
 GÉRARD DIFFLOTH

8.1. Introduction

From the start, one must admit that the study of sound symbolism has a tarnished reputation in current linguistics. Among several reasons, the poor quality of the evidence is sufficient to explain why many theoreticians show a definite lack of interest in this topic.

Instances of sound symbolism found in languages like English tend to be limited in number, and scattered pell-mell through the language; the iconic patterns themselves are ill-structured, timidly developed, and often difficult to identify and describe. Nevertheless, the more uncertain the data the more daring the theories tend to become, and sober-minded linguists have good reasons to remain skeptical.

Among the more reasonable statements made about sound symbolism, it is often said (Sapir 1929; Newman 1933; Jespersen 1933; Tarte 1974) that if vowel quality is used for size symbolism, [i] will symbolize smallness, and the lower vowels, especially [a], will symbolize largeness, with degrees in between. Casual remarks are often made about this being another set of language "universals," even though one major effort in this area (Ullian 1978) led only to guarded statements. Furthermore, there are suggestions (Ohala 1984) that this trait belongs not to the cultural but to the natural, innate domain.

This last point appears to be headed in the wrong direction, as I try to show below. Regarding the claim of universality, I will not have much to say, beyond deploring the incorrect use of the term "universal" to mean simply "found in a number of languages." One learns to take such grandiloquent terminology for what it is. The real problem is in the first claim, the apparently reasonable one.

The records show that there are well-developed sound-symbolic systems where vowel quality is used with systematic results exactly opposite to those predicted. Furthermore, there is really no point in considering the first type of sound symbolism as somehow being normal, while this second type would be aberrant or

language-specific; both, as I will argue, find equal justification in the physiology of speech and in the principles of iconicity, explored and applied differently in different languages.

In order to sway the skeptical, I will use evidence from languages where iconicity is rich, well-structured, and encoded in such a way as to make its presence quite certain. I am referring to languages which possess a class of words variously called "descriptives" (Smith 1973), "impressifs" (Durand 1961), /i-y-te-ɔ/ (Korean linguistic terminology; Martin 1962) /gitaigo/ (Amanuma 1974), "trung hinh" (Vietnamese linguistic terminology), "obraznye slova" (Kile 1973), /olikkurippu/ (Sadasivam 1966), among others. The term "ideophone" has also been used to cover a wide variety of African linguistic phenomena, some of which correspond to what will be discussed here. I have used the term "expressives" to refer to this basic part of speech, which is alien to Western tradition but can be defined in the traditional way by its distinct morphology, syntactic properties, and semantic characteristics; these have been discussed elsewhere (Diffloth 1972, 1976, 1979).

Some non-native linguists, especially in Japanese and Korean studies, have proposed that expressives be considered a subclass of adverbs. In passing, I must mention that similarities between expressives and adverbs do exist, but are quite superficial. The differences are profound and more relevant. For instance, English adverbs are inherently negatable (un-/fortunate-ly, in-/tolerabl-y, superficially vs. deeply, etc.). This is not an accidental but a fundamental property of the class "adverb," which points to its close relationship with the class "adjective." Expressives, on the other hand, though they may on occasion be used in sentences containing negatives, cannot be themselves negated. It is not possible to say that this tree trunk, in Semai, is floating down-river in an "un-/dyɔʃl-yɔʃl/" manner, that there is something "un-/pika-pika/" about this Japanese lantern, or that this Korean girl is smiling in an "un-/pangil-pangil/" way. Such expressions are rejected not simply on morphological or syntactic grounds; they are obnoxious and baffling to the native speaker because they are semantically ill-formed. They have no meaning, and their use (by non-natives or inquisitive linguists) betrays a misunderstanding of what expressives are for.

Adjectives and adverbs, like predicates, function in the conventional semiotic domain, where having truth values and being negatable are fundamental characteristics. Expressives do not operate in that domain; instead, they represent an attempt at fully exploiting the semiotics of iconicity, in order to convey various sensations in as direct a manner as speech makes possible. Because of this, it is not sufficient to say that expressives form a distinct basic part of speech: they actually constitute a parallel sublanguage grafted on, and parasitic on, the conventional one. This can explain many of the strange linguistic properties of these words; it accounts for their large but indefinite numbers, for their creativity and semantic elusiveness. The presence of expressives also gives us a chance to study sound symbolism in its finer grade and its more purposeful development.

8.2. Expressives in Bahnar

Bahnar, a Mon-Khmer language of Vietnam, has a large class of expressives, which is conspicuous for having plural and dual suffixes. This is all the more noticeable in that Mon-Khmer languages show a variety of both prefixes and infixes, but almost never have suffixes, except, precisely, in expressives; moreover, in this family generally, morphological plurals or duals are never found in nouns and verbs. In spite of these rather obvious pointers, the class of expressives has usually been neglected or even ignored by linguists, in this and similar languages. We are fortunate to have, in print, a very large dictionary of Bahnar (Guilleminet and Alberty 1959) which gives a great number of expressives (probably around two thousand). They are labeled as "mot descriptif" or "reduplication descriptive," as the case may be.

Examples ("D. red." = "Descriptive reduplication"):

- (1) /bloŋ-bloŋ/ "D. red. of the numerous reflections caused by rays of light on a small object"
- (2) /bloŋ-bleeew/ "D. red. of the numerous reflections caused by a single ray of light on a small shiny object"
- (3) /bleel-bleel/ "D. red. of small flames appearing intermittently but remaining vivid"
- (4) /bleel-ɲep/ "D. red. of a small scintillating fire, of the last intermittent flashes given by a small fire about to die off"
- (5) /kheeg-cəkheeg/ "D. red. of someone carrying a small burden on his shoulder"
- (6) /reel-hleel/ "D. red. of a very light movement, of something moving after being lightly brushed by something passing by (*affleure*)"
- (7) /rahyaal/ "Descriptive word of a light movement, like that of grasses a wild animal is cautiously stealing into"
- (8) /jəhaah/ "D. word of something small and gaping (a wound, a mouth)"
- (9) /hlep/ "D. word for what disappears, hides itself"

In expressives, as these examples attempt to show, onomatopoeia plays only a minor role and is sometimes not involved at all, as in (1-4), (8). Bahnar has, in addition to expressives, many onomatopoeic expressions which are separately labeled as such in the dictionary. And yet, in expressives as in onomatopoeia, the phonetic substance of the word has something to do with its meaning. This may not be obvious at first to the non-speaker of Bahnar: in order to understand and use these expressives properly, one must know the Bahnar iconic system, i.e. one must learn to focus on those specific resemblances between sound and meaning which its speakers have selected and exploited.

It is important to notice that, in most languages, expressives use only phonic material which is already given by the phonological system of the language. This is

true not only in terms of inventory, but also, for the most part, in terms of distribution. Expressives are phonologically well-formed words of the language, and when there are unusual sound combinations, the phonological violations appear limited, and clearly iconic (Diffloth 1979). In this obvious way at least, the iconicity of expressives is language-specific: Korean exploits the three degrees of aspiration in initial stops which its prosaic phonology provides, whereas Bahnar utilizes its large number of vowels.

The Bahnar vowel system is typologically normal for mainland Southeast Asia, at least in Mon-Khmer and Southwestern Tai languages:

ia	ua				
ii	uiu	uu	i	w	u
ee	əə	oo	e	ə	o
ɛɛ	aa	ɔɔ	ɛ	a	ɔ

Bahnar expressives tend to cluster into small networks of semantically and phonologically related forms, which are cross-referenced to each other in Guilleminet and Alberty's dictionary. These related forms differ mostly in the quality of their vowels. By far the most common pattern is a pair of expressives, one with a low vowel, the other with a mid-high or a high vowel, length and fronting remaining the same. The semantic difference has to do with size, and the pattern is invariably as follows:

"big"	ii	uu	i	u
	ee	oo	e	o

"small"
 ee ɔɔ ɛ ɔ
 (Central vowels are not very common in expressives.)

Examples:

- (10) /bloong-bloong/ "D. red. of numerous reflections caused by rays of light on a large object, elongated in shape"
 vs. /blɔɔŋ-blɔɔŋ/ "id., small object," cf. (1).
- (11) /bloong-bleew/ "D. red. of the numerous reflections caused by a single ray of light on a big shiny object"
 vs. /blɔɔŋ-bleew/ "id., small shiny object," cf. (2)
- (12) /bleel-bleel/ "D. red. of large flames appearing intermittently but remaining vivid"
 vs. /bleel-bleel/ "id., small flames," cf. (3)
- (13) /blɪɪl-ɟɪp/ "D. red. of a large scintillating fire, of the last flashes of a large fire about to die"

- vs. /bleel-ɲep/ "id., small fire," cf. (4)
- (14) /kheɛŋ-cəkheɛŋ/ "D. red. of someone carrying a heavy burden on his shoulder"
 vs. /kheɛŋ-cəkheɛŋ/ "id., small burden," cf. (5)
- (15) /ɟul-keɟul/ "D. red. of a large creature, or an important person, trotting about"
 vs. /ɟɪl-keɟɪl/ "id., small creature."

There is usually no way to predict, in the "large" variety, whether the high or the mid-high vowel will be used. There are a number of cases where both are given, and with the same meaning:

- (16) /ramut/ "D. word for lovely big objects equal in size"
 (17) /ramot/ "id."
 (18) /ramot/ "D. word for lovely small objects equal in size"
 (19) /ɾabɾil/ "D. word for a pair of big spherical objects"
 (20) /ɾabɾeɪl/ "id."
 (21) /ɾabɾeɪl/ "D. word for a pair of small spherical objects"
 (22) /cəɾil/ "D. word for a large source of light"
 (23) /cəɾeɪl/ "id."
 (24) /cəɾeɪl/ "D. word for a luminous point, a far-away light."

Often, the high vowel /uu/ is further distinguished from /oo/ by a nuance of reverence, social importance or fear:

- (25) /guun-teguun/ "D. red. of a tall and impressive man, of an imposing and awe-inspiring person, who is bending under a heavy load or is hunchbacked"
 (26) /goon-tegoon/ "D. red. of a tall man or important person, who is hunchbacked or bending under a heavy load; (tiger) arches its back"
 (27) /gɔɔn-tegɔɔn/ "D. red. of a small man bending under a heavy load"
 (28) /ɟəhuhuh/ "D. word for something large, gaping, and awe-inspiring"
 (29) /ɟəhohoh/ "D. word for something large and gaping"
 (30) /ɟəhohoh/ "D. word for something small and gaping," see also (8).

But there are examples where a three-way gradation is given, with high vowels providing a third degree: "enormous." The fact that such triads of expressives are not as frequently found in the dictionary as pairs are may have more to do with elicitation procedures than with the actual structure of the lexicon; further work on Bahnar would probably produce a good many more, and fill in a number of obvious gaps. The actual iconic system of Bahnar vowels is then likely to look like this:

"ENORMOUS"	ii	uu	i	u
"BIG"	ee	oo	e	o
"SMALL"	εε	ɔɔ	ε	ɔ

Examples:

- (31) /halul/ "D. word for an enormous wedged-up (*coincé*) object, immense overfilled premises, a vast filled-up container, impressive or frightening-looking"
- (32) /halol/ "D. word for a big wedged-up object, wide but overfilled premises, a large filled-up container"
- (33) /halol/ "D. word for a small wedged-up object, small cramped premises, a small filled-up container"
- (34) /galuuy-galaan/ "D. red. of very big heaps, very great pilings, of a confused, awe-inspiring scuffle"
- (35) /galooŋ-galaan/ "D. red. of big heaps, great pilings, in disorder"
- (36) /galɔɔŋ-galaan/ "D. red. of small heaps, small pilings, in disorder"
- (37) /dabuuy/ "D. word of the curved ridge of an immense (*très vaste*) roof, the center of the curve being below the ridge"
- (38) /dabooy/ "id., large roof"
- (39) /dabooŋ/ "id., small roof"
- (40) /cawiiir/ "D. word of a very large (twisted mouth in a grimacing face (due to joy or suffering))"
- (41) /caweer/ "id., large mouth" is not found in the dictionary)
- (42) /ŋaniir/ "D. word, superlative of /ŋaneer/, of a person annoyed by the sun, blinking eyes a great deal, or unable to keep them open"
- (43) /ŋaneer/ "D. word of a person annoyed by the sun, blinking eyes a little bit." [/*ŋaneer*/ is missing in the dictionary]

8.3. Conclusions

Whether it is this more elaborate system or the simpler two-way division which is at the basis of the vowel gradations of Bahnar expressives is not crucial to the point made here. In either case, the iconic values of the vowels are, roughly speaking: High = Big and Low = Small, exactly opposite to the English /i/ = Small and /a/ = Big, claimed to be universal. There is nothing peculiar about this Bahnar system, and one can easily find an iconic basis for it.

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.

In this perspective, two different languages may easily use the same phonetic variable (vowel height) to convey the same range of sensations (size), and come up with exactly opposite solutions, both being equally iconic: all they need to do is focus upon different parts of the rich sensation package provided by articulatory gestures, in our case the volume of the tongue instead of the size of the air passage between it and the palate. Iconicity can be both physiologically motivated and culturally relative at the same time.

It follows that iconic patterns, being fundamentally language-specific, must be described in the grammars of particular languages. But at the moment, we do not have the formal linguistic tools necessary for describing iconicity. One problem is that current models do not allow us to show a direct relation between phonetics and semantics. This could easily be arranged by modifying formal conventions about rules and features. However, the real difficulty is not in mapping or deriving various kinds of notations, but in showing resemblances. A phonetic feature and a semantic one are entirely different linguistic objects; how can we show that there are actual similarities between them if there does not exist a common medium where such similarities could reside?

In any case, as the Bahnar example suggests, the phonetic parameters needed for iconicity, for example perceived size of the tongue in the oral cavity, are very different from those needed to represent the phonological contrasts of prosaic phonology; and a similar point could probably be made on the semantic side. Thus, even our notation systems are inappropriate to describe the iconic systems found in expressives.

Iconicity belongs to a different semiotic domain from the one usually described in our grammars. As far as expressives are concerned, the phonic and the meaning elements must be described in terms of certain elementary sensations. Iconicity consists here in exploiting similarities between the sensations of speech and other kinds of sensation. This kind of synesthesia must be described in a distinct component of grammar, the esthetic component, which is distinct but not isolated, as it somehow must be plugged into the conventional components which have received much of the attention of theoreticians so far.

- Amanuma, Y. 1974. *Dictionary of Onomatopoes and Expressives* (in Japanese). Tokyo: Tokyodo.
- Diffloth, G. 1972. Notes on expressive meaning. *Papers from the Eighth Regional Meeting of the Chicago Linguistic Society*: 440–448.
1976. Expressives in Semai. In *Austroasiatic Studies*. Oceanic Linguistics, Special Publications 13:1. Hawaii: University Press, 249–264.
1979. Expressive phonology and prosodic phonology in Mon-Khmer. In *Studies in Thai and Mon-Khmer Phonetics and Phonology*. Bangkok: Chulalongkorn University Press, 49–59.
- Durand, M. 1961. Les impressions en Vietnamien, étude préliminaire. *Bulletin de la Société des Etudes Indochinoises*. Nouvelle Série 36:1. Saigon.
- Guillemet, P. and J. Alberty. 1959. *Dictionnaire Bahnar-Français*, 2 vols. Paris: Ecole Française d'Extrême-Orient.
- Jespersen, O. 1933. Symbolic value of the vowel *i*. In *Linguistica. Selected Papers of O. Jespersen in English, French and German*. Copenhagen: Levin and Munksgaard, 283–303.
- Kile, N. B. 1973. *Obraznye slova namajskogo jazyka*. Leningrad: Nauka. (In Russian.)
- Martin, S. E. 1962. Phonetic symbolism in Korean. *Uralic and Altaic series*, 13: Bloomington: Indiana: University Press, 177–189.
- Newman, S. S. 1933. Further experiments in phonetic symbolism. *American Journal of Psychology* 45: 53–75.
- Ohala, J. J. 1984. An ethological perspective on common cross-language utilization of F₀ of voice. *Phonetica* 41: 1–16.
- Sadasivam, M. 1966. *Olikkurippakarai*. (Dictionary of Expressives, in Tamil). Pāri Nilaiyam.
- Sapir, E. 1929. A study in experimental symbolism. *Journal of Experimental Psychology* 12: 225–239.
- Smith, R. L. 1973. Reduplication of Ngeq. *Mon-Khmer Studies* 4: 85–112.
- Tarpe, R. D. 1974. Phonetic symbolism in adult native speakers of Czech. *Language and Speech* 17: 87–94.
- Ullian, R. 1978. Size-sound symbolism. In J. H. Greenberg, C. R. Ferguson, and E. A. Moravcsik (eds.) *Universals of Human Language*, vol. 2. Stanford: University Press, 527–568.

9

*Tone, intonation, and sound symbolism in Lahu: loading the syllable canon**

JAMES A. MATISOFF

9.1 Feature shuffling and tonogenesis in Sinospheric languages

The development of full-fledged tonal systems of the "omnisyllabic" type seems to be unique to East and Southeast Asia. In a language with an omnisyllabic tone system, virtually every syllable occurs with a distinctive tone that is not predictable either in terms of the syntactic structure of its phrase or phonotactically in terms of neighboring syllables. These tones are not just oppositions of higher vs. lower pitch, but are complex bundles of prosodic features including pitch, contour, vowel length, and "phonation type" (clear, creaky, breathy voice). Omnisyllabic tone languages usually have a minimum of three distinctive tones, and some have as many as 10 or 12.¹

There appears to be a necessary connection between omnisyllabic tone and monosyllabic morphemes. The stronghold of these tone systems is precisely the monosyllabic languages that are typologically similar to Chinese: what I have called the "tone-prone" or "toniferous" languages of the "Sinosphere."² Some of these languages are genetically related to Chinese (those of the Tibeto-Burman family), but others (Tai, Hmong-Mien [Miao-Yao], Vietnamese) have developed their tones – and indeed their monosyllabicity – secondarily, through contact influence from Chinese.

Diachronically, the development of tonal contrasts – *tonogenesis* – has been shown to result compensatorily from losses or mergers in the consonantal system. Loss of a voicing contrast in pre-vocalic consonants can be transphonologized into a contrast between higher and lower tones; while loss of a postvocalic laryngeal (-ʔ or -h) can lead to a phonemic contrast between rising and falling tone.³ "There is something about the tightly structured nature of the syllable in monosyllabic languages which favors the shift in contrastive function from one phonological feature of the syllable to another" (Matisoff 1973: 78), and the birth of tones is only the most spectacular of these "feature shufflings."⁴

Lahu is a typical omnisyllabic tonal language of the Loloish subgroup of the