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

Ewelina Wnuk (e.wnuk@let.ru.nl)
Radboud University, Nijmegen, The Netherlands
Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands
International Max Planck Research School for Language Sciences, Nijmegen, The Netherlands

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; Asian.

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; Tsalmy, 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 basic-level 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 Austronesian 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 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 *hãw* (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>
<thead>
<tr>
<th>Verb</th>
<th>Gloss</th>
<th>Example objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>hãw</td>
<td>‘to chew, to eat mainly by chewing’</td>
<td>rice, non-fibrous yams, pineapple, cucumber, garlic, chili, papaya, sweet potato, nut of <em>Canarium</em> sp., durian, banana, jackfruit, petai beans, leafy plants, mushrooms, cempedak, baked goods (cookies, cakes, bread)</td>
</tr>
</tbody>
</table>

Table 1: Basic-level human ingestion verbs in Maniq.
kap ‘to bite, to eat harder objects that require biting’
lik ‘to swallow, to eat with little biting or chewing’
pan ‘to eat with spitting out hard fibers’
hop ‘to consume nutritious and/or savory liquids’
buʔ ‘to drink non-nutritious liquids’
han ‘to inhale medicinal smoke (does not involve blowing out)’
yet ‘to inhale and 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-han, 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) ?ɛn bəh lamah, ?ɛn həw
1S NEG be.hungry 1S chew
‘I’m not hungry, I ate.’
(2) ?ɛn həw ?anciʔ
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 həw (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. kabiʔ yobac. 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 hāw, 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) naʔ hay miʔ kc-kac
FOC like Maniq IMFV-scratch
ʔages ʔeʔ kap
mosquito 3 bite
‘It’s like when Maniq scratch after they’ve been bitten by mosquitoes.’
(4) ?ɛn kap tawʔ palič
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 hunter-gatherer groups (e.g. Jahai, Batek Deq, Semaq 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 ʔay ‘edible animal’, gev ‘to eat starchy food’ onto foods known as kap ‘starchy food’, but ‘to eat ripe fruit’ onto boh ‘ripe fruit’, and hāw ‘to eat leafy greens’ onto tlaʔ ‘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 ʔay ‘game’ and kabiʔ ‘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 ʔay 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

1 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 (kabii) 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 haw. 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 pag 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 non-
fibrous yam species. Haw is used with the majority of the
consumed types, which usually do not contain hard fibers,
while pag is employed especially with ciyak ‘(D. cf.
piscatorum)’ and ciyak lapon ‘(D. laurifolia)’2, 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 pag 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 tanat
sections of tubers is usually described with the verb pag,
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 len ‘nutritious
and/or savory liquid substance’ such as soup, meat juices,
and honey. The verb bui, 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

2 Ciyak lapon 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 pag-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.

noted to occur both with hop and bui. 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 hopp
describes the inhaling of smoke from the burning of dried
roots of the medicinal plant called kasay ‘Dianella
ensifolia’. Crucially, in the case of hopp 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) jawanŋ ?et coh kabiiŋ
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.
Table 2: Basic-level animal ingestion verbs in Maniq.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Gloss</th>
<th>Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>coh</td>
<td>‘to eat by pecking’</td>
<td>birds</td>
</tr>
<tr>
<td>nam</td>
<td>‘to eat fruit, involves spitting out seeds, skin and pulp’</td>
<td>bats</td>
</tr>
<tr>
<td>dut</td>
<td>‘to eat by sucking out liquid substance’</td>
<td>insects</td>
</tr>
<tr>
<td>lss</td>
<td>‘to eat fruit/nuts (of squirrels and rats)’</td>
<td>squirrels, rats</td>
</tr>
</tbody>
</table>

The verb *nam* is similar to the human ingestion verb *pay* 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 *diut* ‘to suck’) describes sucking or eating-by-sucking, as in, for instance, bees sucking nectar. Finally, *lss* 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, *hãw* ‘to chew-eat’, *kap* ‘to bite-eat’ and *buʔ* ‘to drink non-nutritious liquid’ are used frequently with animal agents, cf. (6) and (7).

(6) yaskap ʔeʔ kap basiŋ
snake 3 bite-eat dusky.leaf.monkey
‘Snakes eat dusky leaf monkeys.’

(7) kapeč ʔeʔ hãw kabiʔ
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; Matiacci, 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.
Acknowledgments

I would like to thank the Maniq community of the Manan district (Satun, Thailand) and Jaroong Thotsagool. This paper has benefitted from comments and discussions with Niclas Burenhult, Asifa Majid, Nicole Kruspe, Rebecca Defina, Ilja Croijmans, and Laura Speed. This work was supported by Max Planck Gesellschaft and The Netherlands Organization for Scientific Research.

References


