

Tzeltal Maya Affect Verbs: Psychological Salience and Expressive Functions of Language

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Tzeltal Maya affect verbs:
Psychological salience and expressive functions of language*

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This paper presents the initial results of an ongoing field investigation of so-called affect verbs in the Tenejapa dialect of Tzeltal, a Mayan language of Highland Chiapas, Mexico. A semantic description of these verbs is outlined, the first attempt at a detailed analysis of this class of words in Tzeltal. Affect verbs are then examined in their relation to the notion of psychological salience and to the expressive functions of language. Finally, their structural and semantic affinity with ideophones (as found in African and Southeast Asian languages) is suggested.

Affect verbs are a special class of verb stems¹ found in Tzeltal as well as other Mayan languages. They were so termed by Kaufman, who first recognized their existence and briefly described them in his study of Aguacatenango Tzeltal morphology (Kaufman 1961a, b, 1971). For Tenejapa Tzeltal, data on affect verbs are found in Berlin (1962, 1963) and Stross (1974), for Oxchuc Tzeltal in Slocum (1948). Few descriptions of other Mayan languages include mention of affect verbs, and mostly in the context of general morphological and syntactic analyses. To my knowledge, the only work specifically devoted to the analysis of affect verbs in a Mayan language is Ringe (1981) on Tzotzil, based exclusively on secondary sources (Laughlin 1975, 1977).

Structurally, Tzeltal affect verbs are distinct from both transitive and intransitive verb stems, although they bear numerous resemblances to intransitives. The main structural difference vis-à-vis the other verb stem classes is that affect verb forms are always derived, i.e., there are no radical affect verb stems. Furthermore, they are derived by means of a unique set of eight desinences.² These desinences are reported here with their meanings, as given in Kaufman (1971: 60-62). They correspond to those described by Berlin (1962: 8, 83-90), who does not provide glosses.³

- et 'one object, one well-performed occurrence'
- VC2et 'one object, one extended occurrence'⁴
- C1un 'one object, several repetitions'
- Vnaj 'one object, several intense occurrences'⁵
- Hawet 'one object, several very intense occurrences'
- lajet 'several objects, several repetitions'
- lajan 'several objects, several repetitions'
- kVnaj 'walking imperfectly'

These desinences are suffixed directly to roots of most classes (verb, noun, adjective, onomatopoeic, and 'unique constituent'⁶). The mechanism is highly productive, and affect verbs constitute an open class. An estimate based on my own corpus would put their number in the thousands, without taking into account that, apparently, they can also be coined on the spur of the moment. Affect verbs are inflected in a manner similar but not identical to intransitive verbs. Like intransitives, they are prefixed by the incompletive aspect marker *x-* (or its allomorph *s-*⁷), and suffixed by a set of absolutive personal pronouns. Unlike intransitives, they are not marked for tense, and always occur in the incompletive aspect. As for their syntax, affect verbs can occur both as main verbs in independent clauses, and in complex verb phrases directly before the main verb of a clause, in a modifying function. In the latter case, the main verb is often a verb of motion, or of sensory experience (seeing, feeling, hearing, and so forth).

Affect verbs are also peculiar semantically. They refer typically to phenomena of sound, light, color, smell, shape, size, motion, posture or other physical and behavioral characteristics of the body, facial expressions, sensations (both physical and emotional), as well as whole complex events involving more than one sensory modality. The states of affairs in question are characteristically marked as noticeable, salient for a variety of reasons. A noise must be loud,

sudden, or repeated; a movement must be unexpected, exaggerated, or periodic; a feeling of pain, hunger, worry, must be acute, persistent, or recurrent; and so forth. Overall, affect verbs seem to convey connotations of intensity, duration, repetition, or other characteristics of an event that attract the speaker's attention as being deviant with respect to some implicit norm or expectation. At the same time, affect verbs also convey emotional, affective connotations, i.e. the speaker's psychological reaction (of surprise, amusement, puzzlement, and the like) to the unexpected, deviant-from-the-norm, character of a given event. In this sense, they can be seen to serve expressive functions.

Consider the following complete set of affect verb forms derived from the root *t'im* (found in the tv *t'im* 'to stretch (cable, rope, etc.) tautly'). The 3rd person singular is used as citation form.

- xt'imet* 'to be tautly fastened (e.g. rope, cable)'
- xt'imimet* 'to be very tautly fastened (e.g. rope, cable)'
- xt'imt'un* 'to vibrate repeatedly (e.g. taut wire, string of guitar)'
- xt'imunaj* 'to oscillate (e.g. fastened rope, wire)'
- xt'imawet* 'to wriggle (fastened animal)'
- xt'imlajet* 'to become stretched (woman's skirt upon her stepping on its end)'
- xt'imlajan(ik)*⁸ 'to become stretched (women's skirts upon their stepping on them)'
- xt'imkunaj* 'to walk around stepping on the end of one's skirt (woman)'

Perhaps the best way to approach the analysis of affect verbs, and in particular the meaning of the desinences, is to first consider the nature of the phenomenon as a whole, as a specific mechanism of the Tzeltal language. An intuitive but effective characterization might be provided by means of the following metaphor. Imagine being submitted to a peculiar experiment. You are made to sit in a projection room, and are shown a movie. What you see for some time is a series of fairly common, nondescript events of everyday life. You watch passively, without specifically concentrating on what is going on on the screen. Suddenly, a light flashes, an electronic device beeps, and you are irresistibly led to focus on a specific frame in the movie. What you see at once, in a global, gestalt-type perception, is an event, or state of affairs, that suddenly stands out from the nondescript background of events that had previously been unfolding before your eyes. It represents a change from an expected sequence of events, or perhaps your only now realizing that there was something peculiar in what you were seeing. This event, and your psychological reaction to it, might be described by a Tzeltal speaker by means of an affect verb in *-et*. Should the frame stand out with particular intensity, or persist on the screen longer than normal, the event might be described by a verb in *-VC2et*. Should the frame be repeated several times in a tight, or otherwise uninterrupted, sequence, an affect verb in *-C1un* might be used. Should motion within the frame be cyclical, or periodic, or pendular, or should the frame reoccur cyclically at longer intervals, a verb in *-Vnaj* or *-Hawet* might be appropriate. (I will consider the differences between these two desinences shortly.) Should what is remarkable in the frame be a number of actors all doing the same thing, or patients being affected by the same condition, verbs in *-lajet* or *-lajan* would come handy as descriptors. (Problems with *-lajan* and *-lajet* will also be considered shortly.) Finally, if what you see in the frame is someone with a walking impediment, or handicap, a verb in *-kVnaj* would do the job.

Metaphorically so characterized, this seems to be the basic nature of the affect verb mechanism, and the role that the various desinences play in it. A more detailed analysis of each desinence follows. Due to space constraints, only the more clearcut cases are presented. Cases of apparent free alternance of some pairs or triplets of desinences are also not discussed here, with the exception of *-Vnaj* and *-Hawet* on the one hand, and *-lajan* and *-lajet* on the other.

Consider the following examples of affect verbs in *-et*, with my Tzeltal collaborators' comments (affect verbs underlined). Their reference to instantaneous events, or the sudden inception of events, or yet the sudden awareness of an event that may have been going on for some time beforehand, should be readily apparent, along with the speakers' reactions to the events themselves.

xbalet te alale 'at once the child [throws himself down and] rolls over'

Comment: 'It is when he *begins* to be angry.'

xmasetix jsit 'my eyes have already started closing'

Comment: 'I am *beginning* to feel sleepy.'

xnujet sok yijkatz te antze 'the woman was well doubled over with her load'

Comment: 'She was *visibly* carrying a heavy load.'

xchajet ik 'the wind has started blowing'

Comment: 'One hears it *arrive all of a sudden*.'

xbik'et k'oel yu'un srepresko te winike 'the man swallowed *at once* because of [i.e. in ingesting] his soft drink'

Comment: 'He drank it *quickly*, in just one swallow.'

The intensification of states of affairs that might otherwise be described by affect verbs in *-et* is found in the following examples of verbs in *-VC2et*.

šbotz'otz'et tal yu'un te te'e 'the pole popped out [of the ground] *quickly at once*'

stz'apapet ta ti'aw te kee 'all day my teeth are stabbing [me] with pain' [i.e., I am having a terrible toothache]

xliit'it'et yakan te antze 'the woman is standing on tiptoe *for some time*' [e.g., she can't manage to reach something overhead]

stzuket sit ta ilimba te winike 'the man is *constantly* frowning from anger'

Repetition of an event in a tight, or uninterrupted, sequence is implied in the following examples of affect verbs in *-C1un*.

sutsun k'inál la ka'y 'I felt dizzy *repeatedly*'

xch'ijch'un ta te' te winike 'the man is giving blows with a stick *in a quick sequence*'

xmachmun ta beel te ach'ixe 'the girl is moving *rhythmically* in walking with head and shoulders drooping' [because she is tired]

xmelmun ta julel te antze 'the woman is visiting from house to house *over and over again*'

The desinences *-Vnaj* and *-Hawet* appear to be considerably close in meaning, in agreement with Kaufman's glosses ('several intense occurrences' and 'several very intense occurrences' respectively). However, my data suggest a more specific meaning than implied in these glosses. Both *-Vnaj* and *-Hawet* seem to convey notions of cyclicity, periodicity or pendularity of motion, as well as of cyclicity in time, i.e. of recurrence of events in cycles rather than sequences as implied in *-C1un*. While a difference in intensity or degree may indeed be involved in some cases, forms in *-Vnaj* and *-Hawet* are often said by my collaborators to alternate freely.

xbujawet/xbujinaj ta swe'el te chítame 'the pig is making *alternate upwards and downwards* motions with its head in eating'

x'i'awet/x'i'unaj te jch'ujte 'my stomach is growling *every now and then*'

xpurawet/xpurinaj ta tzakel te x'ube 'the quail is *flapping* its wings *every little while* because of being caught' [i.e. in trying to set itself free]

xtuchawet/xtuchinaj te jyakubele 'the drunk is *staggering* while standing'

It also appears, however, that in some cases the two desinences might be distinguished from each other, rather than along a parameter of intensity, along one of animateness, literal or metaphoric. In other words, in such cases the choice between a form in *-Hawet* and the corresponding form in *-Vnaj* would seem to be respectively determined by whether or not the state of affairs in question is caused by an animated being, or other entity (e.g. the natural elements) that can be conceived of as animated, or more specifically, unconstrained in its movements. That something along these lines is implied is made explicit a number of times by my Tzeltal

collaborators themselves. In their own words, the point is whether the 'things' involved have or do not have *vida*, or *alma* (in Tzeltal *ch'ulel*). Compare the following pairs of examples:

xchajawet ta koxtal te ch'oe 'the rat is *periodically* making noise in the sack [of beans, as it eats them]'

xchajunaj te chenek'e 'the beans are making noise *every now and then* [as their dried husks crack]'

Comment: 'One could not say *xchajawet* in the latter case, it would be as if the beans had a life of their own.'

xbalawet ta ajch'al te chitame 'the pig is rolling *back and forth, back and forth* in the mud'

xbalunaj ta sba karro te p'ejte'e 'the piece of wood is rolling *back and forth, back and forth* on the deck of the truck'

Comment: 'In the first case, it can only be people or animals, who have life, a soul.'

xnujawet ta a'tel te winike 'the man is *rhythmically* bending over and straightening up in working'

xnujinaj te bojche 'the gourd is *alternately* moving face down, face up'

Comment: 'In the latter case, it is understood that someone is moving it that way. One could not say *xnujawet*, because it would be as if the gourd were moving by itself.'

At the present stage, I have no explanation for this specific distinction between two otherwise very similar desinences. I can only speculate that, in those cases in which an animateness parameter appears to be involved in the meanings of *-Hawet* and *-Vnaj*, there might be some connection between the implication of relative freedom of movement and Kaufman's feature of relative intensity.

As for the desinences *-lajet* and *-lajan*, again in agreement with Kaufman's glosses ('several objects, several repetitions' in both cases), it appears that these two desinences are very closely related to each other in meaning, if not almost identical. Overall, though, the picture afforded by my data on both sets of forms is less clearcut than in any other case. In some, but not all, instances, a component of plurality of the actors or patients involved seems indeed to be implied, although it is not clear whether a notion of repetition is also always necessarily at play. When plurality is present in the meaning of verbs in *-lajan* or *-lajet*, sometimes it appears to be the only one of the two features to be present. At least in some cases, plurality of actors or patients involved in a given state of affairs would appear to be a sufficiently salient feature in itself. Some examples are:

xbik'lajetik/xbik'lajanik ta yixim te mutetike 'the chickens are *repeatedly* pecking at the corn'

xjajlajetik ta tze'ene te ach'ixetike 'the girls are bursting into laughing *every little while*'

ya yutyut sbaik te antzetike, buen xch'aw'lajetik 'the women are fighting, they are shouting all right'

xkajlajanik ta sba ja' te pech'etike 'the ducks are floating on the surface of the water'.

It is worth stressing that, while the morpheme *laj* found in both desinences carries a feature of plurality, this morpheme does not represent the normal way of marking plurality on verbs. All verb stems, including affect verb stems, can optionally be made plural by means of a specific set of affixes. As the examples above have shown, the same forms in *-lajet* and *-lajan* may be so marked. In this case, therefore, there seems to be a measure of redundancy involved in the meaning of these two desinences. Here again, one should keep in mind the proposed role of salience in the affect verb mechanism. It would appear that, when plurality as such is not in the foreground, only the normal way of marking number is employed, if at all. When plurality in itself is the relevant, salient, feature, one or other of the two above desinences may be used, in some cases even with the redundant addition of the normal markers of number.

In other instances, however, plurality may not be involved in verbs in *-lajet* and *-lajet*. Unfortunately, what may be involved instead is not entirely clear. In some cases, my collaborators seemed to find no particular differences vis-à-vis forms in *-et*; in others, a notion of repetition, or the like, might be at play, as in the following:

xbutlajet ta beel te mamalale 'the old man is constantly walking bent over'
xlutlajet ta skoral te chitame 'the pig is trying to get out of the yard [passing through an opening in the fence]'
xmaxlajet ya xben te winike 'the man is going about grasping for some time'.

Given the above, one might suggest the hypothesis that plurality and repetition may not necessarily be present at the same time in the meaning of these desinences.

The last desinence, *-kVnaj*, is more straightforward. In every instance, it exclusively conveys the meaning of 'walking imperfectly'. The impediment may be either a permanent one (a handicap, or difficulty in walking due to age or illness), or a temporary one (e.g., in the case of an animal, having one's legs tied up), as the following examples demonstrate:

xijkunaj ya xben te winike 'the man is walking with one leg rigid' [he can't bend it]
xbukinaj ya xben te me'tike 'the old woman is walking helping herself with a stick'
stz'otkinaj ya xben the jyakubele 'the drunk is staggering along'
xlut'kinaj ta tajimal te alale 'the child is jumping with joined feet in playing'.

It is apparent that this desinence has a very specific meaning. Correspondingly, it is highly restricted in occurrence. One might wonder what may have led the Tzeltal to focus on so specific a class of events as is referred to by the verbs in *-kVnaj*. At present, I could only offer ad hoc speculations on this topic. Comparative evidence from other Tzeltal dialects would be especially useful here.

Turning to the meaning of the whole affect verb forms, if one looks at verbs as categories (of actions, events, states), and perhaps as cognitively associated with frames, or scripts (Fillmore 1975, 1982, 1985, Schank and Abelson 1977), one is led to conclude that the frames or scripts evoked by affect verbs must be particularly rich. Often, my collaborators would come up with whole 'mini stories' about them. One such example of 'mini story' follows, in free English translation. Only the utterance containing the affect verb form is given in Tzeltal with gloss.

'A woman gets angry at her husband, and runs away crying a lot. She begins to collect her personal belongings to take them with her. This is when her husband begins to worry and says: "*naklan tz'ini kala me', banti ya xbat ch'etete! sok te a'k'u' a'pak'e?*"⁹ (Please, sit down, *mamacita*, where are you going so loaded with your clothes piled up in your arms?'). At this point they both calm down and start weeping, and the fight ends.'

I have previously mentioned the overall sensory type of reference of affect verbs (visual, auditory, tactile, and so forth). Borrowing the terminology introduced by Lenneberg and Roberts (1956), one might also suggest that these words are part of the 'language of experience' of Tzeltal. In some cases just one sensory modality seems to be involved, in others, more than one at the same time, suggesting synaesthetic characteristics. I have also suggested that what all affect verbs have in common, in referring to phenomena of this nature, is their pinpointing them as noticeable, remarkable for a variety of reasons. Assuming implicit, and not necessarily strictly defined, cognitive canons of normalcy for the various kinds of phenomena in the minds of the speakers, whatever is 'normal' in the environment will not evoke the use of an affect verb; unmarked (transitive or intransitive) verb forms will be used to describe the situation or event. Phenomena must become salient, suddenly standing out in the foreground against a (comparatively) undifferentiated background of sensory inputs, for a speaker to feel like referring to them by means of an affect verb. Compare the following pairs of examples:

la stzin te kampana ta ch'ulnae 'someone rang the bell at the church' [I am telling you that this is the case]

stziniinet te kampana ta ch'ulnae 'the bell at the church rang loud' [Hey, did you hear that?]

ya smutz' sit te antze 'the woman closes her eyes' [I am describing the scene to you]

smutz'inaj sit te antze 'the woman's eyes are closing every little while' [Hey, is she falling asleep?]

ya sk'an swe'el te alale 'the child wants food' [I am letting you know]

sk'anawet ta swe'el te alale 'the child is asking for food every other moment' [What's the matter with him?].

From this point of view, the study of affect verbs appears to be related to research in cognitive anthropology and psychology on salience in natural categories (Berlin and Kay 1969, Berlin, Breedlove and Raven 1973, 1974, Berlin 1976, 1978, in press, Berlin, Boster and O'Neill 1981, Heider [Rosch] 1972, Rosch 1973, 1975, 1977, 1978, 1983, Mervis and Rosch 1981). However, the notion of salience in the kinds of actions, events, or states referred to by affect verbs may be partly different from that implied in the latter type of categories. One obvious difference is the intrinsic expressive component of salience in affect verbs. While referential, denotative meaning is unquestionably present in these words, they are used to serve a purpose that is not purely referential, but also expressive: to both describe a state of affairs and comment upon it, conveying one's psychological reaction to it. That this is the case is made clear in a number of instances by my collaborators themselves. For example:

xwolwun yit te antze 'the woman's buttocks are bouncing up and down as she walks'

Comment: 'She has large round buttocks, men like that a lot.'

xkototet te wakaxe 'the bull keeps walking around'

Comment: 'It is doing nothing [i.e., it is not grazing]; it is nervous, perhaps it wants to mate.'

xbalawet ta yakubel te winike 'the man goes rolling on the floor every little while out of drunkenness'

Comment: 'It is understood that he is a real drunk.'

xlij'awet ta stz'akel tal k'oel si' te antze 'every other moment the woman is standing on tiptoe to get the firewood down [from above storage]'

Comment: 'She never tires.'

In this connection, one might suggest another comparison between the notion of salience implied in affect verbs and that implied in e.g. color, or ethnobiological, categories. In the latter case, at the basic level, the salience of the objects or phenomena involved may well remain totally unconscious, and the factors and criteria involved may be very difficult to verbalize. In the case of affect verbs, instead, the salience of phenomena seems, so to speak, to reach beyond the limits of the unconscious. What may be unconscious is the norm or expectation, not necessarily the deviation from them and one's reaction to that deviation. Overall, as indicated above, speakers seem to be quite capable of verbalizing what is salient in affect verb categories, and why. It even appears that affect verbs may be consciously used, in conversation or narrative, for rhetorical purposes. Numerous examples in my corpus clearly carry connotations of gossiping, teasing, scolding, and other socioculturally marked speech acts. In some cases, my collaborators explicitly said of one or other expression containing an affect verb: '*Es una burla*' ('It is a joke'). A few such examples are given below.

staset sne ya xben te winike 'the man is walking with his tail dragging' [i.e., his *chamarra* is not well fastened at the waist, and hangs down too low]

xaxaxet sjol te mamalale 'the old man's head swishes [as one goes with one's hand over it quickly]' [i.e., he is bald]
banti ya xbat batzbunel? 'where are you going moving about with your heavy load [i.e. big belly]?'

For this reason, affect verb categories do not seem to share in the nature of basic categories, but rather in that of secondary, or nonbasic, categories, which are discriminated by means of fairly specific, and generally verbalizable, features. It is worth pointing out that a notion of salience is implied at both the basic and the secondary levels. This should not lead to the conclusion that this notion is used too pervasively for it to maintain analytical validity. Rather, what seems to be involved is a cognitive play of alternative backgrounding and foregrounding of relevant information. Depending on the circumstances, what is foregrounded is either the general, the widespread, the 'normal', or the specific, the uncommon, the exceptional. Affect verb categories focus on the latter.

However, the specificity in reference of affect verbs should not be taken to imply that they only relate to culture-specific phenomena. Instead, many of the phenomena involved appear to be fairly universal, as well as constant through time--as Laughlin (1988: 133) puts it, 'as permanent as the natural world to which they belong'. As far as Tzeltal goes (but one might well expect the same to be the case for Tzeltal and other Mayan languages), this author states: 'These associations of shapes, colors, and values presumably have remained fairly constant over time, for many can be found in the seventeenth- or possibly sixteenth-century *Diccionario en lengua sotzil*' (*ibid.*). To a large extent, it would seem that the semantics of affect verbs shares in the nature of universal semantic primitives, or semantic types, such as those proposed by Dixon (e.g. MOTION, AFFECT, CORPOREAL, DIMENSION, GIVING, COLOR; Dixon 1976), although such primitives are, so to speak, cognitively and expressively elaborated upon in the meaning of affect verbs. But even such elaborations seem to follow fairly universal patterns (intensification, repetition, augmentation, and the like), and the related expressive connotations appear to be quite generally predictable, so that, in most cases, these words turn out to make sense as immediately for the alien investigator as they seem to do for native speakers. Consider the following examples:

x'ajajet ta chamel te antze 'the woman keeps moaning from sickness' [Boy, she must be real sick!]
xiipunaj te alchaxe 'the oranges are swinging back and forth as they hang [from the branches]' [It's windy!]
xpulawet ta k'ajk'el te nae 'the house flares up every little while because of the fire' [This fire won't quit!]
xk'aneitix te k'altike 'the cornfield has turned yellow all right' [Doesn't it look good?]
sbatzbun ta skuchel yijkatz te kereme 'the boy is plodding along carrying a heavy bundle' [Gee, look how loaded he is!]
xte'kunaj ya xben te mamalale 'the old man is walking stiff-legged' [Doesn't it make you want to smile?].

Numerous other affect verbs, however, indeed seem to be related to more culture-specific phenomena, and in particular to involve reference to, and expressive comment on, culturally bound aspects of behavior, attire, posture, and other value-laden aspects of the sociocultural environment (cf. Laughlin 1988: 138). For instance:

xk'ajk'et te winike 'the man is displaying the behavior typical of the "hot man" ' [A personality type evaluated ambivalently by the Tzeltal. It implies bravery that may turn into defiance and lead to suspicions of witchcraft.]
stz'it'z'un ta sbojchil smatz' te antze 'the woman wipes repeatedly the inside of the *pozol* gourd with her finger [to gather and ingest what is left of the corn gruel after her husband drank his good share]'. [A familiar gesture for a Tzeltal woman, but commented upon with amusement by a male as slightly childish.]

xbech'unaj ta schukel sch'ujt te ach'ixe 'every little while the girl is making folds [of cloth] in fastening [her skirt around] her waist' [This is considered to be a rather futile act, or a sign that the girl doesn't know how to fasten her skirt properly, and therefore is ridiculed.]

Among affect verbs of this latter type, there also appear to be ways of speaking, as indicated by Stross (1974), who lists a number of Tzeltal affect verbs used to refer to, and evaluate, people's speech, e.g.:

xwulwun 'the sound of incessant talking (without content), a rumbling or buzzing in the ears of the listener'

xpa'pun 'the sound of stuttering accompanying speech'

xk'anet 'talking with a nice, mellow, singing voice'

xtz'ulet 'falsetto voice (the respect voice of women)'

(Modified from Stross 1974: 221-222.)

Nevertheless, even these more culture-specific affect verbs seem not to escape the requirement of salience: to be worth being talked about by means of affect verbs, the phenomena involved must in turn be noticeable, in the sense that they must equally violate some norm or expectation—in this case, sociocultural norms or expectations rather than assumptions about states of affairs in the natural environment. In the domain of affect verbs, the notion of salience appears to provide a strong link between the natural and the sociocultural worlds, and between the universal and the culture-relative dimensions. Both worlds and both dimensions, so to speak, happily coexist in the same class of expressive words. It also appears that the basic kind of emotional connotation involved in the use of affect verbs is purely one of surprise, puzzlement, amusement, and so forth, vis-à-vis a given event, and that this kind of emotional state in itself is a sufficient stimulus for communication, without any socioculturally marked speech act being necessarily implied. In other words, it seems that what is involved in the production of affect verbs in the first place is a cognitive mechanism that might informally be dubbed the 'surprise effect', an impulse to comment on the unexpected that might well be part of the baggage of basic human psychological reactions.

These considerations notwithstanding, there is no doubt that the investigation of affect verbs promises to be particularly rich in an ethnographic perspective. It is apparent that a wide range of salient aspects of the natural and social environments can be brought into focus by means of affect verbs. If one looks at the 'mini stories', or scripts, that my two collaborators attached to them, and at the comments they provided, one finds large chunks of the Tzeltal natural and social worlds, and a wealth of information on what is salient in them, so to speak, from the affect verb point of view. As my examples show, the human actors (or patients) are men, women, youths, children, and drunks (the latter are mentioned so frequently in relation to the events described by affect verbs, to deserve being placed in a category of their own). Animals, domestic and wild, are also very frequently involved, as are plants, the natural elements (water, fire, wind, earth, etc.), and objects pertaining to material culture. What emerges through the study of affect verbs is an especially lively picture of Tzeltal everyday life.

Finally, the preceding should have made the affinities of affect verbs with ideophones evident to anyone familiar with studies of the latter class of words, in particular in African and Southeast Asian languages. In Doke's original definition (he coined the term for a class of words in Zulu), an ideophone is a 'word, often onomatopoeic, which describes a predicate, qualificative, or adverb in respect to manner, colour, sound, smell, action, state or intensity' (Doke 1935: 118). An examination of existing surveys of ideophones (cf. Samarin 1978, or, for a checklist of the main features, Hsu 1989) strongly confirms the similarities, both structurally and semantically, as well as from the cognitive and expressive points of view. To my knowledge, this connection is suggested here for the first time. Closer comparative scrutiny may well show that affect verbs in Tzeltal (and other Mayan languages) also present structural differences vis-à-vis ideophones, in particular in terms of word formation. However, this may not be crucial as far as the affinity between affect verbs and ideophones is concerned: as Samarin suggests, 'one of the characteristics

of the expressive use of language is the utilization of a set of words different in each language but manifesting in all languages certain phonologic and semantic similarities' (1978: 313). And the latter clearly appears to be the case with affect verbs compared to ideophones. Rather than being a peculiarity of Mayan languages, affect verbs might be seen as the specific manifestation in these languages of a more general phenomenon present in similar forms in many languages of the world -- a possibility that would place the study of affect verbs in a much broader comparative perspective.

FOOTNOTES

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¹ Kaufman (1971: 31) defines a stem as 'anything that may occur with the inflectional affixes of a single stem class', and as consisting 'minimally of a root and maximally of a root plus several derivational affixes'.

² According to Kaufman (1971: 33), desinences are 'affixes or combinations of affixes which function as units in stem and word formation. In the case of stem formation, the affixation of a derivational desinence to a root or stem always yields a stem, i.e., something to which inflectional affixes can be added'.

³ The inventory of Tzeltal phonemes is as follows :

Consonants

/p t ts ch k ʔ p' t' ts' ch' k' b' s sh h m n l r w y/

Vowels

/i e a o u/

Tzeltal examples in the text, however, are transcribed according to the Mayanist writing system, whose most recent version is currently being used as script for Tzeltal and Tzotzil. The following equivalences apply: /ts/ = tz; /sh/ = x; /h/ = j. The same orthographic symbol, ' , is used as marker of glottalized consonants and for the glottal stop /ʔ/.

⁴ In -VC2et and -C1un, the presence of reduplication is apparent. From this point of view, affect verbs partake in a more general morphological process of Tzeltal, the semantics of which is described in Berlin (1963).

⁵ In Kaufman's notation, the symbol V in -Vnaj stands for the morphophoneme |V| realized as /i/ if the immediately preceding vowel is lo ul, as /o/ if the preceding vowel is la e il and the following consonant is |w|, and as /u/ if the preceding vowel is la e il and the following consonant is not |w|. The symbol H in -Hawet is the morphophoneme |H|, realized as /C/ when C = /ʔ b' s sh h m n l w y/, and as /hC/ when C = /p t ts ch k p' t' ts' ch' k' l/ (Kaufman: 1971: 20, 23).

⁶ A unique constituent is 'a radical which does not occur as a freely inflectible stem and does not occur with enough derivational desinences to establish its class, and often not in enough constructions to establish its meaning' (Kaufman 1971: 42).

⁷ The incompletive aspect marker is normally realized as s- when the root syllable contains any of the following phonemes: /s ts ts'/, as x- in all other cases. However, there is both

inter- and intraspeaker variation in the use of the allomorph *s-*, which often alternates with *x-* in the mentioned environments. Assimilation of *x-* and *s-* occurs when the root syllable begins with the same consonant respectively.

⁸ The morpheme *-ik* given in parentheses is the nonobligatory marker of 3rd person plural. Marking of plurality on verbs is often omitted, when clearly inferrable from other crossreferencing elements in the clause. The desinences *-lajet* and *-lajan* seem to carry reference to plural subjects in many but not all instances. This latter aspect is dealt with more extensively in the text.

⁹ In this example, the form *ch'etetel* is a verbal noun derived from the affect verb stem *ch'etet* by suffixation of the morpheme *-VI*.

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