

Taste in Two Tongues: A Southeast Asian Study of Semantic Convergence

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ABSTRACT This article examines vocabulary for taste and flavor in two neighboring but unrelated languages (Lao and Kri) spoken in Laos, Southeast Asia. There are very close similarities in underlying semantic distinctions made in the taste/flavor domain in these two languages, not just in the set of basic tastes distinguished (sweet, salty, bitter, sour, umami or glutamate), but in a series of further basic terms for flavors, specifying texture and other sensations in the mouth apart from pure taste (e.g. starchy, dry in the mouth, minty, tingly, spicy). After presenting sets of taste/flavor vocabulary in the two languages and showing their high degree of convergence, the article discusses some methodological and theoretical issues that arise from the observation of

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close convergence in semantic structure across languages, in particular the issue of how much inter-speaker variation is possible not only across apparently highly convergent systems, but also within languages. The final section raises possible causes for the close convergence of semantic structure in the two languages. The conclusion is that the likely cause of this convergence is historical social contact between speech communities in the area, although the precise mode of influence (e.g. direction of transmission) is unknown.

KEYWORDS: Lao, Kri, language of perception, taste, semantic categories

Introduction



Social contact between speakers of unrelated languages can lead in time to convergence in linguistic structure.

Such convergence is often observed in grammatical patterns like word order or sound systems. But how deep can this convergence go? Can it permeate the conceptual organization of lexical semantic domains? I examine this question by taking semantic structure in the domain of sensory perception and comparing it across neighboring languages. Sensory perception is an ideal semantic domain for this research because of all semantic fields it is among the least susceptible to borrowing across languages (Haspelmath and Tadmor 2009). This article presents a case study in one sub-domain of sensory perception – taste and flavor – comparing two languages of mainland Southeast Asia that are related by geographical proximity but not by common ancestry. I examine the nature of their semantic convergence, and its implications, both methodological and theoretical, for the question of permeability of this semantic domain.

Language of Taste and Flavor in Lao

Lao is a Southwestern Tai language spoken by some 25 million people in Laos, Thailand, and Cambodia (Enfield 2007). These are traditionally rural paddy farmers but are increasingly educated and urbanized, in intensive contact with other languages such as Thai and Khmer. Data were collected from Lao speakers around the municipality of Vientiane, Laos, in the semantic domains of touch, smell, shape, sound, color, and taste, using fieldwork stimuli and protocols provided in Majid (2007). This article concentrates on findings from elicitation in one of these domains – taste – and extending into flavor ('taste' and 'flavor' are distinguished below). The stimuli for taste were solutions of salt, sucrose, quinine, glutamate, and citric acid (Senft et al. 2007).

Table 1 Lao taste/ flavor terms (top five are taste terms elicited by Language of Perception stimuli, following these are flavor terms). For key to Lao orthography see Enfield (2007).

<i>Lao word</i>	<i>Meaning</i>
<i>vaan3</i>	'sweet'
<i>khom3</i>	'bitter'
<i>nua2</i>	'umami (taste of glutamate)'
<i>som5</i>	'sour'
<i>khêm2</i>	'salty'
<i>caang3</i>	'not salty (enough), bland'
<i>hùn2</i>	'hot, minty,' e.g. of mint leaves
<i>khùùn1</i>	'biting, tingly,' e.g. of small eggplant <i>Solanum aculeatissimum</i>
<i>faat5</i>	'chalky, dry in the mouth,' e.g. of unripe banana, overly strong tea
<i>phêt2</i>	'spicy, hot,' e.g. of chili, wasabi, pepper, strong toothpaste
<i>khêt1</i>	'causing an "itch in the teeth"' (from too much sour snack food)
<i>man2</i>	'oily, starchy, rich'

The Taste Stimuli and Results

The five taste stimuli elicited the five Lao terms shown in the upper section of Table 1 (numerals indicate lexical tone).

Responses were consistent across speakers tested, with only one irregularity: for the citric acid stimulus one speaker gave *som5* 'sour' and then corrected it to *khom3* 'bitter' (conforming with a widely attested confusion of these two tastes in other languages). Otherwise the five terms were used consistently across speakers, with greater agreement and consistency than any of the other languages discussed in this special issue.

Taste and Flavor: Beyond the Stimuli

Stimulus-based methods of elicitation provide a point of comparison grounded in a cross-linguistically informed profile of a target domain (see, for example, Majid 2007). After terms have been elicited in a given language, it is necessary to go beyond the confines of the stimuli, and to investigate the application and applicability of the terms, as well as any resources that the language provides for expression in the relevant domain but which for some reason were not elicited by the task. (Secondarily, it is useful to know why they were not elicited.) In addition, it is important to know about the cultural context of the conceptual domain under study.

In the case of Lao, the author's familiarity with the language, enriched by focused elicitation, yielded a set of further terms in the domain of flavor. "Flavor" encompasses taste as delivered by the taste receptors, and also includes dimensions of texture and sensation. The words in the lower section of Table 1 are the

important Lao flavor terms, all of which are adjectival stative verbs. In addition to the terms supplied in Table 1, there is also a general evaluative taste term *sèèp4* ‘delicious, tastes good,’ and a noun *lot1-saat4* (a neologism derived from Sanskrit *rasa jāti* ‘essence form’) meaning ‘taste, flavor’ (used in expressions such as ‘Which flavor ice cream?’).

Notice that the Lao words in Table 1 are basic, everyday terms. They are high in frequency, and speakers are consistent and unhesitating in providing glosses of their meanings and examples of their usage. By contrast, while English does have flavor terms like *astringent*, these are low in frequency, and native speakers including me are barely able to supply meanings for them. As an English speaker, when I want to convey things like the meaning of the Lao word *faat5* ‘chalky, dry in the mouth,’ I have to use descriptive or source-based locutions that are not conventional for, or dedicated to, the domain of flavor in English. In Lao these are basic and non-derived terms.

The data in Table 1 give rise to a puzzle that further work will need to solve, namely: why is it that Lao speakers make this rather fine set of distinctions in basic flavor vocabulary? One hypothesis is that there must be a special cultural concern in this domain. Although I have not investigated this systematically, participant observation provides some insight. Lao speakers often display a surprisingly nuanced capacity to detect and distinguish flavors. For example, I have often heard the terms *caang3* ‘not salty (enough)’ or *khêm2* ‘(too) salty’ applied to foods (e.g. soups or salads) that are so overwhelmingly spicy from the use of chili peppers that I myself am unable to discern any component flavors at all. Also, Lao cuisine features a range of flavors that are not appreciated or sought out by the European palate, e.g. bitter (in plant ingredients such as young shoots of rattan *Calamiae* spp., as well as bile and similar animal products) and ‘chalky’ (i.e. *faat5*; e.g. in salads made from banana flowers or young, unripe jackfruit, *Artocarpus heterophyllus*).

Convergence with Neighboring Languages?

A Comparison with Kri

Kri is an Austroasiatic language spoken by a group of around 300 people in upland central Laos (Enfield and Diffloth 2009). I have not run the stimulus-based elicitation tasks in the domain of the senses with Kri speakers, but I did carry out broader lexical semantic research, informed in the domain of taste and flavor by the research on Lao described above. The Kri set of terms in Table 2 appears to be identical to Lao.

In form, most of the terms in Tables 1 and 2 do not look like borrowings from one language into the other. The exception is *nùà* ‘umami’ (cf. Lao *nua2*) a recent word in Kri, we surmise, as the taste itself (in the form of MSG) is also a recent phenomenon. It is also possible that the terms for ‘hot, minty’ – *hùn2* in Lao, *hùl* in Kri – are

Table 2 Kri taste/flavor terms. For key to Kri orthography see Enfield and Diffloth (2009).

<i>Kri word</i>	<i>Meaning</i>
<i>mbaat</i>	'sweet'
<i>tangq</i>	'bitter'
<i>nùà</i>	'umami (taste of glutamate)'
<i>còòq</i>	'sour'
<i>congq</i>	'salty'
<i>mllaac</i>	'not salty (enough), bland'
<i>hùl</i>	'hot, minty,' e.g. of mint leaves
<i>heek</i>	'biting, tingly,' e.g. of small eggplant <i>Solanum aculeatissimum</i>
<i>còòq</i>	'chalky, dry in the mouth,' e.g. of unripe banana, strong tea
<i>har</i>	'spicy, hot' (of chili, wasabi, pepper, or strong toothpaste)
<i>sikêêr</i>	'causing an itch in the teeth' (from certain sour foods)
<i>ntuu</i>	'oily, starchy, rich'
<i>cngalq</i>	'delicious, tastes good'

related. The rest are clearly not related. We see, then, in the case of Lao and Kri, that as Haspelmath and Tadmor (2009) might predict, there has been little borrowing of word forms across languages in this semantic domain. Instead, what appears to have permeated language boundaries is an underlying set of conceptual distinctions that these otherwise native word forms denote. The similarity in semantic differentiation of taste and flavor distinctions in the two languages is striking. Below, we shall consider possible explanations for this convergence, but let us first discuss some methodological and theoretical issues that arise from the discussion so far.

Discussion: The Nature of Semantic Convergence

Do I in fact have evidence that the flavor terms in Lao and Kri are so closely parallel in meaning as I have suggested? The answer is a weak one, but is probably the only one a linguist can truthfully give, namely: I do not have evidence that they are not. But rather than probing further to check if the Kri words differ in precise meaning from their direct Lao translations, I want to suggest that the lexicographer should probe deeply but not too deeply. There is a reason to treat word meanings with a lighter touch. After all, this is what people do when they learn a second language (Weinreich 1953; Muysken 2000), and indeed when they learn their first language (Brown 1958; Tomasello 2003). A speaker forms her personal hypothesis of a word's meaning based on the data she has, and if her communicative experience does not force a revision of that hypothesis, she will stick to it and remain no wiser (and indeed no less wise). In my own experience learning Lao flavor words, it was years before I understood that *caang3* meant 'not salty (enough)' rather than more generally 'bland' (i.e. with no strong flavor of any kind). *Bland* was the one-word translation I had relied upon until the

day I heard *caang3* applied to extremely spicy food that happened to need salt, thus definitively falsifying my hypothesis. Prior to that, my hypothesis that *caang3* meant the same as *bland* had simply not been falsified by experience, because it had not perceptibly compromised communicative adequacy.

Once we entertain the possibility that differences in individual representation of word meaning can go undetected by people who speak different languages, we must entertain the possibility that differences in word meaning can go undetected by people who speak *the same* language. Speakers of English are surprised to learn that their understandings of the word *peruse* can be substantially different ('read through carefully' for older speakers, 'skim casually' for younger speakers; Wilkins 2002). It is therefore possible that words can be reliable for communication yet show variation in psychological representation among individuals in the speech community. In this way, words are *tolerable friends*, where real differences in individuals' understandings of their meanings – unlike false friends – do not compromise communication (Enfield 2010).

So do all Lao speakers have the same psychological representation of words like *faat5* 'chalky, dry in the mouth' or *khùun1* 'biting, tingly?' If substantial individual variation is compatible with effective unity in community convention, then two questions arise for further semantic typological research. First, just how varied are different individuals' internal representations of word meaning? The range of variation will depend on semantic domain, frequency of usage, and variety of contexts of use. Concerning the language of the senses, some sensory stimuli (e.g. visual) will be more available for public inspection in common experience than others (e.g. taste), and thus perhaps more likely to converge. Second, since individual variation in concepts of word meaning are constrained by functional requirements of communication, and word meanings are therefore not free to vary without limit, what are the mechanisms that keep individuals' versions of word meanings effectively convergent? The answer must lie in communicative adequacy, and to measure this we will have to study adequate communication, drawing on corpora of language use in everyday interaction, a critical but as yet underutilized tool in the kit of semantic typological research.

Conclusion

Kri and Lao, two languages spoken in one geographical area, display an uncanny identity of patterning in the complex semantic domain of taste and flavor. How has this convergence come about? One possibility is that parallel development of focal meanings for taste/flavor terms has been independently triggered in the two languages simply because they are spoken in environments in which speakers encounter the same sets of tastes – e.g. in edible plants. But even if the environments were identical (they are not), mere presence of a referent does not account for presence of a word for that referent in

a language. While flavors like “chalky,” “minty,” and “tingly” may be environmentally available to speakers of both Lao and Kri, this does not explain why they are *linguistically encoded* in those languages. As a native speaker of English, I have since childhood experienced these same tastes – e.g. in the form of unripe bananas, mint toothpaste, and pop rocks – but in my language they remain unnamed. When a language has a word for a specific thing, it is not because of the presence of this thing in the environment, but because speakers have historically engaged in social practices of using that word. So, it is not (just) that both Lao and Kri speakers experience these flavors, it is that they are in the habit of *talking about* them.

Our convergence question then becomes: what has caused speakers of the two languages to have similar fashions of speaking about these flavors, with attendant distinctions in vocabulary? Because Lao and Kri are known to be genealogically unrelated, these commonalities in vocabulary cannot be due to inheritance from a common ancestor. And the parallels are too close to be purely coincidental. The only remaining account is that the languages share structure due to long-term areal convergence caused by social interactions between members of language groups in the history of the area, a process widely observed in mainland Southeast Asia (Enfield 2005), and globally (Aikhenvald and Dixon 2006). This does not mean that Kri and Lao speakers have necessarily been in direct contact, but that such contact has taken place across networks of languages in the area, ultimately linking the two. And it does not mean that the content of such diffusion is purely linguistic. Just having a word in a language does not ensure that it will be transmitted across generations. What must also be transmitted is a practice of using the word, and a recurring set of contexts for such use. For example, there could be commonalities in culinary practice (though in fact Kri and Lao speakers have quite dissimilar eating habits). Or there could be a special cultural attention to flavor through some system of cosmological belief (cf. Burenhult and Majid, this issue; though I am not aware of any such system for taste among Lao or Kri speakers).

If we conclude that historical social contact has caused areal convergence in the lexical semantic domain of flavor in Lao and Kri, many questions remain. For instance, did one of these languages borrow from the other? Or did they both borrow from a third? Or was such a system brought into one of the languages through so-called substrate effects? Since it is known that Tai languages were adopted by preexisting Austroasiatic-speaking populations, it may be that the descendants of modern-day Lao speakers once learnt an earlier form of Lao as their second language, and in shifting toward using it as their first language they introduced semantic distinctions that were encoded in their original language (in this case, an Austroasiatic language related to Kri). To test these questions, there is much we need to know about the modern structure of this domain in other languages of the same area, about the etymology of the modern

terms, about historical patterns of interethnic social relations, and about the ethnography of taste and flavor in the region.

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References

- Aikhenvald, Alexandra Y. and Dixon, R.M.W. (eds). 2006. *Grammars in Contact*. Oxford: Oxford University Press.
- Brown, Roger. 1958. *Words and Things*. Glencoe: The Free Press.
- Enfield, N.J. 2005. "Areal Linguistics and Mainland Southeast Asia." *Annual Review of Anthropology* 34: 181–206.
- Enfield, N.J. 2007. *A Grammar of Lao*. Berlin: Mouton de Gruyter.
- Enfield, N.J. 2010. "Tolerable Friends." *Berkeley Linguistics Society Proceedings* 33 (in press).
- Enfield, N.J. and Diffloth, Gérard. 2009. "Phonology and Sketch Grammar of Kri, a Vietic Language of Laos." *Cahiers de Linguistique – Asie Orientale* 38(1): 3–69.
- Haspelmath, Martin and Tadmor, Uri. 2009. *World Loanword Database, Semantic Field 15 "Sense Perception"*. Available online: <http://wold.livingsources.org/semanticfield/15> (accessed May 11, 2010).
- Majid, Asifa (ed.). 2007. *Field Manual Volume 10*. Nijmegen: Max Planck Institute for Psycholinguistics.
- Muysken, Pieter. 2000. *Bilingual Speech: A Typology of Code-mixing*. Cambridge: Cambridge University Press.
- Senft, Gunter, Majid, Asifa and Levinson, Stephen C. 2007. "The Language of Taste." In Asifa Majid (ed.), *Field Manual*, Vol. 1, pp. 42–5. Nijmegen: Max Planck Institute for Psycholinguistics.
- Tomasello, Michael. 2003. *Constructing a Language*. Cambridge, MA: Harvard University Press.
- Weinreich, Uriel. 1953. *Languages in Contact*. New York: Linguistic Circle.
- Wilkins, David P. 2002. *The Importance of Bridging Contexts in Semantic Change: a Case Study of the English Verb "Peruse"*. Typescript, Center for Aphasia and Related Disorders, VANCHCS, Martinez, California.