

Olfaction in Aslian Ideology and Language

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ABSTRACT The cognitive- and neurosciences have supposed that the perceptual world of the individual is dominated by vision, followed closely by audition, but that olfaction is merely vestigial. Aslian-speaking communities (Austroasiatic, Malay Peninsula) challenge this view. For the Jahai – a small group of rainforest foragers – odor plays a central role in both culture and language. Jahai ideology revolves around a complex set of beliefs that structures the human relationship with the supernatural. Central to this relationship are hearing, vision, *and* olfaction. In Jahai language, olfaction also receives special attention. There are at least a dozen or so abstract descriptive odor categories that are basic, everyday terms. This lexical elaboration of odor is not unique to the Jahai but can be seen across many contemporary Austroasiatic languages

and transcends major cultural and environmental boundaries. These terms appear to be inherited from ancestral language states, suggesting a long-standing preoccupation with odor in this part of the world. Contrary to the prevailing assumption in the cognitive sciences, these languages and cultures demonstrate that odor is far from vestigial in humans.

KEYWORDS: language of perception, Jahai, Aslian, Austroasiatic, olfaction

Introduction



Freud (1978: 318) famously proclaimed “the organic sublimation of the sense of smell is a factor in civilization.”

Olfaction has been relegated to a merely rudimentary function in the human sensorium by many great Western thinkers over the centuries. Howard Gardner, proponent of multiple intelligences, reasons “Acute use of sensory systems is another obvious candidate for a human intelligence . . . [but] when it comes to keen gustatory or olfactory senses, these abilities have little special value across cultures” (Gardner 1983: 61), while Arnheim (1969: 19) states “one can indulge in smells and tastes but one can hardly think in them.”

The empirical evidence appears to support these claims. Humans seem to be particularly poor when it comes to olfaction, even when identifying familiar odors (Engen 1991). Under neural impairment – as in aphasia – olfactory identification is especially disrupted, even when it can be shown that the ability to smell is intact (Goodglass et al. 1968). And, it has been claimed that languages have scanty vocabulary for odors (Sturtevant 1964). The British psychologist Edward Titchener remarked “the very fact that odors have no settled system of names, like cold or pain, red or blue, shows that they have not been utilized in human life” (1915: 51). Likewise, the German physiologist Hans Henning declared “olfactory abstraction is impossible. We can easily abstract the common shared color – i.e. white – of jasmine, lily-of-the-valley, camphor and milk, but no man can similarly abstract a common odor by attending to what they have in common and setting aside their differences” (Henning 1916: 66). All of this has led leading cognitive- and neuroscientists to assert that olfaction is “vestigial” in humans (e.g. Pinker 1997; see also Stoddart 1990).

Aslian-speaking communities (Austroasiatic, Malay Peninsula) are a counter-example to the view that the ability of humans to represent odor is feeble. In this article, we provide evidence that odor plays a special role in these societies. We begin by introducing one specific Aslian-speaking group – the Jahai – and present a first description of their odor-oriented ideological system. Echoes of these cultural

practices amongst Aslian-speaking groups are scattered through the literature and further bolster our claim that odor plays an important role in the ideology and practices of Aslian peoples. Aside from these wonderfully complex cultural manifestations of olfaction, Aslian-speaking communities also have an exquisitely elaborated set of odor distinctions in their languages. This lexical elaboration has not been previously described. We argue that the odor categories codified in Aslian languages provide additional evidence of a preoccupation with, and orientation towards, odor.

The Senses in Jahai Ideology

A young Jahai boy sitting on a rock sees a leech, points to it, and laughs. His grandfather scolds him, points to the sky and utters *hmɨŋ*, a word that refers to a state of supernatural danger: Karey will be angry. Karey is an essentially benevolent deity who dwells among the clouds. He creates the fruits in the forest and provides game for hunting. Karey tends the Jahai world and monitors everyday Jahai behavior. The boy's grandfather chides him for mocking the leech – one of many animal species that are particularly close to Karey – because his laughter will attract Karey's attention and anger: Karey gives voice, *gɨr* (thunder); he blinks, *pɨpɛp* (lightning); he emits his smell, *ges*. Multicolored threads with hooks at the ends are sent down by Karey to the boy's body, where they attach to him and cause pain and sickness.

The Jahai are an ethnolinguistic group of around 1,000 people who live in the mountain rainforests of northern Peninsular Malaysia and southernmost Thailand. Traditionally nomadic (Semang) foragers, the Jahai subsist on hunting, fishing, and gathering, as well as trade and occasional swidden cultivation. Camps of huts or lean-to shelters are inhabited for a few days to several months or more, depending on the sustenance circumstances. Nowadays most Jahai are semi-sedentary in regroupment programs established by the Malaysian government. The Jahai speak a language belonging to the Northern Aslian division of the Aslian languages, a branch of the Austroasiatic language family spoken in the Malay Peninsula.¹

A complex set of taboos and avoidance rules exist among the Jahai, which are designed to prevent attracting the curiosity and anger of Karey. Central to both the rules and the punishment are hearing, vision, and olfaction. Karey's anger is manifest in thunder, lightning, and the emission of odor. Taboos likewise revolve around these senses, structuring how humans manage their relationship with Karey. Breaking them is *hmɨŋ* and causes great fear and commotion. For example, laughing while bathing in a river is *hmɨŋ* because the laughter attracts the curiosity of Karey, who then perceives the unpleasant smell of human dirt as it is washed away in the river. Similarly, washing uncooked parts of several different species of game animal in the river is *hmɨŋ* because the distinct smell of their blood is offensive to Karey. Mirrors and metal pots should not be

washed in a river, and definitely not turned up towards the sky. The smell dispersed when washing such items will catch Karey's attention and he will notice if humans handle his mirror image sloppily – a thing to be avoided since this enrages Karey.²

Avoiding Karey's anger and punishment is about screening off his visual access to objects and actions. The taboos exemplified above typically do not apply if the precarious doings take place under a cover, *sip*, like inside a hut or house, rather than out in the open, *pnaderj*.³ Karey can still be attracted by noises and smells but is unable to identify the wrongdoer. They also do not apply at night, when Karey is asleep.

Broken taboos are redressed by appealing to Karey's senses. Songs are sung to please his ears, and human blood is offered to please his nose. During blood-throwing ceremonies the Jahai make cuts in their calves, collect the blood, dilute it with water, and hurl it into the air for Karey to smell. If he finds the odor pleasant he will be satisfied; if not he will ask for more by thundering. Such redressing and offerings are accompanied by requests to Karey to turn his face upward, directing his senses away from the humans below, and to Karey's wife Takil in the underworld – who also monitors Jahai behavior – to turn her face downward. Traditional Jahai name-giving is also designed to please Karey's senses: personal names are frequently drawn from the species names of fragrant plants and flowers. Healing magic focuses on driving away Karey's sickness-causing odor emissions with fragrant smells from perfumes, plants, and burnt resin, *kmujin*. Karey himself can be scared off by the smell of burnt crayfish.

It is no accident that sight, hearing, and smell are the critical senses maintaining the relationship with Karey, while touch and taste remain notably absent. Objects and actions can be seen, heard or smelt from the skies where Karey resides as well as the underworld, where his wife Takil dwells. But to feel or taste an object or action requires contact and as such these senses cannot transcend to Karey or Takil. The dichotomy between distal and proximal senses, in the Jahai religious context, firmly places olfaction as partner to vision and audition.

An Exquisite Language of Odor

The prominent position of odor in Jahai ideology is echoed in language. Jahai has a set of around a dozen basic odor terms, analyzed on syntactic grounds as stative verbs. As such, they do not usually display subject agreement (unlike dynamic verbs) but can be negated, relativized, and nominalized. Despite the fact that they can be analyzed as verbs they are best translated into English as predicative adjectives ('to be fragrant,' 'to be musty,' etc.) or possessive constructions ('to have a stinging smell'). Most contemporary odor verbs are historically unrelated words, although a few may have been derived from the same word roots. Table 1

Table 1 The most frequent odor verbs in Jahai.

Verb	Approximate translation	Prototypical sources
<i>cŋəs</i>	'to smell edible, tasty'	cooked food, sweets
<i>cŋjir</i>	'to smell roasted'	roasted food
<i>harim</i>	'to be fragrant'	flowers, perfumes, soap
<i>lɔpɨt</i>	'to be fragrant'	flowers, perfumes, soap
<i>haʔɛt</i>	'to stink'	feces, rotten meat, prawn paste
<i>pʔus</i>	'to be musty'	old dwellings, mushrooms, stale food
<i>cŋɛs</i>	'to have a stinging smell'	petrol, smoke, various plants and insects
<i>sʔiŋ</i>	'to have a smell of human urine'	human urine, village ground
<i>hɔnciŋ</i>	'to have a urine-like smell'	urine
<i>pʔih</i>	'to have a blood/fish/meat-like smell'	blood, raw fish, raw meat
<i>pʔeŋ</i>	'to have a blood/fish/meat-like smell'	blood, raw fish, raw meat
<i>pʔeŋ</i>	'to have a smell of blood which attracts tigers'	crushed head lice, squirrel blood

gives the most frequent odor verbs with approximate translations and prototypical sources.

Jahai odor verbs can be categorized along a pleasant–unpleasant dimension. Two-thirds of the verbs have unpleasant connotations; the remaining third have pleasant ones. This division along hedonic lines is also manifest in the belief system associated with Karɛy and healing magic. Unpleasant odors arouse anger and sometimes fear in Karɛy, pleasant odors appease him; sickness is linked to unpleasant odors and is driven away by pleasant ones.

The lexical categories themselves accommodate a range of more specific parameters. The verbs *cŋəs* and *cŋjir* are used for pleasant odors which are associated with edible things. *Harim* and *lɔpɨt*, on the other hand, are not used for pleasant edible odors but are associated with odors that are aesthetically fragrant. Importantly, the terms abstract away from the actual sources typically associated with them. So although a verb like *lɔpɨt* is prototypically used to describe the fragrant odors of flowers (e.g. *Globba*, *Lantana* spp.) and perfumes, any source whose odor approximates such a quality can be described with the same verb, e.g. the fur of the bearcat (a hunted civet species, *Arctitis binturong*, whose musk glands emit an odor reminiscent of popcorn).

The unpleasant group of odors contains at least eight lexical categories, each representing a distinct quality. Stenches associated with rotting carcasses, feces, and the like are described as *haʔɛt*, a verb also used to describe the powerful smell of prawn paste (*belacan*, a traditional ingredient in Malay cooking, and which the Jahai also consider edible) and the sap of the rubber tree (*Hevea brasiliensis*). Another verb, *pʔus*, typically denotes moldy or musty odors, e.g. the smells of decaying vegetation, old dwellings, various types of mushrooms, as well as stale food and some dried plant products. It is also used to denote the smell of unwashed clothes

and people as well as the plumage of some bird species. Taboos against laughing, stomping, and copulating in an old and abandoned dwelling are intended to prevent Karey from noticing that humans are present in an environment which is *pʉus*. A third category is *ɕɲes*, which is associated with sharp “chemical”-like odors, e.g. the smell of petrol, smoke, paint, and various plants, and which possibly involves stimulation of the trigeminal nerve. The smell of burnt crayfish (*kantɛm*) is also considered *ɕɲes* and it is used to scare off Karey, who dreads crayfish.⁴ Two other categories, *sʉiŋ* and *həŋciŋ*, describe different types of urine smell.

Three verbs have a particular association with the smell of blood, raw meat, and fish: *pʉih*, *pʉeŋ* and *pʉeŋ*. The former two are difficult to tease apart semantically and are both central to beliefs associated with Karey. For example, animals whose blood is distinctly *pʉih* or *pʉeŋ* are *hmɪŋ* and should not be washed in a river. As a general rule, the smell of blood from fish and other riverine animal species is not considered offensive to Karey, and killed specimens of such species can be washed in a river, whereas a strict washing taboo applies to many terrestrial and arboreal animals whose blood is considered very *pʉih* or *pʉeŋ*. However, the odor differences claimed to determine whether a species is *hmɪŋ* or not seem surprisingly subtle. For example, the washing taboo applies to the banded leaf monkey (*Presbytis femoralis*), as well as five other hunted primate species, but not to the dusky leaf monkey (*Trachypithecus obscurus*). Jahai consultants affirm that the blood smell of the latter is less unpleasant. Furthermore, during blood-throwing ceremonies, Karey is believed to base his judgment on whether the offered human blood is *ɕɲəs*, pleasantly edible-smelling and acceptable, or *pʉih*, offensive and unacceptable. Also, the terms *pʉih* and *pʉeŋ* are used to describe the smells of sickness which Karey himself emits as punishment to misbehaving humans.

The third term – *pʉeŋ*, distinguished formally from *pʉeŋ* only by a different front vowel in the final syllable – describes a particular type of blood odor that is considered to attract tigers and leopards. The blood of most rodent and civet species, as well as that of gibbons and occasional species of bat, bird, fish, and reptile, is *pʉeŋ* and therefore precarious and handled carefully in the forest. A crushed louse is also *pʉeŋ* and delousing is associated with particular codes of conduct if performed away from a camp or village. Wild lemongrass (*Cymbopogon* sp.) is *pʉeŋ* when cooked and therefore carried fresh through the forest. The odor is also typical of old rain water in the hollow stems of bamboo, and the collecting of such stems must be followed by a quick return to the place of abode.

Jahai odor verbs are monolexicemic, psychologically salient, not restricted to a narrow class of objects, nor are they source descriptors. They therefore qualify as basic terms, in the sense of Berlin and Kay (1969). These verbs are common parlance, known and used by all. Everyday conversation is peppered with them and

they are not limited to religious, mythical, or otherwise specialist genres.

A Long-standing Preoccupation with Odor

The Jahai preoccupation with odor is not unique amongst Aslian-speaking cultures. Its close relatives in the Malay Peninsula have also been identified as being “smell cultures” (Classen et al. 1994). The Batek – a linguistically and culturally closely related Semang group – have a similar ideology where smell features prominently (Endicott 1979). Among the Chewong – another closely related group – human relations with the supernatural are arbitrated largely through the olfactory channel (Howell 1984). And the Temiar – swiddener neighbors of the Jahai – have an intricate set of beliefs concerning personal odor and odor mixing (Roseman 1991).

Although some features of odor orientation have been brilliantly described in these sources, the attendant lexical elaboration of a set of abstract olfactory terms has not been addressed. But closer examination of a number of related languages shows that similar lexical patterns reverberate throughout the Aslian language group. For example, recent work on Menriq (another close Northern Aslian relative of Jahai) and Semnam (a language belonging to the Central Aslian division of Aslian) has revealed odor lexica very similar to that in Jahai (Burenhult field notes 2008). Similar-sized sets of stative verbs draw on many of the same cognates (words inherited from ancestral language stages) to make semantic distinctions akin to the Jahai categories described above (see also Kruspe 2004, 2010).

Elsewhere in Aslian, olfactory language takes on other formal characteristics. Thus, in Semai (a Central Aslian language closely related to Temiar and Semnam) odor terms are not stative verbs but belong to a word class referred to as expressives, which displays distinct syntactic properties and is devoted to representing sensory notions (Diffloth 1976; Tufvesson, this issue). Although the number of roots employed to describe odors is probably similar to that of the other languages mentioned, Semai expressives have a productive pattern of sound alternation whereby forms with slightly different meanings (signaling, e.g. degrees of perceived intensity) can be derived from one and the same root, e.g. *ghu:p* ‘acid smell, neutral,’ *gho:p* ‘acid smell, intense,’ *ghɔ:p* ‘acid smell, very intense’ (Tufvesson, this issue). Importantly, however, this expressive odor vocabulary largely draws on the same inherited lexicon as the other languages, indicating that lexical elaboration of odor is a pan-Aslian phenomenon with a long history within the language group.

In fact, preliminary comparison with languages belonging to other branches of Austroasiatic – an ancient language family whose members are scattered over an area covering much of Southeast Asia and India – suggests that this preoccupation with odor may have even deeper historical roots. For example, Kammu – a member of the Khmuic branch of Austroasiatic, spoken in a distant part of

Southeast Asia and whose ancestor shared with Aslian was spoken an estimated 5,000–6,000 years ago – has several odor terms whose form and meaning are strikingly similar to Aslian terms, e.g. *pʷúus* ‘to smell badly’ (cf. Jahai *pʷus* ‘to smell musty’), *hʷú* ‘to stink’ (cf. Jahai *haʷɛt* ‘to stink’), and *hʷɪŋ* ‘stink of urine’ (cf. Jahai *sʷɪŋ* ‘to have a urine smell’) (Svantesson et al. n.d.; for similar examples in Khmer, see Headley 1977). These similarities point to a remarkable stability in odor representation in the Austroasiatic language family. It remains to be seen what role ideology, subsistence, and ecology play in this larger Aslian and Austroasiatic context. However, it is clear that the inherited lexical elaboration of odor in Austroasiatic transcends major cultural and environmental boundaries, being manifest in diverse small-scale language communities as well as major official languages, from Jahai foragers in the Malayan rainforests to Kammu swiddeners in the Laotian uplands to Khmer nation-builders in the Mekong floodplains.

Conclusions

This article draws attention to odor representation in ideology and language among the Aslian-speaking communities of the Malay Peninsula, demonstrating that olfaction attains considerable cultural and lexical elaboration in these societies. Comparison of odor vocabularies across diverse Aslian cultures and the larger Austroasiatic context suggests the lexical distinctions – although tightly intertwined with local systems of belief and subsistence – cannot themselves be explained as arising from particular cultural practices or ecological circumstances. Instead, the cross-cultural similarities in odor lexicon suggest the distinctions are largely inherited and thus first and foremost bestowed by language itself. Furthermore they display remarkable stability across space, time, cultures, and ecologies. That is not to say, of course, that culture and ecology are of no relevance: it may be that the Aslian (and larger Austroasiatic) cultural and ecological settings provide ideal circumstances for such distinctions to persist and flourish.

The data reported challenge the current understanding of olfaction in the cognitive- and neurosciences and indicate that it may be unsatisfactory, if not wrong. Aslian communities – and probably several other communities around the world (see, for example, Classen et al. 1994) – provide compelling evidence that basic odor vocabularies can be tremendously sophisticated and show that speakers of these languages are able to represent and cognize about odors robustly and effectively.

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Notes

1. This brief inquest into Jahai ideology is based on recent ethnographic and linguistic fieldwork by the authors. Fuller accounts albeit with a different focus include (Schebesta 1927) and (van der Sluys 2000). Related belief systems have been thoroughly described for the Temiar (Benjamin 1967) and the Batek (Endicott 1979). The origins of the taboos and rituals we describe have been debated previously (e.g. Needham 1967; Freeman 1968; Robarchek 1987), but these authors did not consider the role of the senses in this connection. For a comprehensive description of the Jahai language, see Burenhult (2005).
2. The management of smell in human–supernatural interaction is also fundamental to the Ongee of the Andaman Islands (Pandya 1993).
3. The meaning of this term can be historically analyzed as 'place of making visible.'
4. *Kantĕm* crayfish represent one of the foremost human weapons against Karĕy, who is terrified that the claws will pinch his penis.

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