Sound, Metaphor and Shape in Thai

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1. Introduction

1.1 Background

While it has been a fundamental tenet in Saussurean linguistics that the relationship between form and meaning (FM) is arbitrary, there have been numerous attempts, both inside and outside Asian linguistics, to come to terms with groups of words whose 'sub-morphemes' bear varying degrees of related meaning. Attempts to unravel earlier systems of **derivative morphology** for Sino-Tibetan have been launched by Benedict in his *Conspectus* and by scholars such as Downer and Tsou. Processes which remain productive in Tiddim Chin have been described by Hendersen. In the Tai area, Li's *Handbook* and Diller's review of it both commented on the suggestive nature of Tai data in relation to an early derivational system and Prapin has attempted some Downer-like analyses. Matisoff's **allofams** represent an approach to Sino-Tibetan FM with less of a demand for paradigms and more interest in universal semanatics. In *Austronesian Root Theory* Blust launches a discussion of the problem of FM in diachronic terms but raises the synchronic issue of a missing level of language between phonology and morphology. Discussion of **expressives** in Semai by Diffloth has been synchronic, involving universals in **sound symbolism** as the study of FM is generally called today. Still, study of expressives, along with study of Japanese **mimetics**, such as Hamano's, and the study of African **ideophones**, such as Childs', reflect analysis of FM as applied to restricted cross-sections of individual languages. Guthrie's *Comparative Bantu* reveals what he calls **osculant comparative series** involving the same FM issues as those raised in comparative Tai, an issue broader than that of ideophones or expressives. In the wider linguistic tradition, Bloomfield, who is reputed to have written his doctoral thesis on FM relations, finds a place in his definitive text *Language* to discuss the place of **sub-morphemes** while Bolinger has written extensively on **phonesthemes** involving synchronic sociolinguistic and pragmatic aspects of FM relationships. While Bloomfield and later Chomsky, shepherds in American linguists, may have steered away from the study of FM relations, recent issues of *Language* (the journal) include Woodbury's work on **meaningful phonological processes** in Central Alaskan Yupik Eskimo and a paper calling for a re-evaluation of the work of Jesperson, who inclined heavily towards sound symbolism in his study of English. This is the background of the study of the relationship between form and meaning against which this paper is set.

1.2 Form and Meaning Associations

There are at least two levels of arbitrariness or non-arbitrariness which must be considered in the debate over the relationship between form and meaning.

The most basic level is that which relates to the work of Ohala on **Frequency Code**. Ohala's underlying hypothesis, which might be termed macro-evolutionary, relates meaning-bearing features of human and animal communication. This is sound symbolism 'proper' where there are perceived to be direct high-vowel 'small' low-vowel 'big' universal but crude correspondences between form and meaning. Sound symbolism is seen as a product of basic instinct. While it is the most highly disputed approach to the study of non-arbitrariness, it is useful to the extent that it makes no distinction between the core vocabulary FM relations treated

in diachronic linguistics and expressive vocabulary FM relations treated in synchronic linguists.

The second level of arbitrariness relates to Bolinger's work on **phonesthemes**. Bolinger's underlying hypothesis, which might be termed micro-evolutionary, is that sound symbolism in language is self-generating (Bolinger, 1980:24), the product of a universal process of forms molding themselves on other forms with like meaning, and meanings molding themselves on other meanings, conveyed with like words (Bolinger, 1969:248). Sound symbolism is a product of human cognition, of the need to organise and make associations. Folk etymologies and malaproprisms are examples of associations in natural language which may not accord with a language's history yet are meaningful for speakers. At this level non-arbitrariness is common sense.

The position taken here is that human cognition is the primary generator of form and meaning relations, redefined as **form and meaning associations**, though neither the frequency code factor nor defunct systems of derivative morphology are ruled out as contributing factors to synchronic, language specific sound symbolism.

1.3 Prototype Categories

In the study of human cognition there are two distinct schools, each with a theory of how we make sense of experience using categorisation.

In classical objectivism, meaning transcends life. Categories are characterised by literal properties shared by their members existing independently of any body doing the categorising. Human reason is an incomplete blueprint of transcendental reason. Imaginative aspects of reason — metaphor, metonomy and mental images — are peripheral and inconsequential. Correct reason mirrors the logic of the external world (Lakoff, 1987:xi-xvii).

In experiential realism, bodily experience and the way we use imaginative mechanisms are central to how we construct categories to make sense of experience. Our conceptual systems grow out of our bodily experience. The existence of a real world, a stable body of knowledge about the world and the recognition that reality constrains human conceptualisation are accepted, but reason is only made possible by and is grounded in our experience of seeing, moving and feeling. Human reason is creative and our imaginative capacity takes us from concrete seeing and feeling to abstract conceptualistion (ibid).

My work so far in dealing with Thai has met with only minimal success in trying to engineer the construction of classical categories from form and meaning associations. Classical analysis asks me to ignore a pervasive metaphorical nature of categories which I perceive and which it superficially reveals. It has provided no way to compare the infinite and multidimensional nature of meaning with the relatively finite nature of a language's forms, a shortfall pointed out some time ago by Bloomfield. In contrast, general experientialist principles of human categorisation summarised by Lakoff including centrality, chaining, experiential domains, idealised models, specific knowledge and motivation help characterise reasons for category membership where the controlling conceptual system is fundamentally metaphorical. Rosch's theory of prototypes and basic level categories can furthermore be adapted to provide a method for integrated study of phonology and semantics so that form and meaning associations can be identified and graded. This method, which is described here, is accessible to psycholinguistic testing.

2. The Method

2.1 Definition

From here on I will use the term **metaphone** to stand for a meaning-bearing form:

(i) consisiting of a phoneme, prosody, or group of phonemes or prosodies;
(ii) which is less than or equal to a morpheme in both form and function; and
(iii) with which is associated a **set** or network of words bearing this form;
(iv) which together form a basic conceptual category;
(v) with an identiable conceptual core; and
(vi) prototype words which can stand as exemplars;
(vii) along with **clusters** of subsidary semantic elements;
(viii) which are linked according to principles of human categorization.

2.2 Overview

The method in its present crude form is able to accomplish two things:

1. Identify and grade core and radial forms, meanings, and form-meaning composites for a given metaphone.
2. Calculate the number of occurrences of a form which belong to a basic category of meaning.

2.3 Forms and Data

The basic method involves identification and examination of all words within the language which bear a proposed form in order to establish whether it functions as metaphone or not. Phonological elements chosen for this analysis will vary according to the language under study and the desired level of abstraction between phonology and morphology. For the three Thai examples here I have chosen rhyme as the level for analysis. Words ending in [ee], [ɔʔ] and [ooŋ] have been selected and are listed in Table 1. Hence leel, lɔʔl and looŋl are proposed as metaphones in the analysis. Tone is ignored, though for a more detailed level or a different phonological cross-section tonal restrictions could be considered.

Whatever the source of the data, meanings ideally should be provided in the language under study as the method makes use of **circular definitions**. Circular definitions are usually considered to be a negative factor in semantics but they are a feature of natural language and find a place here. They are important, at least in the case of Thai, because definitions often contain forms belonging to the same metaphonic set. The data set needs to be extensive and from one rather than several sources. Inadequate detail and uncontrolled variety in the data set will affect category links.

The source used here is the *Rachabanditsathaan* (2525) dictionary, the most comprehensive Thai language lexicon available at the time of writing. This has been treated as an 'informant'. For the purpose of this pilot study, I have chosen to restrict the data set to occurrences of monosyllables. Examples are only admitted into the data set if they have a monosyllabic entry in the dictionary. This means that relevant material, including instances of reduplication, is ignored. In addition, in listing forms, a standard of pure arbitrariness was administered whereby one form is equal to one meaning and vice versa. Multiple entries for the same form were listed only once and meanings treated as variants of the one form. Note that this falsely forces an association between meanings which may otherwise show no relationship. Where an entry has a variant form listed alongside the main entry, the variant form, if it includes the relevant metaphone, is listed separately (though this

Table 1 Thai rhyme examples for analysis of proposed metaphones |ee|, |ɔʔ| and |ooŋ|

|ee| (43 forms)

เก	kee	เท	thee	เร่	rêe
เก่	kèe	เท่	thêe	เลห	lee
เก้	kée	เบ้	bêe	เล่ห์	lêe
เก๋	kěe	เป้	pêe	เว้	wée
เข	khěe	เป๋	pěe	เส	sěe
เข้	khêe	เปร	pree	เห	hěe
เขว	khwěe	เปล	plee	เห่	hèe
เง้	ŋée	เผ	phěe	เหม่	mèe
เจ	cee	เผล	phlěe	เหย	yěe
เฉ	chěe	เผล้	phlêe	เหล่	lèe
เซ	see	เผล่	phlèe	เหว่	wèe
เด	dee	เพ	phee	เอ้	ʔêe
เด่	dèe	เพล	phlee	เฮ	hee
เต	tee	เม	mee		
เตร่	trèe	เย้	yée		

|ɔʔ| (17 forms)

เกรอะ	krɔ̀ʔ	เซอะ	sɔ́ʔ	เยอะ	yɔ́ʔ
เขรอะ	khrɔ̀ʔ	เตอะ	tɔ̀ʔ	เลอะ	lɔ́ʔ
เขลอะ	khlɔ̀ʔ	เถอะ	thɔ̀ʔ	เหนอะ	nɔ̀ʔ
เคอะ	khɔ́ʔ	เบอะ	bɔ̀ʔ	เหวอะ	wɔ̀ʔ
เงอะ	ŋɔ́ʔ	เปรอะ	prɔ̀ʔ	เหอะ	hɔ̀ʔ
เจอะ	cɔ̀ʔ	เฟอะ	fɔ́ʔ		

|ooŋ| (48 forms)

โกง	kooŋ	โซ่ง	sôoŋ	โมง	mooŋ
โก่ง	kòoŋ	โด่ง	dòoŋ	โม่ง	môoŋ
โกรง	kroonŋ	โต่ง	tòoŋ	โยง	yooŋ
โกร่ง	krôoŋ	โต้ง	tôoŋ	โย่ง	yôoŋ
โกลง	kloonŋ	โถง	thŏoŋ	โรง	rooŋ
โขง	khŏoŋ	โปง	pooŋ	โลง	loonŋ
โข่ง	khòoŋ	โป่ง	pòoŋ	โล่ง	lôoŋ
โขลง	khlŏoŋ	โป้ง	pôoŋ	โล้ง	lóoŋ
โค่ง	khôoŋ	โปร่ง	pròoŋ	โว่ง	wôoŋ
โค้ง	khóoŋ	โปล่ง	plòoŋ	โห่ง	hŏoŋ
โครง	khroonŋ	โผ่ง	phŏoŋ	โหน่ง	nòoŋ
โคร่ง	khrôoŋ	โพง	phooŋ	โหม่ง	mòoŋ
โคลง	khloonŋ	โพรง	phroonŋ	โหย่ง	yòoŋ
โงง	ŋooŋ	โพลง	phloonŋ	โหรง	rŏoŋ
โง้ง	ŋóoŋ	โพล่ง	phlôoŋ	โหว่ง	wŏoŋ
โจง	cooŋ	โพล้ง	phlóoŋ	โอ่ง	ʔòoŋ