Frog Mouths and Mimesis:  
An Essay on the Relationship Between  
Form and Meaning  

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The world lives as you live,  
Speaks as you speak, a creature that  
Repeats its vital words, yet balances  
The syllable of a syllable.  
—Wallace Stevens  

Conventional scientific views of language presuppose that there are sounds and groups of sounds that humans are capable of hearing and producing to which societies attach meaning. The ordering of sounds in a syllable is subject only to physiologic constraints, and the assignment of meaning is arbitrary. Of course there are exceptions to this convention, but these are classified as marginal or paralinguistic phenomena, confined to relatively few examples and hence not considered crucial to linguistic theory generally.

To some linguists, however, the notion of an arbitrary relationship between sound and meaning feels unnatural, not because it may run contrary to universals of child language acquisition like bilabials and breast sucking, but because those linguists have experienced the feeling of “knowing” what words mean without having heard them before.

Precisely how these insights originate I will not attempt to describe in this paper, but I do propose to offer a clear-cut and undeniable example of a case in the Lao language where the relationship between sound and meaning is not arbitrary, even by scientific linguistic definition, and where the occurrence is regular and not marginal. I would maintain that this case is not isolated and that all natural language is composed of relationships that are similar in type. The example offered here is merely more dramatic; and yet it can be explained by scientific linguistics, which heretofore has tabooed the suggestion of such a coherence because it exists in the unconscious and is natural.

It seems appropriate to begin with the mouth of the frog through which I first entered the subject, in particular the mouth of *Rana tigrina* (replaced by *Rana rugulosa* in China), a large frog, similar in shape and size to the American bull frog. It is called *kop* in Lao and other Tai languages, pronounced with a final unaspirated, unreleased /-p/.
is wide, rounded, and slightly elongated. Viewed from the side, the line of the mouth gives the impression of being compressed or flat, giving rise to the expression *pee paan paak kop* 'as flat as a frog’s mouth'. I discovered while studying the etymology of the Lao word for Tokay gekko (*Gekko gekko*), *kap kee*\(^2\), that the first syllable is cognate with *kop* and that the only viable explanation for this is the shape of the gekko’s mouth, which closely resembles that of the frog. It was at this point that I began to suspect that the physical character of the frog and gekko mouths were being mimicked by the word.\(^1\)

A number of other similar Lao lexemes then came to mind, *nāp* 'to close like a box turtle'; *Hāp* 'to close a lid or door'; *kap* 'box'. And as I was thinking about the similarities of boxes and frog and gekko mouths, the relationship of mouth activity, closure, and the unreleased final */-p/* became obvious; the */-p/* brings together the jaws like a frog catching a fly or a gekko attacking a beetle. From here it is only a short mimetic journey to words with similar mandibular referents, for instance, *Khop* 'to bite'; *khaap* 'to hold in the jaws'; or *nāap*, which describes 'the act of yawning repeatedly' as in *Hāaw nāap*.

A detailed combing of Maha Sila’s (1966) Lao dictionary of approximately 12,000 entries revealed that virtually all of the native Lao words (excluding Indic or Khmer borrowings) ending in */-p/* can be shown to follow the same rule of relationship between sound and meaning. I am not sure what percentage of the Lao lexicon these words represent as there is probably not an equal distribution of final consonants, but like all Tai languages there are only ten possible finals of which */-p/* is one. Thus, it may be shown that in ten percent of these possible syllable types for Lao, and probably the entire Tai family, the meaning is predictable from the form of the word.\(^2\)

The primitive meaning of all syllables ending in */-p/* may be stated as ‘coming together’, and all other meanings can be derived from this in three manifestations: as an *action*, as a *result* of the action, and as a *static form*. As an action, it includes such ideas as close, enclose, encircle, ensheathe, pinch, slip, hit, compress, and step on. As a result of the action, notions

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\(^1\) For a further discussion of */kop/* and Chinese contact words, see Chamberlain 1977: 99 ff.

In the phonemic transcription adopted here, the high class consonant series of Lao is represented by upper case initials, and low class by lower case. For vowels I have used */e/* for low front, */ɔ/* for low back, */i/* for high back unrounded, and */a/* for mid back unrounded. Otherwise the conventional symbols have been used. For tones, */φ/* represents the A class, */x/* the B class, and */x^2/* the C class.

\(^2\) It may be possible to make a similar association for final */-ml/*, although at first glance the examples do not seem as clear-cut. But such words as */loom/\(^2/* 'surround', */phoom/\(^2/* 'simultaneous', */nam/ *'with, follow', or */tam/ *'to pound', do seem to display the same general range of meanings as found in words ending in final */-pl/*.
such as flatness, smoothness, pain, completion, closure, simultaneous, and tandem are indicated. And as a static form, it involves nouns such as box, frog, circle, cycle of time, and period of time.

Take, for example, words relating to the mouth: Sop is the word for 'lips' (in some dialects it replaces paak, the usual word for 'mouth'). The word for 'fish gill', which looks like a mouth, is nēap. As we have already seen, kхаap means 'to hold in the mouth' and Khop means 'to bite'. The word for 'to kiss' is cuup, especially that kissing-sucking action required to suck the insides out of freshwater snails, named appropriately H重重 cuup. 'To suck in smoke' is Suup and 'to suck in air', particularly after eating hot peppers, is ciip or Hiip. Many other words refer to the use of the mouth for eating; cip is used for 'tasting with the tongue or in small sips'; Heep applies to 'engulfing small chunks of food', the way a duck eats, while Suap is used for 'eating like a pig in large greedy mouthfuls'. When a 'big fish devours a little fish', the term is Hup, and the same might be used for a frog eating a fly; the prey just disappears. The 'spirit that possesses a person and devours his insides' is a Phiī poop. 'Splashing large amounts of water into one's mouth with the hands' is Hуup.

Nor is the action of the tongue to be left out, as shown by words like leep, 'to stick out the tongue rapidly like a snake', or luap, 'to lick back and forth with the tongue'. (Notice how these words begin with the lateral /l-/, as do lia 'lick' and lin² 'tongue'.)

Descriptions of sounds associated with the mouth are likewise plentiful, such as cap cap, the chewing sound, reminiscent of the White Tai chep chep with the same meaning that I take to be cognate with the Lao word seep 'delicious'. When pigs eat (Suap), the sound they make may be either cop cop or kop kop. The sound kuap kuap is one of 'eating crunchy things' and kup or kup kup is 'the sound of whisky being poured into the mouth'. The sound kaap kaap is that of the female duck. 'Many voices talking at the same time' is described by khoop or khoop khoop. A man with no nose is said to speak with Siang Mīip. 'A special form of singing' is Khap, kāsīp is 'whisper'; and 'a hoarse voice' may be either Heep or saap.

The other sensory organ involved in closures is the eye. 'To close the eyes decidedly or with finality' is vap; 'to close the eyes and sleep' is Lap. 'To blink' is phīp; and 'to see in flashes' is Hen map meep, whereas 'to see in a single flash' is Hen Liap. 'To close the eyes just before or almost sleeping' is Siap taa, and 'to very slowly close the eyes' is saop saop. 'A nap' may be either ńiip or ńiip; another word for 'sleeping lightly' is khoop.

Some foods are included in the range of final /-p/ meanings as well, depending on the way they are prepared; for example, laap refers to 'food that is made by chopping meat', sup to 'food prepared by pounding certain vegetables such as beans, jackfruit, eggplant, or bamboo shoots'. 'To bake' is ʔop (that is, 'heated while enclosed'), and ʔuap is 'to preserve by salting or fermenting in a sealed container'.
Another aspect of 'coming together' is grasping, as in the word cap meaning 'to grasp or grab'. 'To grab something fast and hold it in the hand' is khup. 'A pinch, or to pick up a pinch of something between the thumb and forefinger' is ?yip, but if all the fingers are used, the word is ?yup. 'To pinch in order to hold in place' is Naap. If an instrument such as pliers or tweezers is used, the term is Niip. 'Tweezers or tongs' are called Neep.

'To grab or lift something with both hands' is Hoop or Hoop. 'To hug with both arms' is ?oop, and 'to pin down by both arms' is naap, often used in the expression naap Khuu 'interrogate'. The word neep can also mean 'to pinch'. 'To grab a bag with a drawstring' is Hip, and khip is 'to grab with chopsticks or two fingers'.

' Striking or hitting with the flat of the hand' is top, also used for 'clapping the hands'. A word for 'hitting with the fist' is bup. If the knuckle of the middle finger is used to knock the head, it is called Sap as in the expression Sap Maak kook Say Hua, literally, 'knocking the head with a hog plumb'. 'To strike with a stick' is thup; 'to beat a drum with two sticks at once' is caap, used most frequently with the koon kig, large drums suspended in pairs from bamboo tripods, perhaps originally used as war drums.

'Meeting between people' may be phop, or variously 'intentionally' cuap, 'unintentionally' khop, with a group Sop.

Other aspects of 'joining or coming together' include the conjunction kap, meaning 'and' or 'with'. The word kip means 'to bring two things close together'; kup refers to 'jamming together', as with herds of buffaloes; koor is 'to bring both hands together to form a cup'; and Khaap, nop, and noop all refer to 'bringing the palms of the hands together as in prayer, greeting, or as a sign of respect'. 'Close-fitting or tight' is khap. Measurements that are made by stretching and bringing together the thumb and forefinger or the thumb and middle finger are called khip and khip, respectively. The same action when used for locomotion by inch worms or land leeches is variously kaaip, kapid, kaup, kadeep, kadeep, usually reduplicated. The word khuup refers to the back bone where it joins the neck, and khup and khaup both mean 'to bring together'.

Bringing together also implies completeness, hence such items as cup or cop meaning 'to be finished or completed', no doubt giving rise to cop which means 'good or nice', as completeness implies goodness. The word khip means 'complete', and nap means 'to count', that is, 'to establish completeness or to make sure something is all there'.

Cycles are likewise forms of completeness, both pictorially and chronologically, as in hoop, 'a cycle', or Khaup, 'an annual cycle'. Khoop is a 'circular boundary'; khaop means 'to surround or to complete a cycle'; and Kheep is 'to be enclosed within a circular boundary'. 'To curve or bend around and come together at the ends to form a circle' is koop. The word liap refers to 'walking around or circumambulating in order to watch over',

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as in the expression liap lam¹ kham¹ khɔy, 'to watch over or protect, as a monarch over his people'.

Yet another set of final /-p/ words have to do with enclosures or vessels that enclose. 'An envelope for letters' is called sop. 'Box-like containers' may be like kap for tobacco or betel. An ?up is 'a four-cornered box also used for tobacco or betel leaves'. It is larger than an ʔeep, which comes in many different shapes but is used for the same purpose. 'A basket for carrying glutinous rice' is tip. Thoop or thoop refers to 'banana leaves used for wrapping food or betel leaves'. The word kaap is 'a clam'; Lip is 'a silk cocoon' in which the worm has died; ʔeep is 'a rice husk'. 'The box-like howdah placed on the back of an elephant' is called a kuup. 'A thick place in the forest' is known as tip, and Hoap refers to 'an overgrown place in the jungle that forms a cave'.

Many more examples could be cited, but those already given above are sufficient for purposes of this paper. The interested reader may consult Lao dictionaries for additional instances of this all-pervasive phenomenon.

I have already implied that it is not the sound itself but rather the production of the sound that allows the meaning to be predictable: the entire oral ballet that enacts the meaning of the words—the jaws coming together to close, pressing the lips together, and enclosing a space within the mouth. In fact, a search through the rich array of Lao words ordinarily associated with sound symbolism—intensifiers, for example—reveals proportionately few ending in /-p/, and even those usually follow alliteratively a regular word of the /-p/ type, for example ceep cap map 'to be very close' (Banphot 1979), suggesting that this pervasive relationship is different in type from the marginal phenomena usually categorized as sound symbolism. It is clearly the synaesthetic quality of the relationship that is crucial to a theoretical accounting of the regularity, and very little has been studied along these lines because of the conventional scientific interdiction.

There are three hypothetical participants in each such enactment: the listener, the viewer, and the performer. Each of them, upon experiencing the production, is aware of the other two. That is, as the speaker is performing for the viewer and listener, all three participants—the viewer, the listener, and the potential performers—are likewise empathetically aware of the anatomical positions of the articulatory performance.

It is important to note that the predictability factor of the mimetic relationship between form and meaning works only in a single direction, from sound to meaning. This follows the natural ordering of all communication phenomena; form imitates meaning, or form is derived from meaning, never the reverse.

One heuristic label that has emerged frequently is icon or iconic sign, following the definition of Charles Morris (1946: 191):

An iconic sign...is any sign which is similar in some respects to what it denotes. Iconicity is thus a matter of
degree. It can obviously be a property of auditory and visual signs alike.

Of course there is an immediate problem because of the tradition that words are not classified as signs, in the sense, for example, that the term sign is used in "a high forehead is a sign of intelligence." Words are supposed by Western philosophic convention to be symbols, that is, non-natural signs (see Flew's 1979 definition), suggesting that the taboo of scientific linguistics that denies the relationship of form and meaning is artificial and unnatural, whereas, by the same token, the contrary principle of non-arbitrariness of this relation, such as indicated by the Lao data, would be natural.

As a further consequence of the arbitrariness premise, linguistic attention is characteristically focused on that which is produced, the characters of the sound, rather than the potential significance of the act of production, or the relation between them, much in the same way that in the field of aesthetics the art object is studied rather than the artistic act. I would maintain that communication, whether in human speech, animal dancing, or artistic creation, is fundamentally an imitation of nature, and plays a systemic or artistic role beyond the limits of human interaction. Jacques Lacan (1977: 113), the French psychoanalyst, wrote that:

What makes the value of the icon is that the God it represents is also looking at it. It is intended to please God. At this level the artist is operating on the sacrificial plane—he is playing with those things...that arouse the desire of God.

This aspect of icons has been largely ignored by linguistics, but if it were to be included, words would become sacrifices, part of an exchange with nature from whom something may be expected in return.

Like the coloration of birds and animals, which when surveyed in its entirety has little to do with survival or preservation, languages tend to diversify in the interest of ecological balance, that is, for the stability of the whole system as opposed to the individual organism. In his study of animal form and coloration, Adolf Portmann (1952: 212) concluded:

It is significant that just that which has been recognized as having a meaning is by no means the useful, the purposive, the functionally necessary, but what goes beyond all these spheres, yet can be clearly grasped in that it is correlated with the level of differentiation.

Since the metonymy adopted here veers away from that of theoretical linguistics and emphasizes the aesthetic and biological nature of the mimetic phenomenon, I will adopt the literary term mimesis, which has come to mean specifically "imitation of nature" in the context of art and literature. I
stress that the imitation is neither overt nor conscious. I would also emphasize that I do not mean to imply that every language behaves in precisely the same way as Lao, although it is worth mentioning that Jakobson (1968: 69) noted a similar instance in Russian for “strong opening and closing of the fist, mouth, and jaw, -ap, -am, also hap, ham.” But we would do well, I believe, to look for additional ways in which mimesis operates in natural language, and homologous examples abducted from the realm of biological mimicry should prove useful.3

Myriad other mimetic orderings are manifested in Tai languages. On a phonological level, intensifiers in Lao equate vowel quality with physical size, and other elegant words and expressions imitate physical form and movement with sound and articulatory activity. There are, for instance, fifty-eight words descriptive of kinds of walking given in Banphot (1979). Elsewhere in Tai languages, the hierarchical structure of nature is inherent in biological taxonomies. Plant and animal kingdoms are separated by a rule of form where plants may be named after animals but not the reverse, depicting, as it were, the closer human relationship with animals. On yet another plane, the natural asymmetrical role of female or mother is apparent in its association with lizards (dragons were originally female) and certain kin relations. Form, then, goes beyond the phonological, but in all cases relates to meaning in a non-arbitrary way.

Professor Gedney (1989: 90) has offered the suggestion, in his article entitled “Future Directions in Comparative Tai Linguistics,” that the B and C tones of Proto-Tai had their origin in Tai boating songs, a proposal eminently well-suited to a riverine or estuarine people as the Proto-Tais apparently were. In one of the passages, as I recall, he suggested that perhaps the B and C tones were associated with intervals when the rowers were to rock, first to one side of the boat and then to the other, giving rise to particular cadences, songs, and tones. I am not sure that this was actually the case, since, in the oldest form of boating preserved, the boat-racing festivals in Laos and elsewhere, the paddling is done simultaneously (incidentally called phaap or phiap). But it is the correctness of the approach that I have always found most interesting, the suggestion that form derives from meaning, that there may be natural or aesthetic solutions to comparative linguistic problems, a clear violation of the arbitrariness principle. For this reason, I would like to offer this short essay to Professor Gedney.

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3 I have borrowed this term “abducted” from Bateson, who used it frequently with the meaning “drawing from phenomena of different fields that which is shared among them” (1987: 37). Bateson, I believe, took the term from the American philosopher C. S. Pierce.
References

Banphot Premchu

Bateson, G. and M. C. Bateson

Chamberlain, J. R.

Flew, A. (ed. consultant)

Gedney, W. J.

Jakobson, R.

Lacan, J.

Morris, C.
1946  *Signs, Language and Behavior.* New Jersey: George Braziller, Inc.

Portmann, A.
1952  *Animal Forms and Patterns: A Study in the Appearance of Animals.* Translated by Hella Czech. New York: Faber and Faber.

Sila Viravong, Maha
1966  *Vacanaanukom Phaasaa Laaw.* Vientiane: Ministry of Education.