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# Specificity at the basic level in event taxonomies: The case of Maniq verbs of ingestion

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#### Abstract

Previous research on basic-level object categories shows there is cross-cultural variation in basic-level concepts, arguing against the idea that the basic level reflects an objective reality. In this paper, I extend the investigation to the domain of events. More specifically, I present a case study of verbs of ingestion in Maniq illustrating a highly specific categorization of ingestion events at the basic level. A detailed analysis of these verbs reveals they tap into culturally salient notions. Yet, cultural salience alone cannot explain specificity of basic-level verbs, since ingestion is a domain of universal human experience. Further analysis reveals, however, that another key factor is the language itself. Maniq's preference for encoding specific meaning in basic-level verbs is not a peculiarity of one domain, but a recurrent characteristic of its verb lexicon, pointing to the significant role of the language system in the structure of event concepts.

**Keywords:** basic level; categorization; events; verbs; Maniq; Aslian.

# Introduction

How shall an event be called? Paralleling the research question famously posed by Roger Brown (1958) for objects, an analogous problem can be raised for events. Is there a default most salient level of abstraction commonly applied to refer to events? For objects, such a default level has been termed the basic level, i.e. the level that "anticipates the equivalences and differences" relevant in most "dealings" with particular objects (Brown, 1958, p. 16). A label at the basic level is thus one that brings forward "an immediately important property of the referent" (Brown, 1958, p. 17). For example, the default way of referring to spoons is by the word *spoon*, rather than a more general label such as eating implement, or a more specific one such as dessert spoon. Basic-level categories are said to be optimal in the sense that they contain maximal information without being too specific, as this would lead to excessively fine-grained categorizations. In addition, basic labels are associated with cognitive advantages and are typically preferred in communication (Rosch, Mervis, Gray, Johnson, & Boyes-Braem, 1976).

Particularly revealing for the basic-level theory is the observation regarding variation as to what concepts are actually found at the basic level. Contrary to the idea that basic categories reflect some kind of objective reality and are thus invariable, there is cross-cultural variation in basic-level concepts (Dougherty, 1978). For example, some

cultures have expertise in biological categories of plants and animals, and therefore treat the genus level (e.g. "pine") as basic, while other communities of speakers, e.g. some Western societies, show less interest in those categories and use superordinate labels (e.g. "tree") at the basic level (cf. also Tanaka & Taylor, 1991 for variation *within* a culture). Such variation is important as it constitutes evidence for culture-specific constraints on categorization (cf. Malt, 1995; Malt & Majid, 2013).

While there is ample evidence for a basic level for object concepts, there has been relatively little work investigating other ontological categories. For instance, we have comparatively limited knowledge on the basic level for events. The existing studies suggest that event hierarchies, just like object hierarchies, can have a basic-level structure, with one level of abstraction being more salient than others (Morris & Murphy, 1990). However, it has been pointed out that events have a more complex structure when compared to objects. Crucially, events have less clear-cut boundaries than objects and can therefore be conceptualized in a larger number of different ways (cf. Gentner, 1982). This finds reflection in a greater variability of linguistic labels encoding events, i.e. verbs are said to be among the most cross-linguistically variable part of the lexicon in terms of denotation (Gentner, 1982; Talmy, 1985; Evans, 2011). Given the freedom in event conceptualization, we may ask: To what extent is the basic level of events – as reflected in common verbs – similar across cultures and how much does it vary?

It is legitimate to expect that the basic level in verbs similar to nouns - will be a reflection of local preoccupations and expertise of particular communities. Thus, we are likely to find more specific basic-level event labels for events which are culturally salient. For instance, it is not surprising that there is an elaborate lexicon of basiclevel harvesting verbs in Dogon (Heath & McPherson, 2009) or climbing verbs in Jahai (Burenhult, 2013; Schebesta, 1929, pp. 151-152), because these events are highly salient in these cultures. However, as will be shown here, in some cultures highly specific verbs at the basic level occur not only in narrow areas of specialization, but also domains of basic human experience. This article focuses on one such area - ingestion - in Maniq, an Austroasiatic language spoken in southern Thailand. The aim is to demonstrate that specificity at the basic level in verbs is not purely a reflection of cultural concerns, but also of the

language's *typological profile*, i.e. its consistent preference for making fine-grained distinctions in basic-level verbs.

In what follows, I first briefly introduce the Maniq society and give some basic facts about their language. I then provide a detailed case study of verbs of ingestion, demonstrating that ordinary references to ingestion events in Maniq involve the use of verbs with highly specific meanings. An examination of the broader lexicalization patterns reveals further that specificity of basic-level verbs is pervasive in Maniq and is part of the logic of the language, i.e. it follows a systematic lexicalization principle applying across verbal domains (cf. Wnuk, 2016; Wnuk & Majid, 2014).

# The Maniq and their Language

The Maniq language belongs to the Northern Aslian branch of Aslian, a division within the Austroasiatic language family.

The Maniq are a population of about 300 people inhabiting the Banthad mountain range of southern Thailand. They live in small groups scattered across the provinces of Trang, Satun, Phatthalung and Songkhla. Maniq speakers belong to the larger ethnographic cluster of Semang nomadic populations. Their subsistence relies on hunting and gathering as well as small-scale trade of forest products. Nomadism is still practiced by a large proportion of the population, but today there are also Maniq groups that have settled and embraced agriculture and waged labor.

## **Ingestion verbs in Maniq**

Ingestion is a domain of importance across human communities and ingestion verbs are high-frequency words in many languages. However, only some languages distinguish specific types of ingestion events with separate basic-level verbs (cf. Bowerman, 2005; P. Brown, 1998; Burenhult & Kruspe, 2016; Heath & McPherson, 2009; Rice, 2009). For instance, in English, the verb *eat* is a single default descriptor of eating actions. And although there exist a number of more specific 'eat' verbs encoding manner, e.g. *devour, gorge, gnaw, gobble* (Levin, 1993, pp. 213–216), these are not employed in neutral contexts, but are used only when the manner is somehow salient.

In contrast, in Maniq there are multiple specific ingestion verbs applicable at the basic level of contrast. These verbs are neutral, default ways of referring to ingestion events, frequent in everyday discourse and not restricted to special registers or groups of speakers (cf. Brown, 2008, p. 169). They are the preferred labels applied spontaneously in the free naming of ordinary scenes involving ingestion events, general statements about ingestion (e.g. *I've just eaten*), as well as translations of simple sentences from Thai involving the semantically general ingestion verb *gin* 'to eat or drink, to consume' (e.g. *The boy ate the fruit*).

In fact, Maniq does not seem to have separate general 'eat', 'drink' or 'consume' verbs. All mentions of eating/drinking actions involve one of several ingestion verbs with more specific meanings, selected based on

manner of ingestion and/or type of ingested object (see further below). In cases, where these parameters are unknown, speakers typically employ the verb  $h\tilde{a}w$  (cf. Table 1), which is the most frequent ingestion verb with the broadest range of application. Note, though, that this verb is not a true generic term similar to *eat* and cannot be used in contexts where other verbs apply (cf. the verb *gey* in Jahai; Burenhult & Kruspe, 2016, p. 180). Lack of superordinate monolexemic labels is common in the Maniq verb lexicon and accords well with the idea of highly specific basic-level labels (though it is not always the case that basic-level verbs lack labeled superordinates).

The discussion below explores the distinctions in Maniq ingestion verbs. Of central focus is the question of what semantic principles of categorization apply in this set. It covers ingestion defined broadly as the absorption of various kinds of substances through the mouth. The discussion includes human ingestion verbs, which place selection restrictions on the consumed objects, and animal ingestion verbs, which place selection restrictions on possible actors (cf. Bowerman, 2005).

The data were collected during fieldwork carried out with a nomadic Maniq group of the Manang district, Satun province, during five field trips in the period 2009-2014. The group numbers approximately 15-20 members, but its size and composition are not fixed and changed somewhat over this period depending on external conditions such as food availability. The generalizations made here are based on observations of spontaneous uses of the verbs in everyday situations (e.g. with reference to actual ingestion events), informal interaction with speakers, as well as interviews in which speakers provided basic ingestion verbs for various ingested substances named by the interviewer. These included a range of typical objects foraged by the group (e.g. wild yams, fruit, game), as well as those obtained via exchange with outsiders (e.g. cultivated fruit, coffee, cakes). The most extensive interviews were carried out with three speakers (1 female) in the approximate age range of 25-45.

# **Human ingestion**

Table 1 below contains a summary of human ingestion verbs in Maniq, including 'eat', 'drink' and 'inhale'-type predicates.

Table 1: Basic-level human ingestion verbs in Maniq.

Verb	Gloss		Example objects
hãw	'to chew, to mainly chewing'	eat by	rice, non-fibrous yams, pineapple, cucumber, garlic, chili, papaya, sweet potato, nut of <i>Canarium</i> sp., durian, banana, jackfruit, petai beans, leafy plants, mushrooms, cempedak, baked goods (cookies, cakes, bread)

kap	'to bite, to eat	meat, animal fat, fish, bones,
	harder objects that	hard fruit
	require biting'	
l <del>i</del> k	'to swallow, to eat	orange, lemon, mango, grapes,
	with little biting	wild gandaria fruit ( <i>Bouea</i>
	or chewing'	sp.), various unidentified wild
		fruit species (e.g. kabi? yəbac)
paŋ	'to eat with	fibrous yams – especially
	spitting out hard	ciyak (D. cf. piscatorum) and
	fibers'	ciyak lapən (D. laurifolia) $^1$ ,
		sugar cane
hop	'to consume	soup, honey
	nutritious and/or	
	savory liquids'	
bu?	'to drink non-	water, coffee, medicinal
	nutritious liquids'	infusions, coconut water,
		honey
həp	'to inhale	smoke from burning dried
	medicinal smoke	roots of the medicinal plant
	(does not involve	Dianella ensifolia
	blowing out)'	
yət	'to inhale and	tobacco
	blow out smoke'	

Before discussing the semantic distinctions underlying this system, a few general comments on the structural properties of ingestion verbs are in order. The items listed in Table 1 are monomorphemic verbs with no formal relationship to one another. Rather than being derived from the same root, each verb stands on its own. The only case of formal similarity is the pair hop-hop, where the verbs share the underlying template hVp. However, the verbs are synchronically monomorphemic and cannot be decomposed into morphological units (cf. Wnuk, 2016). Semantic richness in Maniq is thus accompanied by formal non-transparency, as the multiple meaning components are packaged into non-analyzable forms.

Maniq ingestion verbs can occur in syntactically intransitive (1) and transitive (2) constructions.

- (1) ?in bah lamah, ?in hãw 1s NEG be.hungry 1s chew 'I'm not hungry, I ate.'
- (2) ?in hãw ?anci? 1s chew yams 'I'm eating yams.'

Note, however, that even when the object is not overtly expressed, it is implied since a particular verb is associated with a restricted range of objects. Thus, for instance, although the speaker in (1) does not mention what he ate, the listener can restrict the possible objects to those fitting with the requirements of the verb  $h\tilde{a}w$  (cf. Table 1).

The categorization of ingestion events in Maniq is influenced by several factors. For most verbs in Table 1, the

primary factor is the manner of ingestion. By indicating manner, ingestion verbs covertly classify objects, as they restrict the possible range of referents to those with the consistency or texture fitting with that manner (cf. Aikhenvald, 2009, p. 106; Heath & McPherson, 2009, p. 42). For instance, lik is a way of eating in which the most prominent part is swallowing since the food does not require much pre-mastication. The prototypical foodstuffs described with *lik* are thus softer types of fruit such as oranges, grapes, as well as a number of wild fruit species, e.g. kabi? yəbac. Note that in its basic sense lik denotes the action of swallowing and may be employed when no eating is involved, as in e.g. swallowing one's saliva or a pill. A similar pattern is attested with the verb kap, referring to biting, and hãw, referring to chewing, which are used to describe eating events in which biting and chewing, respectively, are the most prominent parts. Compare example (3), where kap describes a biting event, with (4), where it is used to describe an eating event.

- (3) mi? kc-kac na? hay IMFV-scratch Maniq FOC like ?ages 383 kap mosquito 3 bite 'It's like when Maniq scratch after they've been bitten by mosquitoes.'
- (4) ?in kap tawsh paliek
  1s bite gibbon be.white
  'I eat white gibbons.' (uttered in a contrastive context, 'white gibbons' are here juxtaposed with 'black gibbons')

The fact that the basic set of ingestion distinctions for solid matter is primarily manner-based constitutes a departure from the basic pattern among some of Maniq's close relatives, i.e. other Aslian languages spoken by huntergatherer groups (e.g. Jahai, Batek Deg, Semag Beri). In these languages, the main ingestion verbs are linked not to manner, but to the categorial identity of a food item. For instance, in Jahai muc 'to eat animal' maps onto all foods classified as Pay 'edible animal', gey 'to eat starchy food' onto foods known as bap 'starchy food', but 'to eat ripe fruit' onto boh 'ripe fruit', and hew 'to eat leafy greens' onto t?a? 'leafy greens' (Burenhult & Kruspe, 2016, p. 180). In Maniq, the categorial identity of food items is of lesser importance and in fact no similarly elaborate system of generic food classes seems to be in place. The only large classes similar to those in other Aslian languages include ?ay 'game' and kabi? 'fruit and some vegetables'. There is no generic label for starchy foods, leafy vegetables, or a specific label for ripe fruit, and Maniq ingestion verbs do not indicate such a classification might be operating at a covert level. Except for food of animal origin associated consistently with the verb kap (and mostly mapping onto the Pay category), most classes of foods are connected to several verbs, depending on which specific food item from that class is involved. The verb kap in fact represents a mixed

<sup>&</sup>lt;sup>1</sup> All identified species of wild yams discussed here are from the genus *Dioscorea*. For convenience, the genus name is abbreviated to "D.". The identifications are based on Maniq vernacular names provided in Maneenoon, Sirirugsa, and Sridith (2008).

pattern, since its use is sometimes triggered by the categorial identity of ingested matter (e.g. in the case of meat), and sometimes by manner of ingestion (e.g. in the case of hard fruit).

Fruit and vegetables (kabi?) can be linked to different ingestion verbs, depending on which specific food item from that class is involved. Eating soft and juicy fruit like orange and gandaria, for instance, is typically described with the "swallow" verb lik. Eating fruit with a somewhat harder or mushy texture such as banana or pineapple is associated with the "chew" verb  $h\tilde{a}w$ . Finally, eating hard fruit, including not fully ripe fruit, and some vegetables such as cucumbers is associated with the "bite" verb kap (cf. Heath & McPherson, 2009, p. 43, for a similar set of distinctions in Dogon). In addition, there is some variation as to what verbs are preferred with what fruit. In particular, fruit with texture not clearly linked to one specific manner of ingestion (e.g. mango) tends to be used with several verbs, depending on the speaker or specific context.

Perhaps the most nuanced culturally-salient contrast among the Maniq ingestion verbs is the one between the verbs pan and haw. Both verbs are used with several kinds of foods, but are associated most prominently with wild yams (Dioscorea spp.), the traditional staple food of the Maniq (Maneenoon et al. 2008). Underlying the distinction between them is the classification into fibrous and nonfibrous yam species. Hãw is used with the majority of the consumed types, which usually do not contain hard fibers, while pan is employed especially with ciyak '(D. cf. piscatorum)' and ciyak lapon '(D. laurifolia)'<sup>2</sup>, which have hard woody fibers that are never swallowed. Apart from these two species, a number of others (e.g. lantak '(D. glabra)') contain fibers of a softer type, which are varyingly described with either of the two verbs. The distinction between pan and haw also roughly maps onto two main labeled types/sections of tubers – the cylindrically-shaped, slender and usually fibrous part called tanat, and the thicker and wider part called bahi? The consumption of the tənat sections of tubers is usually described with the verb pan, while bahi? sections with the verb haw. The covert tuber classification presupposed by these two verbs thus reveals fine details about the indigenous botanical knowledge structure.

While for solid objects, the verb choice is determined by manner of ingestion, for liquids it is based on the category of the ingested substance. Thus, the verb *hop* maps onto liquid substances collectively classified as *leŋ* 'nutritious and/or savory liquid substance' such as soup, meat juices, and honey. The verb *bu2*, on the other hand, is reserved for non-nutritious/non-savory items, many of which fall under the generic label *batew* 'water, liquid' (e.g. water, medicinal infusions, coconut water), but also coffee. Honey has been

noted to occur both with *hop* and *bu?*. By being linked to specific classes of liquid substances, these verbs resemble the classificatory 'eat' verbs in other Aslian languages such as Jahai and Semaq Beri (Burenhult & Kruspe, 2016).

Finally, for volatile substances the choice of verb is determined strictly by manner. Smoking of a cigarette described as yot involves a quick inhale and a voluntary action of blowing out the smoke. In contrast, the verb hpp describes the inhaling of smoke from the burning of dried roots of the medicinal plant called kasay 'Dianella ensifolia'. Crucially, in the case of hop the inhalation is not followed by deliberate blowing out of smoke - the person performing the practice usually attempts to inhale deeply and keep the smoke in the lungs for as long as possible. One may also apply medicinal smoke locally on a particular body part, e.g. a leg. In this case, it is common to first ingest the smoke and then blow it on the ailing body part. This activity – like cigarette smoking – is described with the verb yot, which illustrates that manner, and not the type of smoke, is the primary factor determining verb choice.

To summarize, human ingestion verbs in Maniq are sensitive to a combination of parameters, including the manner of ingestion as well as categorial identity of ingested items, which in turn depend on various physical properties of those items, e.g. their texture, nutritiousness, and taste.

#### **Animal ingestion**

Although most discussions of ingestion verb lexicons focus on the elaboration linked to the ingested object, elaboration can also be linked to the agent performing the action of ingestion. In Maniq, such verbs are associated with some characteristic ways of ingestion typical of specific animals. In such cases, the identity of the agent is linked to the verb indirectly via the manner of ingestion. For instance, the verb coh 'to strike with a long object' is a conventional way of describing pecking and eating-by-pecking, and thus in the ingestion context, it conveys the action of eating associated with birds.

(5) jawāŋ ?ɛ? coh kabi? great.hornbill 3 strike fruit 'Great hornbills eat fruit.'

Note that example (5) is best translated with *eat* rather than *peck* since in English *peck* in generic statements of this kind would be marked. In Maniq on the other hand, *coh* is a basic-level predicate, the most unmarked and frequent item in such contexts. Table 2 lists ingestion verbs associated with particular animals together with glosses and their covert agents.

<sup>&</sup>lt;sup>2</sup> Ciyak lapən is a medicinal yam species that is too toxic for consumption (Maneenoon et al. 2008). Note, though, that the Maniq do classify it as being paŋ-eaten, which suggests that either this is a hypothetical response (one that would apply if it was edible), or that there is a way of detoxifying it.

Table 2: Basic-level animal ingestion verbs in Maniq.

Verb	Gloss	Agent
coh	'to eat by pecking'	birds
nam	'to eat fruit, involves spitting out seeds, skin and pulp'	bats
dut	'to eat by sucking out liquid substance'	insects
los	'to eat fruit/nuts (of squirrels and rats)'	squirrels, rats

The verb *nam* is similar to the human ingestion verb *paŋ* applied with fibrous tubers in that it involves discarding some of the masticated matter. In this case, however, the discarded elements include seeds, skin and pulp of fruit consumed by fruit bats (e.g. large flying fox (*Pteropus vampyrus*)). The verb *dut* (a loanword from Thai *dùut* 'to suck') describes sucking or eating-by-sucking, as in, for instance, bees sucking nectar. Finally, *lɔs* is associated with the particular manner in which some rodents such as squirrels eat fruit and nuts, and is therefore characteristically applied in descriptions of eating actions performed by these animals.

Since some animals bite, chew, drink, etc. in ways similar to people, many human ingestion verbs have been attested with animals, too. In particular,  $h\tilde{a}w$  'to chew-eat', kap 'to bite-eat' and bu2 'to drink non-nutritious liquid' are used frequently with animal agents, cf. (6) and (7).

- (6) yəkəp ?ε? kap basiŋ snake 3 bite-eat dusky.leaf.monkey 'Snakes eat dusky leaf monkeys.'
- (7) kanceh ?ε? hãw kabi? bearcat 3 chew-eat fruit 'Bearcats eat fruit.'

### **Summary and conclusions**

The system of basic-level ingestion verbs described here reveals a more fine-grained and nuanced categorization of ingestion events in Maniq than in many other languages, where only a general division between eat and drink is made (cf. Newman, 2009; Wierzbicka, 2009). Such specificity could be argued to be related to cultural factors. This would then constitute a case parallel to objects, where it was found that more specific labels at the basic level are a reflection of community's expertise in a domain (Dougherty, 1978). Such interpretation appears to be at least partially true since, aside from drawing on basic bodily mechanics, a number of ingestion verbs in Maniq reflect ethnobiological expertise of Maniq speakers. Their semantics involve culturally relevant ethnobiological knowledge (e.g. relating to the ingested objects, behavior of animals, etc.), and presuppose familiarity with this knowledge. While this provides an account for how ingestion events are categorized in Maniq, by itself it does not explain why specific rather than general labels are preferred. Further insights into this issue can be gained by taking into account the distinct meal habits of the community and the typical composition of meals. This has

been suggested by Burenhult and Kruspe (2016) for related Aslian hunter-gatherer groups. According to this account, the existence of specific verbs is linked to the fact that meals in hunter-gatherer communities typically do not involve elaborate combinations of different foodstuffs, but are often instances of "opportunistic ingestion of a single resource" (Burenhult & Kruspe, 2016, p. 194). This would suggest further that "there is no culturally salient type of ingestion event for which a general concept or label "eat" seems necessary" (Burenhult & Kruspe, 2016, p. 194). In other Aslian languages, this has been connected specifically to the existence of one particular subtype of semantically specific ingestion verbs (i.e. food-category-encoding verbs), but it is conceivable that such distinct meal habits could facilitate a fine-grained categorization of ingestion events more generally.

Although culture-specific factors like salience and distinct meal habits are likely important, by themselves they might not constitute sufficient pressure for such lexical elaboration. Ingestion is a domain of basic human experience, and specific subtypes of ingestion events are likely salient in many cultures. Yet, semantically detailed ingestion verbs are found only in a subset of the world's languages. Similarly, although there is no extensive survey of ingestion verb paradigms across hunter-gatherer communities, not all such communities seem to have equally elaborate systems of ingestion verbs (e.g. Wierzbicka, 2009). Further analysis of the Maniq verb lexicon reveals, however, that another key factor is the language itself. Verb meanings do not exist in a vacuum, but form part of a system and often pattern in systematic ways (Gentner, 1982; Talmy, 1985). Hence, the characteristic ways in which languages encode verb meaning in one domain tend to recur in other domains too, revealing general principles underlying lexicalization. In the case of Maniq, and Aslian languages more generally, specificity is such a general principle. Aslian languages have often been noted to have a penchant for encoding specific meanings in monolexemic verbs occurring across multiple semantic domains (Kruspe, Burenhult, & Wnuk, 2015; Matisoff, 2003). For instance, in Maniq they are attested not only in ingestion, but in a number of other domains, e.g. perception (balay 'to look up'), location (cibel 'to be located upside down'), motion (tik 'to move upstream'), and transportation (gales 'to carry on back') (cf. Wnuk, 2016). This typological characteristic makes Maniq and Aslian stand out from many other languages of their linguistic area, placing them together with other languages and language groups characterized by a similar marked preference for verb specificity, e.g. Mayan (P. Brown, 2008). Thus, although the basic level for events is partially a reflection of cultural factors, it is also influenced by the semantic-typological profile of the language, suggesting a significant role for language in the structure of event concepts.

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