symbolic value of consonants. One of the results is a sound-symbolic classification of plosive and fricative consonants with respect to the A and P graded scales (95):

P domain				
<i>(strong-weak, large-small, heavy-light, thick-thin, hard-soft)</i>				
+				—
[k]	[b]	[g]	[d]	[p]
PLOSIVE CONSONANTS				
A domain				
<i>(fast-slow, active-passive, sharp-dull)</i>				
+				—
[f]	[j]	[z]	[s]	[v]
FRICATIVE CONSONANTS				

It was observed in this experiment that the articulatory values of consonants have a significant influence on their ratings in both the A and P graded scales. The medium value of the scores obtained in both domains determined a new dimension of dynamicity and the following result was obtained: front voiced consonants ([b], [d], [m], [v]) are less dynamic (have lower values in both the A and P domains) than back voiceless consonants ([k], [x]). With respect to the E domain, front consonants suggest more pleasant feelings than back consonants (97). In addition, it was observed that nasal consonants are less dynamic than oral consonants and that voiceless consonants are much more dynamic than voiced consonants (98).

A similar experiment was made concerning vowels. In general, front vowels have higher values in the A graded scale than back vowels. In addition, non-rounded vowels suggest more activity (they obtain higher scores in the A graded scale) than rounded vowels. Other findings of this experiment have to do with the acoustic qualities of vowels. First, an increased frequency of the second formant (F<sub>2</sub>) rises the score in the A domain. Second, the first formant (F<sub>1</sub>) has nothing to do with the A domain, but seems to be relevant for the potency of vowels, that is, for their position in the P graded scale

(106). The author states the general conclusion of these experiments as follows:

“Briefly, the different attested relationships between the phonetic qualities and their corresponding sensory-perceptual features supports the assumption that these relationships are determined in a decisive way by the psychophysic organization of the phonetic event” (112).

The third chapter of the book reports on several cross-linguistic experiments. In the first, 524 pairs of German words were translated into 25 languages to check possible sound-meaning correlations with respect to the three dimensions (E, P, A) already used in the preceding experiments. These are the languages:

- Europe: Finnish, Croatian, Latvian, Polish, Russian, Slovenian, Hungarian;
- Near East: Arabic, Hebrew, Persian, Turkish;
- Asia: Batak, Chinese, Hindi, Indonesian, Japanese, Korean;
- Africa: Ewe, Kirundi, Twi, Yoruba;

The word-pairs of the 25 languages were recorded by native speakers of each language. Each word-pair was repeated four times in the order  $w_1, w_1-w_2, w_2$ .

All of the German word-pairs were assigned to a position in the E, P, A graded scales by students of psychology in one hour sessions over ten weeks; in each session, an average of 19 students took part in the experiment. Then, the same process was followed with the word-pairs in the other languages.

The results showed that of the 542 word-pairs, 320 (= 59.4 %) displayed a positive correlation, that is, a coincidence in the judgements made with respect to the relevant dimensions. When those word-pairs apparently based on onomatopoeia were excluded, the positive correlation rose to 61 %.

A second experiment was undertaken using a phonetic transcription of the 542 word-pairs, based on the German alphabet supplemented with some diacritics. The results were similar and 311 (= 57.4 %) positive correlations were obtained.

In addition, the rating of the words with respect to the E, P, A dimensions was compared with the ratings obtained in the earlier experiment using the

consonants and vowels in those words. With respect to the P and E dimensions, the following results were obtained (132):

		Consonants		
		P <sup>+</sup>	P <sup>-</sup>	TOTAL
Words	P <sup>+</sup>	<b>241</b>	170	411
	P <sup>-</sup>	178	<b>217</b>	395
	TOTALS	419	387	806

		Consonants		
		E <sup>+</sup>	E <sup>-</sup>	TOTAL
Words	E <sup>+</sup>	<b>226</b>	165	391
	E <sup>-</sup>	258	<b>252</b>	510
	TOTALS	484	417	901

As can be seen in the above tables, P<sup>+</sup> words have more P<sup>+</sup> consonants than P<sup>-</sup> words; P<sup>-</sup> words have more P<sup>-</sup> consonants than P<sup>+</sup> words. The E dimension behaves in the same way.

Another of the experiments reported in this book concerns the sound-symbolic interpretation of tones in tonal languages (Chinese, Thai, Vietnamese and Ewe). The results obtained (139) indicate that words with high tones have higher values in the graded scales of the A and P dimensions and slightly lower values in the E dimension; and that low tones have more negative values in dimensions A and P while their E positive values slightly outnumber their E negative values.

There is a brief section in the book (140-148) devoted to the effect of phonetic change on the sound-symbolic aspects of words. The results of the experiment conducted to check this point suggest that older word forms have more sound-symbolic features than their more recent forms; this is due to phonetic change, although in some cases a word can acquire sound-symbolic characteristics over time.

There is a section in this chapter (149-159) in which the sound-symbolic adequacy between letters and sounds in different languages is investigated. In an experiment, 19 students were presented with a pair of letters from different alphabets (Hebrew, Devanagari, Ethiopic, Korean, Arabic, Armenian, Georgian and Gujarati) and were asked to situate them in a

graded dynamicity scale with two extremes: one of them associated with *power, strength, dynamism, tension, stress* (the *dynamic* extreme) and the other with *weakness, softness, rest* (the *static* extreme). The mean value of all the scores was calculated and the results obtained (57 letter-pairs and 57 mean values) were compared to the phonetic classification of the sounds corresponding to each letter with respect to the dichotomy *fortis* (voiced)/*lenis* (voiceless): [b]/[p], [d]/[t], [g]/[k], [v]/[f], [z]/[s]... Of the 57 mean values, 40 were positive: the *fortis* letters were considered more dynamic. With respect to the alphabet, only the Gujarati script presented more negative than positive results, the other alphabets obtained more positive than negative results, of different degree, following the hierarchy: Hebrew (9 letter-pairs) > Devanagari (7) > Ethiopic (6) > Korean (5) > Arabic (6) > Armenian (10) > Georgian > (9). The Hebrew alphabet obtained the greatest number of positive results.

The fourth chapter of the book is devoted to describing five experiments related to the articulatory basis of sound symbolism and to the psychological aspects of this phenomenon.

The book concludes with a fifth chapter, in which the results of the experiments are summarized.

## Puff

This word belongs to a phonomimetic root {labial plosive, vowel, labial fricative} mimicking blowing and noisy breathing. This root is attested in many language families: Hmong, Vietnamese, Korean, Minor Mlabri (*puung*); all the languages of the Uralic family (Hungarian *fuj*), Turkish; various New Guinea languages: Kobon (*pu*), Amele (*fudoc*), Tauya (*fufu*), Telefol (*fiu*) and Hua (*fuvu*); and many languages of the Indo-European family: Latin (*flō*), Croatian (*puha*) and English (*puff, blow*) (Haiman 2018: 184).

In his dictionary, García de Diego (1968: 156-158) identifies three variants of this phonomimetic root: *baf* attested in the Spanish words *vaho* 'breath', *bafear* 'to breath' (dialectal), *bafo* 'breath, vapour, fumes', and the Basque words *bafa* 'breath' and *bafada* 'breath, vapour'. The variant *bef* is attested in some Romance languages with a metaphoric meaning: Italian *beffare* 'to mock', French *beffer* 'to mock', Spanish *befo* 'horse lip, thick lip', *befar* 'to flap their lips (of horses), to mock'. Finally, the variant *buf* is attested in Spanish (*bufar* 'to snort', *bufido* 'snort'), Basque (*buhatu* 'to blow', *buhada*

'wind'), and, with a lateral extension, in English (*baffle*) and French (*baffler* 'to mock').

[Haiman 2018: 184; García de Diego 156-159]

See *PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*.

## **Punjabi**

Indo-Aryan language spoken in the Punjab region (India) by approximately 110 million people.

See *CACKLE*, *NURSERY WORDS*, *SIZE-SOUND SYMBOLISM*

## **Purépecha [Tarasco]**

Indigenous language of Mexico spoken in Michoacán by approximately 120,000 speakers.

See *BIRD NAMES*, *BUTTERFLY*, *NURSERY WORDS*

# QU

## Quantity principle

This principle establishes a diagrammatically iconic relationship between semantic information and linguistic codification. It was defined and explained by T. Givón (1990: 969) as follows:

- (a) A larger chunk of information will be given a larger chunk of code.
- (b) Less predictable information will be given more coding material.
- (c) More important information will be given more coding material.

Principle (a) is reflected in the larger size and more prominent stress of lexical words, as compared to grammatical morphemes; also in the larger size of derived lexical words as compared to un-derived words.

Principle (b) is reflected in the larger size and more prominent stress of full-NPs, independent pronouns and moved NPs, as compared to clitic pronouns and zero anaphora. It is also reflected in the deletion under identity of the co-referent NPs in verb complements and relative clauses.

Principle (c) is reflected in the deletion of the less topical agent-of-passive and in verbal incorporation.

## Quechua

Language family of the Quechuan people living in the Andes and highlands of South America.

See AMERICAN INDIAN LANGUAGES, *BUTTERFLY*, *DOPPELUNG (REDUPLIKATION, GEMINATION)*, PASTAZA QUECHUA IDEOPHONES, NURSERY WORDS, *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI, PRIMITIVE CULTURE*

## Quenya

A fictional language created by J. R. R. Tolkien and spoken by the Elves. Its grammatical and lexical structure was inspired by Finnish and other European languages, such as Latin, Greek and the Germanic languages.

See ICONICITY IN INVENTED LANGUAGES

### *Quest for the essence of language (Jakobson 1965)*

This paper by Jakobson can be considered a milestone in research of linguistic iconicity. In this important work, Jakobson used Peirce's semiotic theory for the first time to tackle the problem of the iconically motivated sign. In doing this, Jakobson extended the field of linguistic iconicity beyond sound-meaning relations making it possible to apply the concept of iconicity to the morphological and syntactic levels.

The paper can be thematically structured in terms of an introduction and six sections. In the introduction (page 345 of *Selected Writings, II*, 1971), following a statement on Bloomfield's influential handbook of linguistics, he states that one of the major problems in linguistic research is the nature of the relationship between sound and meaning: "This connection and coordination have been an eternal crucial problem in the age-old science of language" (345). Jakobson mentions the famous distinction between *significant* and *signifié* proposed by Ferdinand de Saussure and the adaptation by St. Augustine of Stoic sign theory by means of the terms *signans* and *signatum*, which he uses in the paper.

The first part of the paper (346-349) introduces important concepts of Ch. S. Peirce's semiotic theory and constructs its major theoretical contribution. First, Jakobson speaks about semiotics as a new science advocated both by Ch. S. Peirce and F. de Saussure and introduces the distinction made by Peirce between *icon\**, *index\** and *symbol\**. He refers to Plato's *Cratylus\**, to D. Whitney and to F. de Saussure, who highlighted the arbitrary character of the linguistic sign. He then mentions O. Jespersen and D. Bolinger, who insisted that this arbitrary character has been overstated. In the final paragraphs of this section, Jakobson says that, for Peirce, three sign-types coexist in actual signs with different degrees of predominance and quotes the following: "the most perfect signs" are those in which the iconic, indexical, and symbolic characters "are blended as equally as possible"; this is contrasted with de Saussure's view that "entirely arbitrary signs are the most appropriate to fulfil the optimum semiotic process".

The rest of the paper is an application of Peirce's semiotic conceptions to the analysis of the motivated aspects of the morphology and syntax of natural languages.

The third section of the paper (350-351) deals with the iconic aspects of syntax. In order to exemplify them, Caesar's famous quotation *veni, vidi, vici*\* is briefly analysed. Jakobson notes that the temporal order of speech events tends to mirror the order of narrated events in time or rank. He also observes that the initial position in the clause reflects the priority in official standing in the sentence *the President and the Secretary of State attended the meeting*.

Jakobson then introduces the distinction between *image* and *diagram*\* proposed by Peirce. For Peirce, a diagram is "a *representamen* which is predominantly an icon of relation and is aided to be so by convention"; for example, two rectangles of different size representing a quantitative comparison of steel production in the USA and Russia. "The relations in the *signans* correspond to the relations in the *signatum*" (350).

Jakobson finds a direct relationship between the diagrammatic analysis of syntax and the findings of J. H. Greenberg (1963) of some cross-linguistic generalizations concerning the order of meaningful elements. He notes that, in conditional sentences, the proposition stating the condition is placed before the proposition stating the consequence or result of that condition and that there is a clear preference for the subject, the agent, to precede the object, the thing affected by the agent. In these cases, the precedence relation diagrammatically symbolizes a corresponding precedence relation in the non-linguistic world.

The fourth section of the paper (352-356) extends this diagrammatic analysis to morphology. Jakobson gives as an example of diagrammatic iconicity in morphology the expression of degrees in adjectives: *altus-altior-altissimus*, *high-higher-highest* where the increasing intensity of a property is expressed by the increasing length of the adjective. Jakobson also notes that a numeral increment in the denotation of actions or processes is coded by an increased length of the corresponding verbal form: French *je finis* 'I finish'—*nous finissons* 'we finish'; Polish *znam* 'I know'—*znamy* 'we know'.

Jakobson also says that de Saussure spoke of relative arbitrariness in cases in which the meaning of a complex expression is completely motivated by the meaning of its constituent parts. In Jakobson's opinion, this relativized



arbitrariness can also be applied to morphology so that the meaning of French *berger* ‘shepherd’ is partially motivated, since the *-er* suffix is an agentive suffix and occupies the same place in many other words, such as *vacher* ‘cowboy’.

In addition, Jakobson thinks that this diagrammatic analysis of morphological elements can be extended to those situations where different affixes share a certain grammatical function and one constant morphemic feature. For example, in Russian, the phoneme *m* only occurs in the endings of oblique cases (instrumental, dative, locative). In the kinship terms *father*, *mother* and *brother*, which cannot be analysed in terms of root and suffix, the common second syllable can be “felt as a kind of phonemic allusion to their semantic proximity” (354).

He mentions the cross-influences between sound and meaning and the “constellations of words having similar meanings tied to similar sounds” noted by Bolinger in his 1949 paper.

Jakobson thinks that there is an overall and incessant diagrammatic influence on the lexicon: “Thus the distinctly diagrammatic constituents in the system of verbal symbols are universally superimposed upon the vocabulary” (353).

Pages 356-357 contain a brief illustration of the autonomous iconic value of phonemic oppositions in poetic language.

Pages 357-359 constitute the final part of the paper. Jakobson says that the two fundamental features of the linguistic sign established by de Saussure, arbitrariness and linearity, are challenged by the system of diagrammatization and the dissociation of phonemes into distinctive features. Then he quotes Peirce: “a symbol may have an icon or an index incorporated into it” and concludes:

“The iconic and indexical constituents of verbal symbols have too often remained underestimated or even disregarded; on the other hand, the predominantly symbolic character of language and its consequent cardinal difference from the other, chiefly indexical or iconic, sets of signs likewise await due consideration in modern linguistic methodology” (357-358).

The paper concludes with some additional reflections on Peirce’s conception of the import of the icon, index and symbol distinction.

[De Cuyper 2008: 83-90]

See DIAGRAMMATIC LEGISIGN, FIRSTNESS, HYPOICON, HYPOICONIC DIAGRAMMATICITY, ICON, ICONIC DIAGRAM, ICONIC INDEX, ICONICITY IN PEIRCE'S SEMIOTICS, INDEX, SECONDNESS, SYMBOL, *THE SIGN IS NOT ARBITRARY*, THIRDNESS

## **Quiché**

Mayan language of Guatemala spoken by approximately 2 million people.

See *PRIMITIVE CULTURE*

## **Quichua**

Quechuan language of Ecuador, Colombia and Peru spoken by more than one million people.

See QUECHUA

## R

### ***Recherches expérimentales sur le symbolisme phonétique*** **(Peterfalvi 1970)**

This book reports on a series of experiments carried out in the *Laboratoire de Psychologie Expérimentale* of the Sorbonne University under the direction of Professor Paul Fraise. The book has seven chapters and two appendices.

The first chapter introduces the main concepts and hypotheses of the research. First, there is an overview of previous works on sound symbolism and the motivated sign. The mentioned authors include M. Leroy, A. Martinet, S. Ullmann, R. Jakobson, E. Sapir (1929)\*, M. Chastaing, W. Köhler and G. Guillaume.

The main hypothesis of the book is stated on pages 47-55. It is called the *intermediate generalisation hypothesis* [*hypothèse généralisation médiate*]: the characteristics perceived in certain stimuli are generalized to other stimuli through the mediation of concomitance relationships between different stimuli and not through their psycho-physiological proximity, as in the classical generalization.

Peterfalvi interprets the *malúma-takéte* phenomenon in the following way: the two figures and the two invented words trigger two common responses (one for *takéte* and the angular figure and another for *malúma* and the round figure): these common responses are not directly observable, but make possible the association of visual and auditory stimuli.

Peterfalvi posits six relations of three types (51-52):

- A. For an auditory (or visual) stimulus there is a correspondence between its physical and symbolic features. For example, sharp (front) vowels suggest smallness (relation 1) and the smallness of a figure triggers an impression of sharpness (relation 2).
- B. The physical characters of a word and of a figure can correspond to each other (relation 3) as well as their symbolic features (relation 4).

- C. The physical features of a word can correspond to the symbolic character of a figure (relation 6) or vice versa, the symbolic character of a word can correspond to the physical features of a figure (relation 5).

To illustrate these relations, Peterfalvi gives the following example: a word with back vowels induces the auditory perception of a low pitch; this low pitch is symbolically associated with big things (relation 1). A big figure induces the visual perception of a big thing; this visual perception is symbolically associated with a low pitch (relation 2). The visual and auditory perceptions are related to each other (relation 3) and the same occurs with the corresponding symbolic associations (relation 4). Finally, there is a correspondence between the symbolic suggestion of the auditory stimulus and the visual induction of the visual stimulus: the *big thing* suggestion of the auditory perception with the *big thing* perception (relation 5); there is also a correspondence between the symbolic suggestion of the visual perception and the induced perception of the auditory stimulus (relation 6): the low pitch suggested by the visual perception corresponds to the auditory perception induced by the auditory stimulus (a word with back vowels).

Chapter II is devoted to investigating relation 1, chapter III studies relation 2 and chapter IV discusses relations 3, 4, 5, and 6.

In chapter II, a reference is made to the study of phonetic symbolism by Sapir\* (1929) and to other ensuing studies by Newman (1933), Miron (1961), Chastaing (1962) and Taylor (1963). Peterfalvi thinks that sound symbolism and the synaesthetic correlations in general can exist on two levels: as a direct result of the learning of the relations existing in nature (a universal aspect) and as a result of the translation of these relations into a particular linguistic system (a conventional and culturally-mediated aspect) (78).

The experiment reported in this chapter deals with invented words and their suggested meanings in three symbolic dimensions: size (*small/big*), brightness (*bright/dark*) and roundness (*round/angular*). The hypothesis to be checked is that there are significant correlations between the perceived physical dimension and each one of the three symbolic dimensions. The experiment used 40 invented words, which were recorded on tape, and involved 27 students. It gave the following results:

- Voiceless consonants are *smaller, brighter* and *more angular* than voiced consonants.
- Front vowels are *smaller, brighter* and *more angular* than back vowels.
- Labialized vowels are more *rounded* than non-labialized vowels and open vowels are *bigger* than closed vowels.

Chapter III deals with the relationships between visual forms and meanings. The experiment described in this chapter used 20 figures contrasting roundness (rounded-angular), brightness (bright-dark) and size (big/small). The 90 individuals taking part in the experiment were asked to classify these figures with respect to the three dimensions and an additional scale of aural-based impression (high-pitched/low-pitched). The results indicate that only the property of angularity has a significant correlation with the aural-based impression. This means that there is a certain connection between a visual property (angularity) and an aural-based impression (high-pitched). This is relation 2 of the general hypothesis.

Chapter IV analyses the relationships between sounds and visual shapes. From this point of view, the [i], [z] and [k] phonemes are usually associated with angularity and [m], [l], [h] and [u] are associated with roundedness and bulkiness (117).

The experiment reported in this chapter used five pairs of two-syllable meaningless words and five pairs of figures taken from the previous experiments and the results of these experiments with respect to the three known dimensions (size, brightness and roundness). These are listed below:

1. Word-pair: *tafa/lebe*; figure-pair: big/small; expectation: *tafa* will be more frequently associated with the big figure.
2. Word-pair: *lægæ/teke*; figure-pair: dark-bright; expectation: *loegoe* will be more frequently associated with the dark figure.
3. Word-pair: *vødø/nege*; figure-pair: rounded-angular; expectation: *vødø* will be more frequently associated with the rounded figure.
4. Word-pair: *lobo/ligi*; figure-pair: big and rounded—small and angular; expectation: *lobo* will be more frequently associated with the big and rounded figure.
5. Word-pair: *børø/kufu*; figure-pair: both big and rounded; expectation: random association.

The 53 individuals subjected to the experiment were said to assign one of the elements of the five meaningless word pairs to a corresponding figure

of the figure-pairs. A clear majority of the obtained pairings between words and figures were consistent with the expected results based on the earlier experiments, as can be seen in the following table (125):

Word-pairs	Expected responses	Non-expected responses
1 <i>tafa/lebe</i>	37	16
2 <i>lægæ/teke</i>	29	24
3 <i>vødø/negæ</i>	40	13
4 <i>lobo/ligi</i>	48	5
5 <i>bɔrɔ/kufu</i>	28	25

Chapter V discusses sound-symbolic associations involving real words of natural languages. Peterfalvi states the following hypothesis concerning the adequacy of the meaning of words to their phonetic configuration: the adequacy of the sound-meaning relations in words depends on their denotation, especially on whether or not their denotation is related to sensorial experience.

Peterfalvi posits five main categories in order to check this hypothesis:

1. Auditory experiences.
2. Simple non-auditory sensorial experiences
3. Movements.
4. Concrete objects.
5. Abstract words.

There are three particular cases to be checked: a) the degree of sound-meaning adequacy will be higher in words denoting simple sensorial experiences; b) among the words denoting simple sensorial experiences, the most adequate in their sound-meaning relations will be those referring to auditory experiences; c) words that do not denote sensorial experiences will present a less than adequate sound-meaning relation than those of the other categories.

The experiment reported in this chapter used 75 French words belonging to the five categories listed above. These were presented to 84 individuals; they were requested to estimate the degree of their sound-meaning adequacy by means of a scale of four grades (0 to 3, from less to more adequacy). The following results were obtained (expressed as mean values):

Semantic categ.	1	2	3	4	5
Grammatical categ.					
Nouns	2,37	1,43	1,41	0,32	0,32
Verbs	2,67	1,16	1,07	0,27	0,50
Adjectives	2,76	1,52	1,18	*	0,41
All three categories	2,59	1,40	1,23	0,31	0,41

\*No data

These results show that the grammatical category of the words does not have a systematic influence and that the main hypothesis is borne out: maximal adequacy is observed in the words denoting simple sensorial experiences.

As a general conclusion, Peterfalvi says that sound symbolism is not confined to meaningless words specifically invented to prove the alleged connections between sound and meaning.

The hypothesis that the sensorial denotations determine the judgement of sound-meaning adequacy is borne out by the experiments. In addition, the words denoting movement are judged more adequate in their sound-meaning relations than those denoting visual properties. This fact can be a sign of the importance of kinaesthetic mediation in sound symbolism.

Chapter VI deals with the influence of sound symbolism in learning tasks. There is an experiment reported in this chapter, in which the invented words used in the preceding experiments are investigated. Its results indicate that sound-symbolic associations facilitate learning.

The book concludes with a brief summary of the main conclusions. Peterfalvi considers that sound symbolism is a special case of synaesthesia: vocal sounds can be assigned qualities inherent to visual stimuli independently of their linguistic meaning, and visual stimuli can be assigned vocal sound qualities. This inter-sensorial generalization makes possible the pairing of stimuli from different sensorial modalities and supports the conception of sound symbolism as a particular case of synaesthesia (153)

## Reduplication

A repetition of phonological material within a word (Rubino 2005: 11).

There are several types of reduplication. Full reduplication obtains when an entire word is repeated: English *very very*, Latin *quisquis* ‘whoever’, Mandarin Chinese *jangjang* ‘every sheet’, Mokilese *roarroarroar* ‘to continue to shudder’ (Moravcsik 1978: 301, 305). Partial reduplication appears in a

variety of forms: simple consonant gemination, as in the Ilocano words *babái* ‘female’/*babbái* ‘females’; the repetition of an open syllable: Ilocano *na-lukmeg* ‘fat’/*na-lulukmeg* ‘fat, distributive’; or the repetition of a closed syllable: Ilocano *kalding* ‘goat’/*kalkalding* ‘goats’ (Rubino 2005: 12).

Concerning the number of times an element is repeated, there are languages in which a triple repetition can be observed: Bambara *dórádórádórá* ‘greasy’, Dogon *gengu-gangu-gengu* ‘trembling’, Mokilese *soang soang soang* ‘still tight’, Yoruba *pó-pò-pó* ‘small pieces, bits’ (Rozhanskij 2011: 42-43).

Vowel alternation is common in reduplicative expressions, as in *zigzag*. In Bambara we have *bilísibálásá* ‘to tangle up, to confuse, to complicate’, *nìgìsìnógósó* ‘muscle pain’ (Rozhanskij 2011: 45); in Basque *binbili-bonbolo* ‘rocking’, *dilin-dalan* ‘swing’, *kinki-kanka* ‘to walk with difficulty, trudge’ (Ibarretxe-Antuñano 2006: 27).

Reduplication usually conveys plurality, similarity, and diminution in nouns. In verbs and adjectives it can convey plurality, distribution, collectivity, repetition, intensity, transitivity, attenuation, conditionality, reciprocity among other related meanings. For example, in Tzeltal *pikpik* means ‘touch it lightly and repeatedly’, Sundanese *guguyon* ‘to jest repeatedly’, Yami *mipalupalu* ‘strike each other’, Turkish *dopdolu* ‘quite full (*dolu* full)’, Tsimshian *am’am* ‘several are good’ (Moravcsik 1978: 319-321), Indonesian *pai-pagi* ‘early in the morning’, Tausug *du:m-du:m* ‘every night’ (Rubino 2005: 21).

[Moravcsik 1978; Skoda 1983; Hurch (ed.) 2005; Rozhanskij 2011; Fischer 2011]

See ABLAUT REDUPLICATION, *DOPPELUNG*, JANUS-FACE ICONICITY

## Referential association binding

W. J. Herlofsky (2001: 60-62) proposes the following principles based on the nature of the relationships between icons\*, indices\* and symbols\* and the objects they denote:

- A. An icon must resemble its referent within a certain range of resemblance.



- B. An index does not resemble its referent within a certain resemblance range, but must be connected temporally and/or physically to its referent.
- C. A symbol expression is free from resemblance or necessary physical and/or temporal connection with its referent.

With these definitions the following rules isomorphic to the Binding Principles by Chomsky (1986: 166) can be stated:

The Principles of Referential Association Binding:

- A. An icon is bound in a local domain.
- B. An index is free in a local domain.
- C. A symbolic expression (s-expression) is free.

In order to understand these principles, a distinction must be made between the local real-world space, noted  $[RWS\dots]$  and the wider real-world space noted  $\{RWS\dots\}$ . In the local real world space we find those real objects seen as having a series of properties (size, shape, sound...) inside a certain resemblance range (OBJECT), and in the wider real world we have all the real objects. Icons (IC) can only refer to objects inside its resemblance range (Y). This is noted as follows:

#### ICON

$$\{RWS \dots X_i \dots [RWS \dots Y_j \dots IC_{*i/j} \dots] \dots \}$$

Those objects outside an icon's resemblance range cannot be denoted by it.

Indices (IN) cannot denote an object inside their resemblance range (otherwise they would be icons) and can refer to objects outside this range with which they are physically and/or temporally connected:

#### INDEX

$$\{RWS \dots X_i \dots [RWS \dots Y_j \dots IN_{i/*j} \dots] \dots \}$$

A Symbol (SY) cannot arbitrarily refer to Y or X because it resembles Y and is physically and/or temporally necessarily connected to X:

#### SYMBOL

$$\{RWS \dots X_i \dots [RWS \dots Y_j \dots IN_{*i/*j} \dots] \dots \}$$

These principles are used by Herlofsky to propose evolutionary predecessors of the main referential elements of natural languages identified in generative linguistics: icons would be the precursors of anaphors; indices, the precursors of pronominals; and symbolic expressions, the antecedents of free referential expressions. The overall picture is outlined as follows:

“The development of the triadic referential associations of icons, indices, and symbols provided early humans with a means of gradually integrating many of the disjointed entity/event categories they had recognized, and also provided them with a structure that blended non-linguistic and linguistic components. This integration of non-linguistic and linguistic categories, as well as the triadic framework used for this integration, may have also been useful in the synthesis of other conceptual information, including the syntactic information that eventually found its way into Chomsky’s Binding Principles, principles that are claimed to be part of an autonomous linguistic system” (63).

See GENERATIVE GRAMMAR, ICON, INDEX, SYMBOL

## Referential symbolism

See EXPRESSIVE SYMBOLISM

## Relative Iconicity

“[T]he property of a set of words for which there is a correlation between form similarity and meaning similarity. That is, rather than a similarity function relating meaning and form, relative iconicity is based on separate similarity functions relating forms to forms and meanings to meanings. For example, *glow*, *gleam*, *glint*, and *glimmer* seem to exhibit relative iconicity because their similarity of form (*gl-* in the salient initial position) corresponds to a similarity of meaning (having to do with light of low intensity) and because there are relatively few other English verbs that begin with *gl-* and do not share this meaning” (Gasser, M., N. Sethuraman and S. Hockema 2010: 167)

Dingemanse (2011a: 170) defines relative iconicity as a relation between multiple signs that has a resemblance to the relation between multiple meanings and proposes the following Siwu examples: *kpenene* ‘high, shrill voice’ and *wɔrɔro* ‘low, hoarse voice’. The relation between the front vowel /ɛ/ and the back vowel /ɔ/ bears a resemblance to the relation between their denotations: a high sound versus a low sound.

See PHONAESTHEME

## Rengao

North Bahnaric (Austroasiatic) language spoken in Vietnam by approximately 28,000 people.

See ASIAN LANGUAGES

## Romance languages

See CATALAN, FRENCH, ITALIAN, OCCITAN, PROVENÇAL, ROMANIAN, SPANISH

## Romanian

Eastern Romance language spoken in Romania and Moldova by approximately 26 million people.

See *BUTTERFLY*, *BOW-WOW*, *BUZZ*, *CACKLE*, *CROAK*, *SIZE-SOUND SYMBOLISM*, *SYMBOLIC VALUE OF THE VOWEL I*

## Ruihong ideophones

Ruihong is a Gan Chinese (Sinitic) dialect spoken in the town of the same name in Yugan County, Jiangxi Province (southeast China).

The data and interpretations included here are taken from the dissertation by W. Mengqi (2014)

Ideophones have a series of peculiar characteristics: unbalanced phonotactics, syllable lengthening and the disappearance of nasal coda. In addition, they are usually reduplicated.

Tones are indicated by means of numerical notation: 5, 55 are high level tones and 1, 11 are low-level tones; 51 is a high falling tone; 24, 214 are low-dipping tones; 3, 33 are mid-level tones; 35 is a mid-rising tone; and 31 is a mid-falling tone.

First, there are ideophones that function as verbs: *poʔ<sup>5</sup>* ‘to hit, knock’, *koʔ<sup>5</sup>* ‘to knock’, *tat<sup>5</sup>* ‘swing with big strength’, *kiet<sup>5</sup>* ‘to rub throat with dense foods like yolk’, *ŋat<sup>5</sup>* ‘to pump’, *kat<sup>5</sup>* ‘to snip, gossip’.

Second, there is the structure XA, in which X is an ideophone qualifying an adjective (A). This is the most frequent ideophonic expression in Ruihong: *k'uet<sup>5</sup> liu<sup>252</sup>* ‘vivid green’, *te'io<sup>25</sup> u<sup>55</sup>* ‘dark black’, *fet<sup>5</sup> nen<sup>24</sup>* ‘very tender’, *fet<sup>5</sup> teien<sup>55</sup>* ‘very pointed’, *lat<sup>5</sup> set<sup>51</sup>* ‘very wet’, *lat<sup>5</sup> t'i<sup>25</sup>* ‘very straight’, *ta<sup>5</sup> nien<sup>55</sup>* ‘sticky’, *ta<sup>5</sup> nian<sup>51</sup>* ‘(body) soft, may be sick’, *pin<sup>55</sup> lan<sup>51</sup>* ‘very cold’, *p'an<sup>55</sup> ku<sup>24</sup>en<sup>51</sup>* ‘very hot’, *k'uan<sup>55</sup> eian<sup>55</sup>* ‘fishy smell’.

Third, there is the structure AXXli, in which A is an adjective and XX is a reduplicated ideophone followed by the *li* adjectival suffix: *ηai<sup>51</sup> tu<sup>25</sup> tu<sup>25</sup> li* ‘short’; *te'iy<sup>214</sup> te'ieu<sup>51</sup> te'ieu<sup>51</sup> li* ‘quiet’; *kon<sup>55</sup> pa<sup>55</sup> pa<sup>55</sup> li* ‘dry, monotonous’; *k'əən<sup>55</sup> toη<sup>214</sup> toη<sup>214</sup> li* ‘empty’; *eiē<sup>52</sup> uoη<sup>24</sup> uoη<sup>24</sup> li* ‘plenty of blood’; *təən<sup>24</sup> təən<sup>24</sup> li* ‘chubby’; *soη<sup>24</sup> soη<sup>24</sup> li* ‘downheartedness’; *fu<sup>24</sup> fu<sup>24</sup> li* ‘(air) warm’; *ka<sup>24</sup> ka<sup>24</sup> li* (depicts an arrogant sitting posture); *eiēu<sup>24</sup> mi<sup>55</sup> mi<sup>55</sup> li* ‘genial smile with the eyes narrowed’; *ηan<sup>51</sup> ts'an<sup>214</sup> ts'an<sup>214</sup> li* ‘eyes open’; *te'i<sup>214</sup> ku<sup>51</sup> ku<sup>51</sup> li* ‘a lovely angry look’.

There are also ideophonic expressions of the type XYY without non-ideophonic words as: *pi<sup>55</sup> pi<sup>55</sup> pa<sup>55</sup> pa<sup>55</sup>* ‘mottled and dirty’; *p'i<sup>55</sup> p'i<sup>55</sup> p'a<sup>55</sup> p'a<sup>55</sup>* ‘the sound of fireworks, to keep talking’; *tei<sup>55</sup> tei<sup>55</sup> kua<sup>55</sup> kua<sup>55</sup>* ‘noisy talking’; *te'iy<sup>55</sup> te'iy<sup>55</sup> k'uaη<sup>55</sup> k'uaη<sup>55</sup>* ‘the sound of metallic collision’; *pi<sup>25</sup> pi<sup>25</sup> po<sup>25</sup> po<sup>25</sup>* ‘crack in the fire’; *tei<sup>55</sup> tei<sup>55</sup> ku<sup>55</sup> ku<sup>55</sup>* ‘jabber’; *tei<sup>55</sup> tei<sup>55</sup> tsa<sup>55</sup> tsa<sup>55</sup>* ‘brittle noise’; *tiη<sup>24</sup> tiη tan<sup>24</sup> tan* ‘shake of things with clear and melodious sound’; *t'i<sup>21</sup> t'i<sup>21</sup> t'at' t'at'* (depicts the sound of walking in slippers); *pi<sup>25</sup> pi<sup>25</sup> po<sup>25</sup> po<sup>25</sup>*, *pi<sup>25</sup> li<sup>25</sup> po<sup>25</sup> lo<sup>25</sup>* ‘crack’; *ti<sup>25</sup> li<sup>25</sup> tu<sup>25</sup> lu<sup>25</sup>* (depicts a light noise like a knock); *pi<sup>25</sup> li<sup>25</sup> pu<sup>25</sup> lu<sup>25</sup>* ‘eat food that is crisp and with plenty of water’; *mi<sup>55</sup> mi<sup>55</sup> mo<sup>55</sup> mo<sup>55</sup>* ‘doing useless things to waste time when working’; *ti<sup>24</sup> ti tia<sup>11</sup> tia* ‘clumsy’; *teiē<sup>52</sup> teiē lai<sup>24</sup> lai* ‘to hesitate in speech, not go well’; *nian<sup>11</sup> nian<sup>11</sup> ηot<sup>5</sup> ηot<sup>5</sup>* ‘clumsy and stupid’; *t'iau<sup>55</sup> t'iau<sup>55</sup> eit<sup>5</sup> eit<sup>5</sup>* ‘surreptitious’; *t'i<sup>55</sup> t'i<sup>55</sup> t'o<sup>55</sup> t'o<sup>55</sup>* ‘the act of carrying many useless things’.

## Rundi

Bantu language of Burundi spoken by about 9 million people.

See *VÖLKERPSYCHOLOGIE*

## Russian

Eastern Slavic language spoken in Russia and neighbouring countries by approximately 260 million people.

See *ARBITRARINESS*, *BALTO-SLAVIC LANGUAGES*, *BIRD NAMES*, *BOW-WOW*, *BUZZ*, *CAKCLE*, *CRACK*, *CRASH*, *CROAK*, *CUCKOO*,

*FANGEN-FINGER-FÜNF. STUDIEN ÜBER ELEMENTAR-PARALLELE  
SPRACHSCHÖPFUNG, GRUNT, ONOMATOPOEIA*

**Rwanda (Kinyarwanda)**

Bantu language of Rwanda and Uganda spoken by about 10 million people.

See BANTU IDEOPHONES

# S

## **Sahaptin**

Penutian language spoken in Washington, Oregon and Idaho (USA) by approximately one hundred people.

See *DOPPELUNG (REDUPLIKATION, GEMINATION), PRIMITIVE CULTURE, SIZE-SOUND SYMBOLISM, VÖLKERPSYCHOLOGIE*

## **Samoaan**

Malayo-Polynesian language spoken in the Samoan Islands by approximately 500,000 people.

See *BUTTERFLY, NURSERY WORDS, VÖLKERPSYCHOLOGIE*

## **Samoyedic**

Uralic language group located on both sides of the Ural Mountains with approximately 25,000 speakers.

See *VÖLKERPSYCHOLOGIE*

## **Sami**

Group of Uralic languages spoken by the Sami people in Finland, Norway, Russian and Sweden. It has 30,000 native speakers.

See *BUTTERFLY, ELEMENTARE WORTSCHÖPFUNG (OEHL 1917-1924)*

## **Sandawe**

Khoisan language spoken in the Rift Valley of Tanzania by approximately 60,000 people.

See *CROW*

## **Sango**

Ngbandi based creole of the Central African Republic spoken by approximately 1.6 million people.

See *BUTTERFLY*

## **Sanskrit**

Indo-Aryan Language of Ancient India (since c. 1500 B.C.E.). It is the liturgical language of Hinduism.

See *BABBLE*, *CRACK*, *FANGEN-FINGER-FÜNF. STUDIEN ÜBER ELEMENTAR-PARALLELE SPRACHSCHÖPFUNG*, *MIM/MON/MUM, ONOMATOPÉES ET MOTS EXPRESSIFS*, *ONOMATOPOEIC EXPRESSION*, *PIP*, *PRIMITIVE AND UNIVERSAL LAWS OF THE FORMATION AND DEVELOPMENT OF LANGUAGE*

## **São Tomé Creole**

Portuguese-based creole of São Tomé Island (Gulf of Guinea).

See *CREOLES*

## **Saramaccan**

English-Portuguese creole of Suriname and French Guiana spoken by approximately 90,000 people.

See *CREOLES*, *IDEOPHONE*

## **Savo (savo)**

Papuan language (Central Solomons branch) spoken on Savo Island by about 2,400 people.

See *BUTTERFLY*

***Schallnachahmung, Wortschöpfung und Bedeutungswandel***  
 [Sound imitation, word creation and meaning change] (H.  
 Hilmer 1914)

The complete title of this notable book is *Schallnachahmung, Wortschöpfung und Bedeutungswandel auf Grundlage der Wahrnehmungen von Schlag, Fall, Bruch und derartigen Vorgänge dargestellt an einigen Lautwurzeln der deutschen und der englischen Sprache* [Sound imitation, word creation and meaning change on the basis of the perceptions of hitting, falling, breaking and similar processes as expressed in various phonetic roots of the German and the English languages].

This book is structured into three parts. The first part (6-34) describes some general aspects of sound imitation (*Schallnachahmung*). The second part (35-178) analyses and classifies the different meaning changes undergone by sound-symbolic words and expressions. In this part, four basic semantic dimensions are used: *mass*, *elevation*, *depression* and *movement*. All the meaning changes considered have to do with these four basic semantic fields. The third part (178-355) is a list of English and German sound-symbolic words denoting hitting, falling, breaking, and similar processes.

In the first part, Hilmer explains the two main concepts *Schallnachahmung* (sound imitation) and *Wortschöpfung* (word creation). Concerning the first, Hilmer notes three different types of relation. In the first place, when the perception of a sound is not clear enough it is usually supported by a visual representation related to that sound. As an example, Hilmer gives the English onomatopoe *pat* characterized as the sound made by a light footfall when walking or running. Secondly, the perception of a sound can be related to a referred movement in order to characterize, in a more precise way, a movement representation, as in the English word *pat* in the sense of ‘to beat with light sounding steps’. Thirdly, the denotations of objects can be related to sound representations, as in the German word *klappe* ‘a thing placed on or over another so that it can move and produces the sound *klapp* when hitting it’.

Sound imitation (*Schallnachahmung*) is based on auditory perceptions, but is not in itself linguistic, it must be given a linguistic form to create words (*Wortschöpfung*). For instance, in German three words can be created from the sound imitation *Bumps*: *Bumps* ‘the sound produced by the fall of a heavy object’, *Bumps* ‘the process of a heavy object falling’, and *Bumps* ‘a bump, a dent’. Something similar can be said of the English *bang*.



Words sound-symbolically denoting falling, hitting, and breaking share some phonetic characteristics: back low vowels suggest the sound produced by bulky objects and front high ones suggest the sound produced by little objects: English *plump* ‘the sound of a heavy object falling’ and *tip* ‘a light stroke’.

Voiceless plosive consonants are common in words denoting a quick tap, as in the English word *pat* ‘the sound made by striking lightly with something flat’. A sharp sound is frequently symbolized by a final lateral consonant, as in the German word *Knall* ‘a breaking sound’. In addition, the final consonantal groups *-nk*, *-ng*, *-mp* and to a lesser extent *-nt* suggest the sound produced by a hard impact: English *bang* ‘a heavy resounding blow’, *bink-bank* ‘the sound of tolling bells’. The breaking sound is symbolised by *crack*, *break*, *knack*.

Sound-symbolic phono-symbolism can be recognized into three different cases. The first case is direct and consists of the imitation of a sound. The second and third cases are indirect: a sound imitation can be mediated by the denotation of a movement related to that sound or by the noun of a thing or entity in which sound plays a significant role.

Hilmer also summarizes Wundt’s conception of sound imitation (27-34).

The major theoretical contribution is found in the third part of the book, which is entirely devoted to change in meaning. Hilmer uses the concept of *Urschöpfung*\* ‘original creation’ (58) to characterize the union of a representation and a phonetic expression that has not already been assigned to any other representation (this is exactly the sense in which H. Paul uses this term, although there no mention is made of this author). Hilmer thinks that the original creations in a language were denotations for the representation of things and of processes. In addition, a meaning change occurs when the phonetic expression is detached from the original representation and attached to a new representation.

In some cases, there is a non-systematic addition of new meanings without producing a complete meaning change. For example, the English phonetic expression *lump* is associated with the meaning ‘a small mass’ from which the meanings ‘a protuberant part’, ‘a knob, bunch or swelling’ or ‘a dull stolid person’ can be derived. None of these meanings displace the original meaning and, therefore, the meaning change has not been completely carried out.

The main section of this part is devoted to the study of change of meaning pertaining to four main representations: *object* (*Körper*), *elevation* (*Erhöhung*), *depression* (*Vertiefung*), and *movement* (*Bewegung*). The first three concern representations of shape.

The representation of an object or an elevation can be denoted under the impression of the perception of a thing falling to the ground and the produced sound, as in *dump* ‘the sound of a heavy object falling’, ‘a pile or heap of refuse or of other matter, dumped or thrown down’ or ‘anything short, thick and heavy’.

A small depression can be caused by rain falling on the ground, as in *pit* ‘an imitation of the sound of raindrops, striking against a surface’ and ‘an indentation like that made by a raindrop in the sand’.

Elevations and depressions can be caused by impacts or collisions, so we have *bump* ‘a blow, somewhat heavy, but rather dull in sound’ and ‘a protuberance, such as is caused by a blow or collision’.

Other concepts different from *object*, *elevation* and *depression* can also be denoted by means of the imitations of the sounds produced by impacts or collisions, such as *clap* ‘the noise made by the sudden collision of two hard, flat or concave surfaces’ and ‘the clapper or tongue of a bell’, or *knap* ‘the sound of a sharp blow’, a clapper’ and *knapper* ‘a hammer used for shaping flints’.

Concerning the imitation of other types of sound and their related sound-meaning associations, Hilmer mentions *roll* ‘that which is rolled up’, ‘a rounded strip fastened upon an extending along the ridge of a roof’, ‘a swell or undulation, as the roll of the prairie’.

Concerning the sound-symbolic denotation of movement, since it is not possible to represent a movement without a clear picture of the object that is moving, some movement denotations can be obtained from the denotation of objects: English *bat* ‘a wooden implement with a rounded handle, to strike with or as with a bat’. The fuzziness of the distinctions between different types of movement can be shown by inspecting the different meanings of the English verb *to revolve*: ‘to turn’, ‘to move like waves or billows’, ‘to fluctuate’, ‘to move tumultuously’, ‘to tumble or fall over and over’, ‘to walk with a rolling gait, to swagger’, ‘to sway heavily’, ‘of a ship to sway to and fro’.

There are several possibilities in the shift from the three fundamental representations of shape (object, elevation and depression) to a representation of movement. A phonetic form denoting an object representation can be assigned a movement representation because the movement representation includes the creation of that object, as in the German words *Klecks* 'stain' and *klecken* 'to stain'; or a phonetic form denoting a movement representation can be assigned an object representation because it is the result of a movement: English *dump* 'to throw down in a lump or mass' and 'a pile or heap of refuse dumped or thrown down'.

It is also possible that the meaning changes of a sound-symbolic word are produced in a circular way: English *tip* 'a light stroke', 'to touch lightly', 'any pointed tapering or rounded end or extremity', 'the outer or exposed termination of anything running to or approximating a point', 'a small piece or part attached to or forming the extremity of something', 'a tool made of pasteboard and fine hair, used by gilders, as to lay the gold upon the edges of a book'.

Hilmer analyses the English homonymous verbs *to cleave* 'to stick, adhere, be attached, cling' and *to cleave* 'to part, or divide by force, rend apart, split or rive, separate or sunder into parts) as follows (129). Both verbs have a sound-symbolic nature based on a *klap, klep, klip, klop, klup* phonomimetic rule. The first meaning can be obtained from a displacement of the representation of a piece of something or of an elevation usually denoted through sound imitation, to the representation of a bunch, bundle, heap or pile, like in *bank* 'a pile', 'to heap or pile up', 'a long flat-topped mass, e.g. of cloud', 'to gather in masses (of clouds)'; *plump* 'of full and rounded form', 'to form plumps, to mass or crowd together'; *bing* 'a heap or pile', 'to pile in a heap'; *club* 'a bunch', 'to gather or form into a club-like mass, to collect, gather together'. The transition from the representation of a crack to the representation of the action or process that causes it produces the second meaning.

The third part of the book gives a list of German and English sound-symbolic words denoting the sounds, movements and objects related to hitting, falling, breaking, and other processes. The list is organized so as to follow the phonetic configuration of the words. In each phonetic type three semantic types are distinguished: words denoting sounds (I), movements (II), and objects (III). The following list includes all the considered phonomimetic roots with German/English examples (all the German and English words analysed by the author are taken from German and English dictionaries published in the nineteenth and early twentieth centuries):

TAP (187-191): I: *tap/-*; II: *tappen/tap*; III: *Tappe/tap*. TOP (191-194): II: *toppen/top*; III: *Toppen/top*. TUP (195-196): II: *tuppe/tup*; III: *Tüppel/tup*. TIP (196-200): II: *tipp/tip*; III: *Tipp/tip*.

PAT (201-202): I: *-/pat*; II: *-/pat*; III: *Patte/pat*. POT (203-204): II: *Pot/pot*; III: *Potte/pot*. PUT (204-205): II: *putteln/put*; III: *Putte/put*. PET (206): II: *pettern/-*, *petten/-*; III: *-/pettle*. PIT (206-208): I: *-/pit*; II: *pitteln/pit-a-pat*; III: *-/pit*.

BAT (209-211): I: *-/bat*; II: *Bats/bat*; III: *Batler/bat*. BOT (212-213): II: *Bott/-*; III: *Botte/bottle*. BUT (213-217): II: *butten/butt*; III: *Butte/butt*. BET (217): II: *Bet/bet*. III: *Betel/betel*. BIT (218-219): II: *Bit/bit*; III: *-/bit*.

HACK (220-224): II: *Hack/hack*; III: *Hacke/hack*. HOCK (224-229): II: *hocken/hockle*; III: *Höcker/hock*. HUCK (229-230): II: *hücken/huck*; III: *Huckel/huck*. HECK (231-234): II: *Heck/heck*; III: *Heck/heckle*. HICK (234-236): II: *Hick/hick*; III: *Hicker/hick*.

KNAP (237-239): I: *-/knap*; II: *knappen/knap*; III: *Knapp/knap*. KNOP (239-241): I: *knopen/-*; II: *knopen/-*; III: *Knope/knop*. KNUP-KNUB (241-246): II: *Knupp/knub*; III: *Knupp/knub*. KNEP (246-247): II: *kneppeln/knep*; III: *Kneppel/kneppel*. KNIP (247-249): I: *knippen/-*; II: *Knipp/knip*; III: *Knipp/-*.

KNAT (250): III: *Knattel/knat*. KNOT (250-254): II: *knotten/-*; III: *Knoten/knot*. KNUT (255-257): II: *knüttern/knutle*. III: *Knüttel/-*. KNET (257-258): II: *kneten*; III: *Knetterle*. KNIT (259): II: *knittern/-*; III: *Knitter/knit*.

KNACK (260-261): I: *Knack/knack*; II: *Knacken/knack*; III: *Knacke/knack-kneed*. KNOCK (262-264): II: *Knock/knock*; III: *Knocke/knock*. KNUCK (264-266): I: *knuck/-*; II: *Knuck/knuckle*; III: *Knuckel/knuckle*. KNICK (266-269): I: *knicken/knick*; II: *knicken/knick*; III: *Knick/knicker*.

KNALL (270-271): I: *Knall/-*; II: *Knall/knal*; III: *Knallen/-*. KNOLL (271-274): II: *Knöllen/knoll*; III: *Knollen/knoll*. KNULL (275-278): II: *knullen/-*; III: *Knulle/-*. KNELL (278-279): I: *knellen/knell*; II: *knellen/knell*; III: *Kneller/-*.

KNAR (280): I: *knarren/-*; II: *Knaur/-*; III: *Knarre/knar*. KNOR (281-282): I: *knörren/-*; II: *knörren/-*; III: *Knorre/knor*.

KLAP (284-286): I: *Klapp/clap*; II: *Klapp/clap*; III: *Klapper/clap*. KLOP (286-287): II: *Kloppe/-*; III: *Kloppe/cloppers*. KLUP-CLUB (288-292): II: *Chlupp/club*; III: *Kluppell/club*. KLEP (292-293): II: *Klepper/-*; III:

*Klepper/clep.* KLIP (293-295): I: *klippen/clip*; II: *klippen/clip*. III: *Klippe/clip*.

DAMP (296): I: *damperten/-*; III: *Damper/-*, *-/ damp*. DOMP (296): II: *-/domp*; III: *-/domp*. DUMP (297-300): I: *-/dump*; II: *dumpeln/ dump*; III: *-/dump*. DIMP (300): III: *Dimpel/dimple*.

BANT (301): II: *bantlen/banter*; III: *Bantli/bantling*. BONT (301-302): III: *Bonta/-*, *-/bonting*. BUNT (303-305): II: *-/bunt*; III: *Bunte/bunt*. BENT (305-306): II: *-/bent*; III: *Bente/bent*. BANK (307-311): I: *bank/-*; II: *banklen/bank*; III: *Bank/bank*. BONK (311): III: *Bong/bonker*. BUNK (311-315): II: *bunken/bunker*; III: *Punken/bunk*. BENK (315-316): III: *Benk/-*; BINK (316-317): I: *binke-bank/-*; II: *binken/bink*; III: *Binkert/bink*. PINK (318-319): I: *pink/pink*; II: *pinken/pink*; III: *Pinken/pink*.

BANG (320-321): I: *bang, bing/-*; II: *banggen/bang*; III: *-/banger, bang*. BUNG (322-325): I: *bungen/bung*; II: *Bung/bung*; III: *Bunge/bungle*. BUNG (325-326): II: *bengen/-*; III: *Bengel/-*. BING (326-328): I: *bing-bang/-*; II: *Binges/bing*; III: *Bing/bing*.

PLAMP (329-330): II: *Plamp/-*; III: *Plamper*. PLUMP (330-333): I: *plump/plump*; II: *plumpen/plump*; III: *Plump/plump*. PLEMP (333-334): I: *plempen/-*; II: *plempen/-*; III: *Plempe*.

KLAMP (335-339): II: *-/clamp*; III: *Klampe/clamp*. KLOMP (339-340): I: *-/clomp*; II: *clomp*; III: *Klomsack/clomper*. KLUMP (340-344): I: *-/clump*; II: *Klumps/clump*; III: *Klumpen/clump*. KLEMP (344-345): I: *Klempen/-*; II: *Klempen*; III: *Klempel*. KLIMP (345): II: *klimpen/climp*; III: *Klimp/-*.

[The final part of this list only includes English words.]

BUM (347-349): I: *bum* ‘to make a hollow noise, boom, hum, buzz’; II: *bum* ‘to read in a droning, indistinct manner’; III: *bummer* ‘a carriage that sounds from a distance on the road’, ‘a dissolute fellow’. BUMB (350-352): I: *bumble* ‘a humming noise’; II: *bumble* ‘to buzz as a fly’; III: *bumble* ‘a humming beetle’, ‘a drone, a lazy fellow’. BUMP (352-355): I: *bump* ‘the cry of the bittern’; II: *bump* ‘a blow, somewhat heavy, but rather dull in sound’; III: *bumper* ‘the heavy weight used in driving piles’, ‘a swelling, a protuberance’.

## ***Schallnachahmungen und Schallverba in Litauischen*** [Sound imitations and verbs of sound in Lithuanian] (J. H. A. Leskien 1902)

In this early study of onomatopoeia and sound symbolism (published in *Indogermanischen Forschungen*, XIII), Leskien discusses words

mimicking movement, sound, and visual impressions in Lithuanian. The original Lithuanian orthography in Leskien's essay is preserved in this entry.

Leskien observes that in Lithuanian, sound-symbolic words have a constant phonetic form: most of them end in *-t*, *-st*, *-szt*. The *-t* ending can follow any consonant, as in *càpt*, *czúzt*, *bìmt*, *blèrbt*, *plept*. The same can be said of the *-st* ending: *býlst*, *drykst*, *dìngst*, *bùmst*, *rýst*. The *-szt* ending occurs after guttural consonants: *bárkszt*, *blókszt*, *pýkszt*, *pókszt*.

The first group of onomatopoeic expressions in Lithuanian contains sound-mimicking verbs appearing with a cognate object: *burszkiù bürkszti* 'to hum, buzz', *czerszkiù czerkszti* 'to twitter, chirp, hiss', *czurszkiù czurkszti* 'to trickle', *plerszkiù plerkszti* 'to rattle', *társzku tarkszti* 'to clatter', *trėszkiù trėkszti* 'to squeeze and splash', *páuszkiu pauszketi* 'to bang, slam', *plezskù pleszketi* 'to roar, patter', *treszkù treszketi* 'to crackle, sizzle', *krykszczù krykszti* 'to screech, squawk', *gìrgždžu gìrgždėti* 'to creak', *sznibždžù sznibždėti* 'whisper'.

There is also a verbal form *-siu -sėti*, which is almost always used for sound imitation: *czypsiù czyps* 'to beep, peep', *kìrksiu kirkseti* 'to cackle (of hens)', *kiáuksiu kiáuksėti* 'to cackle (of turkeys)'.

There is a verbal ending in Lithuanian (*-/telėti*) that indicates a short, quick, sudden process. It is used to derive verbs from exclamations: *cínkt!* 'clink' < *cínktelėti* 'to clink, clank', *búmbt!* 'bang!' < *búmbtelėti* 'to boom, bang'.

Leskien includes a list of sound-mimicking exclamations and their verbal derivatives:

B: *baksz* 'sudden impact, collision, stab' < *baksėti*, *bakterėti*; *bárksz*, *bárkszt*, *brabraksz* 'crashing, roaring, crackling' < *barszkėti*, *barksztelėti*; *brákszt*, *bráksz*, *brabraksz* 'sound of breaking, knocking' < *braszketi*, *brakszterėti*, *bást* 'pricking, stabbing, sharp push' < *bastinėti*, *bástelėti*; *bęnc* 'strong impact, blow, fall'; *býlst*, *bilst* 'falling down' < *bilstelėti*; *bįndzi* 'to walk with long strides'; *bimpt*, *bimt* 'sound produced by the fall of a light object' < *bimbėti* *bįmterėti*; *bįzdu* 'aimless wandering' < *bįzdinėti*, *bįzdįnti*; *blakt* 'something appearing suddenly or producing a sudden noise' < *blakštūti*; *bląngst* 'sound produced by a sudden throw or blow' < *bląngsterėti*; *Blèrbt* 'to bubble' < *blerbti*, *blerbėti*; *blèst* 'to go out suddenly (of lights)' < *blèstelėti*; *blikst* 'quick lighting' < *bliksterėti*; *blùrbt* 'strong abdominal noises, bowel sounds' < *blurbėti*; *blust* 'winking' < *blusterėti*; *brįnkt* 'clinking fall' < *brįnktste*; *brùkutu* 'hurry' < *brucėti* 'to hurry' *brùcįnti* 'to rush somebody'; *burg* 'bubble' < *burgėti*, *burgtelėti*.

C: *cinkt* ‘clink’ < *cíngteléti*; *cvánkt* ‘a sudden blow’ < *cvánkteréti*; *čár* ‘sound made by snow when stepped on’ < *čárškéti*; *čiučiu-lulu* ‘eiapopeia’ (said to lull a child to sleep) < *čiučiu*, *liuliúti* ‘to swing’; *čiuzt* ‘sliding, gliding’ < *čiužti*.

D: *digt* ‘stinging, biting’; *drykt* ‘rapid in and out displacements’ < *drikteléti*; *drúmszt* ‘flop (into water)’ *drúmszeléti*; *dúlkt* ‘quick movement’ < *dulkéti*; *dúinkt* ‘dull thump’ < *dúingsteréti*; *dzvákzt/dzvankt* ‘sudden blow, collision’ < *dzvákteréti*; *dvilkt* ‘glance’ < *dvilkteléti*; *džir džir* ‘sound produced by strings’ < *džirgšteréti*.

G: *garr* ‘snoring’; *gargaliúti* ‘to gasp’; *girkst* ‘creak’ < *girksteréti*.

K: *kabákszt* ‘limp, hobble’; *kaukszt, kauksz* ‘beat, hit’; *képszt* ‘peck’ < *képszteréti*; *kímszt* ‘light impact’ < *kímszteréti*; *klabákszt* ‘rattling, clattering sound’; *kluksz* ‘swallowing sound’; *knábszt* ‘grab’; *krímszt* ‘bite sound’; *kripszt* ‘quiet rustle’ < *kripszteréti*; *krúinkt* ‘crow call’; *krúpt* ‘startle’ < *krúpteréti*; *mírkt* ‘winking glance’ < *mirkteréti*.

P: *pákszt* ‘the sound of a blow’; *pýkszt* ‘whip sound’; *pláukszt* ‘splash’, *pliúkszt* ‘sound caused by the falling of a soft mass’; *pókszt* ‘slap, beat, whip’ < *pókszteréti*.

S: *skímt* ‘ring, clink’; *stápt* ‘sudden stop’ < *stápteréti*; *szmákszt* ‘quick insertion’; *szmáukszt* ‘quick whipping’ < *szmaukszteréti*; *szmírkszt* ‘the sudden liquid ejection from a syringe’ < *szmírkszteréti*; *sznyápszt* ‘a short hissing sound’; *szwykszt* ‘a sharp whistling stroke’; *szwilpt* ‘whistling’.

T: *takszt* ‘sound produced by a strong blow’; *tékszt, patékszt* ‘sound made by throwing a viscous matter’ > *tékszteréti*; *tápszt* ‘sound made by a soft stroke’ < *tápszteréti*; *tímt* ‘the sound of heartbeat’, *tárkszt, trákszt, trékszt* ‘a clattering, cracking noise’ > *trákszketi, trékszketi*; *twýkszt* ‘loud bang, sound of a violent impact’ < *twýksteréti*; *tvínkt* ‘sound made by a hard fall onto the floor’.

Z: *zybzt* ‘a sudden lighting’ < *zybteréti, zibteréti* ‘to light up’; *žýrgt* ‘sound made by jumping onto a horse’.

## Schallwort

A German word meaning sound-word. Oehl (1933b: 3) defines it as an onomatopoeic word mimicking an auditory impression.

See BILDWORT

## Scottish Gaelic

Goidelic (Celtic) language spoken in Scotland by approximately 57,000 people.

See BABBLE, PHONOMIMETIC ROOT

## Secondary Cratyism

See SECONDARY MIMOLOGISM

## Secondary iconicity

This expression is used to refer to phonaesthetic, sound-symbolic and psychomorphic expressions; as opposed to primary iconicity, which includes onomatopoeic and sound-imitative echoic expressions (Meier 1999: 142).

See ICONICITY

## Secondary mimologism [*mimologisme secondaire*]

The almost irresistible desire of *correcting* language in one way or another in order to restore its supposedly original iconic transparency (Genette 1976: 40, 1995: 26).

## Secondness

A category in Peircean semiotics, related to indices (index\*) and defined by Peirce in the following terms:

“Just as the first is not absolutely first if thought along with a second, so likewise to think the second in its perfection we must banish every third. The second is therefore the absolute last. But we need not, and must not, banish the idea of the first from the second; on the contrary, the second is precisely that which cannot be without the first. It meets us in such facts as another, relation, compulsion, effect, dependence, independence, negation, occurrence, reality, result. A thing cannot be other, negative, or independent, without a first to or of which it shall be other, negative, or independent. Still, this is not a very deep kind of secondness; for the first might in these cases be destroyed yet leave the real character of the second absolutely unchanged. When the second suffers some change from the action of the first, and is dependent upon it, the secondness is more genuine. But the dependence must



not go so far that the second is a mere accident or incident of the first; otherwise the secondness again degenerates" (Peirce 1931-1958, 1.358).

See FIRSTNESS, HYPOICON, ICON, ICONICITY, ICONICITY IN PEIRCE'S SEMIOTICS, THIRDNESS

### ***See-saw***

"The term is here used in the first place for a plank that is supported or fastened near the middle and on which one or more persons sit on opposite ends and rise and fall alternately as the plank moves, and also for the moving up and down in this manner. [...] The word has been formed from *saw* and is symbolic of alternating movements made by a sawyer or rather by two sawyers. [...] Originally the word may have been used as a working song by sawyers or by children imitating them. Later, *see-saw*, we may guess, came to be used as a rhythmical jingle accompanying alternating movements in games" (Thun 1963: 76-78).

See ABLAUT REDUPLICATION

### **Semang**

Mon-Khmer language group of Thailand, Malaysia and Malacca.

See *BUTTERFLY*

### **Semasiological iconicity**

In this type of iconicity a linguistic form is interpreted as suggesting a certain linguistic meaning, so we obtain a *form miming meaning*. Onomatopoeia is the most characteristic case of semasiological iconicity, as well as certain forms of sound symbolism. In general, ideophones show semasiological iconicity.

See ONOMASIOLOGICAL ICONICITY, ONOMATOPOEIA

### **Seneca**

American Indian language of the Iroquoian family spoken by about a hundred people in western New York and the Six Nations Reserve (Ontario).

See NURSERY WORDS

## Sensory sound symbolism

This term is proposed by Cuskley and Kirby (2013: 875) to cover *conventional sound symbolism* and *synaesthetic sound symbolism*.

See SOUND SYMBOLISM, SYNAESTHESIA, SYNAESTHETIC ICONICITY, SYNAESTHETIC SOUND ICONICITY

## Sentani

Papuan language of Indonesia (East Bird's Head) spoken by about 30,000 people.

See *BUTTERFLY*

## Serbian

South Slavic language spoken in Serbia and neighbouring countries by 12 million people.

See BABBLE, BALTO-SLAVIC, BIRD NAMES, *BOW-WOW*, *CACKLE*, *CROAK*, *FANGEN-FINGER-FÜNF*, PHONOMIMETIC ROOT

## Setswana ideophones

Setswana is a Bantu language spoken in Southern Africa and Botswana by some 5 million people. The following data and analyses are taken from Creissels 2001.

Ideophones in this language have been classified as adverbs and as constituting a distinct grammatical category. They are combined with a limited set of verbs, notably *be*, *do* and *say*, which lose their semantic contents and function as support verbs. The following are examples of the use of the ideophones *phatla!* and *ngwee!* introduced by the verb *re* 'say': *dikokwana tsa re phatla! di bona segodi* 'the chickens suddenly scattered when they saw the hawk', *mosimane o ne a re ngwee! le moratiwa* 'the boy absconded with his sweetheart'.

The combination of *re* with an ideophone modifies the syntactic nature of this verb: the selection of the subject and of the complements and the semantic roles assigned to them are completely determined by the ideophone. For example, in the sentence *notshe ya mo re po! mo tsebeg* 'the

bee stung him on the ear', the object prefix marker *mo* attached to *re* 'say' is triggered by the ideophone *po!*.

Creissels (2001: 83) proposes that there are two different types of clause structure depending on the choice of a regular verb or an ideophone as the main predicate:

1. Subject noun phrase + subject marker + object marker+ verb inflected for tense, aspect and modality + object noun phrase + adjunct noun phrase.
2. Subject noun phrase + subject marker + object marker + verb RE inflected for tense, aspect and modality + object noun phrase + IDEOPHONE + adjunct noun phrase.

In the second type of clause, the same ideophone can occur in both intransitive and transitive sentences without voice-marking affixes, which are required in the first clause type. Creissels gives the following examples of this property of ideophonic constructions: *bojalwa jwa re goro! fa fatshe* 'the beer poured out on the ground', *monna a re bojalwa goro! fa fatshe* 'the man poured out the beer on the ground', where *bojalwa* means 'beer', *goro!* is the ideophone, *monna* means 'man' and *fatshe* means 'ground'.

See AFRICAN LANGUAGES, BANTU IDEOPHONES

### ***She sells sea shells...***

Tongue-twisters are invented phrases devised to be difficult to articulate properly. This difficulty is based on the alternation of similar but distinct phonemes, as in the widely known:

She sells sea-shells on the sea-shore. The shells she sells are sea-shells, I'm sure. For if she sells sea-shells on the sea-shore, then I'm sure she sells sea-shore shells.

Tongue-twisters, in general, exploit the so-called syntagmatic endophoric iconicity\* of which repetition, alliteration, rhyme, meter and translative and mirror symmetry are notable examples. The first sentence of the above English tongue-twister illustrates the two types of symmetry mentioned: the sequence *sh...s* of the first half (*She sells*) is inverted (*sea-shells*) in the second half. This is an example of mirror symmetry. In addition, the vowel pattern *i-e* of the first half is the same as that of the second part. This has been noted by Nöth (2001: 23-24), who concludes:

“We thus have two conflicting principles of iconicity in one line, and it seems to be precisely this conflict which is responsible for the phonetic difficulty of the tongue twister” (Nöth 2001: 24).

## ShiNzwani

Benue-Congo language of the Island of Anjouan (Comoros) spoken by approximately 200,000 people.

See AFRICAN LANGUAGES

## Shipibo

Panoan language of Peru (Ucayali region) spoken by about 26,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Shona Ideophones

Shona is a Bantu language spoken in Zimbabwe by about 10 million people; it is the most widely spoken Bantu language. The following data are taken from Fortune (1980: 175-193).

In Shona, ideophones combine with complements and adjuncts to form ideophonic phrases and they can be placed in different sentence positions. This is an example with the *pikú* ideophone: *nyama pikú somuridzi*, *nyama somuridzi pikú* ‘taking up meat as its owner’.

Ideophones and the phrases containing them can be integrated in different grammatical structures:

- Complex ideophone: *taúrei* ‘speaking’;
- Ideophone phrase: *mazwí manyóró taúrei* ‘speaking soft words’;
- Ideophone clause: *mambo mazwí manyóró taúrei* ‘the chief spoke soft words’;
- Ideophone sentence: *mambo mazwí manyóró taúrei, vanhu vóse mwoyó pfavei* ‘the chief spoke soft words, and everyone was mollified’.

Ideophones can also form part of nominal constructions, usually reduplicated. The following examples contain a nominal class prefix: *mu-kúdúbu-kúdúbu* ‘continual uncovering’, *mu-suduru-suduru* ‘continual withdrawing’, *chi-tang-e-tang-e* ‘starting without method, anyhow’, *chi-*

*bik-e-bik-e* ‘cooking without method’, *chí-nhí-nhí* ‘continual gripping’, *chí-dó-dó-dó* ‘falling, knocking, hammering’.

In the following examples, the class prefixes are also reduplicated: *chá-mu-chétu-mu-chétu* ‘snipping all over’, *chá-mu-undú-mu-úndu* ‘plucking feathers from all over’. Double duplication is seen in the following examples: *chá-mu-nzvé- nzvé- mu-nzvé- nzvé* ‘continual dodging all over’, *chá-mu-pú-pú-mu-pú-pú* ‘continual falling of light objects everywhere’.

Ideophones can also show certain prosodic peculiarities as expressive words. They can be marked off from the rest of the sentence by means of pauses: *ndatí bhátýe rángu # páyi # ndókugara pasí* ‘I hung up my jacket and sat down’. Ideophones may have a pitch either higher or lower than that appropriate to their position in the sentence. There is also an expressive tempo used to convey the degree of speed and size: *razvu* ‘standing up and jumping away’ > *rá::zvu*: ‘(the same) of a large and heavy person’; *sandu* ‘turning over, e.g. small piece of meat in a pan’ > *sa::ndu*: ‘(the same) only larger and more slowly and by a larger person’.

In addition, voicelessness and murmur may indicate degrees of size and of weightiness of an action. For example, *páru*, *báru*, *bháru* ‘tearing’ suggest actions that are respectively on a small, medium or large scale; *pitiri*, *bidiri*, *bhidhiri* ‘falling (e.g. from a roof)’ depict the falling of objects that are of light, medium and heavy weight respectively.

It is also possible to add extra syllables to ideophones to indicate degrees of intensity: *mbu* ‘being white’ > *mbure*: ‘being very white’ > *mburetete::* ‘being extremely white’; *tónho* ‘being quiet’, *tónhono* ‘being very quiet’, *tónhonono::* ‘being as quiet as the grave’. Ideophones can also present metathesis: *tíngíni/níngítí* ‘being thin-waisted’, *súngúnu/súnúngu* ‘untying’.

Ideophones also exhibit syllable repetition and vowel harmony: *babandu* ‘chewing hard and brittle food’, *bhabhangu* ‘splashing water during swimming’, *súrududu* ‘sitting with bowed head’, *nyúriúdiúdi* ‘going down into the water’, *nánái* ‘moving painfully’, *tutururu* ‘arriving’, *miníní* ‘lifting a thin object pointing upwards’, *rwódódó* ‘falling gently to the knees’.

[Fortune 1962]

See AFRICAN LANGUAGES, BANTU IDEOPHONES *FANGEN-FINGER-FÜNF*

## Sign languages

See ICONICITY IN SIGN LANGUAGES

## Sindarin

See ICONICITY IN INVENTED LANGUAGES

## Sinhalese

Indo-Aryan language of Sri Lanka spoken by approximately 17 million people.

See NURSERY WORDS

## Siwu ideophones

Siwu is a Kwa language of the Ghana-Togo Mountain languages spoken in the Volta Region (north of Hohoe) of Ghana by about 30,000 people.

The data presented here are taken from Dingemans's outstanding thesis (Dingemans 2011a).

Siwu ideophones have special characteristics: deviant phonotactics, special word structures, expressive morphology\*, syntactic aloofness, foregrounded prosody, sensory semantics and a depictive mode of signification (Dingemans 2011a: 133).

Ideophones generally have more syllables than the average word in Siwu: *pumbuluu* 'round and fat', *velevele* 'dizzy'. In addition, a vast majority of them have only one vowel throughout. Both properties are clearly seen in *gbadaragbadara* 'tottering gait of a drunkard', *wùrùfùù* 'fluffy'.

Expressive lengthening is common in ideophones: *fututu-tutututututu* 'pure white', *gelegele-gelegelegelegele* 'shiny', *kanananananana* 'quiet, lacking noise or sound'.

This language has ideophonic adverbs with adverbial meanings and ideophonic forms: *pɔpɔɔpɔ* 'chock-full', *kengkengkeng* 'not at all', *tutuutu* 'exactly', *pelepele* 'completely', *nyemrenyemre* 'wriggling/zigzagging', *gelegele* 'sparking', *sùkùrù-sùkùrù* 'sound of grinding'. There are also adjectival ideophones, such as: *kpiná-kpinà* 'black', *kpiì* 'big', *minimini* 'spherical', *miɔmiɔ* 'pointy', *pɔtɔɔ* 'rotten', *kpiìì* 'static'.

Nouns can be derived from ideophones: *gbugburu* ‘short and stocky’ > *kà-gbugburugbu* ‘dwarf’, *fututu* ‘pure white’ > *kà-fututu* ‘television’, *fukafuka* ‘breathing heavily’ > *i-fokofoko* ‘lung’.

The use of ideophones in everyday conversation is characterized by Dingemanse thus:

“It is a technique rooted in everyday practices of language use, a skill that forms an integral part of what it means to have achieved communicative competence in Siwu. Illustrative of this is the fact that ample and proper use of ideophones is considered a sign of eloquence among the Mawu” (Dingemanse 2011a: 340).

[Dingemanse 2011a, b]

See AFRICAN LANGUAGES, IDEOPHONE, IMAGIC ICONICITY, RELATIVE ICONICITY

## Size-Sound Symbolism

The use of certain phonemes to suggest size, such as /i/ for small (English *little*, Spanish *chic(o)* ‘small’) and /o/ or /a/ for big (English *large* or Spanish *grand(e)* ‘large’). This is not always so: *big/small* or Georgian *didi* ‘big’ and *p’at’ara* ‘small’.

R. Ulta (1978) carried out a study of size-sound symbolism using data from 136 languages. 38 of those languages gave data relevant to the following hypothesis: high and/or front vowels symbolize diminutive size. The phonetic basis for this symbolic relation is stated in the following paragraph:

“Since high front vowels reflect proportionately higher second formant frequencies, and the higher the tone the higher the natural frequency, there appears to be a correspondence between a feature of high frequency (= short wavelength in physical terms) and the category of small size” (Ulta 1978: 545).

The following is a list of languages that gave data supporting the hypothesis (and corresponding counter-examples):

- Diminution expressed by vowels: a) front vowels: Diola-Fogny, Grebo, Khasi, Rotuman (counter-examples Khasi, Nez Perce); b) high vowels: Bengali, Punjabi, Romanian, Wishram; c) high front vowels: Kashaya, Konkow; d) other vowel types: long vowels (Chehalis; counter-example: Sahaptin), nasalized vowels (Logbara), lenis vowels (Korean).

- Diminution expressed by consonants: a) degree of closure (stops/affricates): Chinook, Cocopa, Karok, Miwok, Nez Perce; b) manner of closure (lateral/nasal): Chinook, Diegueño, Nez Perce, Romanian, Sahaptin, Totonac, Wiyot, Yurok; c) front or fronted: Chinook, Coeur d'Alene, Dakota, Nez Perce, Wappo, Eskimo, Karok, Nootka, Quileute, Sahaptin, Tillamook, Totonac, Wappo, Wishram, Wiyot (counter-examples: Nez Perce, Wappo); d) glottalized: Chinook, Coeur d'Alene, Kwakiutl, Wappo, Wishram; e) other consonant types: e1) nasalized (Karok, Yana), e2) lenis (Kwakiutl), e3) voiced (Diegueño; counterexample: Shona); f) high tone: Ewe, Gola, Zapotec.

As can be seen from the above list, there is a clear American Indian language bias. Size symbolism occurs in 27.3 % of the sampled languages. Consonant ablaut as size-symbolic expression is exclusively shown by the American languages included in the sample.

G. Diffloth (1994) has observed that in Bahnar, a Mon-Khmer language of Vietnam, the vowels /i/, /u/, /e/ and /o/ are consistently used to symbolize bigness and that the correspondent opened versions of the mid vowels (/ɛ/, /ɔ/) are used to refer to small things. For example: *bloong-bloong* 'numerous reflections caused by the rays of light on a large object, elongated in shape' vs. *blɔng-blɔng* 'id., small object'; *bliil-nyip* 'large scintillating fire, of the last flashes of a large fire about to die' vs. *blɛɛl-nyɛp* 'id., small fire'.

Diffloth maintains that this association has an articulatory grounding justifying an iconic interpretation:

"In the articulation of high vowels, the tongue occupies a much larger volume in the mouth than it does for low vowels. The proprioceptive sensation due to this, reinforced by the amount of contact between the sides of the tongue and the upper molars, is available to all speakers and is probably necessary to achieve a precise articulatory gesture. The most direct form of iconicity relies on finding similarities between two different kinds of sensations: articulatory feedback sensations (or proprioception of articulation) on the one hand, and the various sensations conveyed by expressives on the other" (Diffloth 1994: 113).

This author concludes that different languages may use the same phonetic variable to convey the same range of perceptions and come up with opposite solutions, all of them iconic. This is possible because different aspects of these articulatory gestures can be used to establish sound-symbolic relations. This means that iconicity "can be both physiologically motivated and culturally relative at the same time" (Diffloth 1994: 113).



Shinohara, K. and S. Kawahara (2010) carried out an experiment to check the plausibility of size-sound symbolism across languages. They tested one hundred speakers of different native languages (English, Chinese, Japanese and Korean) using 40 meaningless invented words of the type VCVC (*ibib, ubub, ebeb, obob, ipip, upup, epep, opop, igig, ugug, egeg, ogog, ikik, ukuk, ekek, okok...*). They were asked to guess the size suggested by each word on a 1-4 scale (1 = very small, 2 = relatively small, 3 = relatively large, 4 = very large). Some of the results, ordered by native language, are given below:

Language	/i/	/o/	[high]	[low]	[front]	[back]
Chinese	2>	2'5<	2	3<	2<	2,5<
English	2>	2,5<	2,5>	2,5<	2	2,5<
Japanese	2'5>	2<	2,5>	2,5	2,5<	2,5<
Korean	2	2,5<	2,5>	2,5<	2,5<	2,5<

2> 'a value lower than 2', 2,5< 'a value higher than 2'5.

In this table, it can be seen that the English vowel /i/ and the features [high] and [front] suggested smallness and that the vowel /o/ and the features [low] and [back] were interpreted as suggesting something relatively large.

As can be seen on inspecting the table, the values assigned to each element coincide in the four languages.

The experiment also considered the voicing of consonants. It was observed that in three of the languages (English, Japanese and Chinese) voiced stops received higher ratings than voiceless stops.

The authors end their paper with the following conclusion:

“Cross-linguistically, vowel height, backness, and voicing of obstruents all affect the perception of size. All of these patterns make phonetic sense (articulatory and/or acoustic). Speakers can project their articulatory gestures (or their acoustic consequences) to the sensation of image. [...] Speakers have some non-arbitrary intuition about connections between sounds and meanings/images. They may have embodied motivations and may instantiate iconicity [...] between sound and meaning. The study of sound symbolism thus can be an interesting topic in cognitive linguistics” (407).

See IMITATIVE ROOTS, SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I*, SYNAESTHESIA

## Slavic Languages

See BALTO-SLAVIC, BULGARIAN, CROATIAN, CZECH, POLISH, RUSSIAN, SERBIAN, SLOVAK, SLOVENE, *DICCIONARIO DE VOCES NATURALES*

### Slovak

West Slavic language spoken in Slovakia and adjacent countries by more than 5 million people.

See *CROAK*

### Slovene

South Slavic language spoken in Slovenia and adjacent countries by about 2.5 million people.

See *CROAK*, *CUCKOO*

## Somali Ideophones

Somali is a Cushitic (Afro-asiatic) language spoken in Somalia by 15 million people.

The following data are taken from Dhoorre and Tosco (1998), who give a survey of the ideophones in this language.

The phonetic pattern of Somali ideophones is CV(V)C, the most usual shape of a basic root. In addition, only in ideophones is a final *-m* admitted. Complete reduplication is characteristic of Somali ideophones. From a morphosyntactic point of view, Somali ideophones present the following features: they function like nouns, not like verbs or adverbials; they can have suffixed determiners; they are of feminine gender; and they are not pluralized (unlike nouns).

Ideophones mimicking movement: *big* 'get off', *haf* 'rise, lift up', *wab* 'to fall down rolling', *shalab* 'to drop upon (liquids)', *shulux* 'to fall down' > *shululux* 'to crash down', *fash* 'to sprinkle', *haw* 'to jump upon, hug', *lib* 'to slip into', *jug* 'to pass from part to part', *shuq* 'to penetrate neatly', *balaw* 'to hop with a target'.

Ideophones mimicking hitting and breaking: *qac* ‘to break’, *bash* ‘to crash with a loud sound’, *dhash* ‘to crack with a squeaking sound’, *jaf* ‘to cut horizontally’, *xaf* ‘to cut neatly and sharply’, *hig* ‘to pierce’, *tush* ‘to prick’, *dhac* ‘to tear with a ripping noise (skin, cloth)’, *dhag* ‘to puncture making a hole’, *qab* ‘to slam (door)’, *gub* ‘to knock’, *wash* ‘to whip’

Ideophones mimicking sound and light: *xuux* ‘to cry, shout threatening’, *wah* ‘to bark’, *hindhis* ‘to sneeze suddenly and violently’, *qux* ‘cough’, *tatac* ‘to shoot repeatedly’, *qalaw* ‘to ring, clink (bell)’, *jiiq* ‘to squeak (wood and bird)’, *bug* ‘to explode’, *quququc* ‘thunder’, *halalac* ‘to give off a sparkling light’, *bilig* ‘to give off a piercing light’

Other ideophones: *dhalag* ‘to swallow something small’, *dhujuq* ‘to swallow involuntarily’, *juluq* ‘to gulp down without chewing’, *yalam* ‘to gulp down something small’, *fush* ‘to bubble’, *uf* ‘to stink’, *fiiq* ‘to suck’, *dug* ‘to fall into a deep sleep’.

The following sentences illustrate the use of some of the preceding ideophones:

1. *Hal mar bay BIG isla yiraahdeen* ‘they all left suddenly’.
2. *Nalkii baa meel fog BILIG ayuu ka yiri* ‘light appeared suddenly from afar’.
3. *DUG dheh* ‘hush, hush; go to sleep’.
4. *Qarinkii ayuu DHASH ka siiyay* ‘he broke the cane with a squeaky noise’.
5. *Qodax baa cagta JUQ iiga tiri* ‘the thorn jabbed into my foot’
6. *UF buu yiri* ‘he farted (without noise)’.

The last word of sentences 1, 3, 5, and 6 is a verb meaning ‘to say’, while that of sentence 4 is a verb meaning ‘to give’.

See AFRICAN LANGUAGES, *BUTTERFLY*, *ELEMENTARE WORTSCHÖPFUNG*

## Songhay

Group of Nilo-Saharan languages spoken along the middle reaches of the Niger River (Mali, Niger, Benin, Burkina Faso, Nigeria).

See MATRIX AND ETYMON THEORY

## Sotho Ideophones

Sotho is a Southern Bantu language spoken in South Africa by approximately 8 million people. The following data are taken from Kunene 2001.

Ideophones in Sotho, like in many other languages, are pure oral phenomena accompanied by deliberate gestures whose intent is to approximate the act depicted by the ideophone.

Ideophones can function as predicates without the intervention of the verbalizing element *-re*: *ngko bjara* ‘the clay pot broke’, *mahlo etlo* ‘his/her eyes became clear’, *ntja photse* ‘the dog bolted out’, *ngwana nngo bjara* ‘the child broke the clay pot’. They can also function as adverbials, as in *hanghang photse* ‘at once he/she/it bolt out’, *hara bosiu Masopha thoso* ‘in the middle of the night Masopha suddenly appeared’, *kwena metsing bito* ‘the crocodile out of the water suddenly appeared’, *a thola tu* ‘he kept completely silent’.

Ideophones can be created from verbs: *kena* ‘enter’ > *keni*, *tlamolla* ‘untie’ > *tlamolli*, *hlotsa* ‘limp’ > *hlotsi*.

English verbs can be used as ideophones by means of the verbal stem *etsa*: *ra mo etsa discourage* ‘we discouraged him’.

Ideophones can also be introduced by interjections: *hela! ...kikirikiri kikirikiri* ‘my goodness, *kikirikiri kikirikiri!* (reference to people fighting or wrestling), *bona! Kgatla fatshe* ‘watch! Kgatla on the ground’ (reference to throwing someone forcefully on the ground); a demonstrative can also be used to point out to the hearer the subject performing the ideophonic act: *ke ehwa tlole ka thota* ‘there he is *tlole* beyond the rise’ (reference to someone disappearing beyond the rise).

See AFRICAN LANGUAGES, BANTU IDEOPHONES, *ELEMENTARE WORTSCHÖPFUNG*

## Souletin Basque Ideophones

Souletin or Zuberoan is the Basque dialect spoken in Soule (South West France) by approximately 8,000 people. A distinctive phonetic characteristic of this dialect is the vowel *ü*, unknown in the other Basque dialects; the name for the language in Standard Basque is *Euskera*, but in this dialect it is *Üskara*. The ideophone data given here are taken from the comprehensive study by J.-B. Coyos (2000).

Ideophones in Basque present reduplication. The following is a representative list of Souletin ideophones (double consonants indicate palatalization, the letter *ñ* is pronounced as in Spanish and the sound represented by *x* is similar to *sh* in English; *tx* corresponds to *ch* in English):

There is considerable phonological and morphological variation in some phonomimetic roots. The following list includes ideophones mimicking noise: *badabim badabam*, *banba banba*, *barrabim barrabam*, *barranba barranba*, *binba banba*, *binbi banba*, *birribim barrabam*, *birrinba barranba*, *birrinbi barranba*, *brinba branba*, *bunba bunba*, *burrunba barranba*, *burrunba burrunba*.

The ideophones analysed by Coyos include:

*arri arri* ‘without a break’, *bar bar* ‘whispering, without a break’, *barrabis barrabas* ‘anyhow’, *barranba*, *barranba* ‘crashing, banging, clattering, roaring, thundering’, *birrinba barranba/birrinbi barranba* ‘quickly, making noise’, *bur bur* ‘continuous noise, boiling’, *burrunba burrunba* ‘muffled sound, thud, dull sound’, *dal dal* ‘trembling’, *dar dar* ‘strong pain’, *dilinga dilinga* ‘waddling’, *estrik estrak* ‘to be in a hurry’, *farra farra* ‘sneaking with a slight noise’, *farrasta farrasta* ‘quickly with a slight noise’ (variants: *farraxta farraxta*, *firrista farrasta*, *firristi farrasta*, *fixta fixta*, *fixti faxta*, *flisti flasta*, *frista frista*, *parrasta parrasta*), *frin fran frin fran* ‘sound produce by lawn mowing’, *gar gar* ‘in flames’, *gili gili* ‘tickling’, *gurgur* ‘gargling noise’, *hü hü* ‘pretentious’, *hürrüpa hürrüpa* ‘drinking sound’, *karru karru* ‘scratching noise’, *killi killi* ‘slowly, gently’, *kirriska karraska* ‘cracking’ (variants: *kirrixka karraxka*, *kirriski karraska*, *kirrixka karraxka*, *kiska kaska*, *kiski kaska*, *kis kas*, *kixka kaxka*, *kix kax*, *kixki kaxka*, *klixka klaxka*, *krixka kraxka*, *kuruska kuruska*, *kurruxka kurruxka*), *lapa lapa* ‘noisy drinking’, *mar mar* ‘mumbling’, *miaxta miaxta* ‘noisy eating’, *mirrimarra* ‘scribbling’, *nahas mahas* ‘confusion, mess’, *ñasta ñasta* ‘noisy chewing’, *ñir ñir* ‘little by little, but regularly’ (variants: *pir pir*, *ter ter*, *tter tter*, *ttir ttir*, *txer txer*, *txir txir*, *txur txur*, *tzur tzur*), *parranpanpan* ‘loud music’, *parrasta parrasta* ‘dragging noise’, *pilli pilli* ‘slowly, gently’, *pixta paxta* ‘breathing sound’, *punpa punpa* ‘slowly and heavily’, *purrusta purrusta* ‘in large quantities’, *putti putta* ‘kisses’, *taka taka* ‘to walk slowly in short and quick steps, toddling’ (variants: *tika taka*, *tiki taka*, *tapa tapa*, *tipi tapa*, *toko toko*, *traka traka*, *trika traka*, *troko troko*, *truksu truksu*, *ttaka ttaka*, *ttapa ttapa*, *ttika ttaka*, *ttiki ttaka*, *ttipi ttipa*, *ttoko ttoko*, *ttuku ttuku*, *tuku tuku*, *txuku txuku*), *tanpa tanpa* ‘noisy walking’, *tik tak* ‘tick tock’, *tilin tilin* ‘small bell sound, high-pitched sound’, *til til* ‘slowly’, *tirripiti tarrapata* ‘loud noise, hastily’, *trika traka* ‘walk rhythmically’, *truksu truksu*

‘in small steps’, *trützüpützü* ‘somehow’, *ttorta ttorta* ‘drop by drop’, *txafla txafla* ‘boiling, squelching’ (variants: *txapa txapa*, *txipa txapa*, *txipi txapa*, *txipista txapasta*, *txipista txipista*, *txipisti txapasta*, *txufla txufla*, *txupa txupa*, *tzapa tzapa*, *tzipa tzapa*, *tzipi tzapa*, *xafila xafila*, *xifla xafila*, *xifli xafila*) *xafila xafila* ‘noise (a slight snap, steps, water)’, *zipirti zaparta* ‘without a break, quickly’.

Coyos proposes the following classification concerning the iconic sound-symbolic system of Souletin Basque (90-92):

(a) Ideophones mimicking sound

- B/B.B/P.P/B.D.B/B.R.B mimic noises, hard repeated and jerking impacts and noisy movements: *badabim badabam*, *banba banba*, *barrabim barrabam*, *barranba barranba*, *binba banba*, *binbi banba*, *birribim barrabam*, *birrinba barranba*, *birrinbi barranba*, *blau blau*, *briuu brauu*, *bunba bunba*, *burrunba barranba*, *burrunba burrunba*, *panpa panpa*, *pinpa panpa*, *pinpi panpa*.
- D.G mimics swinging, waddling: *banba banba*, *binba banba*, *binbi banba*.
- F/FL/FL.ST/FR/FX.T/FRX.T/F.RX.T mimic slight, mild and furtive noises: *farrasta farrasta*, *farraxta farraxta*, *fia fia*, *firrista farrasta*, *firristifarrasta*, *fixta fixta*, *fixti faxta*, *flisti flasta*, *fliuu flauu*, *frista frista*, *friuu frauu*.
- J.G/S.G/S.K mimic recurring taps: *jiga jaga*, *jigu jaga*, *jigu jigu*, *saka saka*, *sigu sigu*, *zigu zigu*
- H.FL/H.BL/Z.FL mimic noises made while eating: *hafila hafila*, *hanbla hanbla*, *zafila zafila*, *zifila zafila*, *zifli zafila*.
- KR/KX/KRXX/KR.K/KX.K/KLS.K/KLX.K/K.RX.K mimic nibbling and a slight crackle; when reduplicated suggest louder noises; the initial *k* mimics an impact or a stroke: *kirriski karraska*, *kirrixka karraxka*, *kiska kaska*, *kiski kaska*, *kis kas*, *kixka kaxka*, *kix kax*, *kixki kaxka*, *kliski klaska*, *klixka klaxka*, *krai krai*, *kra kra*, *krak krak*, *krask krask*, *krixka kraxka*, *kurruska kurruska*, *kurruxka kurruxka*.
- L.K/L.P mimic a drinking noise: *laka laka*, *lapa lapa*, *llapa llapa*.
- MS.T mimics the noises made when eating: *masta masta*, *miasta miasta*, *miaxta miaxta*, *nasta nasta*.
- T.L mimics high-pitched and low-pitched bell sounds: *tilin tilin*, *tilin tilin*, *tilin tulun*, *tilin tilin*, *tulun ttulun*, *tulun tulun*.
- X.FL/TX.P/TZ.P/TX.FL/PLS.T/TX.PS.T mimic splashing: *plasta plasta*, *plisti plasta*, *txafla txafla*, *txafla txafla*, *txapa txapa*,

*txipi txapa, txipista txapasta, txipista txipista, txipisti txapasta, txufla txufla, txupa txupa, tzapa tzapa, tzipa tzapa, tzipi tzapa, xafla xafla, xifla xafla, xifli xafla.*

- -R / -L mimic bubbling, mumbling, whispering, murmuring: *bur bur, far far, kal kal, kar kar, mur mur, pal pal, par par, pur pur, tzur tzur.*
- (b) Ideophones mimicking movement
- D.L.D / D.L.G mimic swinging, waddling, and swaying: *dilinda dilinda, dilinga dalanga, dilinga dilinga, dilingo dalanga.*
  - F / FL / F.R mimic rapid and slight movement: *fia fia, fiu fiu, fliu flau, farra farra, firri firri.*
  - T.K / T.P / TX.K / TR.K / TR.K.L mimic different ways of walking, as in *taka taka, tiki taka, tapa tapa, ttaka ttaka, tanpa tanpa, tinpa tanpa, tinpi tanpa, tipa tapa, tipi tapa, toko toko, traka traka, trika traka, triki traka, troko troko, ttaka ttaka, ttapa ttapa, ttiki ttaka, ttika ttaka, ttiki ttiki, ttipi ttapa, ttoko ttoko, traka traka, trika traka, triki traka, trinka tranka, trinkala trankala, trinkala trunkala, truku truku, ttuku ttuku, tuku tuku, txuku txuku.*
  - Z.B / Z.P mimic regular movements and sudden and noisy movements: *zanba zanba, zanga zanga, zanpa zanpa, zinba zanba, zinpa zanpa, zinpi zanpa, zunpa zunpa.*
  - ZRT / Z.PR.T a sudden, quick and unexpected movement: *zirt zart, zipirta zaparta, zipirti zaparta.*
- (c) Physical sensations
- DL / DR / NR mimic a brief repetitive sensation: *dal dal, dar dar* (trembling), *dar dar, nar nar* (recurrent strong pain).
  - DZST / SST / ZRT / ZST / ZZ.T / TZS.T mimic a brief sharp pain: *dzirt dzart, dzist dzast, dzist dzast, sist sast, sista sasta, sisti sasta, tzista tzista, tzisti tzista, zist zast, zizti zazta.*
- (d) Subjective evaluation
- B.RS.T / P.RS.T / T.RS.T mimic suddenness, disorder, great quantity, irregularity, but in abundance: *birrista barrasta, birristi barrasta, burrusta burrusta, pirrista parrasta, pirrista pirrista, pirristi parrasta, turrusta turrusta, tzirrista tzirrista, tzurrusta tzurrusta.*
  - Ñ.K mimics repeated taps: *ñika ñaka, ñiki ñaka, ñiku ñaka.*
  - -R mimics small quantity, little by little, but regularly: *nir nir, pir pir, ter ter, tier tier, ttir ttir, txer txer, txir txir, txur txur, tzur tzur.*

- ZR.T / Z.PR.T mimic a sharp carelessly movement or a prompt and resolved action: *zipirta zaparta, zipirti zaparta, zirta zarta*.

See BASQUE, IMITATIVE ROOTS

## Sound shape symbolism

“The iconic (i.e. non-arbitrary) form-meaning relationship conveyed by size symbolism is that, in languages with size (or distance) related morphology, high tones, vowels with high second formants (notably /i/ and other front vowels), and high-frequency consonants (palatals) are associated with small size or small distance” (Downing and Stiebels 2012: 381).

See IMITATIVE ROOTS, SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I*, SYNAESTHESIA

## Sound Symbolism

A direct linkage between sound and meaning in some linguistic expressions. This means that linguistic sounds can convey or suggest, by themselves, certain meanings. This sound/meaning relation has a certain degree of iconicity depending on its nature.

Hinton, Nichols and Ohala (1994: 2-8) propose the following typology of sound symbolism:

*Corporal sound symbolism*: interjections expressing pain (*ouch!*) or surprise (*oh!*) are examples of this type of sound symbolism.

*Imitative sound symbolism*: typical examples of this type of sound symbolism include onomatopoeic words, such as *bow-wow* and *bang* and the names of some birds based on the sounds they make: English *cuckoo* or Spanish *cuco*.

*Synaesthetic sound symbolism*: linguistic sounds associated with visual or tactile properties of objects, such as size or shape. The association of a high front vowel [i] with smallness and of a middle back labialized vowel [o] with something big and round are typical examples of this type of sound symbolism.

*Conventional sound symbolism*: based on an analogical association of certain linguistic sounds with certain meanings. For example, the so-called phonaesthemes, such as the *gl-* of *glitter*, *glisten*, *glow*, *glimmer* etc. related to the emission of light.



*Metalinguistic sound symbolism*: this sound symbolism is used to mark grammatical categories. The use of consonant and vocalic ablaut to express a grammatical category, such as tense, aspect or plurality, is an example of metalinguistic sound symbolism: *goose/geese* or *run/ran*. In the first example, the *oo/ee* vowel alternation is used to convey plurality and in the second example the *u/a* alternation expresses tense. *Metacommunicative sound symbolism*: linguistic sounds can be used to signal a communicative function. Whispering is an example: the acoustic form of speech “is adjusted in accordance with the communicative function, namely communication at close distance and where intimacy, privacy, or some form of restraint (conventional or otherwise) on the possible audience is desired”. (Hinton, Nichols and Ohala 1994: 8)

[Ultan, R. 1978; Hinton, Nichols and Ohala (eds.) 1994; Abelin 1999; Shinohara, K. and S. Kawahara 2010; Magnus, E. 2013; Childs, G. T. 2015; Elsen 2016; Nobile and Vallauri 2016]

See IMITATIVE ROOTS, ONOMATOPOEIA, PHONAESTHEME, SIZE-SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I*

## Spanish

Some mimetic roots beginning with *ch* [tʃ] in Spanish have been analysed by García de Diego (1968: 205-290). The most productive are the following. {CH+vowel+CH} with the manifestations CHICH: *chichear* ‘to hiss’, (*a*)*chicharrar* ‘to scorch, to char’, *chichota* ‘pinch’, *chicharra* ‘cicada’, *chichi* ‘edible meat’, *cuchichí* ‘call of the partridge’, *cuchichear* ‘to whisper’; CHOCH: *chocho* ‘gaga, silly, drip’, *chocha/chocho* ‘vulva (vulgar)’, *chochear* ‘to be going gaga’; CHUCH: *chucho* ‘mongrel’, *achuchar* ‘to put pressure on somebody, hug, squash, crush’, *chuchear* ‘to whisper’, *arrechuchar* ‘to push’, *arrechucho* ‘sudden attack of a disease’. There is also a variant with an additional rhotic consonant: CHACHR: *chacharear* ‘to chatter’, *cháchara* ‘chatter’, *chacharrero* ‘chatterbox’.

The mimetic root {CH+vowel+F} suggests the noise made by crushing and squashing: *chafar* ‘to flatten, crush, squash’, *chafallo* ‘smudge’, *chafallón* ‘slapdash’, *chafardear* ‘to gossip’, *chufar* ‘to make fun of, make a mockery of’.

The mimetic root {CH+vowel+ K} in the form CHOK mimics the sound of a crash: *chocar* ‘to collide, crash’, *choque* ‘crash, clash’, *choquezuela* ‘kneecap’. CHAK *chacarrachaca* ‘disturbing noise’; CHIK is an expressive

variant of this root: *chico* ‘small’, *chiquitito* ‘very small’ *chiquitín* ‘sweetheart (directed to children), *chica* ‘girl’, *chico* ‘boy’.

The root CHANKL mimics the sound made by thong (no-heel-strap) sandals when walking in them: *chancla*, *chancleta* ‘flip-flop, mule’, *chanclatear* ‘walk in flip-flops’, *chancloteo* ‘sound made by flip-flops while walking’. CHAP ‘splashing sound’: *chapotear* ‘to splash about, squelch about’, *chapoteo* ‘splashing, squelching’, *chaparrón*, *chaparrazo* ‘downpour’. This root can also mimic the sound of inserting a metal piece or setting metal sheets: *chapa* ‘sheet metal, sheet’, *chapar/chapear* ‘to plate’, *chapista* ‘sheet-metal worker’, *chapado* ‘plated’ *chapistería* ‘bodywork’.

CHUP mimics the sound of sucking: *chupar* ‘to suck, lick, puff’, *chupada* ‘suck’, *chuparse* ‘to waste away’ *chupete* ‘dummy, pacifier’, *chupa-chups* ‘lollipop’, *chupón* ‘sponger’, *chupatintas* ‘pen-pusher’.

CHIRR mimics a squeaking, creaking or screeching sound: *chirriar/chirrear* ‘to squeak, creak, screech’, *chirrido* ‘squeaking, creaking, screeching’. CHORR mimics the sound made by running water: *chorro* ‘stream’, *chorrito/chorrillo* ‘trickle’ *chorrear* ‘to pour, be dripping wet’, *chorreo* ‘gushing’, *chorra* ‘penis (vulgar)’, *chorrada* ‘stupid remark, junk’, *chorroborro* ‘flash flood in figurative senses: barrage, cascade, spate...’.

CHASK mimics clicking and snapping sounds: *chascar/chasquear* ‘to creak, snap, crack’, *chasquido* ‘crack, click’; in figurative senses *chasco* ‘let-down, disappointment’, *chascarrillo* ‘funny story’.

CHISP mimics the sound made by something springing suddenly with a small explosion or jump: *chispa* ‘spark’, *chispazo* ‘spark’, *chispear* ‘to give off sparks, to spit (with rain)’, *chispeante* ‘sparkling’, *chisporrotear* ‘to spit’. CHI(S)T mimics a weak sound: *¡chist!* ‘Sh! (be quiet)’, *chistar* ‘to call (out)’, *rechistar* ‘to answer back’, *sin rechistar* ‘without question, complaining, opposition’, *chiste* ‘joke’ (probably from the unattested \**chistar* ‘tell jokes’).

In his study on the lexicon of play in Spanish, D. A. Pharies (1986) includes, among many others, the following iconic expressions: *taratántara*, *tarantántara*, *tantarantán* ‘drum noise’ (38), *pipiritaña* ‘piccolo’ (56), *tintirinulo* ‘bell ringing’ (56), *tintirintín* ‘bugle sound’ (57), *funfuruñar*, *refunfuñar* ‘to growl’ (58), *chinchirirín* ‘swing, rocking chair’ (59), *mamarramiáu* ‘meow’ (62), *chichirimoché* ‘unfounded promises’ (62), *cucurrucaú* ‘squatting’ (64), *quiquiriquí* ‘cock-a-doodle-do’ (72), *chacarrachaca* ‘disturbing noise of a dispute’ (109), *perendengue* ‘earring’

(119), *foforón* ‘anus’ (139), *mamamama* ‘grandmother’ (147), *chacha* ‘nursemaid’ (153), *ringorrango* ‘flourish (in writing)’ (169), *zipizape* ‘brawl, disturbance’ (176), *chorroborro* ‘abundance’ (198), (*en*) *tenguerengue* ‘in unstable balance’ (219).

Spanish affixes suggesting size are sound-symbolic: diminutive affixes present a front vowel [i] and [e] and augmentative affixes have a back vowel [o]/[u]:

Diminutive affixes: *-it-*, *-ic-*, *-ill-*, *-ín-*, *-ej-*, *-et-*, *-uel-*

Augmentative affixes: *-on-*, *-ot-*, *-udo-*, *-azo*, *-al*

Examples: *casa* ‘house’ > *casita* ‘little house’/*casona* ‘big house’; *hombre* ‘man’ > *hombrecito* ‘boy’/*hombretón* ‘big and hefty man’; *mujer* ‘woman’ > *mujercita* ‘girl’/*mujerona* ‘big and hefty woman’; *nariz* ‘nose’ > *naricita* ‘small nose’/*narizotas*, *narigudo* ‘person with a big nose’.

These suffixes also have expressive uses. For example, *casita* can refer affectively to a house (big or small) to which a person is emotionally attached. The diminutive words *hombrecito* and *mujercita* also have an affective meaning. The diminutive affix *-it-* can also be applied to some adverbs, as in *cerca* ‘near’ > *cerquita* ‘pretty near’, and to some adjectives *chico* ‘little’ > *chiquitito* ‘small (affective)/*chiquitín* ‘little (affective)’.

The augmentative affix *-azo* is used to mimic a snap and violent action and the nominal base denotes the instrument of that action: *paraguas* ‘umbrella’ > *paraguazo* ‘umbrella blow’; *tijeras* ‘scissors’ > *tijeretazo* ‘snip’; *bastón* ‘stick’ > *bastonazo* ‘stick beating’; *pistola* ‘gun’ > *pistoletazo* ‘gunshot, starting signal’; *zapato* ‘shoe’ > *zapatazo* ‘hit given with a shoe’; *timbre* ‘ring’ > *timbrazo* ‘loud ring’; *guante* ‘glove’ > *guantazo* ‘smack’. It has a resultative use in *golpe* ‘blow’ > *golpetazo* ‘bump’; *arañar* ‘to scratch’ > *arañazo* ‘scratch’; *medicamento* ‘medication’ > *medicamentazo* ‘a sudden or significant rise in medication prices’.

Malkiel (1984: 45) noted an example of secondary symbolism\* in certain Spanish adjectives in which an idiosyncrasy of morpho-phonetic shape can be correlated with a peculiarity of meaning. The vowel patterning *e...o*, *o...o* suggests the meaning ‘stupid’ in adjectives, such as *lelo* ‘stupid, dull’, ‘simpleton, dolt’, *memo* ‘simple, foolish’, *zozzo*, *tonto* ‘stupid’.

In general, the morpho-phonetic pattern CóCo (C = consonant) correlates with pejorative or negative meanings. Marcos Marín (2003: 18-28) offers the following classification:

- a) Physical defects or limitations: *bronco* 'surly, chesty', *corto* 'short', *gordo* 'fat', *hosco* 'surly', *pocho* 'poorly, faded, overripe', *porno* 'porn', *ronco* 'hoarse', *sordo* 'deaf', *flojo* 'loose, slack, poor', *tosco* 'rough, uncouth', *fofo* 'flabby', *loco* 'mad', *poco* 'little, few', *romo* 'blunt', *roto* 'broken', *soso* 'tasteless, dull'.
- b) Intellectual and moral defects: *chocho* 'gaga', *golfo* 'scoundrel', *tonto* 'silly, stupid', *bobo* 'silly, stupid', *ñoño* 'affected, prim, wet', *plomo* 'bore', *mono* 'conceited, vain' (in American Spanish; in European Spanish it means 'lovely'), *trompo* 'clumsy person', *sonso*, *zonzo* 'silly, stupid', *torvo* 'giving an angry glance'.

See ARBITRARINESS, BABBLE, BIRD NAMES, *BOOM*, *BOW-WOW*, *BUTTERFLY*, *CACKLE*, *CREOLES*, *CROAK*, *CROW*, *CUCKOO*, *CUCUMBER*, DIAGRAMMATIC ICONICITY, DELOCUTIVE ORNITHONYM, *DICCIONARIO DE VOCES NATURALES*, *DOPPELUNG (REDUPLIKATION, GEMINATION)*, ETYMOLOGY, *FANGEN-FINGER-FÜNF*, GARGLE, GRAMMATICALIZATION, GRUNT, ICONICITY, NURSERY WORDS, ONOMATOPOEIC EXPRESSION, ONOMATOPOEIC ICONICITY, *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI*, PHONOMIMETIC ROOT, *PIP*, *PUFF*, SIZE-SOUND SYMBOLISM, SOUND SYMBOLISM, *SYMBOLIC VALUE OF THE VOWEL I, THE SIGN IS NOT ARBITRARY*

## Spanish Sign Language

Rodríguez González (1992: 34-51) groups the iconic signs of Spanish Sign Language into three categories.

The first category includes those signs that mimic the form of an object. For the sign *MUNDO* 'world' both hands are used to outline the shape of a sphere:

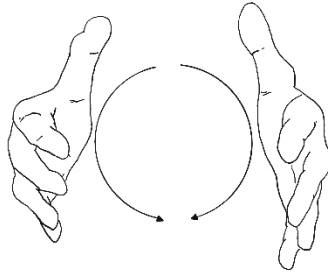


FIGURE S1

To form the sign for *tower*, an upward movement is made with both palms extended facing each other:

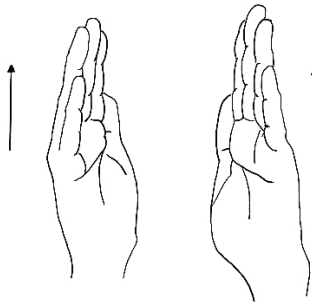


FIGURE S2

The second category includes signs mimicking a movement. To sign *radio*, the index finger points to the ear and then a circular movement is made with both hands (with slightly flexed fingers) to depict tuning into a radio broadcast:

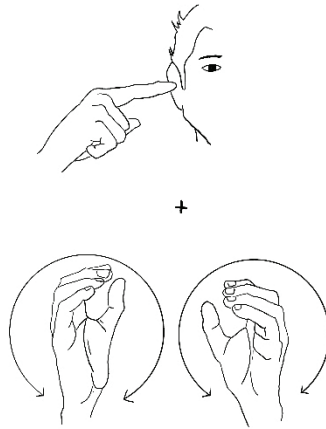


FIGURE S3

The third category includes spatial signs. The sign *ARRIBA* 'above' is made by moving the right hand with a pointed index finger upwards several times:



FIGURE S4

Other signs are only indirectly iconic. For example, to sign *BURGOS* (a city in northern Spain) both hands depict the shape of the twin spires of the city cathedral:

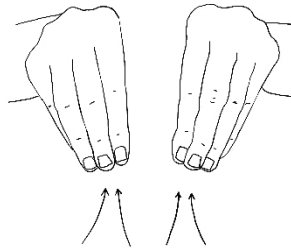


FIGURE S5

The sign for *chestnut* is made by depicting the action of warming one's hands over roasting chestnuts:

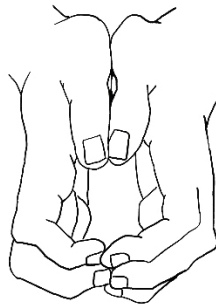


FIGURE S6

The sign TARDE 'evening' depicts the movement of lifting a cup to one's mouth to drink tea; this has to do with the custom of drinking tea in the evening.

[C. Cabeza-Pereiro and S. Iglesias-Lago 2015]

## Spatial deixis

Spatial deixis (*here, there*) shows cases of sound symbolism. R. Ulta, in his study of size-sound symbolism\* found that 33 % of the 136 languages surveyed presented distance symbolism: "An overwhelming preference is shown for front or high vowels corresponding to proximity to the speaker" (Ulta1978: 546).

Front vowels are associated with proximity to the speaker in Bengali, Cocopa, Diola-Fogny, Estonian, Gafat, Konkow, Nez Perce, Ostyak, Panjabi, Rotuman, Tajik, Thai, Wintu, Yurok; with high vowels in Canarese, Kannada, Kolami, Konda, Kota, Kui, Logbara, Maidu, Malayalam, Persian, Shona, Tamil, Telugu, Tillamook, Toda, Tongan, Tulu, Vogul; with high-front vowels in Khasi, Maori.

In their study of sound symbolism in spatial deixis, Johansson and Zlatev (2013) make three assumptions: (a) the sounds produced by having a relatively narrow vocal tract are associated with proximal terms and the sounds produced by having a greater distance between the tongue and the upper jaw are associated with distal terms; (b) closed vowels and rounded vowels, regardless of the place of articulation, are felt as more proximal than open or unrounded vowels; (c) from an acoustic point of view, a high F2 is correlated with proximity and a low F2 with distance. Concerning consonants, voiced consonants are associated with proximity and voiceless palatal, dental, velar and labial consonants are associated with increasing degrees of distance. From the point of view of the corresponding articulatory gestures, the authors classify such consonants in a scale of increasing association with distance in the following way:

#### Haptic-vocal-pointing

Proximal

Distal

Back consonants < front consonants < back plosives < front plosives

From a visual point of view, the following scale based on the visual perception of articulatory gestures is proposed:

#### Vision-based Vocal-Pointing

Proximal

Distal

Non-visually perceptible < visually perceptible < rounded sounds

The authors provide the following table (Johansson and Zlatev 2013: 11) summarizing the main points of their investigation:



Prediction	Semiotic ground	Sound type	Source Senses	Perspective	Proximal	Distal
Haptic-Size	Iconic	Vowels	Haptic sense	Speaker's	i	a
Visual-Size	Iconic	Vowels	Vision	Listener's	u	a
Frequency-Vowel	Indexical + Iconic	Vowels	Hearing + Vision	Speaker's + Listener's	i	u
Frequency-Consonant	Indexical + Iconic	Consonants	Hearing + Vision	Speaker's + Listener's	t	m
Haptic-Vocal-Pointing	Indexical-Directional	Consonants	Haptic sense	Speaker's	h	t
Visual-Vocal-Pointing	Indexical-Directional	Vowels & Consonants	Vision	Listener's	a/h	y/w

The authors collected data from one hundred languages of different language families, including: Afro-Asiatic (7), Australian (3), Austro-Asiatic (4), Austronesian (18), Dravidian (3), Indo-European (9), Mayan (2), Niger-Congo (15), Nilo-Saharan (4), Oto-Manguean (2), Sino-Tibetan (9), Tai-Kadai (2), Trans-New Guinea (4), Creoles, Pidgins (2), Other (17).

The results of the survey supported the assumptions made as follows: (a), with 47.5 % positive correlation; (b) with 44.5 % positive correlation; and (c) with 56 % positive correlation. These assumptions only concerned vowels.

Concerning consonants, the results were less conclusive: frequency formant (F1/F2) obtained only 25.7 %; haptic-vocal-pointing obtained 35%; and visual-vocal-pointing, 42.5 %.

## Sranan

English based creole spoken in Suriname by approximately 130,000 people.

See CREOLES, *VÖLKERPSYCHOLOGIE*

## Structural iconicity

This term applies to the diagrammatic relations between syntactic structures and extra-linguistic reality:

“Structural iconicity occurs when the structure of linguistic elements, as manifested in their ordering in particular, may be shown to reflect a process or state of affairs in extralinguistic reality or our perception of reality, and is violated when the ordering of linguistic elements may be shown to run

counter to extralinguistic reality. Structural iconicity is a special case of diagrammatic iconicity, being related not only to the way the order of words corresponds to the order of events [...] but also to word order characteristics of specific grammatical constructions" (Conradie 2001: 230).

The author of this definition proposes that the Subject + Verb + Object (SVO) structure diagrammatically expresses the chronological order of events: the beginning (agent, controller), the action (transitive verb) and the end (patient, goal) (Conradie 2001: 231).

Moreno Cabrera (2000: 723-724) maintains that the difference between SVO and SOV orders diagrammatically represent two possible transitive events. In effected-object events a pre-existing agent creates a new object (as in *John wrote a book*) and this is reflected in the SVO order; but in affected-object events, there is a pre-existing object that is somehow affected by the action or process (as in *John borrowed the book*). This is diagrammatically reflected in the SOV word order, which is quite common in the world's languages.

[Conradie 2001]

See DIAGRAM, DIAGRAMMATIC ICONICITY, SYNTACTIC ICONICITY

## **Sundanese**

Malayo-Polynesian language of Indonesia (Java) spoken by about 40 million people.

See REDUPLICATION

## **Susu**

Mande language spoken in Guinea, Sierra Leone and Guinea-Bissau by about one million people.

See *VÖLKERPSYCHOLOGIE*

## **Svan**

Kartvelian language spoken in Svanetia (Georgia) by approximately 14,000 people.

See *BUTTERFLY*

## Swahili

Bantu language spoken by 3 million people in Tanzania, Democratic Republic of the Congo, Kenya, Somalia, Mozambique, Burundi, Rwanda, Uganda, Zambia, Malawi, and other countries.

See AFRICAN LANGUAGES, *BUTTERFLY*

## Swedish

North Germanic language spoken in Sweden by approximately 10 million speakers.

See BIRD NAMES, *BOW-WOW*, *CACKLE*, *CRASH*, *CROAK*, *DICCIONARIO DE VOCES NATURALES*, *ELEMENTARE WORTSCHÖPFUNG*, GERMANIC LANGUAGES, ONOMATOPOEIC EXPRESSION, *SYMBOLIC VALUE OF THE VOWEL I*

## Swedish Sign Language

B. Bergman and Ö Dahl (1994) describe some iconic aspects of Swedish Sign Language (SSL). One of these is reduplication, which is used to indicate tense and has aspectual grammatical functions. The following is an illustrative example (402):

- WAIT 'wait'; WAITWAITWAIT 'be waiting, wait for a while', WAIT WAIT WAIT 'wait for a long time';
- WRITE 'write'; WRITEWRITEWRITE 'be writing, write for a while'; WRITE WRITE WRITE 'write very much'.

The signs WAIT and WRITE include a repeated movement. For example, WRITE is analysed as: (1) flat hand, directed forwards, palm up; (2) pinch hand, directed left, palm down; (3) contact, moves forward twice. There are two types of reduplication: fast (WAITWAITWAIT) and slow (WRITE WRITE WRITE). The sign can be reduplicated between two to six times, depending on the context. Slow reduplication is characterized by large, almost circular movements, and fast reduplication shows short movements.

There is also a simultaneous reduplication, with two hands acting instead of one, resulting in forms with simultaneous or alternate movements in similar or opposite directions.

Bergman and Dahl (1994: 413) note interesting parallelisms between ideophones and the use of reduplication in SSL. First, reduplicative verbs are accompanied by an oral or facial component; for example, protruding lips often occur with fast reduplication and mouth patterns can be repeated as many times as manual reduplications. We know that gestures are an essential component of ideophones in spoken languages. Second, when an ideophone is combined with a verb, it makes the interpretation of the latter more specific or concrete and SSL reduplicated verbal forms also have this characteristic. Third, ideophones are often used to give concreteness to the narrative and the same function has been observed in SSL reduplicated verbs.

The authors draw this conclusion about sign languages in general:

“In fact, all signed languages which have been the object of closer study are, to our knowledge, similar to SSL in this regard. This is hardly an accident. It is natural to assume that the gestural-visual character of signed languages favors the development of iconic or quasi-iconic processes like reduplication. It is important to note, however, that it is the extent rather than the existence and the character of such processes that distinguish signed and spoken languages” (Bergman and Dahl 1994: 418).

## Symbol

A category in Peircean semiotics defined by Peirce in the following terms:

“But, I had observed that the most frequently useful division of signs is by trichotomy into firstly Likenesses, or, as I prefer to say, Icons, which serve to represent their objects only in so far as they resemble them in themselves; secondly, Indices, which represent their objects independently of any resemblance to them, only by virtue of real connections with them, and thirdly Symbols, which represent their objects, independently alike of any resemblance or any real connection, because dispositions or factitious habits of their interpreters insure their being so understood” (Peirce 1911: 460-461).

A more accessible definition:

“A *symbol* is based on a learned conventional relation, ascribed contiguity, or colligation, between form and meaning. This relation is completely arbitrary, and this is exactly the basic characteristic of the linguistic sign” (Antilla 1989: 13).

## ***Symbolic value of the vowel I (O. Jespersen 1922)***

This paper by Jespersen was first published in the journal *Philologica* in 1922 and discusses the symbolic values of the vowel [i] from a cross-linguistic perspective. In the first paragraph of the paper, Jespersen states the main hypothesis of his investigation thus:

“Sound symbolism plays a greater role in the development of languages than is admitted by most linguists. In this paper I shall attempt to show that the vowel [i], high-front-unround, especially in its narrow or thin form, serves very often to indicate what is small, slight, insignificant, or weak” (Jespersen 1933: 557).

Jespersen states that the reason for this sound-symbolic interpretation lies in the high pitch of the vowel; in addition, the perception of the small lip aperture in the articulation of this vowel contributes to this interpretation. In Jespersen’s view, this statement does not mean that the vowel [i] always suggests smallness and such examples as *big* and *small* are given to prove this. Nevertheless, he suggests that the sound-symbolic interpretation of the vowel [i] can have a certain influence on language change:

“In other words, sound symbolism makes some words more fit to survive and gives them a considerable strength in their struggle for existence. If you want to use some name of an animal for a small child, you will preferably take one with sound symbolism, like *kid* or *chick* rather than *bat* or *pug* or *slug*, though these may in themselves be smaller than the animal chosen” (Jespersen 1933: 559-560).

Jespersen classifies the sound-symbolic uses of [i] into five groups. The first group includes words in which the vowel suggests smallness. He gives a list of English words: *little*, *tiny*, *weeny*, *skimpy*, *scrimp* ‘thin, stunted or stunted’, *slim*, *slinky* ‘narrowed’, *piddling* ‘small’, *pimping* ‘small, trifling, sickly’, *pink* ‘little’, *jimp* ‘neat, slender’. In addition, Jespersen lists the following synonymous for ‘unimportant’, which have or have had (in parentheses) the vowel [i]: (*trifling*), *trivial*, (*slight*, *light*), *flimsy*, *frivolous*, *niggling*, *piddling*, *fribble*, *finical*, *finikin*, *fiddle-faddle*, *fingle-fangle*, *wishy-washy*, *mean*, *meagre*, *weedy*, *niggardly*.

The following are examples from other languages: German *gering*, *winzig*; Danish *ringe*; Latin *minor*, *minimus*, *micidus* ‘very small’; Italian *piccino*, *piccolo*; French *petit*; Spanish *chico*; Catalan *xic*; Romanian *mic*; Greek *mikrós*, *oligos*; Finnish *pikku*; Estonian *pisikene* ‘little’; Hungarian *kis*, *kicsiny*; Eskimo *mikirsoq* ‘small’, *mikivok* ‘is small’; Japanese *chiisai*; Cantonese ‘*tit*’ *tit*.

The second group includes words referring to children or to young animals. He lists the following English words: *kid*, *chick*, *kitten*, *piggy*, *chit*, *tit* ‘horse of a small kind, anything small’, *snippet* ‘small person’, *midge*, *grig* ‘small person, hen, eel’, *tick* ‘parasitic insect’, *nit* ‘egg of louse’, *shrimp*, *bird*, *nix*, *nixie* ‘water-elf’. In other languages: German *Kind* ‘child’, *Knirps* ‘pigmy’; Norwegian *kind* ‘child’; Danish *fims* ‘slim little person’, *kid* ‘kid’, *killing* ‘kitten’, *gris* ‘little pig’; Latin *filius*; Spanish *niño* ‘child’, *chico* ‘little, boy’, *chiquillo* ‘little child, little boy’; Italian *bimbo* ‘little boy’; Hungarian *fi* ‘son boy, young animal’.

The third group includes words denoting small things. English: *bit*, *chink* ‘slit, fissure’ *whit*, *piece*, *tittle*, *slice*, *slip*, *twig*, *sprig*, *strip*, *snip*, *chip*, *pip*, *slit*, *tip*, *trifle*, *jitney*; Latin *filum* ‘thread’ *titivillidium*, *titibilicum* ‘very small thing’; Spanish *pico*, *triza* ‘small matter’; Dutch *stip* ‘point, dot’; Italian *picco* ‘point’.

The fourth group only contains diminutive suffixes: English *-y*, *-ie*, *-kin*, *-ling*, *-let*, *-ish* (*brownish*, *oldish*, *thinnish*); Old English *-incel*; Dutch *-ie*, *-je*; Greek *-io*; Hungarian *-i*; Gothic: *īn*; Old High German *-lin*; Italian *-ino*; Spanish *-ico*, *-illo*; Portuguese: *-zinho*; Romanian *-ița*.

After listing these examples, Jespersen concludes:

“In the face of all these sentences there can be no denying the fact that the speech instinct in many languages is in favour of using diminutive suffixes containing the sound [i] and of attributing a diminutive meaning to such suffixes, even if they may not at first have connoted the idea of ‘little’” (Jespersen 1933: 570).

The fifth group is miscellaneous and includes some interesting examples. First, Jespersen notes those verbs meaning either to make small or to become small: *mince*, *shrink*, *shrivel*, *shrim*, *dwindle*, *peak*. Second, there are some English words containing [i] and referring to a very short time or to what can be done in a short time: *jiffy*, *jiff*, *in a clink*, *fit* ‘short attack of fever’, *trip*; also adjectives: *quick*, *glib*, *vivid*, *diligent*, *nippy*, *fickle*, *giddy*, *busy*, *nimble*, *swift-fleet*, *speedy*. In other languages, words for ‘quick’ also have an [i]: Danish *kvik*, *livlig*; Swedish *pigg*; French *vite*, *vif*, *rapide*; Italian *vispo*, *visto*.

Jespersen also includes in this group a series of verbs that indicate rapid motion (some of them also the sound produced by it): *slit*, *split*, *splinter*, *rip*, *chip*, *slip*, *whip*, *whittle*, *jig*, *fillip*, *flip*, *flit*, *flutter*, *flick*, *flicker*, *fisk*, *frisk*, *whisk*, *fidget*, *jink*, *blink*, *wink*, *twinkle*.

The following English verbs are also connected with the idea of smallness: *sting* ‘inflict a small wound with a pointed dart’, *nip*, *pinch*.

In the final part of the paper, Jespersen analyses how the sound-symbolic values of [i] have influenced the phonetic and semantic development of some words (*pittance*, *miniature*, *trivial*, *little*, *weak*, *brisk* among others).

See IMITATIVE ROOTS, SPANISH

## Syncretism Principle

Syncretism in morphology implies that a form has two or more different functions and this contradicts isomorphism\*, a one-to-one correspondence between meaning and form.

G. Müller (2004: 236) proposed the following heuristic principle in relation to isomorphism:

### Syncretism Principle

Identity of form implies identity of function (within a certain domain and unless there is evidence to the contrary).

This author thinks that this principle is a special case of a more general iconicity principle\*.

[Downing and Stiebels 2012: 405-409]

See ICONICITY PRINCIPLE, ISOMORPHISM

## Synaesthesia

It can be defined as a “metaphorical extension of onomatopoeia to sight, touch, and taste” (Childs 1994: 191). The association of front vowels with ‘bright’ and back vowels with ‘dark’ or a high tone with small things and a low tone with large things are well known examples of synaesthesia. In Zulu, the consonantal contrast t/th/d suggests an increasingly more powerful action: *tapu* ‘touch something soft’, *thaphu* ‘take something’, *daphu* ‘grab’ (Childs 1994: 192).

[Simner and Hubbard (eds.) 2013]

See PHONETIC METAPHORS, TONAL ICONICITY

## Synaesthetic iconicity

In this type of iconicity, certain phonological patterns suggest or induce visual or tactile properties of objects (size, shape, softness, temperature, weight). For example, front vowels are associated with smallness as in the diminutive affixes of some languages (Spanish, for instance).

[Sadowski 2003: 417-18]

See SIZE-SOUND SYMBOLISM, SPANISH

## Synaesthetic sound iconicity

This expression was proposed by Hinton, Nichols and Ohala (1994: 4) and defined as the acoustic symbolization of non-acoustic phenomena.

[Auracher 2015]

See SYNAESTHETIC ICONICITY

## Syntactic iconicity

Iconic form-meaning relations in syntax. Word order is sometimes iconic, as in *veni, vidi, vici*\* where the order of the verbs is diagrammatically connected with the temporal order of the denoted events. Word order can also diagrammatically convey preference, hierarchy, direction, length, duration, complexity.

[Genette 1995: 143-178; Sadowski 2003: 417-18]

See DIAGRAM, DIAGRAMMATIC ICONICITY, *QUEST FOR THE ESSENCE OF LANGUAGE, VENI, VIDI, VICI*

## Syntagmatic iconicity

“Iconicity within the linearity of text or discourse: repetition, parallelism, alliteration, rhyme” (Nöth 2001: 23).

See ALLITERATION, AUTOICONISM, *SHE SELLS SEA SHELLS*



# T

## **Tabasaran**

Northeast Caucasian language spoken in southern Dagestan by about 126,000 people.

See *BUTTERFLY*

## **Tagalog**

Malayo-Polynesian language of the Philippines spoken by about 70 million people.

See *BUTTERFLY*, *CAKLE*, *NURSERY WORDS*, *ORIGINE, FORMAZIONE, MECCANISMO, ED ARMONIA DEGL'IDIOMI, VÖLKERPSYCHOLOGIE*

## **Tahitian**

Polynesian language spoken on the Society Islands of French Polynesia by approximately one hundred people.

See *DOPPELUNG (REDUPLIKATION, GEMINATION)*, *NURSERY WORDS, PRIMITIVE CULTURE, VÖLKERPSYCHOLOGIE*

## **Taita**

Bantu language spoken in Kenya by the Taita people with approximately 400,000 speakers.

See *BUTTERFLY*

## **Taiwanese Sign Language**

L. Yu-da and Y. Li-chin (2009) give the following data about iconicity in Taiwanese Sign Language, taken from Su 2004.

Imagic iconicity is seen in the sign for CHICKEN: the extended thumb and index of one hand open and close repeatedly in front of the mouth, depicting

the beak of a chicken and its movement. The signs SCISSOR and TOOTHBRUSH also show imagic iconicity. In the former case, the handshape for 'two' with extended middle and index fingers describe the shape of this object. In the latter case, the handshape for 'one' with the extended index finger moving back and forth in front of the mouth depicts tooth brushing movements.

Other signs show diagrammatic iconicity: INVENT, THINK and REMEMBER present this iconicity. The sign INVENT is expressed by the index finger of one hand touching the side of the head while the other fingers are held together and then open up suddenly. The sign THINK is made by pointing the index finger to the temple and wiggling it slightly. The sign REMEMBER is made by putting the fist on one side of the head with the palm touching the head. The three signs are diagrammatically linked to the head.

Metaphorical iconicity consists of depicting an object by pointing to a parallel between that object and something else. For example, the sign MARRY is made by putting the thumb and the little fingers together and the sign DIVORCE is made by moving these two fingers away from each other. In the study made by Su (2004) it is estimated that 30 % of the vocabulary of TSL can be considered iconic.

J. H.-Y. Tai (2005) notes the following classes of iconic signing in Taiwanese Sign Language: (a) direct representation by pointing: the pronouns HE and SHE are signed by pointing with the index finger of the dominant hand to the extended thumb of the other hand (HE), or to the little finger of the other hand (SHE); (b) number representation: numbers from ONE to FIVE are expressed by the number of extended fingers; numbers from SIX to TEN are expressed by adding fingers to the thumb of the dominant hand, which now stands for FIVE; (c) shape representation: in the sign for TREE the non-dominant hand and forearm stand for the ground, the dominant forearm stands for a tree trunk and the spread dominant hand stands for the branches; (d) size representation: the absolute size of a piece of paper can be expressed by tracing its extent in space; (f) part-for-whole representation: the word for DOG is signed by the two hands flapping at both sides of the head: a depiction of the head of a dog with two ears flapping.

[J. Tai and J. Tsay 2015]

See CHINESE SIGN LANGUAGE, ICONICITY IN SIGN LANGUAGES

## Takete-maluma phenomenon

See BOUBA-KIKI EFFECT

### Tamil Ideophones

Tamil is a Dravidian language spoken in South India (Tamil Nadu) and Sri Lanka by more than 70 million people

Ideophones in Tamil are defined by Asher (1985: 242) as “uninflected onomatopoeic forms [...] normally followed by the quotative particle *-NNu*, the whole expression generally functioning as an adverb. [...] Reduplication is common. [...] The set is at least to some extent and open one”. In a study of ideophones in Tamil, Chevillard (2004) observes the following:

“Tamil vocabulary contains a group of idiomatic *X-ənal* phrases, the formation of which is based on the *verbum dicendi ənal* ‘to say’. That group contains the vast majority of the 632 items which we have just now delimited” (Chevillard 2004: 6).

The following ideophones are taken from the exhaustive list given in Chevillard 2004 (Appendix A, 27-58):

*cukkrenal* ‘rustling’, as of palmyra leaves, spreading fire; *vellenal* ‘becoming white’, ‘becoming clear’, ‘dawning of day’; *loŋenal* ‘dogs bark’; *mukarenal* ‘humming as of bees’, *ikkenal* ‘quickness’; *immenal* 1. ‘hurry, celerity, haste’, 2. ‘humming, rustling, pattering’; *ommenal* ‘the sound of a ball tossed about’; *kinneŋal* ‘tinkling, clinking sound’, *kiricceŋal* ‘creaking sound’, *kuppenal* ‘suddenness’; *koppənal* ‘quickly, swiftly or suddenly’, *cuppenal* ‘quick absorption of liquid’, *tanneŋal* ‘sound of a bell or gong’, *taŋneŋal* ‘tapping’; *tiŋneŋal* ‘vibrating sound of a stringed musical instrument’; *noyyənal* ‘lightness, thinness, slenderness, insignificance’, *pallicceŋal* ‘flashing, shining’, ‘promptness, rapidity’, ‘decidedness, vividness’, ‘sharp pain’, *mellenal* ‘being soft’, ‘being gentle in speech’, ‘being dull’, *viŋneŋal* ‘tinkling, as of a bell’, ‘being made public’, ‘throbbing, as the eye’, ‘great speed’, ‘tightness’, *iŋumeŋal* ‘sound as of a drum’, ‘sweet, pleasant, agreeable sound, both vocal and instrumental’, ‘slipperiness’, *curiŋənal* ‘hissing, as of heated iron in contact with water’, ‘sharp pain, as from sting or burn’, *pakireŋal* ‘the state of being greatly terrified’, ‘the state of being perturbed suddenly’, *maŋareŋal* ‘crashing, cracking’, *kulukkeŋal* ‘laughter’; *taŋakkeŋal* ‘sharp sound, as of sudden dropping, beating, etc.’, *veŋukkeŋal* ‘noise of breaking’, ‘suddenness and unexpectedness’, ‘quickness’, ‘churlishness in talk’, ‘shooting pain’, *kulakkattiyənal* ‘the falling of anything infirm or loosely set as the head of

an infant', *nerukkattiyēṇal* 'suddenness, abruptness', 'promptness, quickness', 'sudden breaking, as of a stick', 'falling suddenly with a crash'.

The following ideophones are reduplicative: *akkuvaḷkēṇal* 'restless wandering'; *kiyyāṅkiyyāmeṇal* 'peeping of chickens, etc.', 'the state of being in a fix', *kāccukkīccēṇal* 'screaming, squawking, chirping, twittering sound'; *āvāriyāvāriyēṇal* 'great eagerness, avidity', *iḷaviḷaveṇal* 'luxuriant growth of vegetation', *kaṇakaṇēṇal* 'tinnabulation; tinkling, as of bells', 'chiming', 'burning fiercely, as of fire with a hollow roar', 'feeling feverish', *katakateṇal* 'being hot from fever or from the closeness of a crowded room' 'sound produced in boiling, as of liquid, in flowing, as water from a sluice', *kapakapaveṇal* 'the sound of gurgling', *kiriccukkiriḷcēṇal* 'creaking noise', *kucukuceṇal* 'whispering'; *kuppukuppeṇal* 'jerking, effervescing, bubbling, crackling noise', *kuḷakuḷēṇal* 'gurgling sound, as water when boiled', *korukoruveṇal* 'roaring, as the sea; rattling, as in the throat', *cacacacaveṇal* 'blowing of the wind'; *curucureṇal* expr. signifying 'rapid burning, as for dry combustibles', *cullucculleṇal* 'sharp pricking sensation'; *takkuttakkeṇal* 'repeated thumping sound'; *tapatapaveṇal* 'quick succession', *tokkuttokkeṇal* 'creaking noise, as of shoes', *pūttuppūtteṇal* 'hard breathing, as from running', *mocumoceneṇal* 'swarming, as of bees', 'gurgling sound, as in drinking'; *veḷuveḷuveṇal* 'extreme whiteness', *kiṇukkukkiṇukkeṇal* 'tinkling sound as of a hand bell'; *kuṭukkukkuṭukkeṇal* 'rattling noise', *tuṇukkuttumuḷkkeṇal* onomatopoeic expression of being afraid.

See ASIAN LANGUAGES, *DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES*, NURSERY WORDS, *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## Tarahumara

Uto-Aztecan language of Mexico (Chihuahua) spoken by about 85,000 people.

See *CROW*, *VÖLKERPSYCHOLOGIE*

## Tarasco

See PUREPECHA

## Tariana

Arawakan language of Brazil (Vaupés River) spoken by about a hundred people.

See BIRD NAMES

## Tatar

Turkic language of the Tatar people (Russia and neighbouring countries) with more than 5 million speakers.

See *DICTIONNAIRE DES ONOMATOPÉES FRANÇAISES*

## Tausug

Malayo-Polynesian language of the Philippines, Malaysia and Indonesia spoken by more than one million people.

See REDUPLICATION

## Tauya

Trans-New Guinea language spoken in Madang Province (Papua New Guinea) by approximately 300 people.

See *PUFF*

## Telefol

Trans-New Guinea language of the Telefol people spoken in Sandaun Province (Paua New Guinea). It has 5,000 speakers.

See *PUFF*

## Telugu

South-Central Dravidian language of India (Andhra Pradesh) spoken by approximately 80 million people.

See GLOBAL ETYMOLOGIES

## Temiar

Temiar is a Mon-Khmer language spoken by some 30,000 people in the interior of northern Peninsular Malaysia. The following data and interpretations are taken from G. Benjamin (2014).

In Temiar, a relatively open mouth position underlies the OTHER-referring features (*you-deixis*) as in the vowel [a], and in the back consonants [ʔ] and [h]; in contrast, a relatively closed mouth position signifies a self-focused *I-*

deixis, as in the vowel [i] and the front consonants [y], [ç], [m] and [r]. The following examples illustrate this iconic contrast: *hah* ‘you (sg.)’, *ʔah* ‘you-and-I’, *na-* ‘he/she/it’ vs. *yeeʔ* ‘I’, *ʔi-* ‘I, my, me’, *ceeʔ* ‘I (emphatic)’.

Morphological iconicity in Temiar is shown in the incopyfixed (incopyfixation\*) reduplicative pattern. This pattern means ‘plural’ with adjectives and some human nouns and ‘imperfective’ with verbs:

*ʔəroʔ* ‘long (singular) < *ʔeʔroʔ* ‘long (plural)’, *taaʔ* ‘sir’ < *təʔtaaʔ* ‘old men’, *gəl* ‘to sit (perfective)’ < *gəlɡəl* ‘to sit (imperfective)’, *trgəl* ‘set down (completed act)’ < *trlgəl* ‘set down (incomplete act)’, *srlɔg* ‘to put someone to sleep (completed act)’ < *srglɔg* ‘to put someone to sleep (incomplete act)’.

See INCOPYFIXATION

## Tepahuano

Uto-Aztecan language of Mexico spoken by about 36,000 people in Chihuahua and Durango.

See NURSERY WORDS

## Tetela Ideophones

Tetela is Bantu language spoken in the Democratic Republic of the Congo by approximately 800,000 people. The following data are taken from Tassa’s (2001) study.

In this language, verbs can be morphologically derived from ideophones, as the following examples show:

- *té* ‘a little slight sharp noise produced by breaking or cracking’ > *tétámá* ‘being broken, cracked, struck’;
- *má* ‘bringing two entities closer together’ > *mámémá* ‘to be attached to, to be slandered’;
- *ká* suggests incrustation, jamming, attachment > *kákémá* ‘to be incrustated’;
- *bééé* mimics bleating > *bébélá* ‘to bother with a pressing, irritating demand’;
- *sààà* suggests the unfolding of cloth to be shaken > *sàsòla* ‘to unfold and shake clothes to remove dust or dirt’;
- *hoooo* suggests or amplifies a descent > *hòlòya* ‘to move something down’;

- *heeee* mimics the sound of a boiling kettle, of a distant engaged engine > *lohelo* ‘sound of a distant engaged engine’;
- *kōrrr* mimics snoring > *lōkōdu* ‘snore’;
- *terr* mimics the sound of a sewing machine or a talkative and indiscreet child > *ɔtedi* ‘chit-chat and indiscretion’.

In addition, there are also ideophonic suffixes in Tetela. Tassa mentions five ideophonic suffixes:

- *-à* evokes or amplifies the action denoted by the verb > *sénénálá* ‘become rigid, stiff’;
- *-ò* gives to the verb an expressive or iconic flavour > *sókólá* ‘to push violently, repudiate a woman bluntly’;
- *-ààà* evokes or amplifies the action denoted by the verb > *mataaa* mimics collapse, deflation;
- *-óòò* evokes the verbal action > *kōkōō* mimics loosening, slackening;
- *-ìì* evokes or amplifies the verbal action > *lōwìì* mimics soaking.

See BANTU IDEOPHONES

## Textual iconicity

In textual iconicity, the meaning is suggested by the structure and length of the whole utterance, and in written texts by the visual shape, composition of a page, the graphic features of letter-shape, as in ideograms, emblems, and picture poems (Sadowski 2003: 417-18).

See CALLIGRAM, GRAPHOLOGICAL ICONICITY

## Thai

The national language of Thailand spoken by more than 60 million people. It belongs to the Tai-Kadai linguistic family.

See ASIAN LANGUAGES, *BOW-WOW*

### ***The sign is not arbitrary (Bolinger 1949)***

This paper, written by the American linguist D. L. Bolinger (1907-1992) and published in 1949 (BICC 5, 52-62), offers an early assessment of the arbitrariness of the sign in modern linguistics. Bolinger observes that the

prevalent assumption of the arbitrariness of the sign produced a divorce of linguistics from semantics. Therefore, linguistic form can and should be studied without paying attention to meaning; otherwise linguistic analysis may be confusing, anarchic and unsystematic.

Bolinger questions this postulate and explores the relationships between form and meaning in four aspects: (1) meaning alters phonemic shape; (2) phonemic shape alters meaning; (3) a meaning may spell the difference between the existence and non-existence of a given phonemic shape; (4) shape may do the same for the existence of a meaning.

The first aspect is clearly seen in popular etymologies and in certain changes in the phonemic form of certain words. Bolinger mentions the English word *smash* derived from *mash*, under the influence of *smear*, *slash*.

The second aspect is seen when a certain meaning is attached to a meaningless form because of its phonemic configuration. Bolinger coined a non-existent word *smuck* and asked some students to semantically interpret the word according to a list of meanings (*dirt/mud*, *slimy/sticky*, *worthless*, *stupid act*, *stupid person*, *opprobrious name for a foreigner*, *slap*). The meanings *dirt*, *mud* and *worthless* were the most popular among the students. In Bolinger's opinion, the first and second meanings echo *muck*, *mud*, *mire*, *marsh*, *moor*, *morass*.

As another striking example of this type of relation between form and meaning, Bolinger mentions the "constellations of words having similar meanings tied to similar sounds" (58-59): English *bash*, *smash*, *crash*, *dash*, *lash*, *hash*, *rash*, *brash*, *clash*, *trash*, *plash*, *splash* and *flash*; Spanish *tajar* 'to slice', *rajarse* 'to cut', *ajar* 'to wither, wrinkle', *bajar* 'to go down, to drop', *fajar* 'to hit someone', *majar* 'to smash, to crush', *sajar* 'to lance' and *desgajar* 'to break, tear'.

With respect to the third aspect, "a form which is tied to one tabooed meaning among a number of respectable meanings, may be destroyed in all of its senses by that one meaning" (60). In Argentinian Spanish, *coger* ('to take' in European Spanish), means 'to fuck'. As such, Argentinian people use other verbs with that sense: *tomar* 'to take', *agarrar* 'to grab, to hold'.

The fourth aspect has to do with homonyms, as in *let* 'hinder' and *let* 'allow': the latter has displaced the former. In cases like this, the main reason must be found in the bond between a meaning and a form, resolved in favour of the stronger bond, and not with the mere intention of avoiding confusion.



In the final section of his article Bolinger says:

“While I have attempted to prove the vast importance of cross-influences, I have not aimed at demonstrating their omnipotence. We can be singularly deaf at times to an assonance that is as if it ought to clamor for attention. The existence of a constellation in *blob, gob, cob, knob, daub, bob, job, hob,* and *job* implying ‘compactness’ reflects little about *snob*. *Toilet water* remains a delicacy despite the unfavorable implications of *toilet*. This is not fatal to my thesis, which was that a given form physiologically tied to a given meaning. Any discriminable form, however similar (and discrimination here includes non-linguistic contexts) may be tied to a totally different meaning. It is sufficient evidence if we find that a large part of the time similar forms will tend in the directions of similar meanings” (Bolinger 1949: 62).

See SYNAESTHETIC ICONICITY

## Thirdness

A category in Peircean semiotics related to symbol\* and defined by Peirce in the following terms:

“By the third, I mean the medium or connecting bond between the absolute first and last. The beginning is first, the end second, the middle third. The end is second, the means third. The thread of life is a third; the fate that snips it, its second. A fork in a road is a third, it supposes three ways; a straight road, considered merely as a connection between two places is second, but so far as it implies passing through intermediate places it is third. Position is first, velocity or the relation of two successive positions second, acceleration or the relation of three successive positions third. But velocity in so far as it is continuous also involves a third. Continuity represents Thirdness almost to perfection. Every process comes under that head.

Moderation is a kind of Thirdness. The positive degree of an adjective is first, the superlative second, the comparative third. All exaggerated language, ‘supreme,’ ‘utter,’ ‘matchless,’ ‘root and branch,’ is the furniture of minds which think of seconds and forget thirds. Action is second, but conduct is third. Law as an active force is second, but order and legislation are third. Sympathy, flesh and blood, that by which I feel my neighbor’s feelings, is third” (Peirce 1931-1958, 1.337).

See FIRSTNESS, HYPOICON, ICON, ICONICITY, ICONICITY IN PEIRCE’S SEMIOTICS, SECONDNESS

## Tibetan

Language of the Sino-Tibetan family spoken in the Tibet Autonomous Region of China by more than one million people.

See *DOPPELUNG* (*REDUPLIKATION*, *GEMINATION*)

### *Tick-tock*

This expression is an example of a mimetic reduplicated root denoting a continuous, intermittent or alternating ticking sound. In English, Thun (1963: 51) mentions *tick-a-tick* (1805), *tick-tick* (1774), *click-clack* (1728), *tick-a-tack* (1828), *tick-táck* (1549), *tick-tóck* (1848). The latter is defined as “an imitation of the ticking of a clock, esp. the slow ticking of a large clock” (Thun 1963: 51).

This mimetic onomatopoe is also common in Romance languages: Catalan *clic-clac* ‘noise made by the impact of two objects’; *tifa-tafa* ‘tic-tac, mainly heart beating’; *tip-tap* ‘heart beat’; *triquitrac* ‘noise of repeated beats’; French *clic-clac* ‘sound made by the lash of a whip’.

Elaborating on comments by Grammont (1901), it could be said that this expression also mimics the alternating movement of a pendulum by means of consonant reduplication and the slight sound differences associated with it by means of vowel alternation:

“The pendulum in fact produces two dull and weak sounds that slightly differ from each other by necessity. This difference is signaled by the modulations produced by the two vowels *i* and *a*. The repetition of the two syllables with the same beginning and ending conveys the repetition of the sound. The two brief and weak vowels fit well into a dull and weak sound. These associations are further reinforced by the two voiceless stops opening and closing each syllable. Therefore, it is a perfect onomatopoeia, but it is not an exact reproduction of the sounds it mimics” (Grammont 1901: 99).

[Moreno Cabrera 2017]

See *ABLAUT REDUPLICATION*

## Tigre

Afro-Asiatic language (Semitic branch) of Eritrea spoken by about 1.4 million people.

See *BUTTERFLY*

## Toaripi

Trans-New Guinea language (Eleman branch) spoken in Gulf Province of Papua New Guinea by about 23,000 speakers.

See *BUTTERFLY*

## Tonal iconicity

In tone languages words may be distinguished by distinct tone or sequences of tones that convey a particular meaning. In some cases, tone-meaning correlations have an iconic nature. For example, in Bini, a Congo-Kordofanian language of southern Nigeria, all words meaning 'low', 'short', 'faint' or 'dull' have a uniform low tone. In addition, all words lacking a uniform tone denote something irregular in shape, movement or behaviour; compare *gélétée* 'high', *kpùkùrlù* 'short' with *bigóbigòbigó* 'crooked' (Wescott 1973: 11).

See INTONATION, PROSODIC ICONICITY

## Tongan

Austronesian language of the Polynesian branch spoken in Tonga by more than a hundred people.

See *BUTTERFLY*, *DOPPELUNG (REDUPLIKATION, GEMINATION)*, *NURSERY WORDS*, *PRIMITIVE CULTURE*, *VÖLKERPSYCHOLOGIE*

## Tongue-Twister

See *SHE SELLS SEA SHELLS*

## Tontemboan

Malayo-Polynesian language spoken in northern Sulawesi (Indonesia) by approximately 100,000 people.

See *BUTTERFLY*

## Tommo So Ideophones

Tommo So is a Dogon (Niger-Congo) language spoken in Mali by approximately 50,000 people. The following data are taken from the detailed grammar by L. McPherson (2013).

Ideophones in this language are usually reduplicated, as in *gègèlè-gègèlè-ni* ‘runty and weak’ (expressive adverbial), *nàgádèy-nàgádèy* expressive adverbial for ‘a tall, skinny person walking’ or, with vowel alternation, *yùgù-yàgù-ni* expressive adverbial for ‘fat (woman, cow)’. The suffix *-ni* is an adverbializer.

Partial reduplication is seen in *pédédé* adjectival intensifier for *yégélu* ‘cold’; *púdúdíúú* adjectival intensifier for *wàgú* ‘far’.

Some ideophones show a final vowel /ii/ reminiscent of diminutives: *yùgùdíí-ni* expressive adverbial for ‘woolly’; *gògìlíí-ni* expressive adverbial for ‘rickety (door)’; *súúíí-ni* expressive adverbial for ‘having small eyes’.

The tone patters found in ideophones are: H, LH, HL, LHL (H = high tone; L = low tone); only H and LH are found in native non-ideophonic stems.

The following is an example of the LHL pattern: *gègèlè-gègèlè-ni* expressive adverbial for ‘runty’.

To denote different ways of walking, a phrase with an adverbial ideophone and the verb *yàá* ‘go’ is used, as can be seen in the following examples:

- *gùmmù-gùmmù-ni yàá* ‘(person with big bottom) lumber along clumsily’;
- *nùllí-nùllí-ni yàá* ‘walk with a permanent limp’;
- *yùmbó-yùmbó-ni yàá* ‘(child) walk clumsily’;
- *yóndu-yóndu-ni yàá* ‘walk slowly and stiffly (like a tall lanky person)’;
- *gàngálíyè-go yàá* ‘walk leaning to one side, then to another (rolling gait)’;

- *bàmbú~bàmbú-go yàá* ‘stumble along like a drunk’.

McPherson observes some sound symbolism in this language: the vowel /a/ indicates an increase in size as in: *kébéré* ‘small and flat’/*kábára* ‘flat (and slightly larger)’.

Tommo So is also rich in onomatopoeias. The following refer to different noises produced by humans when chewing: *cákàm~cákàm* sound of someone smacking their mouth while chewing; *kòém~kòém* sound of someone eating something dry and powdery; *yògóbù~yògóbù* sound of quick chewing, especially when monkeys chew. Different kinds of farts are also distinguished: *bùún* sound of a long, melodious fart; *péén* sound of a fart one tries to keep in; *pór* sound of a spluttering fart.

## Torres Island

Malayo-Polynesian language spoken in the Torres Islands (Vanuatu) by about 600 people.

See *BUTTERFLY*

## Totonac Ideophones

A Mesoamerican language spoken by the Totonac People in Mexico (Puebla, Veracruz, Zacatlán) by more than 200,000 people. The following data are taken from Beck 2008.

Ideophones possess properties that set them apart from other words: they have marked phonotactics and prosodic properties, resist morphological processes, are usually reduplicated, and resemble adverbs but differ from them in some aspects. From a semantic point of view, they are not denotative, they evoke, instead, a particular scene.

Some ideophones are onomatopoeic: *chulululu* ‘water trickling’, *lu:p* ‘object dropping into water’, *tzanna* ‘insects buzzing’, *wa’htawa’hta* ‘someone sharpening a machete’.

Other ideophones are synaesthetic: *lam* ‘a bright light flashing, a fire flaring up’, *liplip* ‘a diamond or piece of glass sparkling’, *lipilipi* ‘sun glinting off the water, a mirror, etc.’, *limlim* ‘sun sparkling off flowing water’, *slimslim* ‘something twinkling’.

The alternation /s/-/x/-/lh/ is correlated with increasingly more forceful action: *lanks* ‘hand hitting something hard’ > *lanhx* ‘a blow striking with great force’ > *lanhhl* ‘something being kicked with great force’; *spipispipi* ‘something small trembling’ > *xpipixpipi* ‘something shivering or shaking slightly’ > *lhpilhpipi* ‘someone shaking, someone having convulsions’.

Ideophones undergo total or partial reduplication, as in *chikchik* ‘tree shaking in wind’, *kalanlhkalanlh* ‘a person biting through hard food’, *laksliwilakslawi* ‘a four-legged animal limping along on three legs’, *lununu* ‘a person strutting around showing off’, *spatata* ‘a viscous substance oozing (mud, pus)’, *swatata* ‘many small things moving in a line’.

In this language, ideophones with a very specific meaning are frequent: *chenhechenhe* ‘a large bottle filled with liquid being shaken’, *halahala* ‘someone crawling along on all fours’, *lhanalhana* ‘someone running around in a panic because s/he is late’, *pa’nlhupa’nlhu* ‘a toothless person chewing food’, *tampilili* ‘a long object rolling away’, *tanholulu* ‘a round object rolling away’, *wayaya* ‘person leaving after doing something bad or which the speaker didn’t like’.

Other ideophones have a more general meaning: *pilipili* ‘an object rolling’, *swilaswila* ‘someone or something running about quickly’, *lujlhulujlhu* ‘an object bouncing up and down’.

See AMERICAN INDIAN LANGUAGES, SIZE-SOUND SYMBOLISM

***Traité de la formation mécanique des langues et des principes physiques de l'étymologie*** [Treatise on the mechanical formation of natural languages and the physical principles of etymology] **(de Brosse 1765)**

This treatise by Charles de Brosse (1709-1777) discusses onomatopoeia and sound symbolism in chapters I and VI. Chapter I sets out the key principles underpinning the main proposals concerning the origin of languages, primitive or original natural language and the principles of etymology.

The main idea of the book is that natural language is imposed by nature and not by arbitrary convention and that this necessity is of an organic nature: the organs of speech determine, in a natural way, the relationships between sounds and extra-linguistic things. Language depicts objects by nature but this depiction is determined by the physical nature of the speech organs.

In section II of this chapter, de Brosse discusses four ways in which natural languages are created. The first method is onomatopoeia: the imitation of a natural sound. The second method is sound symbolism: the uttered sound and the natural object have similar properties; a hard sound depicts a hard object and a soft sound depicts a soft object. The third method concerns nursery words: expressions that children produce spontaneously, such as *mama*, *papa*. The fourth method consists in denoting vocal organs by the sounds they produce, so *gorge* ‘throat’ contains a guttural [g] sound and *dent* ‘tooth’ contains a dental [d] sound.

Chapter VI discusses primitive language and onomatopoeia and contains some onomatopoeic and sound-symbolic analyses based on the methods outlined in the first chapter. The following sound-symbolic relations are proposed: [t] designates fixity; [k] suggests hollow or cavity; [n] symbolizes that which acts on liquid: Latin *no* ‘I swim’, *naus*, *navis* ‘ship’, *navigium* ‘vessel’, *nephos*, *nubes* ‘cloud’; [r] serves to paint the rough external of things: French *rude* ‘rough’, *âcre* ‘acid’, *roc* ‘rock’, *rompre* ‘to rupture’, *racler* ‘to scratch’. This sound also suggests things that travel with a quick, forceful motion: French *rapide* ‘rapid’, *ravir* ‘ravish’, *rouler* ‘to roll’, *racler* ‘to rasp’; [s] is suitable for panting hissing and whistling noises: Latin *sibilare* ‘whistle’, French *siffler* ‘to hiss, whistle’, *souffler* ‘to blow’.

With respect to consonant groups, de Brosse proposes the following sound-symbolic relations: [st] expresses firmness and fixity: Latin *stare* ‘to stand’; [sk] suggests hollowness and excavation: Latin *scutum* ‘shield’, *secare* ‘to cut’, French *écu* ‘shield’; [fl] symbolizes liquidity and fluids: Latin *fluo* ‘to flow’, *flatus* ‘blast’, French *flocon* ‘fleck’, *soufflé* ‘breath’, *soufflet* ‘bellows’, *flute* ‘flute’. It is also suitable for suggesting that by which its mobility can have a relationship to elementary liquids: *fly*, *flight*, French *fleche* ‘arrow’, *vol* ‘glide’, *flexible*, Latin *flagellum* ‘whip’, *flos* ‘flower’, French *fléau* ‘flail’; [fr] suggests roughness and bursting out: Latin *frangere* ‘to shatter’, French *briser* ‘to break’, *brèche* ‘breach’; [kl]/[gl] depicts a sliding descent: French *glisser* ‘to slip’, *couler* ‘to flow down’, *clignotement* ‘blinking’; [gr] suggests the reaction of the throat when roughly touched and depicts the effort of climbing up: French *gravir* ‘to climb up’, *grimper* ‘to clamber up’, Latin *gradus* ‘step’; [tr] mimics the movement of a forced passage and the arrival of a new body where two other are previously there (cfr. *trois* ‘three’): Latin *trans* ‘to the other side of’, *intra* ‘inside’, *extra* ‘outside’, *ultra* ‘on the far side of’, *citra* ‘on this side of’.

De Brosse also discusses writing in chapter V of his treatise and proposes an organic alphabet whose letters mimic the position of the speech organs.

The following figure displays the letters mimicking the lips (*lèvres*), throat (*gorge*), teeth (*dents*), nose (*nez*) and tongue (*langue*):

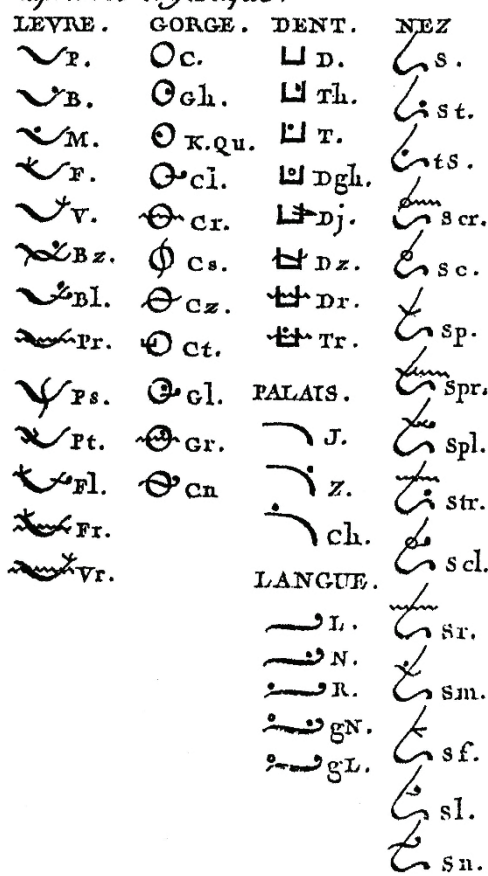


FIGURE T1

[Genette 1976: 93-131; Genette 1995: 65-90; Nobile 2005]

See KOREAN ALPHABET



## **Translucent Iconic Signs**

For E. Klima and U. Bellugi (1979), in signed languages a sign is considered translucent if non-signers can understand its iconicity once the meaning of the sign is explained.

See AMERICAN SIGN LANGUAGE, ICONICITY IN SIGN LANGUAGES, TRANSPARENT ICONIC SIGNS

## **Transparent Iconic Signs**

For E. Klima and U. Bellugi (1979), in signed languages a sign is considered *transparent* “to the extent that a sign meaning can be understood [by non-signers] from its form alone” (22). For example, the sign for tree in ASL is a transparent iconic sign (Figure A1).

See AMERICAN SIGN LANGUAGE, ICONICITY IN SIGN LANGUAGES, TRANSLUCENT ICONS

## **Trinidad French Creole**

French based creole language spoken in Trinidad.

See CREOLES

## **Tsimshian**

Language family of British Columbia and Alaska, possibly of Penutian stock.

See REDUPLICATION

## **Tsonga Ideophones**

Tsonga is a Southern African Bantu language spoken in Mozambique, South Africa, Swaziland and Zimbabwe by 13 million people.

D. L. Cole (2000) collected several ideophones used by a native speaker of the language when telling stories. These included the following:

- *gèdlè-gèdlè* ‘to flutter, palpitate, as of heart in sudden fright’. This ideophone was used by the informant to depict ‘getting ready to take off’;
- *psiii* ‘to disappear quickly’. The informant pointed his finger and moved his hand quickly across his body and away;
- *gì-gì-gì* ‘brief crisp thud’;
- *dlòmú* ‘plumping into deep water, as a big stone’;
- *mpfèká-mpfèká* ‘something badly made, rickety, not firm, as of a basket, chair’;
- *fèhlè-fèhlè* ‘something soft and bouncy’. This ideophone is pronounced with an ‘up-down, up-down’ intonation mimicking rhythmic bouncing;
- *dlòrí-dlòrí* said while swaying a little from side-to-side;
- *dlidlirita* said with a push from the diaphragm on the first two syllables to make a sound almost like a car engine trying to start.

See BANTU IDEOPHONES

## Tswana

See SETSWANA

## Tuareg

A Berber (Afro-Asiatic) language spoken in Algeria, Niger, Mali, Libya and Burkina Faso by more than one million people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Tumleo

Malayo-Polynesian language of Papua New Guinea (Sandaun Province) spoken by about 800 people.

See *BUTTERFLY*

## Tungusic

Group of languages spoken in Siberia, Manchuria.

See NURSERY WORDS

## Tupi (Nheengatu)

Tupi-Guaraní language spoken in Brazil, Colombia and Venezuela and spoken by some 20,000 people.

See *BUTTERFLY, PRIMITIVE CULTURE*

## Turkish ideophones

Turkish is the most widely spoken of the Turkic languages. It has more than 80 million speakers. It is currently written in the Roman alphabet. Turkish orthography has the following special letters: c [dʒ], ç [tʃ], ı [u], ş [ʃ].

The following data are taken from the excellent survey by G. Jendraschek (2002). In Turkish, ideophones are usually reduplicated and inflected for the suffix *-ir/-il* (the vowel may vary because of vowel harmony\*): *dan dan/dangl* ‘coarse, blunt, uncouth, clumsy’. Vowel alternation is also possible, as in the following examples: *cap, cip, cib, cip, cop, cub, cup* ‘the sound of splashing’; *cang, cing, cong, cung, cunk* ‘clinking’; *çar, çır, çir, çur, çür, şar, şır, şir, şor* sound of running liquid; *dab, dib, dip, düp* noise of irregular stepping and stamping; *zang, zing, zink, zonk, zong* sound of trembling, shaking, vibrating.

These alternations seem to mimic small variations in the suggested natural sounds. This is the case in *şırıl şırıl* ‘sound of a small quantity of water running monotonously’, *şarıl şarıl* ‘sound of a big quantity of water running loudly’, and *şorul şorul* ‘sound of a big quantity of water running noisily’. In some cases, the ideophone and the verb share the same ideophonic root: *dere gürül gürül gürüldüyor* ‘the brook rushes noisily’.

Something similar can be seen in the alternation *su fişş* ‘splattering water of a spring’, *su foşş* ‘roaring water of a flushing toilet’.

Sound-symbolic aspects of Turkish ideophones: [b] and [p] suggest the sound of an explosion, bumping, striking and falling; [d] and [t] suggest the sound of beating and bumping; [f] and [v] mimic the sound of flying, skidding, spinning and the sounds produced by water and wind; [k] and [g] are used to mimic sounds produced by geese, chickens and birds; [m] is used to imitate the sounds produced by oxen, buffaloes, camels, goats and sheep; [n] and [ŋ] is iconically associated with clinking; ş [ʃ] expresses the flowing of water.

Jendraschek lists two hundred Turkish ideophones in an appendix to his monograph. The list includes: *bar bar* the sound of loud shouting; *car car* ‘to speak a lot loudly’; *çan çan* a sound similar to that of a bell, babbling loudly and constantly; *çın çın* a sound similar to that produced by striking a metallic thing; *çır çır* suggests grief and panic; *çiti piti* suggests ‘small and cute’; *çıtır çıtır* the cracking sound of burning wood or coal; *dan dan* suggests roughness, rudeness; *dir dir* suggests persistent annoyance; *fan fan* suggests hardly intelligible speaking; *fır fır* suggests constant and quick rotation; *ham hum* mimics the opening and closing of the mouth when eating; *har har* mimics snoring, deep breathing; *hatır hatır* ‘sound of cutting, eating, and breaking of hard objects’; *kım kım* suggests slow and clumsy speaking; *kırt kırt* suggests breaking, cutting, scraping, chewing, grating; *lâp lâp* suggests the sound produced by cats and dogs when drinking; *lop lop* suggests the sound of eating and swallowing; *par par* suggests something bright or vibrating; *pat pat pat* ‘sound made when repeatedly striking a flat object with one’s hand or with a club’; *pır pır* suggests fluttering; *rap rap* suggests the sound of people walking; *şap şap* suggests smothering with kisses; *tin tin* suggests something soundless, noiseless, silent; *tip tip* suggests tapping.

See BIRD NAMES, *BOW-WOW*, *BUTTERFLY*, *CACKLE*, *CROAK*, *CROW*, *CUCKOO*, IMITATIVE ROOTS, MATRIX AND ETYMON THEORY, NURSERY WORDS, *ORIGINE*, *FORMAZIONE*, *MECCANISMO*, *ED ARMONIA DEGL’IDIOMI*, REDUPLICATION, *VÖLKERPSYCHOLOGIE*, {-WR-} IDEOPHONIC ROOT

## **Turkmen**

Turkic language of Turkmenistan and adjacent countries spoken by 7.7 million people.

See {-WR-} IDEOPHONIC ROOT

## **Tuscarora**

Nearly extinct Iroquoian language of the Tuscarora people (USA).

See NURSERY WORDS

**Twi ideophones**

See Akuapem Twi ideophones, CREOLES

**Tzeltal**

Mayan language of México (Chiapas) spoken by about 500,000 people.

See REDUPLICATION

## U

### ***Über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluß auf die geistige Entwicklung des Menschengeschlechts*** [The Heterogeneity of Language and its Influence on the Intellectual Development of Mankind] (W. von Humboldt 1863)

W. von Humboldt (1767-1835) was one of the founders of modern linguistics. This volume offers an extensive introduction to his planned investigation on Kawi, the ancient language of Java. In sections §17, §18 and §19 of this book, Humboldt deals with motivated form-meaning relationships and distinguishes three types. The first (§18.1) is called imitative (*nachahmende*) and has to do with onomatopoeia in the traditional sense of the word. The second (§18.2) is called symbolic (*symbolische*) and is produced when words produce an impression similar to that of the objects associated with them. The phonetic composition of words like *stehen* 'stand', *stätig* 'steady', *starr* 'stiff' suggests an idea of fixity similar to that produced by the properties or actions referred to by these words. This means that the initial *st-* has a certain sound-symbolic significance.

The third type of motivated form-meaning relation (§18.3) is called by Humboldt *analogical* (*analogische*). H. observed that words whose meanings are close to one another tend to be expressed with the same or similar sounds. He does not give any examples of this.

Humboldt stated the following account of sound-symbolic processes:

“But since language-making [*Sprachbildung*] finds itself here in a wholly intellectual region, at this point also there develops, in a quite eminent way, yet another higher principle, namely the pure and—if the term may be allowed—quasi-naked sense of articulation [*Articulationssinn*]. Just as the effort to lend meaning to sound engenders, as such, the nature of the articulated sound, whose essence consists exclusively in this purpose, so the same effort is working here towards a determinate meaning [*Bedeutung*]. This determinacy becomes the greater as the field of the designatum [*Bezeichnende*] still hovers effectively before the mind; for the field is the soul's own product, though it does not always enter, as the whole, into the light of consciousness. The making of language [*Sprachbildung*] can thus be

more purely guided here by the endeavour to distinguish like and unlike among concepts, down to the finest degree, by choice and shading of sounds. The purer and clearer the intellectual view of the field to be designated, the more the making of language feels itself to be compelled to let itself be guided by this principle; and its final victory in this part of its business is that principle's complete and visible dominance" (cited in Magnus 2013: 197).

## Udi

Northeast Caucasian language spoken in Azerbaijan, Russia, Georgia and Armenia by about 6,000 people.

See *BUTTERFLY*

## Udmurt

A Uralic language of the Permic group spoken in the Republic of Udmurtia (Russia) by approximately 300,000 people.

See *ELEMENTARE WORTSCHÖPFUNG*

## Urdu

Indo-Aryan language spoken by more than 60 million people in Pakistan and India.

See ONOMATOPOEIC EXPRESSION

## Ureparapara

See LÖYÖP, ONOMATOPOEIC EXPRESSION

## *Urschöpfung* [Original Creation]

This German word is the title of chapter IX of the influential *Prizipien der Sprachgeschichte* [Principles of the History of Language] (Paul 1880) by the German linguist H. Paul (1846-1921). This chapter (§266-§285) is entirely devoted to sound symbolism as one of the main aspects of language creation. In section §268, Paul defines *Urschöpfung* as follows:

"The essence of original creation consists, as we have already seen, in the fact that a sound-group is placed in relation to a group of ideas, which then comes to constitute its signification, and this without the aid of a connected group of ideas already attached to the sound-group" (Paul 1891: 176).

This original creation is based on sound-symbolic relations:

“If, however, the same combination of sounds is found connected with the same meaning, at different times and in different individuals, then this connexion must necessarily be conditioned by the same cause. And this cause must be rooted in the nature of sound and of meaning, and not in any fortuitously accompanying circumstance” (Paul 1891: 178).

First, Paul lists some German words mimicking noises and movements, such as *blaffen* ‘to snap’, *ballern* ‘to bang’, *plaudern* ‘to chat’, *puffen* ‘to puff’, *flink* ‘quick, swift’, *flüstern* ‘to whisper’, *glucken* ‘to cluck’, *humpeln* ‘to hobble, limp’, *holpern* ‘to jolt’, *klimpern* ‘jingle’, *klatschen* ‘to clap’, *knacken* ‘to crack’, *klirren* ‘to clink, chink’, *knistern* ‘to crackle, rustle’, *knirschen* ‘to crunch, grate’, *schwabeln* ‘to buff sth., wobble’, *wimmern* ‘to whimper, wail’, *wabbeln* ‘to wobble’.

Paul holds that interjections alone can be seen as absolutely new creations. These are defined as involuntary reflex sounds elicited by sudden emotion. But interjections in natural languages are culturally learned. This explains how expressions for the same feeling can differ in different languages or dialects (for example, the English interjection of pain *Ouch!* is translated into Spanish as *¡Ay!*). Paul also discusses expressive ablaut reduplication in the section devoted to interjections: English *criddle-craddle*, *widdle-waddle*, *hankey-pankey*, *ding-dong*; German *fickfack*, *gickgack*, *kliffklaff*, *klippklapp*, *klitschklatsch*, *klimperklammer*, *kribbeskrabbes*, *krimskrams*, *mickmack*, *pinkepanke*, *ripsraps*, *ritschratsch*, *schnickschnack*, *schnippschnapp* (*schnur*), *stripstrap* (*strull*), *schwippschwapp*, *ticktack*, *lirumlarum*, *bimbambmn*, *piffpaffpuff*; French *clic-clac*, *cric-crac*, *drelin-dreton*. These are considered onomatopoeic. See Haiman (2018: 157-181) for a thorough discussion of the words mentioned by H. Paul in his famous handbook.

In sections §279-285, Paul speculates about the origins of language. He states the difficulty of this subject as follows:

“There is no fixed rule or authority for human beings before the creation of language. It seems accordingly that language must have begun with a confused utterance of the most various articulations such as we never find combined in any language. But how out of such a chaos could consistency in motor sensation develop?” (Paul 1891: 188).

Paul says that *Urschöpfung* is not sufficient to create a language:

“What we have called original creation is of itself insufficient to form a language. Its product must be stored up in memory by individuals who



belong to one linguistic community. *True language does not exist until speech and apprehension depend upon reproduction*" (Paul 1891: 189, author's italics).

At the end of the chapter, Paul makes a brief consideration concerning the main difference between human and animal language; syntax seems to be the key element:

"It is undoubtedly of great significance that the number of the traditional words, and herewith the number of the differentiated conceptions, is far greater among mankind than among any species of beasts; but the strict characteristic which differentiates the language of men from that of animals, existing language from a previous linguistic stage, consists in something very different. This decisive advance consists in the collocation of several words into one sentence. Only thus does man receive the power to free himself from simple intuition, and to pronounce judgment on what is not before him" (Paul 1891: 189).

See ABLAUT REDUPLICATION, *ELEMENTARE WORTSCHÖPFUNG*, *FANGEN-FINGER-FÜNF*

## Uyghur

Turkic language spoken by 15 million people in the Xinjiang Uyghur Autonomous Region of Western China.

See *FANGEN-FINGER-FÜNF*

# V

## **Vai**

A Mande language spoken by the Vai people of Liberia.

See **ICONIC LENGTHENING**, *PRIMITIVE CULTURE*

## **Vanua (Vera'a)**

Malayo-Polynesian language of the Vanua Lava Island (Vanuatu) spoken by approximately 500 people.

See *BUTTERFLY*

## **Venda**

Bantu language of South Africa spoken by approximately 1.7 million people.

See **BANTU IDEOPHONES**

## ***Veni, vidi, vici***

Julius Caesar's famous phrase *veni, vidi, vici* 'I came, I saw, I conquered' was introduced into iconicity research by R. Jakobson in his foundational 1965 paper as an example of diagrammatic iconicity\*: the order of the verbs mirrors the chronological order of the denoted events.

G. W. Müller (2001: 305-307) maintains that what the linguistic structure imitates is not external reality, but a subjective perception of reality, i.e. a mental structure reflecting reality. The asyndetic isocolon is a rhetorical device used to express the sense of personal triumph of the speaker. A similar interpretation is given by R. Ajello in the following terms:

"The meaning of the motto is not the description of Caesar's arrival in the country, his looking around in order to evaluate the situation, and lastly the victory over the enemy. The sequence of the three verbs has the rhetorical function to extend and underline the last event described, and the motto has the function of founding Caesar as a strategist always bound to an immediate victory" (Ajello 1995: 82).

In addition to the verb order, some interesting properties of this phrase are described by M. Nänny and O. Fischer (2001: 2-4). These authors note some endophoric and autoiconic aspects worth mentioning here. There is an increasing assonance in the three verbs, [i:] occurs once in *veni*, but twice in *vidi* and *vici*. Concerning consonants, there is a gradual loss of sonority from [n] to [d] to [k]. The three disyllabic words resemble each other since they begin with [v] and, in addition, *vidi* and *vici* are more similar to each other than to *veni*, thus syllable similarity increases. In Jakobson's own words: "symmetry of three disyllabic verbs with an identical initial consonant and identical final vowel add splendour to Caesar's laconic victory message: *Veni, vidi, vici*" (Jakobson 1960: 358).

See *CAESAR'S LAW, QUEST FOR THE ESSENCE OF LANGUAGE, SYNTACTIC ICONICITY*

## Vepsian

A Uralic language of the Finnic group closely related to Finnish and Karelian spoken in the Veps National Volost (Russia) by approximately 1,000 people.

See *DICCIONARIO DE VOCES NATURALES*

## *Verba sonandi*

Latin expression used to denote verbs that mimic animal sounds and are derived from onomatopoeic forms. These verbs can have numerous metaphorical uses (Rakhilina, Kor Chahine and Merle (eds.) 2017).

## Vietnamese

Vietnamese is an Austroasiatic language spoken in Vietnam by 74 million people.

Phuong Ngoc (2017: 300-301) lists the following verbs mimicking animal sounds in Vietnamese: *súa* 'to bark', *gáy* 'to cackle', *tót* 'to chirp', *hí* 'to neigh', *gầm* 'to roar', *tác* 'to bellow'. Animal onomatopoeias are preceded by the verb *kêu* 'to shout' or by the verbs *bay* 'to fly' and *nhảy* 'to hop' for insects: *gâu gâu* (dog), *meo meo* (cat), *ừn ừn* 'pig', *cục tác* 'hen', *cạc cạc* 'duck', *be be* 'goat', *ve ve* 'cicada', *vo ve* 'fly', *chiêm chiêm* 'chicken', *rinh rinh* 'ratón', *cúc cu* 'turtledove'. *quạ quạ* 'raven'.

Văn Chinh (1970: 35-50) and Thành Do-Hurinville (2017: 261) note that the articulatory gestures made to produce many Vietnamese words mimic the things or actions referred to. For example, *ăn* ‘to eat’, *uống* ‘to drink’, *cười* ‘to laugh’, *há* ‘to open one’s mouth’, *mim* ‘to smile’, *ngáp* ‘to yawn’, *ngọam* ‘to bite’. In addition, a high tone suggests the idea of violence and suddenness: *bắn* ‘to draw, pull’, *bắt* ‘to force, to coerce’, *hất* ‘to reject’; it can also mimic sharp and brief sounds: *chat-chát*, *véo-véo*, *chop-chép*. A low tone mimics a quiet, mumbling voice and the idea of softness, grace, sweetness or harmony: *rừrừ* ‘to speak slowly’, *địu-dàng* ‘gracious, affable, indulgent’; it can also suggest sadness, darkness: *buồn* ‘sad’, *tò mò* ‘dark’, *mù* ‘dark’ (Văn Chinh 1970: 39).

In his Vietnamese grammar, L. C. Thompson (1965: 173-176) identifies as *dramatics* those polysyllabic bases that “add to the basic meaning of their bases strong dramatic overtones”: *bối rối bối rối* ‘be troubled, upset, perplexed’, *lối thối lôi thôi* ‘be complicated’, *lúng túng lúu túu* ‘be caught in a situation without recourse’, *khóc-la khóc-lóc* ‘weep, cry’, *lụng thà lụng thụng* ‘be too big (of clothes), *đông-đa đông-dành* ‘be difficult, exacting’, *lính-quýng lảng-quáng* ‘be careless’, *nhí-nha nhí-nhảnh* ‘be lively, sprightly’.

Brunelle, M. and L. Th. Xuyên (2014) note three types of iconic expression in Vietnamese: reduplicated expressions, ideophones\* and phonaesthemes\*. The following examples are taken from this paper.

Vietnamese ideophones are normally reduplicated and used as stative verbs or as adverbs. They can be onomatopoeic, such as *ù ù cạc cạc* ‘cackling’, *òam oạp* ‘of waves breaking on the shore’, *hi hi* ‘of high-pitched laughter’, *phì phò* ‘of panting’.

Non-onomatopoeic ideophones include: *rực rỡ* ‘bright and intense’, *nhò nhò* ‘faded’, *bầy nhầy* ‘slimy’, *thăm thăm* ‘deep’, *thum thum* ‘deep’, *hoảng hoắc* ‘of intense smell’, *lảo đảo* ‘stumbling because of intoxication’.

In the following variants of the ideophone depicting laughter vowel quality is associated with loudness and tone height correlates with the pitch of the laughter: *hí hí* ‘of high-pitched laughter’, *hì hì* ‘of low-pitched forced laughter’, *hề hề* ‘medium-pitched friendly laughter’, *hề hề* ‘very low-pitched discreet laughter’, *hồ hồ* ‘high-pitched vulgar laughter’, *ha há* ‘high-pitched natural laughter’.

The ideophones that depict chewing show consonant alternation: *nhóp nhép* ‘of chewing discreetly’, *tóp tép* ‘of chewing loudly’, *chóp chép* ‘of chewing

very loudly'. The onset consonants suggest the amount of noise made when chewing.

Brunelle and Xuyên (2014: 91-93) note that Vietnamese is exceptionally rich in phonaesthemes. For example, the rhyme *-um* is associated with the idea of grouping, putting together: *cum* 'group', *nhúm* 'to grab with all the fingers', *chùm* 'to group', *dúm* 'to grab with all the fingers', *túm* 'to grab', *xúm* 'to gather up', *tùm* 'to gather up' *chùm* 'bunch'.

The rhyme *-ep* suggests compressing, squeezing, flattening: *ép* 'to press, to crush', *bép* 'flattened', *dep* 'flat', *lép* 'flat', *kep* 'to pinch', *khép* 'to close gently', *nép* 'splint', *nép* 'to crouch', *ép* 'to deflate, to flatten', *xép* 'to flatten, to deflate'.

The rhyme *-eo* suggests something crooked, twisted, diagonal: *queo* 'crooked', *veo* 'crooked (body part)', *queo* 'to turn', *treo* 'twisted (limb)', *chéo* 'diagonal', *xéo* 'diagonal', *khoèo* 'crooked (limb)', *ngọeo* 'to bend (body part)'.

The compound *l-* and *-nh* suggests talking: *lãi nhãi* 'to talk continuously', *lãi nhãi* 'to ramble', *lảm nhảm* 'to mumble', *lầu nhầu*, *lầu nhầu* 'to grumble', *lèo nhèo* 'to bother', *lèo nhèo* 'to speak unclearly (because of distance)', *lè nhè* 'inarticulate because of intoxication', *lí nhí* 'to mutter', *lảm nhảm* 'to be incoherent'.

Brunelle, M. and L. Th. Xuyên end their paper with a very interesting characterization of iconicity in Vietnamese:

"Vietnamese, like its neighbours, makes widespread use of sound symbolic expressions. While sound symbolism is mostly expressed through the use of language-specific reduplicated forms, ideophones similar to reduplicated forms, and phonaesthemes, there is little evidence of an exceptional reliance on direct iconicity in the language. It seems that in Vietnamese, as in most languages, iconicity is primarily learned: as they acquire the language, speakers learn to attribute sound symbolic values to arbitrary phonological forms. The strong cultural association between eloquence and sound symbolic expressions explains in large part their prevalence in the language. However, we argue that structural factors, synchronic or diachronic, also play a role. First, the central role of reduplication in Vietnamese favours the development of ideophones. Second, the monosyllabic structure of the language explains the frequency of phonaesthemes, both for synchronic and diachronic reasons" (Brunelle, and Xuyên 2014: 95).

See ASIAN LANGUAGES, BIRD NAMES, *BOW-WOW*

## Vilela

Extinct language once spoken in Resistencia (Argentina).

See NURSERY WORDS

### ***Voces variae animantium. Ein Beitrag zur Naturkunde und zur Geschichte der Sprache*** [*Voces variae animantium. A contribution to Natural History and Language History*] (Wackernagel 1867)

This book is a collection and linguistic analysis of onomatopoeias mimicking animal sounds in Greek, Latin and German.

The work begins with a report of how the calls of some animals, especially birds, can be interpreted in folklore and in literature as meaningful phrases of a particular language (see bird names\*, *kiskadee*\*). For example, the croaking of a frog is mimicked by onomatopoeias as *Arg Arg* or *Quad Quad* in German and has been linguistically interpreted as *Gieb Acht, Gieb Acht* 'Look out!, Look out!' (10).

The following is a list of the animal onomatopoeias discussed in this book:

Birds (1) Mockingbird: German *zir zir*. (2) Duck: German *quak quak, pak pak*. (3) Owl: Greek κικκαβαῦ. (4) Finch: German *pink pink*. (5) Goose: German *ga ga ga, gickgack, giga, drussla drussla*. (6) Rooster: Greek κόκκυ. (7) Hen: German *gack gack, glu glu glu, tuck tuck tuck*. (8) Crane: Greek γρό, German *kuru*. (9) Lapwing: German *kiwitt*. (10) Cuckoo: Greek κόκκυ, German *cucu, gugu, guck guck, kuckuck*. (11) Lark: German *tireli*. (12) Nightingale: German *zucküt zicküt zicküt, zidiwik, tilidon zi zi, tandaradei, deilidurei faledirannurei*. (13) Flamingo: Greek φοινικόπτερος. (14) Raven: German *raco, krapp krapp*. (15) Swallow: German *tisch tasch*. (16) Great Sparrow: Low German *karra karra kikik*. (17) Sparrow: German *zir zir, schjirp*. (18) Dove: German *ruckediguck*. (19) Quail: German *wack di wack, wapp di wapp*. (20) Hoopoe: Greek έποποι, ποποπό, ποποι ποποι, German *hupp hupp, hoz hoz hoz*.

Mammals: (1) Donkey: German *ia, ika, hika*. (2) Dog: German *wau wau, bau bau, huhu huhu*. (3) Cat: German *mau miau, murmau, pfuch*. (4) Horse: German *hui, hü, hi*. (5) Cow: Low German *bu*, High German *mu, much*. (6) Sheep: Greek, Latin, German *be, me*. (7) Pig: Greek γρό; piglet: Greek κοῖ, German *quik*. (8) Goat: German *meck meck*.

Wackernagel notes that partial or total reduplication is usually used in animal onomatopoeias: Greek κακκάβη ‘partridge’, κικκάβη ‘screech-owl’, κόκκυξ ‘cuckoo’, τέπιτιξ ‘grasshopper’; Latin *upupa* ‘hoopoe’, *turtur* ‘turtle-dove’, *cicada* ‘cicada’; German *Kuckuck* ‘cuckoo’, *Wurriquakquak* ‘duck’, *Karrakarrakikik* ‘great sparrow’.

Nouns of animals can be derived from corresponding onomatopoeias: Greek γρύλλος ‘piglet’, γέρανος ‘crane’, κορώνη ‘crow’; Latin *cuculus* ‘cuckoo’, *querquedula* ‘teal’, *ulula* ‘owl’, *graculus* ‘rook’, *fringuilla* ‘chaffinch, brambling’, *bubo* ‘owl’, *buteo* ‘gyrfalcon’, *sturnus* ‘starling’, *quaquila*, *quaquara*, *quacara*, *quaquadra*, *quarqu* ‘quail’ (Mediaeval Latin).

Wackernagel also gives an exhaustive list of onomatopoeic verbs denoting animal sounds and derived from the onomatopoeias listed above as well as a linguistic analysis of the morphological processes used to produce them.

An appendix to the main text includes a brief anthology of Latin and German poems about animal sounds.

See BIRD CALLS, BIRD NAMES, CUCKOO, KALULI BIRD NAMES, KISKADEE, MIMOLOGISME

***Völkerpsychologie. Eine Untersuchung der Entwicklungsgesetze von Sprache, Mythos und Sitte Erster Band. Die Sprache [Cultural Psychology. An Investigation of the Laws of Evolution of Language, Myth, and Custom. First Volume. Language] (Wundt 1904)***

W. M. Wundt (1832-1920) was a German physician and psychologist and known as one of the founding figures of experimental psychology. Between 1900 and 1920 he published a ten volume book entitled *Völkerpsychologie* [Cultural Psychology]. The first volume is devoted to language and contains a section on sound imitation in chapter III, which discusses the sounds of language (*Die Sprachlaute*).

This volume had a noticeable influence on early twentieth century linguistics.

In the third section of chapter three, Wundt discusses sound imitation (*Lautnachahmung*). He distinguishes two types of sound imitation: the first type called *Schallnachahmung* ‘onomatopoeia (lit. noise imitation)’ is directly based on the imitation of a natural sound, as in the German noun

*Kuckuck* ‘cuckoo’; the second type covers the imitation of non-auditory phenomena by means of linguistic sounds, as in the German verb *flimmern* ‘flicker, shimmer, twinkle’. These words are called *Lautbilder* ‘symbols (lit. sound pictures)’.

Wundt says that the expression *Lautnachahmung* ‘sound imitation’ can be interpreted in two ways: as an imitation of sound (onomatopoeia) and as an imitation through sound (sound symbolism). He thinks that the two phenomena are essentially different. The first case, a pure onomatopoeia in which a sound is mimicked without intending to denote anything, is different from onomatopoeic word creation, in which a noun or verb is created on the basis of a previous sound imitation.

In the second case, the imitation of non-auditory phenomena through sound, there are sound symbols (*Lautsymbole*) or sound metaphors (*Lautmetaphern*) based on a correspondence between representations of two different senses. In sound symbolism, articulatory gestures play an important role. This is clearly seen in words denoting the articulatory organs: frequently, the pronunciation of these words involves the action of the organs referred to. Wundt points out that in many languages the word for *tongue* contains lingual or dental consonants. In a similar way, the words for *mouth* and for the actions in which this organ is used have labial consonants. Wundt gives the following examples in a footnote:

Tongue: Turkish *dil*, Hungarian *nyelv*, Javanese *hilat*, Polynesian *elelo*, Australian *tullun*, African *télam*, *ludiimi*, *limi*. Mouth: Mongolian *am*, Samoyedic *namo*, Malay *mulut*, Fulani *bútom*, Rundi *mulam*. Eat: Chinese *nam*, Javanese *mangan*, Tahitian *amu*, Sranan *njam*, Australian *nomang*, Susu *nimiu*. Be silent: Tahitian *namu*, Fijian *hamu*, Mpongwe *imamu*, Hebrew *alam*. Blow: Malay *puput*, Tongan *bubu*, Maori *pupui*, Australian *bobun*, Kafir *pupuza*, Galla *bufa*, Finnish *pukkia*, Hebrew *paah*.

Wundt discusses natural sound symbolism (*Natürliche Lautmetaphern*) in section four of this chapter. Artificial sound symbolism is consciously created in poetry and literature in general. Wundt mentions Homer and Schiller as authors who used sound-symbolic effects in their works. Natural sound symbolism is not produced by the speakers, but comes from the form of the word itself, is suggested by it. He distinguishes several types. First, nursery words, such as *papa* for father and *mama* for mother. He illustrates this point with several words for *papa* and *mama* from Asiatic-European, African, American and Polynesian languages (see nursery words\*).



He also considers natural sound symbolism with a deictic function. Wundt observes a correlation between pitch and distance: the higher the pitch the farther away the referred object. He gives some examples of this correlation in different languages with the deictic adverbs *here/there*: Malagasy *io/ao*, Tahitian *io nei/ia na*, Tagalog *ditto/taon*, Japanese *ko/ka*, Sahaptin *kina/kuna*, Tarahumara *ibe/abe*; and with the determinants *this/that*: Javanese *iki/iku*, Maori *tinei/tera*, Tagalog *dini/yari*, Tamil *ila*, Mande *nyin/wo*, Abkhaz *abri/ubri*, Hungarian *ez/az*.

Wundt also notes the iconic use of tone in some African languages. For example, it is reported that in Ewe an adjective with a low tone and a long vowel is applied to big things and an adjective with a high tone and short vowel is applied to small things (359).

He also reports on phonaesthemes in Indo-European languages. For example, roots beginning with *kr-* suggest different types of noises, as in the Greek words *κράζω* 'to caw', *κρᾶνγῆ* 'noise', *κρίζω* 'to screech' (360). In Hebrew, he gives the following example in which the final consonant has a mimetic value: *para* 'to loose', *parad* 'to separate', *parat* 'to throw', *param* 'to split, separate, 'share', *paras* 'to disperse, scatter', *paraz* 'to spread', *parak* 'to break', *parar* 'to split'. Wundt also comments on the iconic aspects of Hebrew verbal inflection (260-264).

In the final section of the chapter, Wundt discusses two objections to the iconic nature of sound-meaning relations: first, such relations are considered secondary or derived, and second, such sound-meaning relations are not systematic and do not involve the major part of the lexicon of a language. Wundt argues that sound-meaning relations can lose their original iconic motivation by means of language change, especially phonetic change.

In the fifth chapter, which is devoted to morphology, there is a section dealing with reduplication (627-651). Wundt considers reduplication to be the most primitive way of word formation. In addition, it is very frequent in nursery words, such as *papa*, *mama*. He discusses the following meanings of reduplication: iterated action processes (Latin *cuculus* 'cuckoo' mimicking the repeated calls of this bird); plurality and collection (Dakota *runa runa* 'people'); and an enhancement of a property or action (Italian *tutti tutti* 'everyone' or Samoan *taba* 'to speak' < *taba taba* 'to shout').

See NURSERY WORDS, PHONETIC METAPHORS

## *Vowel harmony*

“Agreement among vowels in successive syllables in respect of one or more features. E.g., in Turkish, *köy* ‘village’ has a front vowel (ö) while *son* ‘end’ has a back vowel; in harmony with these, the plural suffix has a front vowel (e) in *köy-ler* ‘villages’, but a back vowel (a) in *son-lar* ‘ends’” (P. H. Matthews 2014: 431).

Vowel harmony is used iconically in several languages. Korean is one of them. Kwon (2018) offers the following examples:

Dark forms	Light forms	
<i>kʰəŋ.cʰuŋ</i>	<i>kʰaŋ.cʰoŋ</i>	‘skipping with longer: shorter legs’
<i>pʰuŋ.təŋ</i>	<i>pʰoŋ.taŋ</i>	‘popping sound of a bigger and heavier: smaller and lighter object’
<i>cʰi.ləŋ</i>	<i>cʰa.laŋ</i>	‘dropping of a longer: shorter object’

The ideophonic harmony system in Modern Korean comprises light vowels, consisting of /ɛ, (ø), a, o/, and dark vowels, consisting of /i, e, (y), ɨ, ə, u/. Each member of each pair shows vowel harmony according to this system.

See KOREAN

# W

## Watjandie

Nhanda

See *PRIMITIVE CULTURE*

## Welsh

Welsh (Awbery and Parina 2017) has verbs mimicking certain animal sounds: the verb *rhuo* conveys sounds produced by lions, bulls and dragons; the verb *brefu* covers different sounds of cattle (cows, rams, oxen, sheep and goats); the verb *crawcian* is used to refer to sounds of birds (crows, ravens) and of frogs; the verb *gwichian* is used for pigs, piglets and mice.

In Welsh there is some dialectal variation concerning these verbs. For example, the roaring of bulls can be mimicked by *rhuo*, *puo*, *beichio* (North Wales), by *bygloddi* (Mid Wales), and by *bygynad*, *bygylad*, *boichen*, *bolgen* (South Wales).

These verbs can also be metaphorically used to convey human voice quality, emotional reactions, inarticulate speech, multiple subjects, expressions of disapproval: “*O Iesu mawr*”, *gwichiodd Morfudd* “‘O Jesus’ *squealed Morfudd*”; *Roedd hi’n nadu crïo yn ei galar* ‘she was *weeping noisily* (braying) in her grief’; *Roedd y torfyn rhuo wrth i Jack anelu am y gól* ‘the crowd was *roaring* as Jack aimed for the goal’.

Sounds made by wind are expressed by four different verbs mimicking animal sounds depending on its intensity: *suo* (to buzz; bees), *chwiban* (to whistle; small birds), *nadu* (to bray; donkey), *rhuo* (to roar; bull, lion). For example: *Roedd yr awel yn suo rhwung y dail* ‘the breeze was *murmuring* through the leaves’ (Awbery and Parina 2017:119).

## Wemba Wemba

Extinct Australian language once spoken along the tributaries of the Murrumbidgee River.

See ANTI-ICONIC SUFFIX ORDERING

## White Hmong

Hmong is a dialect continuum spoken by approximately 4 million people in China, Vietnam, Laos, Myanmar and Thailand.

The following data are taken from Ratliff (2014).

In White Hmong, ideophones are reduplicated and can be grouped into two types: those having the same tone in both syllables and those having different tones. The following ideophones belong to the first type: *nplhí nplhéng* ‘the sound of a pin coming out of a hand grenade’; *mí mé* ‘the sound of mosquitos buzzing by your ear’; *dí dàu* ‘the sound of many people walking on a surface of twigs, rock, and soil’; *ì à* ‘of a mute person trying to talk’. The ideophones listed below belong to the second tone-alternating type: *hnyù hnyía* ‘to do something against one’s own wishes to please another’; *chhù chhàu* ‘to keep on coming, so that one cannot see the end of their coming’; *lù làu* ‘of a big, continuous, humming sound, such as an electric generator, or a person speaking without expression, but not without feeling’; *nTù nTì* ‘of nodding while sleeping, or of the way a horse walks, raising and lowering his head at each step’. This last ideophone can also present a form of the first type: *nTàu nTì* ‘manner of (a human) walking, with application’.

There is also an iconic interpretation of tone distinction: *falling + falling* ‘energetic, fast, short sights and sounds’; *low level + low level* ‘continuous, flat sights and sounds’; *breathy-breathy* ‘low-pitched, echoic, hollow, airy sounds’.

Ratliff (2014: 186) notes the following iconic relations between consonants and meanings: clearing the throat or coughing is conveyed by an aspirated uvular stop; air whizzing past is represented by labiodental fricatives ([f] and [v]), and lightning is expressed with an aspirated retroflex stop. The following ideophones: *lì lóng* ‘loud droning, bees buzzing’, *lù làu* ‘a big, continuous, humming sound’, *lù lè* ‘the sound of a vacuum cleaner, bees, airplane’, *lù lià* ‘a manner of flying (of a butterfly)’, *lù lià* ‘of a lethargic

feeling, of wandering' suggest that the lateral consonant [l] is associated with the idea of a prolonged sound or activity.

## Wishram (Upper Chinook)

Extinct language of the American Pacific Northwest (Columbia River).

See AMERICAN INDIAN LANGUAGES

## Wiyot

Extinct Algic language of California (US).

See AMERICAN INDIAN LANGUAGES

## Wolaitta Ideophones

Wolaitta is an Omotic language spoken in the southern part of Ethiopia by approximately 1.5 million people. The following data and analysis are taken from Amha (2001).

There are two groups of ideophones in this language: group I involves full and partial reduplication and group II requires a support verb.

Examples of the first group are given here. Full reduplication: *tiit'itiit'a* 'one with a hasty manner of walking', *miik'imiik'a* 'disagreeable, short tempered', *liifiliifa* 'thin, soft, flat', *lookiloóka* 'long, thin', *jabbijábba* 'restless, not careful in action', *puskipúska* 'agile'. Partial reduplication: *binjiliila* 'too smart, unrespectful person', *kiciriúra* 'stubborn, dry (of objects)', *kuncuruúka* 'inelegant', *k'azázza* 'handsome, beautiful', *lakákka* 'agreeable, decent', *sakákka* 'very beautiful', *karbábba* 'wide (of ear)', *sampáppa* 'very wide (of leaves), bed, seat', *gaagaáno* 'very big', *loolloósa* 'beautiful', *bunduruúk'a* 'dirty, messy (of babies)', *pucilánco* 'restless (referring to babies)', *wununuúk'a* 'very, very small'. These ideophones occur as modifiers of noun phrases and share some syntactic and semantic properties with adjectives; they can also be used predicatively: *Gallásoy k'ap'k'ap'a* 'Gallasso is greedy'.

The second group of Wolaitta ideophones obligatorily occur with the verb *g—* 'say' when intransitive and with *'oott—* 'do' when transitive. Here are some illustrative examples of both subtypes: *kúruúru g—* 'to move (of small children)', *tólólu g—* 'to boil over', *zírt'i g—* 'to be alert', *c'ippi g—* 'to become very full (of liquid)'; *púsku 'oott—* 'to scatter completely (of small

things)', *pógg* 'oott— 'to make light, unexpectedly', *fóttu* 'oott— 'to lift something or somebody quickly', *háhwu* 'oott— 'to leave wide open', *káhwu* 'oott— 'to hit a hard object with a stick', *túlku* 'oott— 'to break easily (of something small)'.

## Wolof

Atlantic-Congo language spoken in Senegal, Gambia and Mauritania by approximately 4 million people.

See *BUTTERFLY, ELEMENTARE WORTSCHÖPFUNG*

## Wortschöpfung [word creation]

See *ELEMENTARE WORTSCHÖPFUNG*

## {-WR-} ideophonic root

A {-wr-} ideophonic root associated with the concepts of twisting and turning was identified by J. Haiman (2018: 186-191). It is usually realized with a consonantal suffix, as in *warble, wrag, work, quarrel, worm, warp, wrap, worse, verse, versatile*, or with a consonantal prefix as in *quarrel, quirk, swerve, squirm, twirl*.

In Dutch (Klamer 2001: 176-178) [vr-] is associated with something having negative connotations or referring to undesirable states and referents, or with sense impressions (sound, touch, taste, smell, feeling, emotion): *wraak* 'revenge', *wrack* 'wreck', *wrat* 'wart', *wreed* 'cruel, harsh', *wrevel* 'resentment, rancor', *wrok* 'resentment, grudge', *wriemelen* 'wriggle, squirm', *wringen* 'wring, squirm, wrench, pinch', *wrong* 'roll'.

This root is also attested in other languages unrelated to English or Dutch, such as Turkish, where the consonant combination [vr-] is also connected with twisting and turning: *deveran* 'circulation', *devir* 'rotation', *devirmek* 'to overturn reverse', *devre* 'cycle', *devrii* 'rotational', *cevri* 'circumference, circuit', *yuvar-lamak* 'to rotate, roll, be round', *kıvrım* a twist, coil'.

Greenberg (2002: 182) proposes the Eurasiatic root *ur* 'to weave', which is allegedly attested in the following language families:

Indo-European: \**wer-* 'tie, adjoin, hang up', \**uer-g* 'to turn': Lithuanian *veriù* 'I thread', Latvian *vert* 'thread'.

Uralic: Cheremis *urqe-* ‘sew’, Hungarian *varr-* ‘sew’

Turkic: Yakut *ör-* ‘plait’, Turkmen *ör-* ‘plait’. Middle Mongolian *öre-* ‘to plait’.

Korean: *ol* ‘strand, ply, warp’, Japanese: *or-* ‘to weave’.

Eskimo-Aleut: Aleut *uli-lix* ‘to bend (a piece of wood into an arc), *uli-kung* ‘I fold, turn up’.

# X

## **Xhosa**

Bantu language of the Xhosa people of South Africa, Zimbabwe and Lesotho spoken by approximately 11 million people.

See AFRICAN LANGUAGES, BIRD NAMES, *CACKLE*



# Y

## **Yakut**

Turkic language of the Sakha Republic (Russia) spoken by approximately 450,000 people.

See {-WR-} IDEOPHONIC ROOT

## **Yami (Tao)**

Malayo-Polynesian language of Taiwan spoken by approximately 40,000 people.

See REDUPLICATION

## **Yao**

Bantu language of Malawi, Mozambique and Tanzania spoken by approximately 3 million people.

See AFRICAN LANGUAGES

## **Yir-Yoront Ideophones**

This extinct Australian language was spoken on the southwestern part of the Cape York Peninsula, Queensland. The following data are taken from Alpher 1994.

Ideophones in Yir Yoront show some phonological and syntactic peculiarities. For example, they can lack vowels: *trrrt* (of entering), *fffft* (of blowing fire), *ppp* (of handcuffs falling off), *prrr* (of sliding on a salt-pan), *ppbp* (of falling); they can present vowel alternation: *lhop/lep* (of being swallowed), *puy/poy* (of leaving), *kət/kat* (of spearing). There are also isolated cases of extreme complexity, such as *thetpppffff* (of hitting someone with a thrown boomerang).

Ideophones occur immediately before the verb or are finally separated from the verb by a falling-intonation contour. Ideophones are the center of

intonation: they take the highest stress. Syntactically they behave as manner adverbials: *Ngoyo kalpn piw ungnh* ‘I hit him hard’, where *kalpn* is the ideophone. Nevertheless, they do not have all of the syntactic properties of adverbials. Alpher explores the idea that Yir Yoront ideophones are part of a ‘punctuation component’, which includes intonation as a means of syntactic structuring.

The following is a brief list of Yir Yoront ideophones included in Alpher’s paper:

*Chan* of hanging or being suspended, *chawarrq* of picking up and carrying off, *chip* of going along a course, *chirr* of emerging, of arriving or coming into the center from the outside, *chirr* of a boat’s fast motion, *chok* of slicing through something, *chor* of cutting or splitting or ripping open, *churup* of a manta ray landing on the water, *chuy* of plunging into water, *chep* of lightning striking, *karrq* of scraping, *kitkitkit* of a snake’s tongue darting in and out, *kət* of spearing, hitting, *lak* of throwing, knocking, or falling heavily to ground, *lhop* of being swallowed by the Rainbow Serpent, *mot* of waves submerging one, *nychip* of foot being pierced by catfish spine, *nyom* of falling dead, of going underwater, *parrq* of finishing up food, *pill* of shooting star’s flight, *piw* of a twig or stick breaking with a snap, *poq* of picking up and carrying off a corpse, *poor* of floating up to surface of water, *porrl* of dumping waterlily from container to ground, *pow* of getting, fetching, picking up, *purr* of emerging or appearing or rising, *purrt* of throwing, *put* of pushing, *puu* of starting a fire, *puww* of burning, *perr* of beating someone up, *ta* [voiceless vowel] of a spear breaking, *taaa* [voiceless vowel] of lightning striking, *tak* of biting, *tap* of dying, *tatl* of the cracking of a tree about to fall from chopping, *tik* of handcuffs locking, *to* of putting aside for good, *toll* of popping or bursting, *tony* of the breaking or sudden severing of a straight rigid thing, *tor* of striking a blow with an implement, *trtrtrt* of running a flame along a line, *tup* of setting something on fire or cooking it, *turr* of jumping, *tek* of finishing an action, *thak* of a sudden strike, *tharr* of grabbing or catching, *tharrch* of sudden upward motion, *thup* of closing something, of a thrown stick hitting the water, *thut* of assuming a stable relative position, *thet* of chopping, *wurhwurlwurl* of running from water in a panic, *wuuuu(t)* of tree beginning to fall.

Alpher characterizes Yir Yoront ideophones as follows:

“Ideophones in YY constitute a part of speech that belongs in an entirely different realm from the familiar nouns, verbs, and particles, and from bound morphemes. The members of this class are phonologically aberrant in certain patterned ways, are apparently exempt from regular sound change, tend to be onomatopoeic and sound-symbolic in certain limited ways, and constitute the only communicative noises that are permitted in social contexts where ‘speech’ is forbidden” (Alpher 1994: 172).

See AUSTRALIAN LANGUAGES

## Yoruba Ideophones

Yoruba is an Atlantic-Congo language spoken by 28 million people in Benin and Nigeria.

The following data are from Awoyale 1989. Yoruba ideophones are usually reduplicated, although not in exactly the same way other non-ideophonic words reduplicate: ideophone reduplication is freer and more productive.

The following are some examples of reduplicated ideophones: *fòò-fòò* ‘repeatedly red’, *pàpààpà* ‘running very hastily’, *gbàgìdì gbàgìdì* ‘big and weighty’, *búú búú* ‘completely hidden underneath’, *rigidi rigidi* ‘several things being round’, *fínni fínni* ‘of scrutinizing very meticulously’, *yùngbà yungba* ‘honey-sweet’.

There are other forms of reduplication: *rùbùtù tù rùbùtù tù* ‘several things being cute’, *rogodo do rogodo do* ‘several things round and small’, *porogodo do porogodo do* ‘being completely used up’, *fàràgádá dá fàràgádá dá* ‘repeatedly, totally wipe out’.

In all these cases, all vowels share the same tone, but other ideophones present tonal variation: *pòtò pótò* ‘very muddy’, *gbàlá gbàlá* ‘very free or loose moment’, *gbòò gbòò* ‘vegetables being deep green’, *bórò bórò* ‘free and fast in motion’, *púù púù* ‘popping intermittently’, *roro róró* ‘very clear’, *dodo dódó* ‘severely sick or run down’, *yìgì yìgì* ‘not walking straight/upright’.

There are also cases of triplication: *há bá hà bà há bá* ‘very difficult and clumsy motion’, *bírikítì bírikítì bírikítì* ‘very tightly enclosed’, *bàmbà bamba bàmbà* ‘something heavy being wide’, *guu guu guu* ‘landing swiftly many times’, *koro koro koro* ‘winding many times’, *nigín nigín nigín* ‘very clean/white’. Quadruplication is also possible: *yóbo yòbo yòbò yobò* ‘very clumsy and sluggish’, *jìnni jìnni jìnni jìnni* ‘extremely nervous’.

Partial reduplication occurs in the following ideophones: *làndèdè* ‘conspicuously oblong’, *ronkoko* ‘being very blunt’, *fàràgádádá* ‘being totally wiped off’.

Awoyale (1989: 30) points out that tone has the following functions in ideophones: (a) it can indicate the lexical meaning of an ideophonic stem;

(b) it can indicate emphasis; (c) it can indicate intensity; (d) in reduplication, it frequently indicates the speaker's changing attitude to an event.

See AFRICAN LANGUAGES, CREOLES, *DOPPELUNG* (*REDUPLIKATION*, *GEMINATION*), FREQUENCY CODE HYPOTHESIS, *LAUT, TON UND SINN IN WESTAFRIKANISCHER SUDANSPRACHEN*, *PRIMITIVE CULTURE*, REDUPLICATION

## **Yucatec Maya**

See AMERICAN INDIAN LANGUAGES, MAYA

## **Yukaghir**

A nearly extinct language spoken in Yukaghir (Russian Far East)

See NURSERY WORDS

# Z

## Zigzag

This word has some interesting iconic properties. Thun (1963) makes the following commentary in his book on English reduplication:

“A series of short lines at angles in alternate directions; a line or course having sharp turns of this kind; to go or move in a zigzag course. French loanword, ultimately prob. of German origin. The nucleus would be *Zacke* ‘tooth’, perhaps [...] with reference to *Zackenwerk* ‘notched work’; *zickzack* would thus originally have meant ‘in an indented manner’” (Thun 1963: 163).

In general, a *zigzag* is a pattern made up of small corners at variable angles, though constant within the zigzag, tracing a path between two parallel lines; it can be described as both jagged and fairly regular. The pattern is illustrated in the following picture:



FIGURE Z1. Zigzag line

The following is an essential definition of this pattern: “A line or course that proceeds by sharp turns in alternating directions”. This definition has a static side in which a line is described and a dynamic side in which there is a reference to a movement following an imaginary zigzagged line. The line is both continuous and changing: it has alternating orientations with respect to the two imaginary parallel lines. This means that the intertwining of continuity and change is the primary characteristic feature of this pattern.

The word *zigzag* shows an ablaut reduplication\* in which there is a constant consonant pattern *z...g* intertwined with a vowel alternation *i/a*. This morphological pattern has a clear diagrammatic relation with a zigzagged line and could also be related to the abstract association between the concepts of continuity and change. This point can be shown in the following scheme:

## CONTINUITY

Z\_G + Z\_G

## CHANGE

I / A

FIGURE Z2. Iconic interpretation of *zigzag*

From an iconic point of view, consonant reduplication in AR expressions suggests the continuity of the line or course and vowel alternation suggests directional changes. There are two crucial points here. First, the intertwining between continuity and change is essential to the configuration of a zigzagged line or course; second, this interconnection is indicated by a reduplication showing a vowel alternation.

In addition, this word presents two instances of the letter *z*. The shape of this letter mimics, in a perfect way, a zigzagged line. This graphic iconicity is clearly secondary or onomasiological\*, since the shape of the letter has not been motivated by a zigzagged image; in fact, the shape of the original Phoenician letter, *zayin* ‘weapon, sword’, was originally more similar to I than to Z:

Phoenician	Etruscan	Greek
<i>Zayin</i>	Z	Zeta
I	I	Zζ

FIGURE Z3

<https://en.wikipedia.org/wiki/Z>

[Moreno-Cabrera 2014, 2017]

See ABLAUT REDUPLICATION

## Zulu Ideophones

Bantu language of South Africa spoken by more than 15 million people. C. T. Msimang and G. Poulos (2001) offer an overview of Zulu ideophones. The following data are taken from this source.

Zulu is rich in ideophones. Although they are often onomatopoeic, there are many ideophones that do not have a clear onomatopoeic nature.

Ideophones in Zulu differ from regular words, since they do not have affixes and consist of a bare root. In addition, they are usually reduplicated: *ngqo* 'of knocking' > *ngqongqongqo*, *phoko* 'of breaking easily' > *phoqophoqo*, *ndi* 'of rumbling' > *ndindindi*, *khence* 'of tinkling' > *khencekhence*, *qatha* 'of dropping easily' > *qathaqatha*.

Zulu ideophones place extra-long vowels in unusual positions: *geeengelezii* 'of gaping/wide open', *huuubuluzii* 'of gulping down', *bhaaalakazaa* 'of being sprawled out', *foolokohloo* 'of crashing through', *diindilizii* 'of lying stark-naked/exposed'.

In many cases, ideophones are univocalic: *phahla* 'of smashing/dropping', *phehle* 'of breaking apart', *phihli* 'of smashing to pieces', *phohlo* 'of breaking', *phuhlu* 'of decaying', *cababa* 'of being flat', *shelele* 'of slipping', *coshosho* 'of perching', *vuthuthu* 'of rising suddenly', *fofololo* 'of falling', *gulukudu* 'of rushing off'.

Ideophones in Zulu very often occur after the verb *-thi* 'to say' which receives tense/aspect and number affixes, as can be seen in the following examples: *ubhanana umnandi u-thi ncamu-ncamu* 'the bananas are very sweet', *wawubula umlilo wawu-thi bu!* 'he beat out the fire', *waphosa itshe la-thi vri!* 'he threw the stone and it whizzed past'.

See AFRICAN LANGUAGES, BANTU IDEOPHONES, *PRIMITIVE CULTURE*, SYNAESTHESIA

## GLOSSARY

[The arrow (⇒) refers to the entries of the dictionary (in capital letters) in which the iconic expressions appear]

### —A—

ANGRY ⇒ CANTONESE IDEOPHONES *hei<sup>3</sup> gu<sup>2</sup> gu<sup>2</sup>* ‘to be angry’, *nau<sup>1</sup> baau<sup>3</sup> baau<sup>3</sup>* ‘angry’.

### —B—

BABBLE ⇒ BABBLE. ⇒ BALTO-SLAVIC Russian *zhurzhanije* ‘purling, babbling, murmur’. ⇒ *DICCIONARIO* SOUNDS *BABL*, *BALB*, *BLAB*, *BLED*, *BARB*. HUMAN *FARF*, *FARFL*, *FARFR* (difficult pronunciation), *MIM*, *MOM* ‘awkward, imperfect or indistinct pronunciation’. ⇒ *DICTIONNAIRE* *bredouiller*, *gazouiller*. ⇒ GEORGIAN *rak’rak’i* ‘ripple, babble’. ⇒ HEBREW *lʒ* ‘to talk unintelligibly’, *lʒ-tʒ* ‘jaw’, *lʒb* ‘jest’, *ʒlg* ‘to speak strangely’, *lʒg* ‘mock’, *lglg* ‘to mock’, *lhg* ‘to speak much’. ⇒ TURKISH *fan fan* suggests hardly intelligible speaking.

BANG ⇒ BANG. ⇒ BALTO-SLAVIC Russian *khlopók* ‘clap, bang’. ⇒ BASQUE *dzast*, *zart* ‘bang, boom, snap’, *zampa* ‘crash, bang’. ⇒ CREOLES Krio *gbang* ‘sound of a heavy banging or slamming’. ⇒ *DICTIONNAIRE*, *poue*. ⇒ GEORGIAN *batkabutki* ‘banging (guns), jingling (keys)’. ⇒ ILOCANO *libong* ‘bang’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *páuszkiu pauszkėti* ‘to bang, slam’, *búmbtelėti* ‘to boom, bang’. ⇒ SOULETIN BASQUE *barranba*, *barranba* ‘crashing, banging, clattering, roaring, thundering’. ⇒ *URSCHÖPFUNG*. German *blaffen* ‘to snap’.

BARK ⇒ ARABIC *nbəh*. ⇒ ASIAN LANGUAGES Vietnamese *súa*, Thai *hào*. ⇒ BALTO-SLAVIC Latvian *ķiukstēt*, Russian *láyat*, Serbian *lajati*, Polish *szczekać*. ⇒ *DICCIONARIO* ANIMALS *ULĒ*, *BAL*, *HURR* ‘sound of grunting or barking’. ⇒ *DICTIONNAIRE*, *aboyer*. ⇒ FINNO-UGRIC Finnish *haukkua*, *räksyttää* ‘to bark with high pitch’, Khanty *khora-* ‘to bark’. ⇒ GEORGIAN *qepa* ‘barking’. ⇒ GERMANIC LANGUAGES German *bellen*, *belfern*. ⇒ ILOCANO *taul* ‘barking’. ⇒ KHUMI *ng(y)e<sup>1</sup> ng(y)e<sup>2</sup>* ‘sound of barking’. ⇒ SOMALI *wah* ‘to bark’. ⇒ TAMIL *loḷḷeṇal* ‘dog’s bark’. ⇒ VIETNAMESE *súa* ‘to bark’.



- BAWL** ⇒ *DICCIONARIO BRAK* Galician *bracar* ‘bawling of calf and other animals’. ⇒ *DICTIONNAIRE*, *beugler*, *brailler*, *japper*. ⇒ *PERSIAN khornash (keshidan)* ‘to growl, bawl’.
- BEAT** ⇒ *ABLAUT REDUPLICATION* Basque *tis-tas* ‘heart beating’; *tiki eta taka* ‘to hit’; *trinbilin-tranbalan* ‘hitting’; *zipirt eta zapart* ‘hitting, beating’; *zipirt-zapart* ‘to throw punches left, right and centre’; *zifri-zafra* ‘beating, shaking’; *tri-tra* ‘to beat’; *xirti-xartaka* ‘to kick a ball around’; *kri-kra* ‘strumming’; *tingili-dangala* ‘to crash’; *ris(t)-ras(t)*, *sisti-sasta* ‘to burst, sting, punch’. ⇒ *AFRICAN LANGUAGES* Lamba *ukupama pame pame pame* ‘to beat and beat and beat again’. ⇒ *ASIAN LANGUAGES* Tamil *ik tik* ‘heart beating with fear or sadness’, *paT paT* ‘palpitation of heart’. ⇒ *AUSTRALIAN LANGUAGES* Yir-Yoront *tala tala* (of beating someone up), *tu tu tu* (of repeated blows, of kicking while swimming, of gunshots). ⇒ *BAKA lang lang lang* ‘beat a nut or hard fruit with a machete’. ⇒ *BASQUE taup* ‘sound of heartbeat’, *pilpil-pulpul* ‘palpitation’. ⇒ *CANTONESE IDEOPHONES* *bing<sup>4</sup> bing<sup>4</sup> tiu<sup>3</sup>* ‘beating, usually of heart’. ⇒ *CATALAN* *bum-bum*, *catric-catroc/cataract/catruc*, *clap-clap*, *patatrap/patatrop/patatrip*, *patrip/patrap*, *tic-tac*, *tec-tec*, *tric-trac*, *trip-trap*, *trop-trop*. ⇒ *CILUBÀ mbambamba*, *ntùm ntùm*, *tàkàtàkà*, *tukùtukù* ‘heart beat’, *kuboobola* ‘beat out’. ⇒ *DICCIONARIO*. *HUMAN CHUT* ‘heart beating’. ⇒ *IŠTIKTUKAI takš(t)* ‘heavy beating’. ⇒ *KHUMI khang<sup>l</sup>* ‘sound of beating’. ⇒ *KOREAN twukun-twukun-(hata)* ‘palpitate’. ⇒ *NIGERIAN PIDGIN gbàmbgàm* ‘sound of a heavy beat e.g. heartbeat’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *kaukszt*, *kauksz* ‘beat, hit’, *pókszt* ‘slap, beat, whip’, *timpt* ‘the sound of heartbeat’. ⇒ *TSONGA gèdlè-gèdlè* ‘flutter, palpitate, as of heart in sudden fright’. ⇒ *YIR-YORONT perr* ‘beating someone up’.
- BEEP** ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *czypsiù czyps* ‘to beep, peep’.
- BELCH/VOMIT** ⇒ *DICCIONARIO*. *BRAK braken* ‘to vomit’ ⇒ *ELEMENTARE* Wolof *gix* ‘to belch’, Sotho *sema* ‘to belch’, Dinka *ngok* ‘to vomit’, Arabic *qa’a* ‘to vomit’, Estonian *kugistama* ‘to belch’, Nasioi *kurin* ‘to vomit’, Manchu *kekere* ‘to belch’. ⇒ *KALULI Gɔɔ To gololo* ‘belch’. ⇒ *KARO IDEOPHONES ué ué* ‘vomit vomit’. ⇒ *KHMER IDEOPHONES lu:ng lu:ng* ‘impression of dog vomiting’. ⇒ *MUNDANG kI* ‘vomit’. ⇒ *PASTAZA QUECHUA palay k<sup>w</sup>inana* ‘to vomit chunks of food’.
- BELL** ⇒ *FINNO-UGRIC* Finnish *kalkkara* ‘bell’, *kilkkaro* ‘small, quiet bell’. ⇒ *GERMANIC LANGUAGES* English *ding-dong* ‘the sound of

- a bell', German *Klingklang* 'ding dong'. ⇒ ILOCANO *kiling* 'sound of a bell'. ⇒ *ONOMATOPÉES ET MOTS EXPRESSIFS* Latin *tintinnabulum* 'call-bell'. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *tang* 'low-pitched sound of a bell', *ting* 'high-pitched sound of a bell'. ⇒ SOULETIN BASQUE *tilin tilin, tilin tilun, tilin tulun, ttilin ttilin, ttulun ttulun, tulun tulun* 'small bell sound, high-pitched sound'. ⇒ TAMIL *ṭaṇṇēṇal* 'sound of a bell or gong', *viṇṇēṇal* 'tinkling, as of a bell', *kaṇakaṇēṇal* 'tintinnabulation; tinkling, as of bells', *kiṇukkuṇṇēṇal* 'tinkling sound as of a hand bell'. ⇒ TURKISH *çan çan* 'sound similar to that of a bell, babbling loudly and constantly'.
- BELLOW ⇒ BALTO-SLAVIC Russian *ryov* 'roar, bellow, howl'. ⇒ *DICTIONNAIRE* *beugler, bramer, mugir*. ⇒ FINNO-UGRIC Finnish *mylviä*, Khanty *wokh-* 'to bellow'. ⇒ GEORGIAN *ghriali* 'roar, bellowing, wailing, howling'. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *raung* 'to roar, bellow, growl'. ⇒ VIETNAMESE *tác* 'to bellow'.
- BIG ⇒ AKWAPEM TWI IDEOPHONES *kakraa* 'huge/big', *yantamm* 'vast'.
- BILLOW ⇒ ILOCANO *yubuyub* 'billow'.
- BITE ⇒ *DICCIONARIO* BROK Old Slavic *gryza* 'to bite'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *diḡt* 'stinging, biting', *krimst* 'bite sound'. ⇒ YIR-YORONT *tak* of biting.
- BITTER ⇒ CANTONESE IDEOPHONES *fu<sup>2</sup> fu<sup>2</sup> gip<sup>3</sup> gip<sup>3</sup>k* 'a bit/too bitter'.
- BLEAT ⇒ ARABIC *sah* 'to bleat, moo, bawl, bellow', *bæbæe* 'to bleat (sheep)', *mæmæe* 'to bleat (goat)'. ⇒ BALTO-SLAVIC Russian *bleyat* 'to bleat', Serbian *blejati*. ⇒ *DICCIONARIO* ANIMALS *BA, BAK, BLEK, BLA, BLIT, ME, MEK*. ⇒ *DICTIONNAIRE*, *béguetter, bêler*. ⇒ GEORGIAN *bghavili* 'bleating, groaning, roaring', *qmuquni* 'bleating (sheep)'. ⇒ GERMANIC LANGUAGES German *bâhen, meckern*. ⇒ ILOCANO *emmak* 'bleating sound of a sheep'. ⇒ *MIM/MOM/MUM* Sanskrit *mimayat* 'to bleat'. ⇒ TETELA *bééé*
- BLINK ⇒ ABLAUT REDUPLICATION: Khakas *tip-tap* 'blinking, winking'. ⇒ BALTO-SLAVIC Lithuanian *mirkčioti*. ⇒ CANTONESE IDEOPHONES *ngaan<sup>5</sup> zaam<sup>2</sup> zaam<sup>2</sup>* 'blinking eyes'. ⇒ *DICTIONNAIRE*, *clignoter*
- BLOW ⇒ AFRICAN LANGUAGES Kisi *faka-faka* 'moving fast', *feel/fee-fee* 'being blown, a whistle, a horn, breathing', *foo* 'wind whistling', ShiNzwani *fwii* 'sound of rapidly passing by'. ⇒ AMERICAN INDIAN Katuena *wuuuu* 'wind blowing close by', *thuuu* 'wind blowing far away'.

- ⇒ BINI *títítítí* ‘sounding like the wind in the trees’. ⇒ CILUBÀ *pee, puupuu* ‘sound of wind’. ⇒ CREOLES Kriyòl *bang* ‘of a blow, thud’, Guyanese French Creole *bim* ‘of a blow’. ⇒ *DICZIONARIO SOUNDS BĒLG, HU, PEF, PIF, POF, PUF*. HUMAN *FUF*. ⇒ *DICTIONNAIRE souffler*. ⇒ FRENCH *pouffer* ‘to blow’, *poufir* ‘to swell’. ⇒ HIXKARYANA *ofu ofu* ‘blowing, breathing out heavily’. ⇒ KATUENA *fu* ‘blow’. ⇒ KHUMI *püng* ‘sound of wind blowing’. ⇒ NIGERIAN PIDGIN *fu fu* ‘sound of blowing of air’. ⇒ PHONAESTHEME Latin *fl-* ‘to blow’, ‘to flow’. ⇒ *PRIMITIVE CULTURE* Kanuri *fungin* ‘to blow, swell’, Australian *wirriti* ‘to blow, as wind’. ⇒ *PRIMITIVE AND UNIVERSAL* Persian *pufidan* ‘blow’, Sanskrit *vā, vīj* ‘blow’. ⇒ TAMIL *cacacacaveṇal* ‘blowing of the wind’. ⇒ *VÖLKERPSYCHOLOGIE* Malay *puput*, Tongan *bubu*, Maori *pupui*, Australian *bobun*, Kafir *pupuza*, Galla *bufa*, Finnish *pukkia*, Hebrew *paah*.
- BOIL ⇒ BASQUE *pil-pil* ‘sound of boiling’, *gal-gal* ‘boil’, *txil-txil* ‘soft boiling’. ⇒ *DICZIONARIO SOUNDS BARBL, BORBL, BORBR, CHIND, CHER, GARF, GORG, GURG* ‘also gargling’. ⇒ *DICTIONNAIRE bouillir*. ⇒ EMAI *kútúkútú* ‘(water) boiling’. ⇒ HEBREW *bwš/bšš/bšbš* ‘boil, bubble’, *bšy* ‘cause to swell or boil up’. ⇒ KATUENA *forio* ‘boiling water bubbling’. ⇒ KILBA *pòr-pòrù*. ⇒ *PRIMITIVE CULTURE* Tupi *púpú, pupúre* ‘to boil’, Zulu *pupuma* ‘to bubble, boil’. ⇒ SOULETIN BASQUE *bur bur* ‘continuous noise, boiling’, *txafla txafla* ‘boiling, squelching’. ⇒ TAMIL *katakateṇal* ‘sound produced in boiling, as of a liquid, in flowing, as of water from a sluice’, *kulakuleṇal* ‘gurgling sound, as of water when boiled’. ⇒ TETELA *heeee* mimics the sound of a boiling kettle, of a distant engaged engine. ⇒ WOLAITTA *tólólu g—* ‘to boil over’.
- BOOM ⇒ BOOM. ⇒ BASQUE *zart* ‘bang, boom, snap’. ⇒ CREOLES Popular Brazilian Portuguese *bum* ‘Boom! Pang! Pow!’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *búmbtelėti* ‘to boom, bang’.
- BOUNCE ⇒ EBWELA *dómbu* ‘bouncing’. ⇒ TOLONAC *lujlhulujlhu* ‘an object bouncing up and down’. ⇒ TSONGA *fěhlè-fěhlè* ‘something soft and bouncy’.
- BOW-WOW ⇒ BOW-WOW. ⇒ ASIAN LANGUAGES Vietnamese *súa gâu gâu, súa ăng ăng*, Thai *hào hông hông, hào eng eng*, Chinese *wāng wāng*. ⇒ BASQUE *au-au*. ⇒ KOREAN *meng-meng* ‘bow-wow’. ⇒ PERSIAN *vâq vâq/hâp hâp/ow ow*. ⇒ VIETNAMESE *gâu gâu*.

- BRAY ⇒ *DICTIONNAIRE braire*. ⇒ FINNO-UGRIC Hungarian *ordít* ‘to roar, bray, howl’. ⇒ MUNDANG *híhòò híhòò* ‘sound of a donkey, braying’. ⇒ WELSH *nadu*
- BREAK ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *law* (of breaking off a leaf from a twig), *toll* (of a rope breaking). ⇒ BAKA *pao* ‘he breaks a branch’. ⇒ CATALAN *cataclac/cataclec/cataclac, catacrac/catacrec/catacric/catacruc, clac, craix, clanc, clang, clec, clic, clinc, clong, cluc, crac, cric-crac, patacrac, tinc, trac*. ⇒ *DICCIONARIO BRAK* Dutch *breken* ‘to break’, *brokken* ‘to break off’, Swedish *bräcka* ‘to break’, German *brechen* ‘to break’; SOUNDS *BROK, BRESK, BIT, CHAB, KLAD* (also boiling), *KRAK, KREK, KRIK* (also expectorating and opening), *RAK* (also splitting), *TRAK, TREK, TRIK, TROK, TRUK*. ⇒ *DICTIONNAIRE briser*. ⇒ HEBREW *pšš* ‘break’, *pšps* ‘break into pieces’, *pšh* ‘cause to break’, *pšf* ‘break, wound’. ⇒ HIXKARYANA *kryay* ‘breaking (of tooth, bone)’. ⇒ KHUMI *thla<sup>2</sup>* ‘breaking sound’, *pha<sup>5</sup>* ‘sound of a large object breaking’, *phe<sup>5</sup>* ‘sound of a small object breaking’, *thi<sup>1</sup>thu<sup>1</sup> thi<sup>1</sup>thu<sup>2</sup>* ‘sound of rope breaking’. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *kerak* ‘sound of a break in a joint’, *rik* ‘sound of breaking a stick, a bone’. ⇒ PASTAZA QUECHUA *tus pakina* ‘the sound of breaking something hard, such as a bone’. ⇒ PHONAESTHEME Latin *fr-* ‘to break’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *brákszt, bráksz, brabraksz* ‘sound of breaking, knocking’. ⇒ SOMALI *qac* ‘to break’. ⇒ TAMIL *vetukkeṇal* ‘noise of breaking’. ⇒ TETELA *té* ‘a little slight sharp noise produced by breaking or cracking’. ⇒ TURKISH *kirt kirt* ‘breaking, cutting, scraping, chewing, grating’. ⇒ WOLAITTA *túlku* ‘oott- ‘to break easily (of something small). ⇒ YIR-YORONT *piw* ‘a twig or stick breaking with a snap’, *ta* [voiceless vowel] ‘of a spear breaking’, *tony* ‘breaking or sudden severing of a straight rigid thing’. ⇒ ZULU *phoko* ‘of breaking easily’, *phehle* ‘of breaking apart’, *phohlo* ‘of breaking’.
- BREATHE ⇒ KHUMI *hüng<sup>1</sup> hüng<sup>5</sup>* ‘sound of irregular breathing’. ⇒ SOULETIN BASQUE *pixta paxta* ‘breathing sound’. ⇒ TAMIL *püttuppüttenal* ‘hard breathing, as from running’.
- BRIGHT ⇒ AKWAPEM TWI IDEOPHONES *hān* ‘brightness’. ⇒ AMERICAN INDIAN Totonac *lam* ‘a bright light flashing, a fire flaring up’. ⇒ CANTONESE IDEOPHONES *gwong<sup>1</sup> caang<sup>4</sup> caang<sup>4</sup>* ‘very bright’. ⇒ CHINTANG *repreprep*.
- BUBBLE ⇒ AFRICAN LANGUAGES Siwu *gblogblogblo* ‘bubbling’. ⇒ AUSTRALIAN LANGUAGES Gooniyandi *boorrag* ‘bubble up’. ⇒ HIXKARYANA *purum purum purum purum puru* ‘bubbling of water

- (in a river or when boiling). ⇒ KATUENA *forio* ‘boiling water bubbling’. ⇒ KHUMI *bu<sup>1</sup>bu<sup>2</sup>* ‘sound of bubbling water’. PHONAESTHEME Latin *gr-* ‘bubbling’, ‘gargle’, ‘croak’. ⇒ PRIMITIVE CULTURE Zulu *pupuma* ‘to bubble, boil’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *blèrbt* ‘to bubble’, *burg* ‘bubble’. ⇒ SOMALI *fush* ‘to bubble’. ⇒ TAMIL *kuppukuppēnal* ‘jerking, effervescing, bubbling, crackling noise’.
- BUFF ⇒ URSCHÖPFUNG German *schwabeln* ‘to buff sth., wobble’
- BULLFROG ONOMATOPOEIA ⇒ AFRICAN LANGUAGES Kisi *ng oong ng oong ndo*.
- BUMP ⇒ DICIONARIO SOUNDS CHACH, CHAF, CHAFL, CHAFR, CHANG, CHANK, CHAST, ZAP, ZART, CHAZ, DAB, DUB.
- BURP ⇒ AUSTRALIAN LANGUAGES Gooniyandi *dawoorrag*. ⇒ ILOCANO *dol’ok* ‘burp’.
- BURST ⇒ CILUBÀ *kidikidi/tòkotòko* ‘bursting’. ⇒ DICIONARIO SOUNDS BAMB, BUMD, KLAF, PAT (also treading, hitting), DAMB, DOMB, DUMB, PAF, RON, RUN, RIN (vibrant and booming sound), RUM (shaking, booming), TRAK, TREK, TRIK, TROK, TRUK. ⇒ DICTIONNAIRE, *éclater*. ⇒ PASTAZA QUECHUA *tus tuyyana* ‘to burst open’. ⇒ YIR-YORONT *toll* ‘popping or bursting’.
- BUTTERFLY ⇒ BUTTERFLY. ⇒ CILUBÀ *cibàyibàyì* ‘butterfly’.
- BUZZ ⇒ BUZZ. ⇒ ARABIC *zanzan, zagnen* ‘to buzz, to hum’. ⇒ ASIAN LANGUAGES Chinese *wēngwēng* ‘buzz/hum’. ⇒ BAKA *juuu*. ⇒ BALTO-SLAVIC Russian *zhuzhzat’* ‘to hum, buzz, whizz’, Serbian *zujati* ‘to buzz, hum’, Czech *bzučet* ‘to buzz, hum, whirr’. ⇒ DICIONARIO SOUNDS BRU, FURL, FĚRL, FRĚL, FRIL, FROL, FRI, RATL, ZUMB. ⇒ DICTIONNAIRE *bourdonner*. ⇒ FINNO-UGRIC Finnish *inistä* ‘to buzz (of mosquitos)’, *siristä* ‘to buzz’; Hungarian *zűmmög* ‘to whirr, reel, hum, buzz’, Khanty *marii-, pängii-* ‘to buzz, hum’. ⇒ GEORGIAN *bzuili* ‘buzzing, humming, droning’ *bzuil-bzuilit* ‘buzzing, humming, droning’. ⇒ GERMANIC LANGUAGES German *brummen* ‘buzz, hum’, *summen* ‘to buzz, hum’, *sirren* ‘to buzz, whirr’, *surren* ‘to buzz, whizz’. ⇒ HIXKARYANA *peryem peryem peryem perye* ‘buzzing of flies’. ⇒ ILOCANO *sayengseng* ‘buzzing sound of mosquitoes’, *wengweng* ‘buzz’. ⇒ KHUMI *vang<sup>1</sup> vang<sup>1</sup> vang<sup>1</sup>* ‘mosquito or fly sound’. ⇒ MUNDANG *nyy* ‘sound of a bee, humming’. ⇒ OSNOVY FONOSEMANTIKI Indonesian *dengung, dengong* ‘sound of a siren, honking, buzzing, humming’, *lesing* ‘to buzz’ *bising* ‘buzzing’. ⇒ PRIMITIVE CULTURE Australian *kurarriti* ‘to hum, buzz’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *burszkiù bürkszti* ‘to

hum, buzz'. ⇒ TAMIL *moçumoçeçal* 'swarming, as of bees', 'gurgling sound, as in drinking'. ⇒ TONAC *tzanna* 'insects buzzing'. ⇒ WELSH *suo*. ⇒ WHITE HMONG *mí mè* 'the sound of mosquitos buzzing by your ear', *li lòng* 'loud droning, bees buzzing', *lú lè* 'the sound of a vacuum cleaner, bees, and airplane'.

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- CAKCLE ⇒ CACKLE. ⇒ ARABIC *tamtam* 'to stutter' *qaqa*. ⇒ BALTO-SLAVIC Russian *gógot* 'cackle, loud laughter', Serbian *kokodakati*. ⇒ *DICCIONARIO ANIMALS KAKAR, KOKOR, KIKIR, KUKUR, KERK, KASK*. ⇒ *DICTIONNAIRE caqueter*. ⇒ FINNO-UGRIC Finnish *nauraa kiekua* 'to cackle'. ⇒ GEORGIAN *k'ivk'ivobs* 'cackles'. ⇒ GERMANIC LANGUAGES German *gackern* 'to cackle'. ⇒ ILOCANO *arakiak* 'sound of many hens', *kakak* 'cry of a hen', *kekkek* 'cry of a hen when calling its chicks', *kokkok* 'clucking sound of chickens'. ⇒ INDO-EUROPEAN *\*ghagha* 'cackle (of geese). ⇒ MUNDANG *gál* 'cackle'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *kirkšiu kirkšėti* 'to cackle' (of hens), *kiáuksiu kiáuksėti* 'to cackle' (of turkeys). ⇒ VIETNAMESE *gáy* 'to cackle', *ù ù cạc cạc* 'cackling'.
- CAW ⇒ ASIAN LANGUAGES Chinese *tí* 'crow, caw'. ⇒ BALTO-SLAVIC Russian *kárvat'* 'to caw, croak'. ⇒ FINNO-UGRIC Finnish *rakkua* 'to caw (crow or raven)'. ⇒ GEORGIAN *ch'khavili* 'cawing'. ⇒ KHUMI *o<sup>1</sup>wa<sup>2</sup> o<sup>1</sup>wa<sup>2</sup>* 'sound made by crow or raven'. ⇒ *VÖLKERPSYCHOLOGIE* Greek *κράζω* 'to caw'.
- CHAT/CHATTER ⇒ ARABIC *xərnən*. ⇒ ASIAN LANGUAGES Tamil *aluvaluveNal* 'unceasing chatter'. ⇒ BABBLE Lithuanian *plepeti*, Serbian *brbljati*, Czech *brebentit*, Spanish *blablá, blabláblá* 'idle talk'. ⇒ BALTO-SLAVIC Latvian *blarkšķēt*, Lithuanian *vepnóti*. ⇒ CATALAN *bla-bla, garranyeu, gu-gu, nyau-nyau, nyic-nyic, patatam, patatim-patatum, piu, tipitap/tipitip, xa-xa-xa, xec-i-xec, xep-a-xep*. ⇒ *DICTIONNAIRE, babiller*. ⇒ FRENCH *babiner, bobiner, débobiner, boboter, bobilloner, papeter, papoter, papier* 'to chat'. ⇒ GEORGIAN *auk'atsk'atsebs* 'will make sb.'s (teeth/glasses) chatter/rattle'. ⇒ GERMANIC LANGUAGES English *chit-chat* 'gossipy talk', *tittle-tattle* 'chat, gossip', German *schnickschnack* 'chit-chat'. ⇒ HINDI *chaRbaRiyaa* 'chattering'. ⇒ INDO-EUROPEAN *\*der-der* 'murmur, chat'. ⇒ KATUENA *ha* 'chatting'. ⇒ PHONOMIME Japanese/Korean *peyapetya (J)/caycalcaycal (K)* 'chatter'. ⇒ SPANISH *chacharear* 'to chatter', *cháchara* 'chatter', *chacharrero* 'chatterbox', *chafardear* 'to gossip'. ⇒ *URSCHÖPFUNG*. German *plaudern* 'to chat'.

- CHEEP ⇒ BALTO-SLAVIC Russian *pisk* ‘squeak, cheep’. ⇒ BASQUE *pio, txio*. ⇒ *DICCIONARIO*. ANIMALS *PIP*.
- CHEW ⇒ *DICCIONARIO* HUMAN *CHAMP, MAND, MORF MORFL, MARR, MORR, MURR*. ⇒ *DICTIONNAIRE* *croquer*. ⇒ FRENCH *paper, papeter, papelocher* ‘to eat’. ⇒ KATUENA *kraw* ‘chew’. ⇒ SHONA *babandu* ‘chewing hard and brittle food’. ⇒ SOULETIN BASQUE *miaxta miaxta* ‘noisy eating’, *ñasta ñasta* ‘noisy chewing’, *hafla hafla, hanbla hanbla, zafla zafla, zifla zafla, zifli zafla, masta masta, miasta miasta, miaxta miaxta, nasta nasta* ‘eating noises’. ⇒ TOMMO-SO *cákàm~cákàm* ‘smack one’s mouth while chewing’, *kòém~kòém* ‘sound of someone eating something dry and powdery’, *yògóbù~yògóbù* ‘sound of quick chewing, especially when monkeys chew’. ⇒ TONONAC *pa'nlhupa'nlhu* ‘a toothless person chewing food’. ⇒ TURKISH *ham hum* mimics the opening and closing of the mouth when eating, *kirt kirt* ‘breaking, cutting, scraping, chewing, grating’. ⇒ VIETNAMESE *nhóp nhép* ‘of chewing discreetly’, *tóp tép* ‘of chewing loudly’, *chóp chép* ‘of chewing very loudly’.
- CHIRP ⇒ ARABIC *zəqzəq* ‘to chirp, to babble’. ⇒ ASIAN LANGUAGES Chinese *míng* ‘the chirp of a bird’. ⇒ ASIAN LANGUAGES Tamil *kiich kiich* ‘chirping’. ⇒ BALTO-SLAVIC Latvian *čiepstēt*, Russian *chirikat*, Serbian *cvrčati* ‘to chirp, to sizzle’, Polish *piszczeć*, Czech *švitořit*. ⇒ BASQUE *txirri-txirri* ‘chirping (of crickets)’. ⇒ *DICCIONARIO* ANIMALS *CHI, CHIRP*. ⇒ *DICTIONNAIRE*, *pépier*. ⇒ FINNO-UGRIC Finnish *sirkuttaa, livertää*. ⇒ FRENCH *piper* ‘to chirp’. ⇒ GERMANIC LANGUAGES German *zwitschern* ‘to twitter, chirp’, *tschilpen* ‘to chirp, tweeter’. ⇒ HEBREW *špr* ‘peep > bird > cover or call by noise > fly over’, *špp/špsp* ‘chirp, peep’. ⇒ PHONOMIME Japanese/Korean *tyuntyun (J)/ccaykccayk* ‘chirp’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *czerskiù czerszti* ‘to twitter, chirp, hiss’. ⇒ TAMIL *kiccukkiccenał* ‘screaming, squawking, chirping, twittering sound’. ⇒ VIETNAMESE *tót* ‘to chirp’.
- CHIRR ⇒ FINNO-UGRIC Finnish *sirittää* ‘to chirr (of grasshoppers, crickets)’.
- CHOP ⇒ KATUENA *taí* ‘chop’. ⇒ PASTAZA QUECHUA *ch'u pikana* ‘to chop something into pieces, to mince’. ⇒ YIR-YORONT *thet* ‘chopping’.
- CHORTLE ⇒ FINNO-UGRIC Finnish *hörahtää*.
- CLANG/CLANK ⇒ BALTO-SLAVIC Russian *lyazg* ‘clank, clang’. ⇒ BANTU IDEOPHONES Luvale *ngúndúngu-ngúndúngu*. ⇒ BASQUE



- brinbraun* ‘clang’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *cinktelėti* ‘to clink, clank’.
- CLAP ⇒ BALTO-SLAVIC Russian *khlopók* ‘clap, bang’. ⇒ KATUENA *tow* ‘clap hands’. ⇒ *URSCHÖPFUNG*. German *klatschen* ‘to clap’.
- CLASH ⇒ SPANISH *chocar* ‘to collide, crash’, *choque* ‘crash, clash’, *choquezuela* ‘kneecap’.
- CLATTER ⇒ ABLAUT REDUPLICATION English *clish-clash* ‘the reciprocal or alternate clash of weapons’; *clitter-clatter* ‘alternating repetition of clattering noise’. Khakas *sigdir-sagdir* ‘clattering’. ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *trrra* (of gathering together things that clatter). ⇒ BASQUE *burrumba*. ⇒ CREOLES Haitian *bim-bam* ‘clatter, quarrel, fistfight’. ⇒ FINNO-UGRIC Finnish *kalkuttaa* ‘clatter’. ⇒ GEORGIAN *i’qap’uni* ‘clatter, patter’. ⇒ KHUMI *tlöyng<sup>l</sup> thöyng<sup>l</sup>* ‘clattering sound’. ⇒ RUIHONG *te’ij<sup>55</sup> te’ij<sup>55</sup> k’uaŋ<sup>55</sup> k’aŋ<sup>55</sup>* ‘the sound of metal collision’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *klabàkszt* ‘rattling, clattering sound’, *tàrkszt, tràkszt, trèkszt* ‘a clattering, cracking noise’. ⇒ SOULETIN BASQUE *barranba, barranba* ‘crashing, banging, clattering, roaring, thundering’.
- CLEAR ⇒ AFRICAN LANGUAGES Yoruba *gboogboo* ‘space being repeatedly clear’. ⇒ AKWAPEM TWI IDEOPHONES *korangyee* ‘clear’.
- CLICK ⇒ CLICK. ⇒ ABLAUT REDUPLICATION English *click-clack* ‘reduplicated expression for recurring or successive sounds of the click type’; ⇒ ARABIC *qarbae*. ⇒ BALTO-SLAVIC Russian *shchelchok* ‘flick (fingers), click (computer mouse)’. ⇒ *DICZIONARIO* SOUNDS *GRAP* (sound produced by springs or staples), *KLENK* (sound made by springs, clips and brooches), *KLING* (high-pitched metallic sound), *KLAMP, KLIMP* (sound of a spring), *KRAP* (sound made by springs, staples, bolts, latches, shoes, etc.), *KRANG, KRING, KRONG, PRANK* (sound made by springs, traps, fetters). ⇒ *DICTIONNAIRE* *clappement* ‘clicking’. ⇒ ILOCANO *kitol* ‘click’. ⇒ KHMER IDEOPHONES *keup keup* ‘click clack’.
- CLINK ⇒ BASQUE *txin-txin* ‘clinking’. ⇒ *DICTIONNAIRE* *tinter* ‘to jingle, clink, ring’. ⇒ KOREAN *callang-callang-(hata)* ‘clink, jingle’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *cinktelėti* ‘to clink, clank’, *brjnkst* ‘clinking fall’, *cinkt* ‘clink’, *skimt* ‘ring, clink’. ⇒ SOMALI *qalaw* ‘to ring, clink (bell)’. ⇒ TAMIL *kinneṇal* ‘tinkling, clinking sound’. ⇒ TURKISH *cang, cing, cong, cung, cunk* ‘clinking’. ⇒ *URSCHÖPFUNG*. German *klirren* ‘to clink, chink’.
- CLOUDY ⇒ AKWAPEM TWI IDEOPHONES *kusuu* ‘cloudy’.



- CLUCK ⇒ ABLAUT REDUPLICATION Khakas *xirt-xart* ‘clucking’. ⇒ ASIAN LANGUAGES Vietnamese *cuc tác*. ⇒ BALTO-SLAVIC Latvian *klukstēt*. ⇒ *DICTIONNAIRE*, *closser*. ⇒ KHMER IDEOPHONES *ktaw:t ktaw:t* ‘cluck of hen’. ⇒ *URSCHÖPFUNG*. German *glucken* ‘to cluck’.
- CLUMSY ⇒ AFRICAN LANGUAGES Yoruba *há bá-hà bá-há bá* ‘very difficult and clumsy motion’. ⇒ CANTONESE IDEOPHONES *leon<sup>6</sup> leon<sup>6</sup> zeon<sup>6</sup> zeon<sup>6</sup>*. ⇒ YORUBA *yóbo yòbo yòbò yòbò* ‘very clumsy and sluggish’.
- CLUSTER ⇒ AMERICAN INDIAN Pastaza Quechua *dzawn makanakuna* ‘to fight as a group’.
- CLUTTER ⇒ ABLAUT REDUPLICATION Mandarin Chinese *dīngdāng* ‘the sound of jingling or cluttering’.
- COCK-A-DOODLE-DO ⇒ AFRICAN LANGUAGES Gbaya *kokeng gekoo* ‘cock-a-doodle-do’. ⇒ ASIAN LANGUAGES Vietnamese *Gáy ó ó o o o*, Thai *kan èk í èk èk*. ⇒ GEORGIAN *qīliqo*. ⇒ PERSIAN *ququliquu* ‘rooster’. ⇒ VIETNAMESE *cuc tác* ‘hen’.
- CONFUSE ⇒ CILUBÀ *lùngidingidi* ‘confusingly’.
- COMPLETELY ⇒ CREOLES Krio *fitifata* ‘completely (of destroying)’.
- COO ⇒ BALTO-SLAVIC Serbian, *gukati* ‘to coo’. ⇒ *DICIONARIO ANIMALS RO, RU, ROLL, RULL*. ⇒ FINNO-UGRIC Finnish *kujertaa*, Hungarian *turbékol* ‘to coo’. ⇒ GEORGIAN *k’rut’uni* ‘(cat’s) purring, (dove’s) cooing’.
- COPULATE ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *chikchikchik* (of a sex act). ⇒ CREOLES Krio *jekjek* ‘to have sex with a harlot’, *jigjig* ‘sexual intercourse (vulgar)’. ⇒ KARO IDEOPHONES *yok* ‘copulate’.
- COUGH ⇒ ARABIC *kàhkàh*. ⇒ AUSTRALIAN LANGUAGES Gooniyandi *goonthoorrg*. ⇒ BALTO-SLAVIC Latvian *krekstēt*. ⇒ *DICIONARIO HUMAN TUS*. ⇒ *DICTIONNAIRE*, *tousser* ‘to cough’, *toux* ‘cough’. ⇒ *ELEMENTARE* Ancient Indian *kash*, Old Slavic *kash*, Lithuanian *kōs*, Latvian *kās*, Albanian *kul*, Old Irish *cas*, Hungarian *köh*, Finnish *kahja*, Estonian *köhi*, Ewe *kpekpe*, Dinka *ghol*, Oromo *kufa*, Arabic *qahaba*, Somali *quffa*, Chinese *kai*, Chinook *hoho*, Maku *hoho*, Navaho *kos*, Mbundu *kohona*, Fang *kogi*, Monjombo *koko*, Bare *ahus*, Kunama *kos*, Amharic *hasasa*, Amazigh *koh*, Mordvin *koz*, Livonian *kev*, Norwegian Sami *gosatak*, Udmurt *kizo*, Khmer *kaak*, Nicobarese *hooa*, Motu *hua*, Bauru *huu*, Nasioi *kou*, Kayapo *kak*, Shipibo *huko*, Biloxi *xoxo*, Otomi *hehe*, English *chincough*, Dutch *kinkhoest*, Swedish *kikhosta*, Danish *kighoste*, Latin *tussis*, Spanish, Catalan and Provençal

*tos* ‘cough’, Mandingo *toto*, Mende *tohe*, Tuareg *tasu*, Bribri *to* ‘to cough’. ⇒ MUNDANG *hèl* ‘cough’. ⇒ SOMALI *qux* ‘cough’.

CRACK, CRACKLE ⇒ CRACK. ⇒ ABLAUT REDUPLICATION Basque *grik-grak* ‘crackling’; *kriski-kraska*, *krisk-krask* ‘creaking, crackling’; *kriskitin-kraskitin* ‘clacking of castanets, snapping’; *klis-klas* ‘to crack, crackle’; *kisk-kask*, *kisk-kosk* ‘to clash, crack’; *kirrin(ka)-karran(ka)* ‘squeaking’, ‘creaking’. Khakas *tir-tar* ‘loud crackling’, *mizh’ir-mazh’ir* ‘crackling, crunching sound’, ‘noisy quarrel’. Mandarin Chinese *pīpā* ‘the sound of crackling’. ⇒ BALTO-SLAVIC Latvian *knikšķēt*, *sprakšķēt*, Lithuanian *brākšt~brākš*, Lithuanian *treskėti*, *brakšėti/braškėti*, *bruksėti* ‘to crackle’ Russian *tresk* ‘crack, crackle, crackling’, Polish *trzaskać*, *trzeszczeć* ‘to crackle’, Czech *prskat* ‘to splutter, spit, sizzle, crackle, hiss’. ⇒ BASQUE *krak!*. ⇒ *DICZIONARIO* BRAK Icelandic *brakak* ‘to crackle’, Swedish and Norwegian *brak braka* ‘crack’, Swedish *brackar* ‘crack’, *KLIK* ‘crackling, trembling, swinging, tickling’; SOUNDS CHASP, CHISP CHASP, CHISP *CHIRRINK*, *CHARRASK*, *CHIRRISK*, *CHARRAST*. ⇒ DIDINGA *var* ‘sound of cracking a stick’. ⇒ FINNO-UGRIC Hungarian *pattog* ‘to pop, crackle’. ⇒ GEORGIAN *t’k’atsani* ‘crack (of whip), crackle (of fire)’, *t’k’atsat’k’utsi* ‘crack(l)ing’, *gizgizi* ‘crackling, roar (of fire)’. ⇒ ILOCANO *litok* ‘sound of a cracking joint’. ⇒ KALULI *Gɔnɔ To Gele*, *kele* ‘crunch and crackle underfoot of people walking through the bush’. ⇒ KOREAN *hotutuk-hotutuk* ‘popping, cracking, snapping’. ⇒ PHONAESTHEME Latin *cr-* ‘crackle’. ⇒ RUIHONG *pi<sup>25</sup> pi<sup>25</sup> po<sup>25</sup> po<sup>25</sup>* ‘crack in the fire’, *pi<sup>25</sup> pi<sup>25</sup> po<sup>25</sup> po<sup>25</sup>*, *pi<sup>25</sup> li<sup>25</sup> po<sup>25</sup> lo<sup>25</sup>* ‘crack’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *treszkù treskėti* ‘to crackle, sizzle’, *bárksz*, *bárkszt*, *brabraksz* ‘crashing, roaring, crackling’, *girkst* ‘creak’, *tárkszt*, *trákszt*, *trékszt* ‘a clattering, cracking noise’. ⇒ SOULETIN BASQUE *kirriska karraska* ‘cracking’. ⇒ SPANISH *chascar/chasquear* ‘to creak, snap, crack’. ⇒ TAMIL *maḷāreṇal* ‘crashing, cracking’, *kuppukuppeṇal* ‘jerkling, effervescing, bubbling, crackling noise’. ⇒ TETELA *té* ‘a little slight sharp noise produced by breaking or cracking’. ⇒ TURKISH *çitir çitir* ‘cracking sound of burning wood or coal’. ⇒ *URSCHÖPFUNG*. German *knacken* ‘to crack’, *knistern* ‘to crackle, rustle’. ⇒ YIR-YORONT *tail* ‘the cracking of a tree about to fall from chopping’.

CRASH ⇒ CRASH. ⇒ BALTO-SLAVIC Russian *grokhot*. ⇒ BASQUE *zanpa* ‘crash, bang’. ⇒ BINI *guàzà* ‘crash’. ⇒ CATALAN *paplaf*, *paplam*, *pataplaf*, *pataplam*, *pataplim*, *pataplof*, *patapluf*, *patatxaf*, *patatxof/patatxuf*, *txaf/txof/txuf*, *xaf/xof/xuf*. ⇒ *DICTIONNAIRE écraser*,

- patatras*. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *bárksz, bárkszt, brabraksz* ‘crashing, roaring, crackling’. ⇒ *SOMALI shululux* ‘to crash down’, *bash* ‘to crash with a loud sound’. ⇒ *SOULETIN BASQUE barranba, barranba* ‘crashing, banging, clattering, roaring, thundering’. ⇒ *SPANISH chocar* ‘to collide, crash’, *choque* ‘crash, clash’, *choquezuela* ‘kneecap’. ⇒ *TAMIL maļāreṇal* ‘crashing, cracking’. ⇒ *ZULU foolokohloo* ‘of crashing through’.
- CREAK** ⇒ *BALTO-SLAVIC* Latvian *klakšķēt*, Russian *skrip* ‘squeak, creak, crunch (snow)’. ⇒ *CANTONESE IDEOPHONES* *zi<sup>1</sup> zi<sup>1</sup> seng<sup>1</sup>* ‘creaking sound’. ⇒ *DICCIONARIO HUMAN GURR*. ⇒ *DICTIONNAIRE grincer* ‘to grind, squeak, creak’. ⇒ *GEORGIAN ch<sup>1</sup>riala* ‘creaking/rattling’. ⇒ *ONOMATOPÉES ET MOTS EXPRESSIFS* German *knirren, knarren* ‘to creak’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *gīrgždžu gīrgždėti* ‘to creak’. ⇒ *SPANISH chirriar/chirrear* ‘to squeak, creak, screech’, *chirrido* ‘squeaking, creaking, screeching’, *chascar/chasquear* ‘to creak, snap, crack’. ⇒ *TAMIL kiricceṇal* ‘creaking sound’, *kiṛiccukkiriṛicceṇal* ‘creaking noise’, *tokkuttokkeṇal* ‘creaking noise, as of shoes’.
- CRIPPLE** ⇒ *BINI góbágòbàgòbá* ‘crippled’. ⇒ *CANTONESE IDEOPHONES* *bai<sup>1</sup> bai<sup>1</sup> dei<sup>2</sup>* ‘crippled’.
- CROAK** ⇒ *CROAK*. ⇒ *ARABIC gərgər*. ⇒ *BALTO-SLAVIC* Latvian *kurkstēt*, Russian *kárkat* ‘to caw, croak’, Serbian *kreketati*. ⇒ *DICCIONARIO*. BRAK Veps *brakutan*. ANIMALS KROK. ⇒ *DICTIONNAIRE, croasser* ⇒ *FINNO-UGRIC* Hungarian *kuruttyol* ‘to croak’. ⇒ *GEORGIAN qiqini* ‘croak(ing) (frog), quack(ing) (duck)’. ⇒ *PERSIAN qur qur* ‘croak’. ⇒ *PHONAESTHEME* Latin *gr-* ‘bubbling’, ‘gargle’, ‘croak’.
- CROOKED** ⇒ *ABLAUT REDUPLICATION* Khakas *sirex-sarax* ‘upstart’; *xijir-xajir* ‘crooked’. ⇒ *BINI bigóbigòbigó* ‘crooked’.
- CROUCH** ⇒ *BANTU IDEOPHONES* Zulu *buthalala* ‘crouching, squatting, ducking down’.
- CROW** ⇒ *FINNO-UGRIC* Hungarian *kukorékol* ‘to crow’.
- CRUNCH** ⇒ *BALTO-SLAVIC* Russian *skrip* ‘squeak, creak, crunch (snow), khrust ‘crunch, crunching sound’. ⇒ *BASQUE kosk!* ⇒ *DICTIONNAIRE, croquer*. ⇒ *GEORGIAN khrashuneps* ‘crunches (snow, sand)’. ⇒ *KHMER IDEOPHONES kru:p kru:p* ‘crunch’. ⇒ *ONOMATOPÉES ET MOTS EXPRESSIFS* French *croquer* ‘to crunch’. ⇒ *PHONOMIME* Japanese/Korean *zakuzaku* (J)/*songsong* (K) ‘crunch’. ⇒ *URSCHÖPFUNG* German *knirschen* ‘to crunch, grate’.

- CRUSH ⇒ *DICCIONARIO* SOUNDS CHACH, CHAF, CHAFL, CHAFR, CHANG, CHANK, ZAP, ZART, CHAZ, DAB, DUB. ⇒ *DICTIONNAIRE* *broyer, écraser*. ⇒ SPANISH *achuchar* ‘to put pressure on somebody, hug, squash, crush’, *chafar* ‘to flatten, crush, squash’, *chafallo* ‘smudge’, *chafallón* ‘slapdash’.
- CRY ⇒ ABLAUT REDUPLICATION Khakas *sir-sar* ‘strong crying’. ⇒ AKWAPEM TWI *ngaa-ngaangaangaa* ‘the sound of a baby’s cry’. ⇒ CANTONESE IDEOPHONES *ngaan<sup>5</sup> sap<sup>1</sup> sap<sup>1</sup>* ‘starting to cry’. ⇒ EBWELA *hɔki* ‘rallying cry’. ⇒ ILOCANO *gokgok* ‘short cry of a hog’, *ngurisngis* ‘cry of hungry pigs’. ⇒ MUNDANG *yí yíi* ‘cry, lament’. ⇒ SOMALI *xuux* ‘to cry, shout threatening’.
- CUCKOO ⇒ CUCKOO. ⇒ BALTO-SLAVIC Serbian *kukati* ‘to cuckoo’. ⇒ *DICCIONARIO* ANIMALS *KUK*. ⇒ *DICTIONNAIRE* *coua* ‘madagascar cuckoo’, *coucou* ‘cuckoo’.
- CUT ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *parr* (of a quick cutting motion). ⇒ HEBREW *btq* ‘cut’, *ntq* ‘separate by cutting’, *ʕtq* ‘[cut and] transfer’, *rtq* ‘seize’, *ʕtq* ‘cut (stop) talking’, *gzy* ‘cut stone’, *gzl* ‘steal’, *gzm* ‘cut’, *gzm* ‘cut’, *qʕʕ* ‘cut off’, *qzz* ‘cut off’, *qss* ‘strip off’, *kss* ‘divide up > compute’, *qsm* ‘distribute’, *qsy* ‘cut off’, *qsb* ‘cut off, shear’ ⇒ HEBREW *gzy* ‘cut stone’, *gzl* ‘steal’, *gzm* ‘cut’, *gzm* ‘cut’, *qʕʕ* ‘cut off’, *qzz* ‘cut off’, *qss* ‘strip off’, *kss* ‘divide up > compute’, *qsm* ‘distribute’, *qsy* ‘cut off’ ⇒ HIXKARYANA *xoko xoko xoko* ‘cutting up flesh’, *txarax* ‘cutting (with scissors, knife)’. ⇒ IŠTIKTUKAI *briaukš(t)* ‘quick pulling away, cutting off’. ⇒ KARO IDEOPHONES *weret* ‘cut hair’. ⇒ KATUENA *chaj* ‘cut’. ⇒ PASTAZA QUECHUA *ch<sup>n</sup>u patina* ‘to cut off a portion of anything’. ⇒ SOMALI *jaf* ‘to cut horizontally’, *xaf* ‘to cut neatly and sharply’. ⇒ TURKISH *hatır hatır* ‘sound of cutting, eating, and breaking of hard objects’, *kirt kirt* ‘breaking, cutting, scraping, chewing, grating’. ⇒ YIR-YORONT *chor* ‘cutting or splitting or ripping open’.

## —D—

- DABBLE ⇒ *DICCIONARIO* SOUNDS BACH, BAD, BADR, BRUCH, BORR, BART, CHALP, CHAMPL, CHAP, CHAPL, CHARK, CHARP, FLIK, FLOK, FLAK, FLAS, FLASK, FLESK, GACH, GUACH, LAM, MARG, PACH, PICH, PAK, PEK, PLAS, PLASK, SKUABL, SKUAMP ‘splashing and dabbling’. ⇒ *DICTIONNAIRE* *barboter*.

- DANGLE/FLAP ⇒ ABLAUT REDUPLICATION English *dindle-dandle, dingle-dangle, flip-flap, flipperty-flopperty*. ⇒ PASTAZA QUECHUA *huy warkuna* ‘to be hanging or dangling’.
- DARK ⇒ AFRICAN LANGUAGES Siwu *gùdùù* ‘pitch dark’. ⇒ AKWAPEM TWI IDEOPHONES *kabii* ‘darkness’. ⇒ CANTONESE IDEOPHONES *hak<sup>1</sup> maa<sup>1</sup> maa<sup>1</sup>/hak<sup>1</sup> mang<sup>1</sup> mang<sup>1</sup>/hak<sup>1</sup> mi<sup>1</sup> maa<sup>1</sup>* ‘very dark’.
- DAWDLE ⇒ CILUBÀ *shèhèhèshè* ‘limping along, dawdling’.
- DAZZLE ⇒ JAPANESE *giragira (to hikaru)* ‘(shine) dazzlingly’.
- DIALECT ⇒ ABLAUT REDUPLICATION Khakas *pish-pash* ‘Shorian dialect’.
- DOODLE ⇒ BASQUE *dzarra-dzarra* ‘scribble, doodle’.
- DRAG ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *wirr* (of pulling or dragging something). ⇒ *DICCIONARIO* SOUNDS *DĀL, DAL RIF, RAFL, RIFL*. ⇒ HIXKARYANA *xeryerye* ‘dragging, sliding’. ⇒ SOULETIN BASQUE *parrasta parrasta* ‘dragging noise’.
- DRINK ⇒ SOULETIN BASQUE *lapa lapa* ‘noisy drinking’, *hürrüpa hürrüpa* ‘drinking sound’, *laka laka, lapa lapa, llapa llapa* ‘drinking noise’. ⇒ TAMIL *mocumocēṇal* ‘gurgling sound, as in drinking’. ⇒ TURKISH *lâp lâp* ‘sound produced by cats and dogs when drinking’.
- DRIP ⇒ ABLAUT REDUPLICATION Mandarin Chinese *dídá* ‘the sound of dripping’. ⇒ AFRICAN LANGUAGES Somali *shalalab* ‘sound of rain dripping’. ⇒ BALTO-SLAVIC Latvian *pakšķēt*, Lithuanian *pakšnóti*. ⇒ GBAYA *lók lók* ‘dripping water’. ⇒ GEORGIAN *ts’k’urts’k’uri* ‘dripping (of sweat)’. ⇒ HEBREW *ipp* ‘drip’, *iptp* ‘drip’, *nṭp* ‘spill’, *twp* ‘drip’, *ipp* ‘march as if dripping’. ⇒ KHMER IDEOPHONES *craok craok* ‘sound of dripping’, *cro:c cro:c* ‘sound of dripping water’. ⇒ KOREAN *ttwuk-ttwuk* ‘dripping’.
- DRIZZLE ⇒ KOREAN *posul-posul* ‘in a drizzle’.
- DROP ⇒ TONAC *lu:p* ‘object dropping into water’. ⇒ ZULU *qatha* ‘of dropping easily’, *phahla* ‘of smashing/dropping’. ⇒ VOWEL HARMONY Korean *c<sup>h</sup>i.ləŋ/ c<sup>h</sup>a.ləŋ* ‘dropping of a longer/shorter object’.
- DRUM ⇒ BASQUE *dunbala*. ⇒ CILUBÀ *nùù* ‘sound of drum’. ⇒ CREOLES Caribbean Spanish *bomba, bombo* ‘big drum; a dance noise’, Haitian, Guadeloupean French Creole, Martiniquais, Trinidad French Creole, Louisianais, Black English *bamboula* ‘drum, dance with drumming, feast’, Krio *bum* ‘sound of a drum being beaten, sound of a heavy fall’. ⇒ *DICTIONNAIRE patapatapon* ‘a drumming onomatopoeia’, *tambour*. ⇒ DIDINGA *pum, ding ding* ‘the sound of a

small drum'. ⇒ EWE *pótópótó* 'sound of a small drum' / *pòtòpòtò* 'sound of a big drum'. ⇒ TAMIL *ilumənal* 'sound as that of a drum'.  
 DUCK ⇒ BANTU IDEOPHONES Zulu *buthalala* 'crouching, squatting, ducking down'.

## —E—

EAT see CHEW

EFFORT ⇒ CREOLES Yoruba *fita-fita* 'effort, energy, endeavour attempt'.

EMERGE ⇒ AMERICAN INDIAN Pastaza Quechua *polang*.

ENTANGLE ⇒ ABLAUT REDUPLICATION Khakas *tirbax-tarbox* 'entangled'.

EXPLODE ⇒ SOMALI *bug* 'to explode'.

## —F—

FALL ⇒ BAKA *wóòò* 'it falls down', *tung* 'hard falling he arrives on the ground'. ⇒ BANTU IDEOPHONES Zulu *phenu* 'falling over'. ⇒ BASQUE *fil-fil-fil* 'fall down in circles and slowly'. ⇒ CANTONESE IDEOPHONES *bing<sup>4</sup> lang<sup>1</sup> baang<sup>4</sup> laang<sup>4</sup>* 'noise made by falling things'. ⇒ CATALAN *barrabam/borrobom, cataclac/cataclec/cataclac, pataplum, patatim/patatium, pum, pom* 'falling and hitting the ground'. ⇒ CILUBÀ *kabyùù, mpyùù* 'sound of something falling', *mbùù, mbyùù* 'movement of something or someone falling'. ⇒ CREOLES Haitian *bum* 'of falling heavily', Krio *bàm* 'of falling', *bum* 'sound of drum being beaten, sound of a heavy fall'. ⇒ *DICCIONARIO SOUNDS BEMBI, BOMBI, BAMBI, BAMBR, BUMP* (also bumping), *DAMB, PLUMP, POM, PUM, PAMP, TAMP, TEMP, TIMP, TUMP*. ⇒ DIDINGA *rim* 'the sound of heavy things falling', *llir* 'sound made when falling down'. ⇒ IŠTIKTUKAI *benc* 'intensive falling on the ground'. ⇒ KARO IDEOPHONES *omuw* 'fall (heavy object)', *oton* 'fall (light object)'. ⇒ KHUMI *piwng<sup>5</sup>* 'sound of a large object falling', *paw<sup>5</sup>* 'sound of something (fruit, dead bird) falling', *phrang<sup>5</sup> phrang<sup>5</sup>* 'motion of many sparks flying from a fire, leaves falling from a tree, scattering motion'. ⇒ NIGERIAN PIDGIN *ìgbàm* 'sound of falling of a heavy item', *dìgbem* 'fall of hard object on a hard surface'. ⇒ NIGERIAN PIDGIN *yàkàtá* 'sprawling fall'. ⇒ PASTAZA QUECHUA *supu saltana* 'to leap and fall into water', *tsuou rina* 'to go into water by leaping, falling, or plunging', *patang urmana* 'to fall down, e.g. tail of a snake, tree struck by lightning', *ki urmana* 'to fall, spilling all over, e.g. a basket of fish'. ⇒ SCHALLNACHAHMUNGEN Lithuanian *bėnc* 'strong impact, blow, fall', *býlst, bìlst* 'falling down', *bimpt, bimt* 'sound produced by the fall of a

- light object', *brjñkt* 'clinking fall', *pliùkszt* 'sound caused by the falling of a soft mass', *tvjñkt* 'sound made by a hard fall onto the floor'. ⇒ SHONA *chi-dó-dó-dó* 'falling, knocking, hammering', *chá-mu-pú-pú-mu-pú-pú* 'continual falling of light objects everywhere', *pitiri*, *bidiri*, *bhidhiri* 'falling (e.g. from a roof)', *rwódódó* 'falling gently to one's knees'. ⇒ SOMALI *wab* 'to fall down rolling', *shulux* 'to fall down'. ⇒ TAMIL *kułakkattiyenal* 'the falling of anything infirm or loosely set, such as the head of an infant'. ⇒ TETELA *hoooo* suggests or amplifies a descent. ⇒ YIR-YORONT *lak* 'throwing, knocking, or falling heavily to ground', *wuuuu(t)* of tree beginning to fall. ⇒ ZULU *fofololo* 'of falling'
- FART ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *puut*. ⇒ KALULI *Gɔɔ To idɔ boto* 'fart (lit. shit pop)'. ⇒ TOMMO-SO *bùún* 'sound of a long, melodious fart', *péén* 'sound of a fart one tries to keep in', *pór* 'sound of a spluttering fart'.
- FAST ⇒ AKWAPEM TWI IDEOPHONES *santan* 'rapid', *pa* 'fast pace', *pampam* 'briskly'. ⇒ BASQUE *za-za-za* 'speak fast'. ⇒ CANTONESE IDEOPHONES *faai<sup>3</sup> faai<sup>3</sup> ceoi<sup>3</sup> ceoi<sup>3</sup>* 'fast'. ⇒ EBWELA *dza* 'fast'.
- FIRE ⇒ AFRICAN LANGUAGES Shona *mbiriviri* 'fire'.
- FLAME ⇒ ASIAN LANGUAGES Bahnar *bleel-bleel* 'large flames appearing intermittently but remaining vivid', *bleel- bleel* 'id., small flames'.
- FLABBY ⇒ CILUBÀ *sùbùsùbù/zùbùzùbù*.
- FLAP ⇒ ARABIC *sərfəq, fərfər*. ⇒ GERMANIC LANGUAGES German *schlagen* 'to flap'. ⇒ KALULI *Gɔɔ To bobo* 'wing-beating sounds'. ⇒ KOREAN *kaphus-i* 'flapping'.
- FLASH ⇒ GERMANIC LANGUAGES Norwegian, *glimte* 'gleam, flash, twinkle'. ⇒ KATUENA *fefe* 'flash of lightning'. ⇒ TAMIL *pałiccenal* 'flashing, shining'. ⇒ TOTONAC *lam* 'a bright light flashing, a fire flaring up'.
- FLAT ⇒ AKWAPEM TWI IDEOPHONES *teteeter* 'flat/plain'.
- FLICK ⇒ BALTO-SLAVIC Russian *shchelchok* 'flick (fingers), click (computer mouse)'.
- FLICKER ⇒ GEORGIAN *tsimtsimi* 'flickering, shimmering'. ⇒ GERMANIC LANGUAGES Swedish *flimra* 'flicker'.
- FLIP-FLOP ⇒ AMERICAN INDIAN Yucatec Maya *tak'ach* 'flip-flop'. ⇒ MUNDANG *pláp pláp pláp* 'sound of sandals'. ⇒ SPANISH *chancla*, *chancleta* 'flip-flop, mule', *chancltear* 'walk in flip-flops', *chancltear* 'sound made by flip-flops while walking'.



FLOP ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *polpolpol* (of a fish's tail flopping on the ground).

FLOW ⇒ AMERICAN INDIAN Katuena *shuuu* 'flowing water'. ⇒ AMERICAN INDIAN Yucatec Maya *tirix ta* 'strong diarrhoea'. ⇒ ASIAN LANGUAGES Tamil *ammeNal* 'filling or overflowing, as of water'. ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *chul* (of liquid gushing forth; of going downwards to water; of crossing a creek). ⇒ CATALAN *blöp, blub-blub, glac-glac, glec-glec, glo-glo, glu-glu, glop-glop*. ⇒ *DICCIONARIO. SOUNDS GLU, GLOP, GLUT*. ⇒ *DICTIONNAIRE, flot* 'sound of running water'. ⇒ EMAI *yüyüyü* '(flow) gushing'. ⇒ GERMANIC LANGUAGES Norwegian *gli* 'glide, flow', Swedish *flöda* 'flow'. ⇒ KALULI *Gɔnɔ To dugu* 'the sounds of water pouring into or out of bamboo tubes'. ⇒ KATUENA *shuu* 'flowing water'. ⇒ NIGERIAN PIDGIN *sélénsé* 'smooth and flowing'. ⇒ *ONOMATOPEÉS ET MOTS EXPRESSIFS* French *couler* 'to flow'. ⇒ PHONAESTHEME Latin *fl-* 'to blow', 'to flow'. ⇒ TAMIL *katakateṇal* 'sound produced during boiling, as a liquid, in flowing, as with water from a sluice'. ⇒ TURKISH *çar, çır, çir, çur, çür, şar, şır, şir, şor* 'sound of running liquid', *şiril şiril* 'sound of a small quantity of water running monotonously', *şarıl şarıl* 'sound of a big quantity of water running loudly', *şorul şorul* 'sound of a big quantity of water running noisily', *su fişş* 'splattering water of a spring'/*su foşş* 'roaring water of a flushing toilet'.

FLUFFY ⇒ SIWU *wùrùfùù* 'fluffy'.

FLUTTER ⇒ AFRICAN LANGUAGES Hausa *fir* 'flutter of wings'. ⇒ BINI *pérlépérlépérlé* 'fluttering'. ⇒ DIDINGA *xapuk xapuk* 'sound of the fluttering wings of a rooster'. ⇒ GERMANIC LANGUAGES Swedish *fladdra* 'flutter' *flaxa* 'flutter'. ⇒ KHUMI *dé<sup>1</sup>dé<sup>2</sup>* 'fluttering flight motion'. ⇒ TURKISH *pır pır* suggests fluttering.

FOOTSTEPS ⇒ CREOLES Papiamentu *bum-bum-bum, bam-bam-bam*.

FRY ⇒ *DICCIONARIO SOUNDS* CHIND, CHER, GARF, GORG, GURG 'also gargling', CHIRRINK, CHARRASK, CHIRRISK, CHARRAST.



## —G—

- GALLOP ⇒ AFRICAN LANGUAGES Yao (*nyama siluwimwile*) *kuputu kuputu* ‘the herd went off at full gallop’. ⇒ BASQUE *Draka-draka-draka* ‘horse galloping’. ⇒ *DICTIONNAIRE patata-patata* ‘sound of a galloping horse’.
- GARGLE ⇒ GARGLE. ⇒ *DICCIONARIO*. HUMAN *GARG, GARGL, GARGR*. ⇒ *DICTIONNAIRE, gargariser*. ⇒ PHONAESTHEME Latin *gr-* ‘bubbling’, ‘gargle’, ‘croak’. ⇒ SOULETIN BASQUE *gurgur* ‘gargling noise’.
- GASP ⇒ FRENCH *pipa* ‘gasp, pant’.
- GENTLE ⇒ BASQUE *binbili-bonbolo* ‘gently’.
- GIGGLE ⇒ FINNO-UGRIC Finnish *nauraa piipitää* ‘to giggle’. ⇒ HAUSA *mùtsùùniyaa* ‘giggling, fidgeting by children’.
- GLEAM/GLINT/GLISTEN/GLITTER ⇒ ASIAN LANGUAGES Tamil *jilu jilu* ‘glittering appearance’. ⇒ BANTU IDEOPHONES Zulu *benge* ‘glittering’. ⇒ ELVISH *sili* ‘gleam, glint’, *winwinoite* ‘glittering’, *itila* ‘twinkling, glinting’. ⇒ GERMANIC LANGUAGES Icelandic *glit* ‘gleam’, *glitra* ‘glitter, glint’, *gljá* ‘shine, glitter, glisten’, *gljai* ‘glitter’, *glæta* ‘faint light, glittering’, Norwegian *glimmer* ‘glitter’, *glimre* ‘glitter, sparkle’, *glimte* ‘gleam, flash, twinkle’, *glinse* ‘glisten, shine’, *glitter* ‘glitter’, *glor* ‘glitter’, Swedish *glimma* ‘gleam’, *glindra* ‘gleam’, *glisa* ‘shine’, *glitra* ‘glitter’, *glimmer* ‘gleaming’. ⇒ KOREAN *allun-(kelita)* ‘glitter, glisten’. ⇒ PASTAZA QUECHUA *ʔu rikurina* ‘to shine or glitter’, *ʔu rana* ‘to make shiny’. ⇒ TONAC *lipilipi* ‘sun glinting off the water, a mirror, etc.’.
- GLIDE ⇒ GERMANIC LANGUAGES Norwegian *gli* ‘glide, flow’, Swedish *glida* ‘glide’, ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *čiužti* ‘sliding, gliding’.
- GLOW ⇒ ASIAN LANGUAGES Bahnar *bloong-bloong* ‘reflections caused by rays of light on a large object, elongated in shape’. ⇒ GERMANIC LANGUAGES Icelandic *glóa* ‘glow, shine’, Norwegian *glød* ‘glow’, Swedish *glöd* ‘glow’, Danish *glød* ‘ember, fire, glow’.
- GNAW ⇒ BASQUE *lafa-lafa* ‘gnawing’. ⇒ *DICCIONARIO* BROK Lithuanian *grauciu* ‘to gnaw’.
- GRATE ⇒ BALTO-SLAVIC Russian *skrezhet* ‘grating, scraping’. ⇒ *DICTIONNAIRE, râper*. ⇒ KATUENA *shik* ‘grate’. ⇒ TURKISH *kirt kirt* ‘breaking, cutting, scraping, chewing, grating’. ⇒ *URSCHÖPFUNG*. German *knirschen* ‘to crunch, grate’.
- GREEN ⇒ CANTONESE IDEOPHONES *ceng<sup>1</sup> bi<sup>1</sup> bi<sup>1</sup>* ‘green’, *ceng<sup>1</sup> bi<sup>1</sup> bi<sup>1</sup>* ‘light green’. ⇒ YORUBA *gbòò gbòò* ‘vegetables being deep green’.

- GRIND ⇒ *DICCIONARIO* BROK Greek *βρόχω* ‘grinding one’s teeth’. ⇒ *DICTIONNAIRE*, *broyer*, *grincer* ‘to grind, squeak, creak’. ⇒ SIWU *sùkùrù-sùkùrù* ‘sound of grinding’.
- GROAN ⇒ ARABIC *wāḥwāḥ* ‘to groan’. ⇒ BANTU IDEOPHONES Zulu *bubu* ‘moaning, sighing, groaning’. ⇒ GEORGIAN *bghavili* ‘bleating, groaning, roaring’.
- GROPE ⇒ BANTU IDEOPHONES Zulu *phumpu* ‘groping’.
- GROWL/GRUNT/GRUMBLE ⇒ GRUNT. ⇒ BALTO-SLAVIC Latvian *urkšķēt*, Russian *kriákat* ‘to quack, to grunt’, Serbian *groktati* ‘to grunt’, Polish *chrzqkac* ‘to grunt’ Czech *chrochtat* ‘to grunt’ ⇒ BASQUE *gur-gur* ‘growling (of the stomach)’. ⇒ *DICCIONARIO* ANIMALS *GRU*, *HURR* ‘sound of grunting or barking’, *GAN̄*, *GOÑ*, *GUAÑ*, *GÜEN̄*, *GÜIN̄*, *GĀR*, *GĀR*, *GORR* ‘onomatopoeias of the grunting of pigs and dogs’. HUMAN *RANK*. ⇒ *DICTIONNAIRE* *grogner*, *grommeler*, *rugir*. ⇒ FINNO-UGRIC Finnish *äristä* ‘to growl’, Hungarian *morog* ‘to grunt, growl’, *brummog* ‘to grunt’. ⇒ GERMANIC LANGUAGES German *knurren* ‘to growl, snarl’, *grunzen* ‘to grunt’. ⇒ ILOCANO *ngernger* ‘growling’. ⇒ KOREAN *thwutel-(kelita)* ‘grumble’. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *raung* ‘to roar, bellow, growl’. ⇒ PERSIAN *qorridan* ‘to roar, growl’, *khornash (keshidan)* ‘to growl, bawl’, *qor (kardan)* ‘grumble’. PHONOMIME Japanese/Korean *gorogoro (J)/twululu (K)* ‘growl’. ⇒ VIETNAMESE *làu nhàu*, *làu nhàu* ‘to grumble’.
- GULP ⇒ BASQUE *zurrut*, *gurka-gurka* ‘in gulps’, *zurga-zurga* ‘drink in gulps’. ⇒ SOMALI *juluq* ‘to gulp down without chewing’, *yalam* ‘to gulp down something small’. ⇒ ZULU *huuubuluzii* ‘of gulping down’.
- GURGLE ⇒ ARABIC *gərgəb* ‘to gurgle (of humans)’. ⇒ *DICTIONNAIRE*, *glouglou* ‘gurgling’. ⇒ DIDINGA *tdul tdul* ‘gurgling sound’. ⇒ PERSIAN *qār o qur* ‘stomach gurgle’. ⇒ PHONOMIME Japanese/Korean *dobodobo (J)/chempengchempeng (K)* ‘gurgle’. ⇒ TAMIL *kapakapaveṇal* ‘the sound of gurgling’, *mocumocēnal* ‘gurgling sound, as in drinking’.

## —H—

- HANG ⇒ CANTONESE IDEOPHONES *diu<sup>4</sup> diu<sup>2</sup> fing<sup>6</sup>* ‘hanging loosely, about to fall down’. ⇒ PASTAZA QUECHUA *huy warkuna* ‘to be hanging or dangling’, *huy puñuna* ‘to sleep hanging’.
- HASTEN ⇒ BANTU IDEOPHONES Zulu *phutha* ‘hastening’.
- HEAP ⇒ ASIAN LANGUAGES Bahnar *gəluung-gəlaang* ‘very big heaps, very great piles, of a confused, awe-inspiring scuffle’/*gəloong-gəlaang*

‘big heaps, great piles, in disorder’/gəɓɔŋg-gəlaang ‘small heaps, small piles, in disorder’.

HESITATE ⇒ KOREAN *yecis-yecis* ‘hesitating to speak’.

HICCUP ⇒ *DICCIONARIO* HUMAN *HĚK, HUK, HIMP, HUIMP, HIP*. ⇒ ILOCANO *saiddek* ‘hiccup’.

HIDE ⇒ AFRICAN LANGUAGES Yoruba *búú-búú* ‘completely hidden underneath’.

HISS ⇒ ASIAN LANGUAGES Vietnamese *rít*. ⇒ BALTO-SLAVIC Latvian *čūks* ‘to hiss’. ⇒ BALTO-SLAVIC Russian *shipeniye* ‘hissing, sizzling, sputtering’, Serbian *siktati*, Czech *syčet, prskat* ‘to splutter, spit, sizzle, crackle, hiss’. ⇒ *DICTIONNAIRE*, *grésiller* ‘to sizzle, hiss’ *siffler*. ⇒ FINNO-UGRIC Finnish *sähistä* ‘to hiss’, *säksättää* ‘to whistle, hiss’, Hungarian *sziszeg* ‘to hiss’. ⇒ GEORGIAN *sisini* ‘hissing (goose, wind)’. ⇒ HINDI *sarsar* ‘hissing’. ⇒ PERSIAN *fes fes/khes khes* ‘hiss’. ⇒ *SCHALLNACHAHMUNGEN*. Lithuanian *czerszkiù czerkszti* ‘to twitter, chirp, hiss’, *sznypszt* ‘a short hissing sound’. ⇒ SPANISH *chichear* ‘to hiss’. ⇒ TAMIL *curireṇal* ‘hissing, as of heated iron in contact with water’.

HIT ⇒ AKWAPEM TWI IDEOPHONES *gbim* ‘collision’. ⇒ AMERICAN INDIAN Totonac *lanks* ‘hand hitting something hard’, *lanhx* ‘a blow striking with great force’. ⇒ BASQUE *panpa-panpa* ‘hit continuously’. ⇒ CATALAN *bim-bam, bom/bum, catacrac/catacrec/catacric, citric-catroc, papam, patam, patapaf, pataplam, patim-patam, plim-plam, trinc-tranc, tum-tum, tutum*. ⇒ *DICCIONARIO* SOUNDS *TAP, TEP, TIP, TOP, TUP, CHACH, CHAF, CHAFL, CHAFR, CHANG, CHANK, ZAP, ZART, CHAZ, DAB, DUB, TĚK, TAK, TEK, TIK, TOK, TUK TRAK, TREK, TRIK, TROK, TRUK*. ⇒ EWE *kpam* ‘sound of a collision between surfaces’. ⇒ HEBREW *pgʻ* ‘hit (> get in contact with, cf. Eng. ‘hit the road’), *pgm* ‘hit, wound’, *pgr* ‘[hit > faint >] die’, *pgʻ* ‘[hit > get in contact with >] meet’, *pwg* ‘[be hit >] go numb’. ⇒ KHUMI *kriwng<sup>l</sup> kriwng<sup>l</sup> kriwng<sup>l</sup>* ‘sound of bamboo hitting something’. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *rai* ‘sound of rain hitting glass’, Indonesian *bang* ‘strong and noisy impact’. ⇒ RUIHONG *po<sup>ʒ</sup>* ‘to hit, knock’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *bėnc* ‘strong impact, blow, fall’, *blakštūti, blqngst* ‘sound produced by a sudden throw or blow’, *dzvakt/dzvankt* ‘sudden blow, collision’, *kaukszt, kaukszt* ‘beat, hit’, *kimszt* ‘light impact’, *pákszt* ‘the sound of a blow’, *pykszt* ‘whip sound’, *takszt* ‘sound produced by a strong blow’, *tápszt* ‘sound made by a soft stroke’, *twýkst* ‘loud bang, sound of a violent impact’. ⇒ TONONAC *lanks* ‘hand hitting something hard’. ⇒ WOLAITTA

*káhwu* 'oott- 'to hit a hard object with a stick'. ⇒ YIR-YORONT *ket* 'spearing, hitting'.

HOARSE ⇒ *DICTIONNAIRE*, *rataplan*, *rauque*.

HOBBLE ⇒ ASIAN LANGUAGES Pacoh *pe:l-klup* 'hobbling lamely'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *kabàkszt* 'limp, hobble'. ⇒ *URSCHÖPFUNG*. German *humpeln* 'to hobble, limp'

HONK ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *dengung*, *dengong* 'sound of a siren, honking, buzzing, humming'.

HOOT ⇒ BALTO-SLAVIC Serbian *hukati*. ⇒ *DICCIONARIO ANIMALS UUL* 'sound of hooting'. ⇒ *DICTIONNAIRE hululer*. ⇒ FINNO-UGRIC Hungarian *huhot* 'to hoot'.

HOP ⇒ SOMALI *balaw* 'to hop with a target'.

HOWL ⇒ ARABIC *wərwər* 'to howl, to holler, to cry (of children), *eawwəg*. ⇒ ASIAN LANGUAGES Vietnamese *hú* 'howl (wolf)', Chinese *háo* 'howl, roar', *xiào* 'whistle, howl, roar'. ⇒ BALTO-SLAVIC Russian *voi* 'howling, wailing', *vopl'* 'wailing, howling', *ryov* 'roar, bellow, howl', Serbian *urlati* 'to howl, to roar', *zavijati* 'to howl, whine', Polish *wyć* 'to howl'. ⇒ *DICTIONNAIRE bramer*. ⇒ FINNO-UGRIC Finnish *murista* 'to growl (of dogs, wolves, bears, boars, lions)', *urista* 'to growl (of dogs, wolves)', *ulvoa* 'to howl', *ulista* 'to howl', Hungarian *ordít* 'to roar, bray, howl', *bömböl* 'to howl', Khanty *örtatli* 'to howl, scream, shout'. ⇒ GEORGIAN *qmuili* 'howl(ing), baying', *ghriali* 'roar, bellowing, wailing, howling', *ghrial-griali* 'howling and wailing'. ⇒ GERMANIC LANGUAGES German, *jaulen* 'to howl', *orgeln* 'to roar, howl'. ⇒ GRUNT Basque *ulu* (*egin*) 'to howl'. ⇒ PERSIAN *zuze* (*keshidan*) 'to howl'.

HUBBUB ⇒ EBWELA *woo* 'hubbub'.

HUM ⇒ ARABIC *zəgnen*, *dəndən*. ⇒ ASIAN LANGUAGES Chinese *wēngwēng*. ⇒ BALTO-SLAVIC Russian *murlykat'* 'to purr, to hum', *zhuzhzat'* 'to hum, buzz, whizz', Serbian *brujati* 'to hum', *zujati* 'to buzz, hum', Czech *bzučet* 'to buzz, hum, whirr'. ⇒ *DICTIONNAIRE bourdonner*, *fredonner*. ⇒ FINNO-UGRIC Finnish *hyristä* 'to hum (of flies)', Hungarian *zümmög* 'to whirr, reel, hum, buzz', Khanty *marii-*, *pängii-* 'to buzz, hum'. ⇒ GEORGIAN *bzuili* 'buzzing, humming, droning', *bzuil-bzuilit* 'buzzing, humming, droning'. ⇒ GERMANIC LANGUAGES German *brummen* 'buzz, hum', *summen* 'to buzz, hum'. ⇒ MUNDANG *nyy* 'sound of a bee, humming'. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *dengung*, *dengong* 'sound of a siren, honking, buzzing, humming'. ⇒ *PRIMITIVE CULTURE* Australian *kurarriti* 'to hum, buzz'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian

*burszkiù bürkszti* ‘to hum, buzz’. ⇒ TAMIL *mukareṇal* ‘humming as of bees’, *immeṇal* ‘humming, rustling, pattering’. ⇒ WHITE HMONG *lù làu* ‘of a big, continuous, humming sound’, *lù làu* ‘a big, continuous, humming sound’.

HURRY ⇒ SOULETIN BASQUE *estrik estrak* ‘to be in a hurry’. ⇒ TAMIL *immeṇal* ‘hurry, celerity, haste’.

HURT ⇒ AFRICAN LANGUAGES Kilba *wàdàu* ‘being hurt’.

—I—

ILL ⇒ CHINTANG *dikdikdik* ‘seriously ill’.

INFLATE ⇒ HEBREW *pwḥ* ‘inflate, blossom’, *npḥ* ‘inflate’, *ypḥ, pḥy, pḥt* ‘deflate’, *tpḥ*: ‘blow, inflate, deflate’, *ʔpy* ‘[inflate by] cooking (dough and the like)’.

IRREGULAR ⇒ CANTONESE IDEOPHONES *aam<sup>4</sup> aam<sup>4</sup> cam<sup>4</sup> caam<sup>4</sup>* ‘irregular, asymmetric’.

—J—

JAB ⇒ BANTU IDEOPHONES Zulu *hloko* ‘jabbing, poking’. ⇒ CREOLES Jamaican *joko-joko* ‘to poke or jab repeatedly’.

JABBER ⇒ RUIHONG *tei<sup>55</sup> tei<sup>55</sup> ku<sup>55</sup> ku<sup>55</sup>* ‘jabber’.

JANGLE ⇒ GEORGIAN *ch’khak’uni* ‘jangling (of metal on metal)’.

JERK ⇒ BINI *khùrlùkhùrlùkhùrlù* ‘jerky’. ⇒ KATUENA *krow* ‘jerk’. ⇒ TAMIL *kuppukuppeṇal* ‘jerking, effervescing, bubbling, crackling noise’.

JINGLE ⇒ ABLAUT REDUPLICATION Mandarin Chinese *dīngdāng* ‘the sound of jingling or clattering’. ⇒ *DICTIONNAIRE tinter* ‘to jingle, clink, ring’. ⇒ FINNO-UGRIC Finnish *kilkutta* ‘tingle, jingle’. ⇒ GEORGIAN *chkharuni* ‘jingling, tinkling’, *batkabutki* ‘banging (guns), jingling (keys)’. ⇒ ILOCANO *kalangiking* ‘jingling sound of coins’. ⇒ KOREAN *callang-callang-(hata)* ‘clink, jingle’. ⇒ *URSCHÖPFUNG*. German *klimpern* ‘jingle’.

JOLT ⇒ *URSCHÖPFUNG*. German *holpern* ‘to jolt’.

JUMP ⇒ CANTONESE IDEOPHONES *bang<sup>1</sup> bang<sup>1</sup> tiu<sup>3</sup>* ‘jumping around’. ⇒ KATUENA *fuhtuchu* ‘jump’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *žýrgt* ‘sound made by jumping onto a horse’. ⇒ SOMALI *haw* ‘to jump upon, hug’. ⇒ YIR-YORONT *turr* ‘of jumping’.

—K—

KICK ⇒ AMERICAN INDIAN Totonac *lanhllh* ‘something being kicked with great force’. ⇒ HIXKARYANA *dey* ‘kicking’.

KNOCK ⇒ ABLAUT REDUPLICATION English *knick-a-knock* ‘a succession of knocks of alternating character’, *knick-knack*, *nick-nack* ‘an alternation of knocking sounds’. Khakas *tishlîrge/tashlîrge* ‘to stamp, to knock’. ⇒ AKWAPEM TWI IDEOPHONES *pumpumpum* ‘the sound from heavy knocking’. ⇒ BALTO-SLAVIC Lithuanian *taukšt~taukš* ‘knock, tap’, *bárškinti* ‘to knock’, *stukénti* ‘to knock’, Russian *stuk* ‘knock’. ⇒ CREOLES Papiamentu *bim-bim-bim* ‘sound of knocking’. ⇒ *DICTIONNAIRE cliquetis* ‘knocking, rattling’. ⇒ FINNO-UGRIC Finnish *kolkutta* ‘to knock’. ⇒ GEORGIAN *k’ak’uni* ‘tapping, knocking noise’. ⇒ ILOCANO *toktok* ‘sound of knocking on something hard’. ⇒ KHMER IDEOPHONES *cheuk cheuk* ‘sound of knocking’. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *tuk* ‘knock’. ⇒ *PRIMITIVE CULTURE* Australian *pitata* ‘to knock’, *pitapitata* ‘to knock’. ⇒ RUIHONG *po<sup>ɔ̃</sup>* ‘to hit, knock’, *ko<sup>ɔ̃</sup>* ‘to knock’, *ti<sup>ɔ̃</sup>* *li<sup>ɔ̃</sup>* *tu<sup>ɔ̃</sup>* *lu<sup>ɔ̃</sup>* ‘light noise like a knock’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *brákszt*, *bráksz*, *brabraksz* ‘sound of breaking, knocking’. ⇒ SHONA *chi-dó-dó-dó* ‘falling, knocking, hammering’. ⇒ SOMALI *gub* ‘to knock’. ⇒ YIR-YORONT *lak* ‘throwing, knocking, or falling heavily to ground’. ⇒ ZULU *ngqo* ‘of knocking’.

## —L—

LAP ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *polpolpol* (‘of waves lapping’).

LAUGH ⇒ AKWAPEM TWI IDEOPHONES *ɔsereɛ kwaakwa* ‘he/she laughed’. ⇒ ASIAN LANGUAGES Tamil *pak pak* ‘bursting into loud laughter’. ⇒ BAKA *mosimòsimosimòsimosi* ‘pulling a grimace of deriding laughter’. ⇒ BALTO-SLAVIC Russian *gógot* ‘cackle, loud laughter’. ⇒ BASQUE *irri (egin)*. ⇒ CANTONESE IDEOPHONES *siu<sup>3</sup> ke<sup>4</sup> ke<sup>4</sup>/ke<sup>4</sup> ke<sup>4</sup> siu<sup>3</sup>* ‘laughing’. ⇒ *DICCIONARIO SOUNDS BARR. HUMAN HA, HE, HI, HO, KARK* ‘loud laughing’. ⇒ *DICTIONNAIRE esclaffer* ‘to burst out laughing’. ⇒ FINNO-UGRIC Finnish *pärskähdellä* ‘a roar of laughter’. ⇒ GEORGIAN *t’k’rialebs* ‘laugh (of someone full of emotion, like a young girl)’. ⇒ KATUENA *hahaha* ‘laugh’. ⇒ PASTAZA QUECHUA *ing asina* ‘to laugh with mouth open in the shape of slit’. ⇒ *PRIMITIVE CULTURE* Australian *wiiti* ‘to laugh’, Dayak *kakakkaka* ‘to go on laughing loud’. ⇒ TAMIL *kulukkeṅal* ‘laughter’. ⇒ VIETNAMESE *hí hí* ‘of high-pitched laughter’, *hì hì* ‘of low-pitched forced laughter’, *hè hè* ‘medium-pitched

- friendly laughter', *hè hẹ* 'very low-pitched discreet laughter', *hò hó* 'high-pitched vulgar laughter', *ha há* 'high-pitched natural laughter'.
- LICK ⇒ *DICCIONARIO* HUMAN *LAB, LIB, LABR, LAK, LEK, LAP, LEP, LOP, LUP*. ⇒ *DICTIONNAIRE lécher*. ⇒ HIXKARYANA *besmesme* 'licking with tongue'. ⇒ *PRIMITIVE AND UNIVERSAL* Sanskrit *lih* 'lick'.
- LIMP/HOP/JOG ⇒ ABLAUT REDUPLICATION English *chick-chock, hiphop, hippety-hoppety, jidderty-jadderty*; Khakas *sirt-sart* 'hopping along'. ⇒ BASQUE *tzainku-tzainku* 'limp'. ⇒ CILUBÀ *shèhèhèshè* 'limping along, dawdling'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *kabàkszt* 'limp, hobble'. ⇒ SOTHO *hlotsa* 'limp'. ⇒ TOMMO-SO *nùlli-nùlli-ni yàá* 'walk with a permanent limp'. ⇒ TONAC *lakliwilakliwi* 'a four-legged animal limping along on three legs'. ⇒ *URSCHÖPFUNG*. German *humpeln* 'to hobble, limp'.

## —M—

- MANY ⇒ AKWAPEM TWI IDEOPHONES *bebrɛɛ* 'many'.
- MEOW/MIAOW ⇒ AFRICAN LANGUAGES Kisi *nyaayoo* 'meow'.  
⇒ ARABIC *mæwəq*. ⇒ ASIAN LANGUAGES Vietnamese *meo meo*, Chinese *mīmī* 'meow'. ⇒ BALTO-SLAVIC Serbian *mjaukati*, Czech *mňoukat*. ⇒ BASQUE *miau*. ⇒ *DICCIONARIO* ANIMALS *MAU* 'meowing'. ⇒ *DICTIONNAIRE*, *miauler*. ⇒ FINNO-UGRIC Finnish *maukua, miukua, naukua*, Hungarian *nyávog* 'to meow, caterwaul'. ⇒ GERMANIC LANGUAGES German *miauen*. ⇒ ILOCANO *ngiaw* 'meow of a cat'. ⇒ PERSIAN *miu miu*. ⇒ VIETNAMESE *meo meo*.
- MESS ⇒ CILUBÀ *bondòbondò*.
- MOAN ⇒ AKWAPEM TWI IDEOPHONES *gagaga*. ⇒ BANTU IDEOPHONES Zulu *bubu* 'moaning, sighing, groaning'. ⇒ *DICTIONNAIRE*, *râler*. ⇒ FINNO-UGRIC Khanty *n'angash-* 'to moan, wail, whine'. ⇒ KHMER IDEOPHONES *kakreu:m-kakrau:m* 'sound of moaning'.
- MOO ⇒ ARABIC *muwəg*. ⇒ ASIAN LANGUAGES Chinese *mōumōu* 'moo'. ⇒ BALTO-SLAVIC Serbian *mukati*, Czech *bučet*. ⇒ BASQUE *mu*. ⇒ *DICCIONARIO* ANIMALS *MU*. ⇒ FINNO-UGRIC Finnish *ammua*, Hungarian *bóg*, Khanty *õmii-* 'to moo'. ⇒ GERMANIC LANGUAGES German *muhen*. ⇒ KOREAN *ummeý* 'moo'. ⇒ PERSIAN *mow mow*.
- MOVE ⇒ ABLAUT REDUPLICATION Khakas *pitir-patir* 'to and fro'.  
⇒ CILUBÀ *bokòbokò* 'repeated and accelerated movement', *njen*



- ‘quick movement’. ⇒ CREOLES Jamaican *jigi-jigi* ‘repeated movement back and forth’. ⇒ IŠTIKTUKAI *strapt* ‘sudden end or beginning of a movement’. ⇒ KHUMI *yü<sup>2</sup>* ‘motion of something passing quickly (including time)’, *pruy<sup>1</sup>pruy<sup>1</sup>pruy<sup>2</sup>* ‘quick motion’, *sō<sup>2</sup>* ‘motion which is direct, without stopping’, *phrü<sup>2</sup>* ‘quick climbing motion’, *hiw<sup>1</sup> hiw<sup>1</sup> hiw<sup>1</sup>* ‘motion of flames, feeling of getting angry’, *prew<sup>1</sup> prew<sup>1</sup> prew<sup>5</sup>* ‘motion of small creatures (e.g. mice)’. ⇒ NIGERIAN PIDGIN *fia/fiam* ‘sound of light swift movement’. ⇒ YORUBA *bórò bórò* ‘free and fast in motion’, *hábá hábà hábá* ‘very difficult and clumsy motion’,
- MUMBLE/MUTTER ⇒ ABLAUT REDUPLICATION Khakas *sabá-subá* ‘muttering, unintelligible speech’. ⇒ BINI *hühühũ* ‘muttering’. *DICCIONARIO HUMAN MUT*, ⇒ GEORGIAN *bluquneps* ‘(he/she) mutters’, *butbuti* ‘mumbling, muttering, murmur(ing)’. ⇒ *MIM/MOM/MUM* Dutch *mummelen* ‘mumble’, *mompelen* ‘mumble, mutter’. ⇒ *PRIMITIVE CULTURE* Vai *mu mu* ‘dumb’, Mpongwe *imamu* ‘dumb’, Zulu *momata* ‘to move the mouth or lips’, *mumata* ‘to close the lips as with a mouthful of water’, *mumuta*, *mumuza* ‘to eat mouthfuls of corn etc., with the lips shut’, Tahitian *mamu* ‘to be silent’, *omomu* ‘to murmur’, Fijian *nomo*, *nomo-nomo* ‘to be silent’, Quiché *mem* ‘mute’, Quichua *amu* ‘dumb’, *amullini* ‘to have something in the mouth’, *amullayacuni simicta* ‘to mutter, to grumble’. ⇒ SOULETIN BASQUE *mar mar* ‘mumbling’, *bur bur*, *far far*, *kal kal*, *kar kar*, *mur mur*, *pal pal*, *par par*, *pur pur*, *tzur tzur* ‘mumbling, murmuring, whispering’. ⇒ TURKISH *kım kım* suggesting slow and clumsy speech. ⇒ VIETNAMESE *lí nhí* ‘to mutter’.
- MUNCH ⇒ *DICTIONNAIRE* *brouter*.
- MURMUR ⇒ BALTO-SLAVIC Russian *zhurzhanıye*. ⇒ CANTONESE IDEOPHONES *am<sup>4</sup> am<sup>4</sup> cam<sup>4</sup> cam<sup>4</sup>* ‘murmuring’. ⇒ *DICCIONARIO SOUNDS MOR, MARM, MIRM, MORM*. ⇒ *DICTIONNAIRE* *murmurer* ‘to whisper, murmur’. ⇒ INDO-EUROPEAN \**der-der* ‘murmur, chat’. ⇒ *PRIMITIVE CULTURE* Tamil *murumuru* ‘to murmur’. ⇒ SOULETIN BASQUE *bur bur*, *far far*, *kal kal*, *kar kar*, *mur mur*, *pal pal*, *par par*, *pur pur*, *tzur tzur* ‘mumbling, murmuring, whispering’.

## —N—

- NASAL SPEECH ⇒ ARABIC *hərnən* ‘to speak through one’s nose’.
- NEIGH ⇒ ARABIC *həmhəm*. ⇒ ASIAN LANGUAGES Vietnamese *hí*. ⇒ BALTO-SLAVIC Serbian *rzati*, Polish *rżec*. ⇒ FINNO-UGRIC Finnish *hirnuu*, Hungarian *nyerít* ‘to neigh’, Khanty *engi-* ‘to neigh’. ⇒



- GERMANIC LANGUAGES German *wiehern* ‘to neigh’. ⇒ ILOCANO *garraigi* ‘neighing of horses’. ⇒ PHONOMIME Japanese/Korean *hinhin* (J)/*hihing* (K) ‘neigh’. ⇒ VIETNAMESE *hí* ‘to neigh’.
- NIBBLE ⇒ *DICTIONNAIRE* *grignotter*.
- NOD ⇒ ABLAUT REDUPLICATION English *niddle-naddle*, *niddle-noddle*, *nid-nod*. ⇒ WHITE HMONG *nTû nTì* ‘of nodding while sleeping, or of the way a horse walks, raising and lowering his head at each step’.
- NOISE ⇒ BALTO-SLAVIC Russian *shum*. ⇒ *DICCIONARIO*. SOUNDS German *brak* ‘noise, explosion’. ⇒ EBWELA *kpá* ‘sharp noise, popping noise’. ⇒ SOULETIN BASQUE *burrunba burrunba* ‘muffled sound, thud, dull sound’, *farrasta farrasta* ‘quickly with a slight noise’, *tirripiti tarrapata* ‘loud noise, hastily’, *xafla xafla* ‘noise (a slight snap, steps, water)’. ⇒ SPANISH *chacarrachaca* ‘disturbing noise’. ⇒ *VÖLKERPSYCHOLOGIE* Greek *κραγγή* ‘noise’.

## —O—

- OINK OINK ⇒ ASIAN LANGUAGES Vietnamese *in in*.

## —P—

- PAIN ⇒ SOULETIN BASQUE *dzirt dzart*, *dzist dzast*, *dzist dzast*, *sist sast*, *sista sasta*, *sisti sasta*, *tzista tzista*, *tzisti tzista*, *zist zast*, *zizti zazta* ‘brief, sharp pain’. ⇒ TAMIL *paḷicceṇal* ‘sharp pain’, *cuṛireṇal* ‘sharp pain, as from a sting or burn’, *veṭukkeṇal* ‘shooting pain’.
- PANT ⇒ BALTO-SLAVIC Latvian *gārkstēt* ‘to pant’ Russian *pykhtiet* ‘to puff, pant’. ⇒ *DICTIONNAIRE* *ahaner*. ⇒ FRENCH *pipa* ‘gasp, pant’. ⇒ GEORGIAN *khvnesha* ‘sighing, panting’. ⇒ GERMANIC LANGUAGES Swedish *flämta* ‘pant’. ⇒ *PRIMITIVE CULTURE* Maori *puku* ‘to pant’. ⇒ *PRIMITIVE AND UNIVERSAL* Sanskrit *phūt* ‘puff’. ⇒ VIETNAMESE *phì phò* ‘of panting’.
- PATTER ⇒ GEORGIAN *ch'khap'a-ch'khup'i* ‘patter (of rain)’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *plezskù pleszkėti* ‘to roar, patter’. ⇒ TAMIL *immeṇal* ‘humming, rustling, pattering’.
- PECK ⇒ BALTO-SLAVIC Serbian *kljucati* ‘to peck’. ⇒ *DICCIONARIO*. SOUNDS *PIK*, *PIT*. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *kėpszt* ‘peck’.
- PEEP ⇒ PIP. ⇒ FINNO-UGRIC Finnish *piipittää* ‘to peep, tweet’, Hungarian *cincog* ‘to squeak, peep’. ⇒ HEBREW *spr* ‘peep > bird > cover or call by noise > fly over’, *spp/spsp* ‘chirp, peep’. ⇒

- SCHALLNACHAHMUNGEN* Lithuanian *czypsiù czyps* ‘to beep, peep’.  
 ⇒ TAMIL *kiyyāṅkiyyāmeṇal* ‘peeping of chickens, etc.’.
- PLENTY ⇒ CREOLES Yoruba, Ewe and Kongo *kolokolo* ‘very (dry), plentiful’, Fa D’Ambu *sécu jolójólo* ‘very dry’ and Jamaican *kulu-kulu* ‘plentiful’.
- PLUCK ⇒ SHONA *chá-mu-undú-mu-úndu* ‘plucking feathers from all over’.
- PLUMMET ⇒ *DICTIONNAIRE dégringoler*.
- PLUMP ⇒ TSONGA *dlòmú* ‘plunge into deep water, as a big stone’.
- POKE ⇒ BALTO-SLAVIC Lithuanian *bak(s)nóti*. ⇒ BANTU IDEOPHONES Zulu *hloko* ‘jabbing, poking’. ⇒ CREOLES Jamaican *joko-joko* ‘to poke or jab repeatedly’.
- POP ⇒ KALULI *Gɔnɔ To boto* ‘popping sounds in cooking’. ⇒ KOREAN *hotutuk-hotutuk* ‘popping, cracking, snapping’. ⇒ YIR-YORONT *toll* ‘popping or bursting’. ⇒ YORUBA *púù púù* ‘popping intermittently’.
- POUND ⇒ ASIAN LANGUAGES Pacoh *tip-tup* ‘sound of two people alternately pounding rice’.
- PRICK ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *braszkėti, braskzterėti, bást* ‘pricking, stabbing, sharp push’. ⇒ SOMALI *tush* ‘to prick’. ⇒ TAMIL *cullucculleṇal* ‘sharp pricking sensation’.
- PUFF ⇒ PUFF. ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *poth* ‘of smoke puffing up from a fire’. ⇒ BALTO-SLAVIC Russian *pykhtiet* ‘to puff, pant’. ⇒ *DICIONARIO. SOUNDS BELG, HU, PEF, PIF, POF, PUF*. HUMAN *FUF*. ⇒ *DICTIONNAIRE, bouffée*. ⇒ GEORGIAN *ts’k’lap’uni* ‘(sound of) puffing on cigarette, lip-smacking’, *s’rup’-ts’rup’i* ‘puffing sound (of a pipe-smoker)’. ⇒ GERMANIC LANGUAGES Swedish *flåsa* ‘puff’. ⇒ *PRIMITIVE CULTURE* Malay *puput*, Tongan *buhi*, Maori *pupui*, Australian *bobun, bwa-bun*, Galla (Oromo) *bufa, afufa*, Zulu *futa, punga, pupuza*, Quiché *puba*, Quichua *puhuni*, Tupi *ypeú*, Finnish *puhkia*, Hebrew *puach*, Danish *puste*, Lithuanian *púciu*, Mpongwe *punchina*, Carib *phoubæe*, Arawak *appüdün*. ⇒ TAMIL *püttuppüttenal* ‘hard breathing, as if from running’. ⇒ *URSCHÖPFUNG*. German *puffen* ‘to puff’.
- PULL ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *wirr* (of pulling or dragging something). ⇒ BALTO-SLAVIC Lithuanian *trūkt* ‘a small pull’, *trūkt* ‘a strong pull’, *trūkt* ‘a very strong pull’. ⇒ IŠTIKTUKAI *briaukš(t)* ‘quick pulling away, cutting off’. ⇒ KARO IDEOPHONES *tuy tuy* ‘pull, pull’.
- PUMP ⇒ FRENCH *pompe* ‘pump’, *pomper* ‘to pump’, *pomper* ‘overdrink’. ⇒ RUIHONG *ṇatʰ* ‘to pump’.

- PUNCTURE ⇒ CREOLES Jamaican *juki-juki* ‘perforated, punctured’.  
 PURR ⇒ BALTO-SLAVIC Russian *murlykat* ‘to purr, to hum’, Serbian *presti*. ⇒ BASQUE *zurrunga* ‘sound of snoring or purring’. ⇒ GEORGIAN *k’rut’uni* ‘(cat’s) purring, (dove’s) cooing’. ⇒ GERMANIC LANGUAGES German *schnurren* ‘to purr’.  
 PUSH ⇒ SPANISH *arrechuchar* ‘to push’, *arrechucho* ‘sudden attack of a disease’.

## —Q—

- QUACK ⇒ BALTO-SLAVIC Latvian *pēkšķēt*, Russian *kriakat* ‘to quack, to grunt’, Serbian *gakati*, *kvakati*. ⇒ FINNO-UGRIC Hungarian *hápog* ‘to quack’. ⇒ GEORGIAN *k’ivk’ivi* ‘quacking of ducks, geese’, *qiqini* ‘croak(ing) (frog), quack(ing) (duck)’. ⇒ GERMANIC LANGUAGES German *quaken*.  
 QUICK(LY) ⇒ SOULETIN BASQUE *birrinba barranba/ birrinbi barranba* ‘quickly, making noise’, *farrasta farrasta* ‘quickly with a slight noise’, *zipirti zaparta* ‘without a break, quickly’. ⇒ TAMIL *ikkenal* ‘quickness’, *koppenal* ‘quickly, swiftly or suddenly’, *paliccenal* ‘promptness, rapidity’, *vefukkenal* ‘quickness’, *nerukkattiyenal* ‘suddenness, abruptness, promptness, quickness’. ⇒ URSCHÖPFUNG. German *flink* ‘quick, swift’.

## —R—

- RAIN ⇒ AMERICAN INDIAN Katuena *shiiii* ‘falling rain’. ⇒ BASQUE *zapar* ‘the sound of heavy rain’. ⇒ CANTONESE IDEOPHONES *si<sup>4</sup> li<sup>1</sup> saa<sup>4</sup> laa<sup>4</sup>* ‘sound of rain drops’. ⇒ KATUENA *shee* ‘rain’, *shii* ‘heavy rain’, *chitovish* ‘pouring rain’, *taariariaria* ‘rain hitting a surface’.  
 RASP ⇒ PRIMITIVE CULTURE Ainu *shiriushiriukanni* ‘a rasp’.  
 RATTLE ⇒ ASIAN LANGUAGES Tamil *gala gala* ‘tinkling or rattling of anklets or bangles’. ⇒ BASQUE *txintxirri* ‘rattle’. ⇒ DICTIONNAIRE, *cliquetis* ‘knocking, rattling’. ⇒ GEORGIAN *tkrialebs* ‘rattle, rush, make noise of horses’ hooves’, *ch’riala* ‘creaking/rattling’, *auk’atsk’atsebs* ‘will meake sb.’s (teeth/glasses) chatter/rattle’. ⇒ HEBREW *śks* ‘rattle, tinkle’. ⇒ KOREAN *ttalkak-ttalkak* ‘rattling’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *klabàkszt* ‘rattling, clattering sound’. ⇒ TAMIL *korukoruvenal* ‘roaring, as of the sea; rattling, as of the throat’, *kuṭukkukkuṭukkenal* ‘rattling noise’.  
 RED ⇒ CANTONESE IDEOPHONES *hong<sup>4</sup> dong<sup>3</sup> dong<sup>3</sup>* ‘red’, *hyut<sup>3</sup> lam<sup>4</sup> lam<sup>4</sup>* ‘blood red’. ⇒ YORUBA *fòò-fòò* ‘repeatedly red’.

- REEL ⇒ BASQUE *trinkulin-trinkulin* ‘staggering, tottering, reeling’. ⇒ FINNO-UGRIC Hungarian *zümmög* ‘to whirr, reel, hum, buzz’.
- REVOLVE ⇒ BANTU IDEOPHONES Zulu *phendu* ‘turning, revolving’.
- RING ⇒ ARABIC *xərɣəʃh*. ⇒ ASIAN LANGUAGES Tamil *TaaN TaaN* ‘ringing the bell’. ⇒ GEORGIAN *rek’va* ‘ringing, tolling, striking’, *ts’ivili* ‘shrieking, screeching, ringing (in ears)’, *ts’k’riali* ‘ringing sound (striking of glass, metal)’. ⇒ ILOCANO *kiring* ‘ring’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *skìmt* ‘ring, clink’. ⇒ SOMALI *qalaw* ‘to ring, clink (bell)’.
- RIP ⇒ *DICCIONARIO* SOUNDS *RIF, RAFL, RIFL*. ⇒ SOMALI *dhac* ‘to tear with a ripping noise (skin, cloth)’.
- ROAR ⇒ ASIAN LANGUAGES Chinese *hōngmíng* ‘the roar of machinery’, *hǒu* ‘roar, howl’, *háo* ‘howl, roar’, *xiào* ‘whistle, howl, roar’. ⇒ BALTO-SLAVIC Latvian *brakšķēt*, Russian *ryov* ‘roar, bellow, howl’, Serbian *mumlati, rikati, urlati* ‘to roar’. ⇒ BASQUE *furrust-farrast* ‘roar’. ⇒ *DICCIONARIO* SOUNDS *BRACH, BRĀK*. ⇒ *DICTIONNAIRE*, *rugir*. ⇒ FINNO-UGRIC Finnish *ärjyä* ‘to roar (of dogs, lions, bears, tigers)’, Hungarian *ordít* ‘to roar, bray, howl’, Khanty *orá-* ‘to roar’. ⇒ GEORGIAN *bghavili* ‘bleating, groaning, roaring’, *ghriali* ‘roar, bellowing, wailing, howling’, *grukhuni* ‘load noise, roar, thunder(ing)’. ⇒ GERMANIC LANGUAGES German *brüllen* ‘to roar’ (lion), *orgeln* ‘to roar, howl’. ⇒ PERSIAN *qorridan* ‘to roar, growl’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *plezskù plezskėti* ‘to roar, patter’, *bárksz, bárkszt, brabraksz* ‘crashing, roaring, crackling’. ⇒ SOULETIN BASQUE *barranba, barranba* ‘crashing, banging, clattering, roaring, thundering’. ⇒ TAMIL *korukoruveṅal* ‘roaring, as the sea; rattling, as the throat’. ⇒ VIETNAMESE *gâm* ‘to roar’. ⇒ WELSH *rhuo, puo, beichio* (North Wales), *bygloddi* (Mid Wales), *bygynad, byglad, boichen, bolgen* (South Wales).
- ROUGH ⇒ AKWAPEM TWI IDEOPHONES *kikiriw* ‘rough surface’. ⇒ BINI *xúaráxúará* ‘rough’. ⇒ *DICTIONNAIRE*, *rêche*.
- ROLL/TURN ⇒ AMERICAN INDIAN Pastaza Quechua *ɬ’am*. ⇒ JAPANESE *korokoro* (*to korogaru*) ‘(small object) rolls’/*gorogoro* (*to korogaru*) ‘(heavy object) rolls’. ⇒ KHUMI *rewng<sup>1</sup>rewng<sup>2</sup>* ‘sound of a rolling rock’. ⇒ TONAC *tampilili* ‘a long object rolling away’, *tanholulu* ‘a round object rolling away’, *pilipili* ‘an object rolling’.
- RUB ⇒ ASIAN LANGUAGES Pacoh *e:t-o:t* ‘sound of bamboo rubbing together in the wind’, Chinese *cācā* ‘the sound of rubbing’. ⇒ AUSTRALIAN LANGUAGES Gooniyandi *boor*. ⇒ *DICCIONARIO* SOUNDS *RIF, RAFL, RIFL*. ⇒ *DICTIONNAIRE*, *frotter*. ⇒ ILOCANO

- gusugus* ‘scrub, rub hard’. ⇒ RUIHONG *kiet*<sup>5</sup> ‘to rub the throat with dense foods like egg yolk’.
- RUMBLE ⇒ CREOLES Haitian *bim* ‘rumble, a blow with a stick’. ⇒ HINDI *gaRgaRaahaT* ‘rumble’. ⇒ ZULU *ndi* ‘of rumbling’.
- RUN ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *chichichi* (of a dog running). ⇒ DIDINGA *kir kir* ‘manner of running’. ⇒ GESTALT ICONICITY Katuena *fififi* ‘running’. ⇒ KHUMI *t’khew<sup>l</sup>vew<sup>l</sup>* *t’khew<sup>l</sup>vew<sup>l</sup>* ‘running motion of a bear, porcupine, vow, large human’. ⇒ NIGERIAN PIDGIN *gìdìgìdì/gìdìgìdì* ‘sound of people running up and down’. ⇒ TONAC *swilaswila* ‘someone or something running about quickly’. ⇒ YIR-YORONT *wurlwurlwurl* ‘running from water in a panic’. ⇒ YORUBA *pàpàpà* ‘running very hastily’.
- RUSTLE ⇒ ASIAN LANGUAGES Chinese *sèsè* ‘rustling of the wind’. ⇒ BALTO-SLAVIC Latvian *čaukstēt* ‘to rustle’, Russian *shelest*. ⇒ CILUBÀ *cyàcyà, kwàà, mvùmvmvù* ‘rustling’, *njènjenjè* ‘slow rustling’. ⇒ DICTIONNAIRE, *bruire*. ⇒ GEORGIAN *shriali* ‘rustling (of foliage, silk)’. ⇒ HINDI *sarsaraaHaT* ‘rustling’. ⇒ KHMER IDEOPHONES *preh prawh preh prawh* ‘rustle, stir’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *kripszt* ‘quiet rustle’. ⇒ TAMIL *cukkrenal* ‘rustling’, *imnenal* ‘humming, rustling, pattering’. ⇒ URSCHÖPFUNG. German *knistern* ‘to crackle, rustle’.

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- SALTY ⇒ CANTONESE IDEOPHONES *haam<sup>4</sup> haam<sup>2</sup> dei<sup>2</sup>* ‘a bit/too salty’.
- SAW ⇒ BASQUE *zirris-zarraz* ‘sound of sawing’.
- SCATTER ⇒ AUSTRALIAN LANGUAGES Jaminjung *burrurrug*. ⇒ HEBREW *pys* ‘scatter’. ⇒ ILOCANO *bukibuk* ‘scatter’. ⇒ KATUENA *meeruru* ‘scattered’. ⇒ KHUMI *phrang<sup>5</sup> phrang<sup>5</sup>* ‘motion of many sparks flying from a fire, leaves falling from a tree, a scattering motion’. ⇒ PASTAZA QUECHUA *sa tuksina* ‘to throw, scattering’, *sa ismana* ‘to defecate, scattering’. ⇒ WOLAITTA *púsku* ‘oott-’ ‘to scatter completely (of small things)’.
- SCORCH ⇒ SPANISH (*a*)*chicharrar* ‘to scorch, to char’.
- SCRAPE/SCRATCH ⇒ ARABIC *xərxəb, xərxəsh, xərbəsh*. ⇒ AUSTRALIAN LANGUAGES Jaminjung *wij-wij* ‘scraping’, Yir-Yoront *karrq* ⇒ BALTO-SLAVIC Russian *skrezhet* ‘grating, scraping’. ⇒ DICTIONNAIRE, *gratter, racler*. ⇒ EBWELA *kwaka* ‘scraping

- noise'. ⇒ GEORGIAN *ghrch'iali* 'screeching, scraping (of metal on metal), gnashing (of teeth)'. ⇒ KARO IDEOPHONES *kây kây* 'scratch scratch'. ⇒ PASTAZA QUECHUA *dzir ð'uchuna* 'to peel by scraping'. ⇒ SOULETIN BASQUE *karru karru* 'scratching noise'. ⇒ TURKISH *kurt kurt* 'breaking, cutting, scraping, chewing, grating'. ⇒ YIR-YORONT *karrq* 'scraping'.
- SCREAM ⇒ ABLAUT REDUPLICATION Khakas *sîx-saax* 'screaming, squeaking'. ⇒ BALTO-SLAVIC Russian *vizg* 'scream, squeal, yelp, screech'.
- SCREECH ⇒ ARABIC *zəgzəg* 'to screech, to grind one's teeth'. ⇒ BALTO-SLAVIC Russian *vizg* 'scream, squeal, yelp, screech', Serbian *klicati* 'to screech'. ⇒ *DICTIONNAIRE crisser*. ⇒ GEORGIAN *ghrch'iali* 'screeching, scraping (of metal on metal), gnashing (of teeth)'. *ts'ivili* 'shrieking, screeching, ringing (in ears)'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *krykszczu krykszti* 'to screech, squawk'. ⇒ SPANISH *chirriar/chirrear* 'to squeak, creak, screech', *chirrido* 'squeaking, creaking, screeching'. ⇒ *VÖLKERPSYCHOLOGIE* *κπιζω* 'to screech'.
- SCRIBBLE ⇒ BASQUE *dzarra-dzarra* 'scribble, doodle'. ⇒ SOULETIN BASQUE *mirrimarra* 'scribbling'.
- SCRUB ⇒ ILOCANO *gusugus* 'scrub, rub hard'.
- SEE-SAW ⇒ SEE-SAW. ⇒ ABLAUT REDUPLICATION English *shig-shog, shoogle-shaggle, teeter-totter, titter-tatter, swing-swang, queequaw, see-saw*.
- SHAKE ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *titititi* (of a dog shaking water off). ⇒ CREOLES Mandingo *fitifiti* 'to struggle, to shake'. ⇒ *DICCIONARIO* SOUNDS *TRAK, TREK, TRIK, TROK, TRUK*. ⇒ *DICTIONNAIRE, cahoter*. ⇒ DIDINGA *kitdik kitdik* 'manner of shaking, vibrating'. ⇒ HIXKARYANA *takeh takeh take* 'shaking loose', *wih wi* 'shaking the head'. ⇒ ILOCANO *wingiwing* 'to shake the head'. ⇒ INDO-EUROPEAN \**balbal* 'shake, dance'. ⇒ MUNDANG *bàbiyò* 'shake the body to dry oneself'. ⇒ RUIHONG *tiŋ<sup>24</sup> tiŋ taŋ<sup>24</sup> taŋ* 'shake of things with clear and melodious sound'. ⇒ TONAC *xpipixipi* 'something shivering or shaking slightly', *chikchik* 'tree shaking in wind'. TURKISH *zang, zmg, zmk, zonk, zong* 'sound of trembling, shaking, vibrating'.
- SHARP SOUND ⇒ CREOLES Jamaican *blam* 'to make a sharp sound'.
- SHATTER ⇒ *DICTIONNAIRE briser*. ⇒ HEBREW, *nps* 'shatter'.
- SHIMMER ⇒ GEORGIAN *tsimtsimi* 'flickering, shimmering'.

- SHIVER/SHUDDER ⇒ AUSTRALIAN LANGUAGES Gooniyandi *mirmirr*. ⇒ GEORGIAN *k'ank'ali* 'shuddering, shivering'. ⇒ TONAC *xpipixipi* 'something shivering or shaking slightly'.
- SHOCK ⇒ *DICTIONNAIRE choquer*.
- SHOOT ⇒ CATALAN *bam, bang, clic, crac, flop, flup, pac-pac-pac, pam, pang, patapum, pim-pam-pum, ratatata, tacatac*. ⇒ SOMALI *tataac* 'to shoot repeatedly'.
- SHOUT ⇒ BALTO-SLAVIC Russian *krik* 'shout'. ⇒ SOMALI *xuux* 'to cry, shout threatening'. ⇒ TURKISH *bar bar* 'sound of loud shouting'.
- SHRIEK ⇒ GEORGIAN *ts'ivili* 'shrieking, screeching, ringing (in ears)', *k'ivili* 'shriek(ing)', *ts'ivil-k'ivili* 'loud shrieks, uproar', *k'ivil-ts'ivili* 'shrieking and yelling'. ⇒ GERMANIC LANGUAGES German *kreischen* 'to shriek, squeal'. ⇒ ILOCANO *dir'i* 'shriek'.
- SHUDDER ⇒ REDUPLICATION Mokilese *roarroaroar* 'to continue to shudder'.
- SIGH ⇒ BANTU IDEOPHONES Zulu *bubu* 'moaning, sighing, groaning'. ⇒ GEORGIAN *khvnesha* 'sighing, panting'.
- SILENCE ⇒ CILUBÀ *nyaa, vii, nyèkètèè*. ⇒ EBWELA *góó* 'silent, quiet'. ⇒ EWE *kpóó* 'quietly'. ⇒ HAUSA *sùmùmù, sùlùlù*. ⇒ HINDI *chupchaap* 'silently'. ⇒ TURKISH *tin tin* 'something soundless, noiseless, silent'. ⇒ *VÖLKERPSYCHOLOGIE* Tahitian *namu*, Fijian *hamu*, Mpongwe *imamu*, Hebrew *alam*.
- SILLY ⇒ CANTONESE IDEOPHONES *mun<sup>2</sup> bai<sup>3</sup> bai<sup>3</sup>/mun<sup>2</sup> sing<sup>6</sup> sing<sup>6</sup>* 'being silly/absent-minded'.
- SIP ⇒ *DICCIONARIO*. HUMAN *LAMP* (sipping, swallowing), *LAP, LEP, LOP, LUP*.
- SIZZLE ⇒ BALTO-SLAVIC Russian *shipeniye* 'hissing, sizzling, sputtering', Serbian *cvrčati* 'to chirp, to sizzle', Czech *prskat* 'to splutter, spit, sizzle, crackle, hiss'. ⇒ *DICTIONNAIRE, grésiller* 'to sizzle, hiss'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *treszkù treszkėti* 'to crackle, sizzle'.
- SKILLFUL ⇒ AKWAPEM TWI IDEOPHONES *kekye* 'skillful'.
- SKIMPY ⇒ BINI *yínghényìngghényínghén* 'skimpy'.
- SLAM ⇒ CREOLES Krio *gbang* 'sound of a heavy banging or slamming'. ⇒ *DICCIONARIO*. SOUNDS *KRAMP* 'slamming, playing a chord instrument'. ⇒ *DICTIONNAIRE, claquer*. ⇒ ILOCANO *ripak* 'sound of a slammed door'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian, *páuszkiu pauszketi* 'to bang, slam'. ⇒ SOMALI *qab* 'to slam (door)'.



- SLAP ⇒ BASQUE *blisti-blasta* ‘slapping’. ⇒ CATALAN *bim-bam, clic-clac, flis(t)-flas(t), paplaf, pataf, patapaf, plif-plaf*. ⇒ FRENCH *paf* ‘slap’. ⇒ KOREAN *chelssek* ‘with a slap’. ⇒ NIGERIAN PIDGIN *zàwà’y* ‘sound of hard slap’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *pókszt* ‘slap, beat, whip’.
- SLIDE ⇒ AUSTRALIAN LANGUAGES Jaminjung *yirrirrij*. ⇒ *DICCIONARIO. SOUNDS* *DLAS, DLIS, LIS*. ⇒ EBWELA *hédédu* ‘sliding’. ⇒ HIXKARYANA *xeryerye* ‘dragging, sliding’. ⇒ *ONOMATOPÉES ET MOTS EXPRESSIFS* French *glisser* ‘to slide’. ⇒ PASTAZA QUECHUA *dzir rana* ‘to slide’. ⇒ SCHALLNACHAHMUNGEN Lithuanian *čiužt* ‘sliding, gliding’.
- SLIP ⇒ SOMALI *lib* ‘to slip into’. ⇒ ZULU *shelele* ‘of slipping’.
- SLIPPERY ⇒ KOREAN *mikkul-mikul* ‘slippery’.
- SLOPPY/CARELESS ⇒ ABLAUT REDUPLICATION Estonian *kriima-kraama* ‘carelessly, sloppy’; *liga-loga* ‘confused, sloppy, bad’; *para-para* ‘scattered, sloppy, carelessly, quickly’; *plihva-plahva* ‘bungling, carelessly’; *limma-lamma* ‘(to do something) bungling, carelessly, thoughtlessly’; *priuh-prauh* ‘quickly, carelessly’.
- SLOW ⇒ CANTONESE IDEOPHONES *maan<sup>6</sup> tan<sup>1</sup> tan<sup>1</sup>* ‘slow’. ⇒ EBWELA *gbéké* ‘slowly’. ⇒ SOULETIN BASQUE *punpa punpa* ‘slowly and heavily’, *til til* ‘slowly’.
- SLURP ⇒ KATUENA *sho* ‘slurp’.
- SMACK ⇒ ASIAN LANGUAGES Chinese *bābā* ‘smacking one’s lip’. ⇒ BALTO-SLAVIC Lithuanian *čepsénti* ‘to smack one’s lips’, Russian *chmokat’* ‘to smack one’s lip, to squelch’. ⇒ GEORGIAN *ts’k’lap’uni* ‘(sound of) puffing on cigarette, lip-smacking’.
- SMELL ⇒ AKWAPEM TWI IDEOPHONES *hūam* ‘pleasant smell’, *nyān* ‘fetid’, *kānkān* ‘bad smell’. ⇒ BANTU IDEOPHONES Southern Sotho *phū* ‘of evil smell’. ⇒ CHINTANG *toktoktok*. ⇒ HINDI *mahmah* ‘smelling’.
- SMASH ⇒ ZULU *phahla* ‘of smashing/dropping’, *phihli* ‘of smashing to pieces’.
- SMILE ⇒ KOREAN *pangkus-i* ‘smiling with joy’.
- SMOOTH ⇒ AKWAPEM TWI IDEOPHONES *fekofeko* ‘smooth’, *sokooo* ‘rosy/smooth/wealth’, *gyirumgyirum* ‘not very smooth’. ⇒ BANTU IDEOPHONES Zulu *thele* ‘smoothness’.
- SNAP ⇒ BALTO-SLAVIC Latvian *krakššis*. ⇒ BASQUE *zart* ‘bang, boom, snap’. ⇒ KOREAN *hotutuk-hotutuk* ‘popping, cracking, snapping’. ⇒ SPANISH *chascar/chasquear* ‘to creak, snap, crack’. ⇒



- URSCHÖPFUNG*. German *blaffen* ‘to snap’. ⇒ YIR-YORONT *piw* ‘a twig or stick breaking with a snap’.
- SNARL ⇒ GERMANIC LANGUAGES German *knurren* ‘to growl, snarl’.
- SNEAK ⇒ SOULETIN BASQUE *farra farra* ‘sneaking with a slight noise’.
- SNEEZE ⇒ *DICTIONNAIRE*, *éternuer*. ⇒ ILOCANO *baeng* ‘sneeze’. ⇒ SOMALI *hindhis* ‘to sneeze suddenly and violently’.
- SNIP ⇒ RUIHONG *kat<sup>5</sup>* ‘to snip, gossip’. ⇒ SHONA *chá-mu-chétu-mu-chétu* ‘snipping all over’.
- SNORE ⇒ AUSTRALIAN LANGUAGES Gooniyandi *boorool*. ⇒ BALTO-SLAVIC Latvian *gārktēt* ‘to pant, to snore’, Polish *chrapać*, Czech *chrápat*. ⇒ BASQUE *zurrunga* ‘sound of snoring or purring’. ⇒ *DICCIONARIO* HUMAN *GURR, RANK*. ⇒ *DICTIONNAIRE*, *ronfler*. ⇒ FINNO-UGRIC Finnish *korskua* ‘to snort, to snore’. ⇒ KATUENA *kroo* ‘snore’. ⇒ MUNDANG *yì yíirI* ‘snore’. ⇒ PERSIAN *khornash keshidan/khor khor (kardan)*. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *Garr* ‘snoring’. ⇒ TETELA *kórrr*. ⇒ TURKISH *har har* ‘mimics snoring, deep breathing’.
- SNORT ⇒ BALTO-SLAVIC Serbian *frktati* ‘to snort’. ⇒ *DICTIONNAIRE*, *ébrouer* ⇒ FINNO-UGRIC Finnish *korskua* ‘to snort, to snore’. ⇒ GERMANIC LANGUAGES German *schnauben* ‘to snort’ (horse, hippopotamus).
- SOAK ⇒ ASIAN LANGUAGES Khmer *leha’-lehia* ‘soaking’.
- SOB ⇒ BALTO-SLAVIC Latvian *šņukstēt*. ⇒ BASQUE *intziri-mintziri*. ⇒ *DICCIONARIO* HUMAN *HIK*. ⇒ ILOCANO *saibbe* ‘sob’. ⇒ JAPANESE *mesomeso (to naku)* ‘sob’.
- SOMEHOW ⇒ ABLAUT REDUPLICATION Khakas *salá-sulá* ‘anyhow, somehow’.
- SOUND REPETITION ⇒ ABLAUT REDUPLICATION English *clip-a-clap* and *clip-clop* ‘imitation of sounds of alternating rhythm’; *pitter-pátter* ‘an imitation of a rapid alternation of light beating sounds, rain, hail, light footfall’. Khakas *tish-tash* ‘soft repetitive noise (steps, knocking)’, *tizh’ir-tazh’ir* ‘strong, repetitive noise (shooting, thundering)’.
- SOUR ⇒ CANTONESE IDEOPHONES *syun<sup>1</sup> mei<sup>1</sup> mei<sup>1</sup>* ‘a bit sour’, *syun<sup>1</sup> lau<sup>6</sup> lau<sup>6</sup>* ‘sour’.
- SPARK/SPARKLE ⇒ AFRICAN LANGUAGES Somali *halalac* ‘to give off a sparkling light’. ⇒ AMERICAN INDIAN Totonac *lipli* ‘a diamond or piece of sparkling glass’, *lipilip* ‘sun glinting off the water, a mirror etc.’, *limlim* ‘sun sparkling off flowing water’. ⇒ *DICCIONARIO* SOUNDS *GLIT, ZIRR*. ⇒ GERMANIC LANGUAGES

- Norwegian *glimre* ‘glitter, sparkle’. ⇒ JAPANESE *kirakira* (*to hikaru*) ‘(shine) sparkingly’. ⇒ SIWU *gelegele* ‘sparking’. ⇒ SOMALI *halalac* ‘to give off a sparkling light’. ⇒ SOULETIN BASQUE *ñir ñir* ‘little by little but regularly’ and ‘sparkle, twinkle, glimmer’ (in Standard Basque). ⇒ SPANISH *chispa* ‘spark’, *chispazo* ‘spark’, *chispear* ‘to give off sparks, to spit (with rain)’, *chispeante* ‘sparkling’, *chisporrotear* ‘to spit’. ⇒ TONAC *liplip* ‘a diamond or piece of glass sparkling’, *limlim* ‘sun sparkling off flowing water’
- SPILL ⇒ PASTAZA QUECHUA *ki urmana* ‘to fall, spilling all over, e.g., a basket of fish’.
- SPIT ⇒ AUSTRALIAN LANGUAGES Yir-Yoront *pith*. ⇒ BALTO-SLAVIC Czech *prskat* ‘to splutter, spit, sizzle, crackle, hiss’. ⇒ *DICCIONARIO*. HUMAN *SPIT*, *SPOT*, *SPUT*. ⇒ HIXKARYANA *tyufa* ‘spitting’. ⇒ KHMER IDEOPHONES *crw:c-craw:c* ‘sound of spitting’. ⇒ KHUMI *thuy*<sup>5</sup> ‘spitting sound’.
- SPLASH ⇒ ABLAUT REDUPLICATION Basque *pilisti-palasta*, *plisti-plasta* ‘splish-splash’; *tilist(i)-talast(a)* ‘to splash’; *txipli-txapla*, *txipi-txapa*, *txipla-txapla* ‘to splash about’; *tisti-tasta* ‘to splash’; *zifli-zafla* ‘splashing about’; *tifli-tafla* ‘beating, splash’; *xifli-xafla* ‘to splash about’; *zipli-zapla* ‘to splash’; *glin-glan* ‘wine poured in a bottle’; *pilist-palast* ‘sound of water moving in a bucket’. Khakas *pilchix-pálchix* ‘splashing’; *pux-pax* ‘splashing noise’. ⇒ AMERICAN INDIAN Pastaza Quechua *tsupu* ‘idea of the sound of the moment of falling into water’. ⇒ BALTO-SLAVIC Latvian *plunkšķēt* ‘to splash’, Russian *pliesk*, Polish *chlupać*. ⇒ BANTU IDEOPHONES Zulu *khapha* ‘splashing’. ⇒ BASQUE *plast*, *zirrist*. ⇒ CATALAN, *paplaf*, *pataplaf*, *patatxip-patxap*, *patxip-patxap*. ⇒ *DICCIONARIO* SOUNDS *BACH*, *BAD*, *BADR*, *BRUCH*, *BORR*, *BART*, *CHALP*, *CHAMPL*, *CHAP*, *CHAPL*, *CHARK*, *CHARP*, *FLIK*, *FLOK*, *FLAK*, *FLAS*, *FLASK*, *FLESK*, *GACH*, *GUACH*, *LAM*, *MARG*, *PACH*, *PICH*, *PAK*, *PEK*, *PLAS*, *PLASK*, *SKUABL*, *SKUAMP* ⇒ EBWELA *kubú* ‘splashing’. ⇒ GEORGIAN *tkapuni* ‘splash’. ⇒ ILOCANO *kireb* ‘wave crash’. ⇒ *IŠTIKTUKAI* *taškyti* ‘splash’. ⇒ KALULI *Gɔnɔ To kubu*. ⇒ PHONOMIME Japanese/Korean *potyapotya* (J)/*calpatang* (K) ‘splash’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *trėszkiù trėszti* ‘to squeeze and splash’, *pláukszt* ‘splash’. ⇒ SHONA *bhabhangu* ‘splashing water during swimming’. ⇒ SOULETIN BASQUE *plasta plasta*, *plisti plasta*, *txafla txafla*, *txafla txafla*, *txapa txapa*, *txipi txapa*, *txipista txapasta*, *txipista txipista*, *txipisti txapasta*, *txufla txufla*, *txupa txupa*, *tzapa tzapa*, *tzipa tzapa*, *tzipi tzapa*, *xafla xafla*, *xifla xafla*, *xifli xafla*. ⇒ SPANISH

- chapotear* ‘to splash about, squelch about’, *chapoteo* ‘splashing, squelching’, *chaparrón*, *chaparrazo* ‘downpour’. ⇒ TURKISH *cap*, *cip*, *cib*, *cip*, *cop*, *cub*, *cup* ‘the sound of splashing’.
- SPLIT ⇒ HEBREW *prd* ‘divide’, *plg* ‘split’, *pry* ‘burst, in fruit’, *ply* ‘be separated’, *prr* ‘split, divide’, *prh* ‘bud, sprout, shoot/fly away’, *plh* ‘cleave’, *prt* ‘break off’, *prk* ‘display violence’, *plk* ‘territorial subdivision’, *prm* ‘unsew’, *prf* ‘become loose’, *prp* ‘unbind’, *prs* ‘divide’, *brr* ‘separate’, *bdr* ‘district’, *pzr* ‘scatter’, *bzr* ‘distribute’, *prz* ‘open’, *brz* ‘appear, burst, divide’. ⇒ HIXKARYANA *karara* ‘splitting wood’. ⇒ ILOCANO *litak* ‘sound of splitting bamboo’. ⇒ PASTAZA QUECHUA *ing partina* ‘to divide lengthwise’.
- SPLUTTER ⇒ BALTO-SLAVIC Czech *prskat* ‘to splutter, spit, sizzle, crackle, hiss’.
- SPRAWL ⇒ BANTU IDEOPHONES Zulu *thambalala* ‘sprawling’. ⇒ HAUSA *rasha-rasha*. ⇒ ZULU *bhaalakazaa* ‘of being sprawled out’
- SPRINKLE ⇒ KALULI *Gɔnɔ to ti* ‘the sound of rain sprinkling, spraying through the entire forest’. ⇒ MAYAN SOUND SYMBOLISM *tos* ‘to sprinkle’. ⇒ SOMALI *fash* ‘to sprinkle’.
- SPUTTER ⇒ BALTO-SLAVIC Russian *shipeniye* ‘hissing, sizzling, sputtering’.
- SQUASH ⇒ *DICCIONARIO* SOUNDS CHACH, CHAF, CHAFL, CHAFR, CHANG, CHANK, ZAP, ZART, CHAZ, DAB, DUB. ⇒ SPANISH *achuchar* ‘to put pressure on somebody, hug, squash, crush’, *chafar* ‘to flatten, crush, squash’, *chafallo* ‘smudge’, *chafallón* ‘slapdash’.
- SQUAT ⇒ BANTU IDEOPHONES Zulu *buthalala* ‘crouching, squatting, ducking down’.
- SQUAWK ⇒ PERSIAN *qâr qâr* ‘squawk’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *krykszczù krykszti* ‘to screech, squawk’. ⇒ TAMIL *kīccukkīccēnal* ‘screaming, squawking, chirping, twittering sound’.
- SQUEAK ⇒ BALTO-SLAVIC Russian *skrip* ‘squeak, creak, crunch (snow), *pisk* ‘squeak, cheep’, Serbian *cijukati*, Polish *zgrzytać* ‘to squeak, to grind (teeth)’. ⇒ BINI *fiefiefiefiefie* ‘squeak-squeak (as of a rat)’. ⇒ *DICTIONNAIRE*, *grincer* ‘to grind, squeak, creak’. ⇒ FINNO-UGRIC Hungarian *nyikkan* ‘to squeak’, *cincog* ‘to squeak, peep’. ⇒ GEORGIAN *ts’rip’ini* ‘squeaking, (bat) peeping, sobbing noise’, *ts’rip’ ts’rip’* ‘peep-peep, squeak-squeak’. ⇒ GERMANIC LANGUAGES German *piepsen* ‘squeak’. ⇒ IŠTIKTUKAI *cypt* ‘squeaking’. ⇒ SOMALI *dhash* ‘to crack with a squeaking sound’, *jiiq* ‘to squeak (wood and bird)’. ⇒ SPANISH *chirriar/chirrear* ‘to squeak, creak, screech’, *chirrido* ‘squeaking, creaking, screeching’.

- SQUEAL ⇒ BALTO-SLAVIC Russian *vizg* ‘scream, squeal, yelp, screech’. ⇒ GERMANIC LANGUAGES German *quieken* ‘to squeal’, *kreischen* ‘to shriek, squeal’. ⇒ WELSH *gwichian*.
- SQUEEZE ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *trėsziù trėkszi* ‘to squeeze and splash’.
- SQUELCH ⇒ ASIAN LANGUAGES Chinese *bāji* ‘the sound of squelching barefoot throughout the mud’. ⇒ BALTO-SLAVIC Latvian *plunkšket* ‘to squelch’, Russian *khliupat*, *chmokat* ‘to smack one’s lip, to squelch’.
- SQUIRM ⇒ HAUSA *wàtsàlniyaa* ‘wriggling, squirming’.
- STAB ⇒ CREOLES Haitian *djage* ‘to stab’, Guadeloupean French Creole, Martiniquais, Guyanese *choke* ‘to stab’.
- STAGGER ⇒ ASIAN LANGUAGES Khmer *mpeh-mpeh* ‘staggering’. ⇒ BAKA *ndiandià* ‘staggering of a tortoise or a drunkard’ ⇒ BASQUE *trinkulin-trinkulin* ‘staggering, tottering, reeling’. ⇒ BINI *rhúrhrúhú* ‘staggering’, *vàghàvaghá* ‘staggering’. ⇒ *DICCIONARIO SOUNDS DALD DILD, DOLD, DULD, DĀMBL, DANDI, DINDI, DĀNG, DĀNGL, DINGL, DANZ, DONDI, PANGL*. ⇒ HINDI *laRk<sup>h</sup>aRaataa* ‘staggering’. ⇒ IŠTIKTUKAI *tabalai* ‘staggering’. ⇒ KOREAN *pithul-(kelita)* ‘stagger, totter’, *pithul-pithul-(hata)* ‘stagger’.
- STAMMER/STUTTER ⇒ AFRICAN LANGUAGES Ngombe (*yenge akekumaka*) *keku-keku* ‘the child stutters’. ⇒ ARABIC *wəkwək* ‘to stutter, to stammer’, *bəzhgət* ‘to stammer’, *təmtəm* ‘to stutter’. ⇒ BABBLE Sanskrit *balbala*, Latin *balbutire*, Scottish Gaelic *blabaran* ‘stammerer’, Spanish *balbucear* ‘to stammer, to babble’. ⇒ BANTU IDEOPHONES Ngombe *keku keku*. ⇒ CILUBÀ, *kukukumina* ‘stutter’.
- STEP/STAMP ⇒ TURKISH *dab, dīb, dip, diip* ‘noise of irregular stepping and stamping’.
- STING ⇒ BASQUE *sisti-sasta* ‘sting’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *digt* ‘stinging, biting’.
- STRAIGHT ⇒ BASQUE *ter-ter-ter* ‘in a straight line’.
- STRAIN ⇒ AFRICAN LANGUAGES Shona *chámuchácha-muchácha* ‘straining’.
- STREAM ⇒ SPANISH *chorro* ‘stream’, *chorrear* ‘to pour, be dripping wet’, *chorreo* ‘gushing’.
- STRIKE ⇒ ILOCANO *kur’it* ‘sound of striking a match’. ⇒ KATUENA *dow* ‘strike’. ⇒ TONAC *lanhx* ‘a blow striking with great force’. ⇒ TURKISH *pat pat pat* ‘sound made when striking repeatedly a flat object with one’s hand or with a club’. ⇒ YIR-YORONT *tor* ‘striking a blow with an implement’, *thak* ‘sudden strike’.

- STRONG NOISE ⇒ ABLAUT REDUPLICATION Khakas *nizirt-nazirt* ‘strong noise’; *tidirt-tadirt* ‘strong, sharp noise’.
- STRUGGLE ⇒ CREOLES Mandingo *fitifiti* ‘to struggle, to shake’.
- STUBBORN ⇒ CANTONESE IDEOPHONES *ngaang<sup>6</sup> baang<sup>l</sup> baang<sup>l</sup>* ‘being stubborn’.
- STUMBLE ⇒ TOMMO-SO *bàmbú-bàmbú-go yàá* ‘stumble along like a drunk’.
- STUTTER ⇒ *DICCIONARIO*. HUMAN *TART, TARTL, ZAR*. ⇒ *MIM/MOM/MUM* Old Slavic *mimak* ‘to stutter’.
- SUCK ⇒ *DICCIONARIO* SOUNDS *CHUP*. ⇒ *DICTIONNAIRE, sucer, téter*. ⇒ KALULI *Gɔnɔ To de* ‘puckering and sucking sounds of bat eating’. ⇒ *PRIMITIVE CULTURE* Botocudo *hou-hou-hou-gitcha* ‘to suck’. ⇒ *PRIMITIVE AND UNIVERSAL* Latin *bibo* ‘drink, suck’, French *boire* ‘drink’, English *bee* ‘the sucking creature’, Japanese *batsi* ‘bee’. ⇒ SOMALI *fiiq* ‘to suck’. ⇒ SPANISH *chupar* ‘to suck, lick, puff’, *chupada* ‘suck’, *chuparse* ‘to waste away’ *chupete* ‘dummy, pacifier’, *chupa-chups* ‘lollipop’, *chupón* ‘sponger’, *chupatintas* ‘pen-pusher’.
- SUDDEN ⇒ CREOLES Jamaican *bam* ‘of a sudden action’. ⇒ EBWELA *gbii, pwa* ‘suddenly’. ⇒ HAUSA *farat*. ⇒ JAPANESE *pokkuri (to shinu)* ‘(die) suddenly’, *pui (to deke itu)* ‘(leave) suddenly’, *putsut (to kireru)* ‘(break) suddenly’. ⇒ TAMIL *kuppenal* ‘suddenness’, *koppenal* ‘quickly, swiftly or suddenly’, *vetukkeṇal* ‘suddenness and unexpectedness, quickness’, *nerukkaṭṭiyēṇal* ‘suddenness, abruptness, promptness, quickness’.
- SURPRISE ⇒ AFRICAN LANGUAGES Kilba *màkidàmà* ‘surprise’.
- SWALLOW ⇒ AUSTRALIAN LANGUAGES Gooniyandi *niyig*. ⇒ BANTU IDEOPHONES Zulu *minyi* ‘swallowing up’. ⇒ BASQUE *klik-klak* ‘swallow’. ⇒ *DICCIONARIO*. HUMAN *DRAG, CHAMP, GALD, GLAF, GAND, LAMP* (sipping, swallowing), *LANG* (swallowing), *LAP, LEP, LOP, LUP, TRAG*. ⇒ HEBREW *lʕ* ‘swallow’, *lwʕ* ‘speak’, *blʕ* ‘swallow’, *lʕt* ‘swallow greedily’. ⇒ PHONAESTHEME Latin *gl-* ‘to swallow’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *kluksz* ‘swallowing sound’. ⇒ SOMALI *dhalag* ‘to swallow something small’, *dhujuq* ‘to swallow involuntarily’, *juluq* ‘to gulp down without chewing’, *yalam* ‘to gulp down something small’. ⇒ TURKISH *lop lop* ‘sound of eating and swallowing’.
- SWAY ⇒ BINI *gòlògòlò* ‘swaying’. ⇒ TSONGA *dlòri- dlòri* (said while swaying a little from side to side).
- SWEET ⇒ CANTONESE IDEOPHONES *tim<sup>4</sup> je<sup>4</sup> je<sup>4</sup>* ‘a bit sweet’.

SWELL ⇒ *DICCIONARIO*. SOUNDS *HAMP, PAMP, POMP, PUMP*. ⇒ FRENCH *poufir* ‘to swell’. ⇒ HAUSA *bùrdùndùn* (emphasizes swelling). ⇒ HEBREW *bšy* ‘cause to swell or boil up’. ⇒ *PRIMITIVE CULTURE* Quichua *punquini* ‘to swell’, Maori *puka* ‘to swell’, Kanuri *fungin* ‘to blow, swell’. ⇒ *PRIMITIVE AND UNIVERSAL* Sanskrit *sphīti* ‘increase’, *sphāy* ‘swelling’.

SWING/ROCK/STAGGER/SWAY ⇒ ABLAUT REDUPLICATION Basque *bantzin-bantzan, bilin-bolan, biliki-balaka, bilinba-balanba, bilintzi-balantza, bilist-balast, binbi-banba, binbili-bonbolo, bindi-banda, dilin-dalan, dinbili-danbala, dingili-dangala, dingolodango, dringili-drangala, kikili-kakala, kikili-makala, kinkili-kankala, kizkili-kazkala, kixkiti-kaxkata, tiki-taka, tilintalanka, tingli-tangla, trinko-tranko, trinkulin-trankulin, zibuka-zabuka, zirrun-zarrun*. ⇒ CILUBÀ *peepeepe* ‘swinging of a flame’. ⇒ *DICCIONARIO* SOUNDS *KLIK* ‘crackling, trembling, swinging, tickling’, *GONDL* (also hesitation), *KLAMB, KLUMB, KLONG* (also trembling), *BĚK, BLAND, BLANG, BĚMB, BĚRLĚK, CHILIMB, CHILINCH, CHILING, CHAMBL, CHIMBL, CHINGL, DĚDL, DĚDR, DLĚND, DLANG, DLING, DLONG, GLIND* (also hanging), *HĚNG, KANG, KING* (also trembling), *PAMPR, SARAND, TAMB, TRANGL*. ⇒ RUIHONG *tať* ‘swing with great strength’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *liuliúti* ‘to swing’. ⇒ SOULETIN BASQUE *banba banba, binba banba, binbi banba, dilinda dilinda, dilinga dalanga, dilinga dilinga, dilingo dalanga* ‘swinging, waddling’.

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TAP ⇒ BALTO-SLAVIC Lithuanian *taukšt-taukš* ‘knock, tap’. ⇒ GEORGIAN *k’ak’uni* ‘tapping, knocking noise’. ⇒ GERMANIC LANGUAGES English *pitter-patter* ‘a light, tapping sound’. ⇒ HINDI *ťapťapaanaa* ‘to tap’. ⇒ ILOCANO *tarťtat* ‘sound of typing’. ⇒ SOULETIN BASQUE *jiga jaga, jigu jaga, jigu jigu, saka saka, sigu sigu, zigu zigu* ‘recurring taps’. ⇒ TAMIL *tannēnal* ‘tapping’. ⇒ TURKISH *ťip ťip* ‘tapping’.

TEAR ⇒ *DICCIONARIO*. SOUNDS *RIF, RAFL, RIFL, ZARR*.

THIN ⇒ AKWAPEM TWI IDEOPHONES *ťiaal/ťiaal/hwīaa* ‘slim’.

THOUGHTLESS ⇒ ABLAUT REDUPLICATION Khakas *sťrēng-sarāng* ‘thoughtlessly’.

THROW ⇒ MUNDANG *twàs twàs* ‘throwing sand’. ⇒ PASTAZA QUECHUA *sa tuksina* ‘to throw, scattering’, *patang tuksina* ‘to throw or fling something down’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian

- blakštúti*; *bląngst* ‘sound produced by a sudden throw or blow’, *tékszt*, *patékszt* ‘sound made by throwing a viscous material’. ⇒ YIR-YORONT *lak* ‘throwing, knocking, or falling heavily to ground’, *purrt* ‘throwing’.
- THUD ⇒ SOULETIN BASQUE *burrunba burrunba* ‘muffled sound, thud, dull sound’. ⇒ TSONGA *gi-gi-gi* ‘produce brief crisp thud’.
- THUMP ⇒ ILOCANO *bitog* ‘thump’. ⇒ TAMIL *takkuttakkeṇal* ‘repeated thumping sound’.
- THUNDER ⇒ BALTO-SLAVIC Russian *grom*, Polish *grom*, Czech *hrom*, *hřmět*. ⇒ DICTIONNAIRE, *tonner*. ⇒ EWE *gbrrr* ‘sound of thunder’. ⇒ GEORGIAN *dgrialebs* ‘make noise, thunder’, *kukhili* ‘thunder’, *grukhuni* ‘load noise, roar, thunder(ing)’. ⇒ KHMER IDEOPHONES *kreul kreul* ‘sound of thunder’. ⇒ MUNDANG *kpáà* ‘anger, unrest, thunder’. ⇒ PRIMITIVE CULTURE Australian *bung-bung-ween* ‘thunder’. ⇒ SOMALI *quququc* ‘thunder’. ⇒ SOULETIN BASQUE *barranba, barranba* ‘crashing, banging, clattering, roaring, thundering’.
- TICK ⇒ TICK-TOCK ⇒ ABLAUT REDUPLICATION English *tick-tack* ‘an imitation of a reduplicated or alternated sound, esp. that made by a clock’; *tick-tóck* ‘an imitation of the ticking of a clock, esp. the slow ticking of a large clock’; *drip-drop* ‘continuous dripping with alternation of sound’. ⇒ DICCIONARIO SOUNDS *KLIK* ‘crackling, trembling, swinging, tickling’. ⇒ FRENCH *tique, toc* ‘tick’. ⇒ GERMANIC LANGUAGES German *tick tack* ‘tick tock’. ⇒ SOULETIN BASQUE *tik tak* ‘tick tock’
- TICKLE ⇒ DICCIONARIO SOUNDS *DAG*, HUMAN *GATL, KATL, KITL, KOTL*. ⇒ SOULETIN BASQUE *gili gili* ‘tickling’.
- TINGLE ⇒ ABLAUT REDUPLICATION Mandarin Chinese *dīngdōng* ‘the sound of tingling’. ⇒ FINNO-UGRIC Finnish *kilkutta* ‘tingle, jingle’.
- TINKLE ⇒ ASIAN LANGUAGES Tamil *gala gala* ‘tinkling or rattling of anklets or bangles’. ⇒ BALTO-SLAVIC Latvian *strinkšķēt*. ⇒ DICCIONARIO SOUNDS *CHINCH*. ⇒ GEORGIAN *chkharuni* ‘jingling, tinkling’. ⇒ HEBREW *fs* ‘rattle, tinkle’. ⇒ TAMIL *kiṇṇeṇal* ‘tinkling, clinking sound’, *viṇṇeṇal* ‘tinkling, as of a bell’, *kaṇakaṇeṇal* ‘tintinnabulation; tinkling, as of bells’, *kiṇukkukkiṇukkeṇal* ‘tinkling sound as of a hand bell’. ⇒ ZULU *khence* ‘of tinkling’.
- TITTER ⇒ FINNO-UGRIC Finnish *nauraa sirkuttaa* ‘to titter’.
- TOCK ⇒ FRENCH *tac* ‘tock’.



- TODDLE ⇒ ABLAUT REDUPLICATION Khakas *táltang-túltang* ‘toddling’. ⇒ SOULETIN BASQUE *taka taka* ‘to walk slowly in short and quick steps, toddling’.
- TOTTER ⇒ BASQUE *trinkulin-trinkulin* ‘staggering, tottering, reeling’. ⇒ HEBREW *ʕwq* ‘totter’. ⇒ HIXKARYANA *tuhturu turu* ‘tottering steps’. ⇒ JAPANESE *yochiyochi (to aruku)* ‘(walk) totteringly’. ⇒ KOREAN *pithul-(kelita)* ‘stagger, totter’. ⇒ SIWU *gbadaragbadara* ‘tottering gait of a drunkard’.
- TREMBLE ⇒ ABLAUT REDUPLICATION English *didder-dadder, didder-dodder, niddle-noddle, pintle-pantle, shig-shog, teeter-totter, whiltie-whaltie, wibble-wobble, wib-wob, widdle-waddle, wimbly-wambly, wingle-wangle*. ⇒ ASIAN LANGUAGES Tamil *giDu giDu* ‘tremor, as of an earthquake’. ⇒ CILUBÀ *ncàncàncà/zàkàzàkà*. ⇒ *DICCIONARIO* SOUNDS *KLIK* ‘crackling, trembling, swinging, tickling’, *DALD, DĀMBL, DANDI, DINDI, DĀNG, DĀNGL, DINGL, DANZ, DONDI, PANGL*. HUMAN *DARD, DARDI, DARDR, DURDR, DART DILD, DOLD, DULD, KATL, KITL, KOTL, NIN, TRAL, TRAM, TREM, TRIM, TROM, TART, TARTL, TARTN*. ⇒ *DICTIONNAIRE frémir*. ⇒ EWE *nyanyaanya* ‘trembling’. ⇒ ILOCANO *yugayug* ‘tremble’. ⇒ INDO-EUROPEAN *rei-rei* ‘tremble’. ⇒ *ONOMATOPÉES ET MOTS EXPRESSIFS* Latin *tremo* ‘I tremble’. ⇒ *OSNOVY FONOSEMANTIKI* Indonesian *detar* ‘sound of trembling’. ⇒ PHONAESTHEME Latin *tr-* ‘to tremble’. ⇒ REDUPLICATION Dogon *gengu-gangu-gengu* ‘trembling’. ⇒ SOULETIN BASQUE *dal dal* ‘trembling’. ⇒ TONAC *spispipi* ‘something small trembling’. ⇒ TURKISH *zang, zing, zink, zonk, zong* ‘sound of trembling, shaking, vibrating’.
- TRICKLE ⇒ KOREAN *col-col* ‘trickling’. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *czurszküi czurkszi* ‘to trickle’. ⇒ SPANISH *chorrito/chorrillo* ‘trickle’. ⇒ TONAC *chulululu* ‘water trickling’.
- TRILL ⇒ GERMANIC LANGUAGES German *tirlieren* ‘to trill’, *trillern* ‘to trill, warble’.
- TROT ⇒ *DICTIONNAIRE, trotter*. ⇒ ILOCANO *padak* ‘trot’.
- TRUMPETING (ELEPHANT) ⇒ ASIAN LANGUAGES Vietnamese *ré*.
- TURN ⇒ BANTU IDEOPHONES Zulu *phendu* ‘turning, revolving’. ⇒ PASTAZA QUECHUA *ʔam voltiriana* ‘to turn completely round’, *ʔam tigrana* ‘to turn over (of a canoe)’. ⇒ TURKISH *fir fir* ‘suggests constant and quick rotation’.
- TWEET ⇒ FINNO-UGRIC Finnish *piipittää* ‘to peep, tweet’, Hungarian *csiripel* ‘to tweet’. ⇒ PERSIAN *jik jik* ‘tweet’.



TWINKLE ⇒ ABLAUT REDUPLICATION Khakas *sh'iltix- sh'altix* 'twinkling, gleaming'. ⇒ AMERICAN INDIAN Totonac *slimslim* 'something twinkling'. ⇒ ASIAN LANGUAGES Khmer *senca'-senca:c* 'twinkling'. ⇒ BASQUE *nir-nir*. ⇒ CILUBÀ *kunyeneyeta* 'twinkle'. ⇒ *DICTIONNAIRE clignoter*. ⇒ ELVISH *wimpele* 'a twinkling', *itila* 'twinkling, glinting'. ⇒ GERMANIC LANGUAGES Norwegian, *glimte* 'gleam, flash, twinkle'. ⇒ *PRIMITIVE AND UNIVERSAL* Sanskrit *div* 'twinkle'. ⇒ SOULETIN BASQUE *ñir ñir* 'sparkle, twinkle, glimmer', 'little by little, but regularly'. ⇒ TONONAC *slimslim* 'something twinkling'.

TWISTED ⇒ BINI *tíghitíghitíghí* 'twisted'.

TWITTER ⇒ BALTO-SLAVIC Serbian *cvrkutati* 'to twitter, warble'. ⇒ FINNO-UGRIC Hungarian *csicsereg* 'to twitter'. ⇒ GEORGIAN *ch'ik'ch'ik'i* 'chirruping, twittering'. ⇒ GERMANIC LANGUAGES German *zwitchern* 'to twitter, chirp', *tshilpen* 'to chirp, twitter'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *czerszkiù czerkszti* 'to twitter, chirp, hiss'. ⇒ TAMIL *kiccukkiccēṇal* 'screaming, squawking, chirping, twittering sound'.

—U—

USED ⇒ AFRICAN LANGUAGES Yoruba *porogododo-porogododo* 'being completely used up'.

—V—

VEHICLE NOISE ⇒ AFRICAN LANGUAGES Swahili *piki-piki* 'motorcycle', *ting'a-tin'a* 'tractor', Gbaya *kutu-kutu-kutu* 'rumble of a car motor', Ibibio *toi-toi-toi-toi* 'motorcycle sound', *akpokko-toi-toi* 'motorcycle', Yoruba *fakafiki* 'sound of a train'.

—W—

WADDLE ⇒ BANTU IDEOPHONES Zulu *batha*. ⇒ BINI *wèkèèwèkèè* 'waddling'. ⇒ *DICTIONNAIRE dandinier*. ⇒ SOULETIN BASQUE *dilinga dilinga* 'waddling', *banba banba*, *binba banba*, *binbi banba*, *dilinda dilinda*, *dilinga dalanga*, *dilinga dilinga*, *dilingo dalanga* 'swinging, waddling'.

WAG/WIGGLE ⇒ ABLAUT REDUPLICATION English *wiggery-waggery*, *wiggle-waggle*, *wiggly-waggly*, *wig-wag*, *wriggle-wraggle*, *pip-pop*, *swig-swag*, *wigglety-wagglety*. ⇒ *DICTIONNAIRE frétilier*.

WAIL ⇒ BALTO-SLAVIC Russian *voi* 'howling, wailing', *vopl'* 'wailing, howling'. ⇒ FINNO-UGRIC Khanty *n'angash-* 'to moan, wail, whine'.

⇒ GEORGIAN *ghriali* ‘roar, bellowing, wailing, howling’, *ghrial-griali* ‘howling and wailing’. ⇒ *PRIMITIVE CULTURE* Australian *walle* ‘to wail’. ⇒ *URSCHÖPFUNG*. German *wimmern* ‘to whimper, wail’.

WALK ⇒ *ABLAUT REDUPLICATION* English *jitty-jetty*, *neck-nack*, *stip-step*; Estonian *tipa-tapa* ‘(walk) with quick and short steps’, *kips-kõps* ‘(walk) with quick and short steps’, *liipadi-laapadi* ‘(to move) heavily, cumbersome, dragging along’, *nika-naka* ‘(to move) steadily, heavily with short steps’. ⇒ *AFRICAN LANGUAGES* Siwu *kpotoro-kpotoro* ‘walking like a tortoise’. ⇒ *CATALAN* *catatric/catacrac*, *patim/patam*, *tipitap/tipitip* (manners of walking). ⇒ *KATUENA* *feetutu* ‘walk tiredly’, *chuku* ‘walking with a walking stick’, *sererere* ‘descend to a creek’. ⇒ *MUNDANG* *géréré* ‘walk in a crooked way’, *yá’yá* ‘walk without making noise’, *ləkáy ləkày* ‘walk unsteadily’. ⇒ *SOULETIN BASQUE* *taka taka* ‘to walk slowly in short and quick steps, toddling’, *tanpa tanpa* ‘noisy walking’, *trika traka* ‘walk rhythmically’, *truku truku* ‘in small steps’, *taka taka*, *tiki taka*, *tapa tapa*, *ttaka ttaka*, *tanpa tanpa*, *tinpa tanpa*, *tinpi tanpa*, *tipa tapa*, *tipi tapa*, *toko toko*, *traka traka*, *trika traka*, *triki traka*, *troko troko*, *ttaka ttaka*, *ttapa ttapa*, *ttiki ttaka*, *ttika ttaka*, *ttiki ttiki*, *ttipi ttapa*, *ttoko ttoko*, *traka traka*, *trika traka*, *triki traka*, *trinka tranka*, *trinkala trankala*, *trinkala trunkala*, *truku truku*, *ttuku ttuku*, *tuku tuku*, *txuku txuku* ‘different ways of walking’. ⇒ *TOMMO-SO* *nágádëy-nágádëy* ‘expressive adverbial for a tall, skinny person walking’, *yùmbò-yùmbò-ni yàá* ‘(child) walk clumsily’, *yóndu-yóndu-ni yàá* ‘walk slowly and stiffly’, *gàngáliyé-go yàá* ‘walk leaning to one side, then to another (rolling gait)’, *bàmbú-bàmbú-go yàá* ‘stumble along like a drunk’. ⇒ *TURKISH* *rap rap* suggests the sound of people walking. ⇒ *WHITE HMONG* *dí dàu* ‘the sound of many people walking on a surface of twigs, rock, and soil’, *nTàu nTì* ‘manner of (a human) walking, with application’. ⇒ *WOLAITTA* *tiit’itiit’a* ‘one with a hasty manner of walking’. ⇒ *YORUBA* *yigí yigí* ‘not walking straight/upright’.

WARBLE ⇒ *BALTO-SLAVIC* Serbian *cvrkatati* ‘to twitter, warble’. ⇒ *DICTIONNAIRE*, *gazouiller*. ⇒ *GERMANIC LANGUAGES* German *flöten* ‘to warble’, *trillern* ‘to trill, warble’.

WARM ⇒ *AFRICAN LANGUAGES* Siwu *kpie-kpie* ‘lukewarm’.

WAVE ⇒ *KHUMI* *li<sup>1</sup>lang<sup>5</sup> li<sup>1</sup>lang<sup>5</sup>* ‘waving motion of bamboo’. ⇒ *MUNDANG* *vík vík vík* ‘sound of broom being waved in the air’, *vIdyàk* ‘wave to someone’, *mèámámí* ‘wave’.

WAVER ⇒ *LAUT, TON UND SINN* Bambara *figifaga* ‘waver’.

- WEEP ⇒ *DICCIONARIO HUMAN GUA, HUA*. ⇒ ILOCANO *ug'ug* 'weep with a closed mouth'.
- WHIMPER ⇒ GERMANIC LANGUAGES German *fiepen, winseln*. ⇒ ILOCANO *riři* 'whimper'. ⇒ JAPANESE *mesomeso* 'whimpering'. ⇒ *URSCHÖPFUNG*. German *wimmern* 'to whimper, wail'.
- WHINE/WHIMPER ⇒ ARABIC *zəxnən*. ⇒ BALTO-SLAVIC Latvian *kunkstēt*, Serbian *cviljeti, zavijati* 'to howl, whine'. ⇒ FINNO-UGRIC Khanty *n'angash-* 'to moan, wail, whine'.
- WHINNY ⇒ ARABIC *həmhəm*. ⇒ ASIAN LANGUAGES Vietnamese *hí*, Chinese *sī* 'hoarse, whinny'.
- WHIP ⇒ GEORGIAN *t'k'atsani* 'crack (of whip), crackle (of fire)'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *pókszt* 'slap, beat, whip', *pýkszt* 'whip sound'. ⇒ SOMALI *wash* 'to whip'.
- WHIRL ⇒ MAYAN SOUND SYMBOLISM *sut* 'to whirl, to make a thing go round'
- WHIRR/WHIZZ ⇒ BALTO-SLAVIC Czech *bzučet* 'to buzz, hum, whirr'. ⇒ FINNO-UGRIC Hungarian *zűmmög* 'to whirr, reel, hum, buzz'. ⇒ GERMANIC LANGUAGES German *sirren* 'to buzz, whirr', *surren* 'to buzz, whizz'.
- WHISPER ⇒ ABLAUT REDUPLICATION Khakas *sibix-sabix* 'whispering'. ⇒ ARABIC *wəshwəsh* 'to whisper'. ⇒ BALTO-SLAVIC Latvian *čaukstēt, svepstēt* 'to whisper', Russian *shyopot* 'whisper', Polish *szeleścić*. ⇒ BASQUE *xuxu-muxu* 'murmur, whispering'. ⇒ BINI *wèwèwè* 'whispering'. ⇒ *DICTIONNAIRE* *chuchoter, murmurer* 'to whisper, murmur', *susurrer*. ⇒ GEORGIAN *churchuli* 'whisper(ing), whispered conversation'. ⇒ PHONOMIME Japanese/Korean *hisohiso* (J)/*ssoktokssoktok* (K) 'whisper'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *sznibždū sznibždėti* 'whisper'. ⇒ SOULETIN BASQUE *bar bar* 'whispering, without a break', *bur bur, far far, kal kal, kar kar, mur mur, pal pal, par par, pur pur, tzur tzur* 'mumbling, murmuring, whispering'. ⇒ SPANISH *cuchichear, chuchear* 'to whisper'. ⇒ TAMIL *kucukuceṇal* 'whispering'. ⇒ *URSCHÖPFUNG*. German *flüstern* 'to whisper'.
- WHISTLE ⇒ ASIAN LANGUAGES Chinese *xiào* 'whistle, howl, roar'. ⇒ BALTO-SLAVIC Latvian *čūks* 'to whistle', Russian *svist*. Czech *pískat*. ⇒ *DICTIONNAIRE*, *siffler*. ⇒ EWE *prrrr* 'sound of a whistle'. ⇒ FINNO-UGRIC Finnish *säksättää* 'to whistle, hiss'. ⇒ GEORGIAN *st'vena* 'whistling'. ⇒ GERMANIC LANGUAGES German *pfeifen*. ⇒ ILOCANO *sultip* 'whistle'. ⇒ KATUENA *foo* 'whistle with hand'. ⇒ *PRIMITIVE CULTURE* Quichua *chiuiuiuiñichi* 'wind whistling in the

trees'. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *szwykszt* 'a sharp whistling stroke', *szwilpt* 'whistling'. ⇒ *WELSH* *chwiban* 'whistle of small birds'.

**WHITE** ⇒ *AFRICAN LANGUAGES* Gbaya *tál-tál* 'pure white'. ⇒ *CANTONESE IDEOPHONES* *baak<sup>6</sup> syut<sup>1</sup> syut<sup>1</sup>* 'white (snow snow)'. ⇒ *CILUBÀ* *zeezeze/teeteete* 'whiteness'. ⇒ *CREOLES* Kriyól *branku fandan*, Sãotomense *blanku fenene*, Fa d'Ambu *bancu pepepe*. Krio *wayt fu*, Sranan *weti faal/fanfan*, Ndyuka *weti fááng*, Mende *fangfang* 'lucidly, clearly (of speaking)', Mandingo *fanfang* 'very well', *fer* 'completely, very (white)', Twi *fufu* 'white', Ewe *fu títiti/tatata* 'snow white', Yoruba *funfun láúláú* 'snow white'. ⇒ *SIWU* *fututu* 'pure white'. ⇒ *TAMIL* *vellēnal* 'becoming white, becoming clear, dawning of day', *veľuveľuvenal* 'extreme whiteness'. ⇒ *YORUBA* *nigin nigín nigín* 'very clean/white'.

**WHIZZ** ⇒ *BALTO-SLAVIC* Russian *zhuzhizat* 'to hum, buzz, whizz'.

**WIDE** ⇒ *AFRICAN LANGUAGES* Yoruba *fèrègèdè-feregedè* 'very wide appealingly'.

**WIND** see **BLOW**

**WINK** ⇒ *ABLAUT REDUPLICATION* Khakas *tip-tap* 'blinking, winking'. ⇒ *DICCIONARIO HUMAN CHUSK*. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *blust* 'winking', *mirk̃t* 'winking glance'.

**WOBBLE** ⇒ *URSCHÖPFUNG*. German *schwabeln* 'to buff sth., wobble', *wabbeln* 'to wobble'.

**WRIGGLE** ⇒ *HAUSA* *wàtsàlniyaa* 'wriggling, squirming'. ⇒ *HINDI* *kulbulaahaT* 'wriggling'. ⇒ *SIWU* *nyemrenyemre* 'wriggling/zigzagging'.

—Y—

**YAP** ⇒ *BALTO-SLAVIC* Lithuanian *kiáksyti*. ⇒ *GERMANIC LANGUAGES* German *kläffen*.

**YAWN** ⇒ *DICCIONARIO HUMAN GASP*. ⇒ *DICTIONNAIRE bâiller*. ⇒ *SCHALLNACHAHMUNGEN* Lithuanian *gargaliúti* 'to gasp'.

**YELLOW** ⇒ *CANTONESE IDEOPHONES* *wong<sup>4</sup> gam<sup>4</sup> gam<sup>4</sup>* 'yellow'.

**YELP** ⇒ *BALTO-SLAVIC* Russian *vizg* 'scream, squeal, yelp, screech'.

—Z—

**ZIGZAG** ⇒ *ZIGZAG*. ⇒ *ABLAUT REDUPLICATION* Estonian *vinkavonka* '(for a vehicle) when not heading straight, from one side to the other, zigzagging', Khakas *xıjbang-xájbang* 'zigzagging'. ⇒

AFRICAN LANGUAGES Gbaya *kilang-kilang* ‘a zigzagging motion’.  
⇒ GERMANIC LANGUAGES German *Zickzack*. ⇒ HAUSA *wàndàr-wandar* ‘zigzagging’. ⇒ *LAUT, TON UND SINN*. Bambara *milikimalaka* ‘to zigzag’. ⇒ SIWU *nyemrenyemre* ‘wriggling/zigzagging’.

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