

Ideophones, adverbs, and predicate modifiers in Upper Necaxa Totonac

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The term “ideophone” (Doke 1935) refers to onomatopoeic or synesthetic expressions which

- are distinguished as a group by syntactic, morphological, and/or phonological properties,
- tend to have an emotive function, and
- are associated with spoken and dramatic registers of speech (Voeltz & Kilian-Hatz 2001)

Ideophones are well-documented in languages in Africa, Eurasia, and Australia, but little work has been done on them in Mesoamerica (*pace* Durbin 1973; Maafi 1990). Upper Necaxa Totonac (UNT) has a rich system of ideophonic expressions like that illustrated in (1):¹

- (1) mat **po'hp'o'h** makawamá:lh xtahanán
mat **po'hp'o'h** maka-wan-má:lh xtaha-nán
QTV IDPH hand-say-PRG make.tortilla-IDO
'there was the sound of a woman making tortillas' (MR)

- in UNT, the phonology and morphology of ideophones set them apart from other words, yet their syntax and semantics link them closely with adverbs
- simply classifying ideophones as adverbs in the traditional sense is not entirely straightforward because they are not simply expressions of semantic predicates

In the end it may be preferable to posit a larger class of predicate-qualifiers which combine with verbs to form complex syntactic predicates.

1) Phonological and morphological properties

As in most languages (Alpher 1994; Childs 1994; Voeltz & Kilian-Hatz 2001), ideophones in UNT are distinguished by a range of phonological and morphological properties that, while not all unique to ideophones, set them off as a group from other parts of speech. These include:

- the lack of primary stress assignment
- use of consonant clusters that are unusual (though not all unattested) in other word classes,
- a high frequency of /ŋ/ (<nh>) (otherwise, the result of velarization of /n/ before /ʔ/ (*q))
- in a few cases, consonant-lengthening (at least of /n/), as in (2):

- (2) *tanntann* 'person walking loudly overhead' *tzanna* 'insects buzzing'

Other phonological and morphological properties that set ideophones apart from other word classes are their frequent use of sound symbolism and the productive use of reduplication.

¹ Upper Necaxa Totonac is a member of the Totonac-Tepohua family, spoken by some 3,000 people in the Sierra Norte of Puebla State, Mexico. Uncited data are from my fieldnotes, individual sources of contextualized examples are given in parentheses. Data are provided in a practical orthography where h = /ʔ/, x = /χ/, tz = /ts/, j = /x/, ch = /tʃ/, nh = /ŋ/, and lh = /ɬ/; vowel length is indicated by a following colon, ' indicates laryngealization of the preceding vowel, and ' indicates glottalization of the preceding consonant. An acute accent marks primary stress. The abbreviations used are as follows: 1, 2, 3 = first-, second-, third-person; AMB = ambulative; APPL = applicative; CLS = classifier; CS = causative; CTF = counterfactual; FUT = future; IDF = indefinite agent; IDO = indefinite object; IDPH = ideophone; IMPF = imperfective; INCH = inchoative; INST = instrumental; LOC = locative; NEG = negative; NM = nominalizer; PFV = perfective; PL = plural; PO = possessor; PRG = progressive; PRT = particle; QTV = quotative; RCP = reciprocal; REL = relativizer; RT = roundtrip; SG = singular; SUBJ = subject.

1.1) Sound symbolism

Sound symbolism covers those phenomena that establish a direct, non-arbitrary (albeit unpredictable) linkage between sound and meaning (Hinton, Nichols, & Ohala 1994).

Onomatopoeia (Doke 1935; Childs 1994):

- (3) *chulululu* 'water trickling'
ho:x 'large stone falling'
lhapo'h 'a hollow object falling and striking the ground'
lu:p 'object dropping into water'
pach 'small stone falling'
tzanna 'insects buzzing'
wa'htawa'hta 'someone sharpening a machete'
xnonxnon 'a cord or elastic being stretched'

Synesthesia (Berlin 1994; Maduka-Durunze 2001; Watson 2001)

"the notion that the physiological properties of perceptions are designed to view different perceptual stimuli as the same" (Nuckolls 1999: 236), resulting in sets of items related in meaning and distinguished by meaningful (or at least semantically motivated) changes in form:

- (4) *lam* 'a bright light flashing, a fire flaring up'
liplip 'a diamond or piece of glass sparkling'
lipilipi 'sun glinting off the water, a mirror, etc.'
limlim 'sun sparkling off flowing water'
slimslim 'something twinkling'

- *lam* expresses the most energetic, brightest phenomenon, as opposed to *liplip* and *limlim*
- the /m/ ~ /p/ alternation corresponds to longer vs. shorter, sharper phenomena (*lam* vs. *lip*) or punctual events (*lip*, *lipi*) vs. events with a continuous, static component (*lim*, *slim*)

Such observations are highly impressionistic, but, as with onomatopoeic forms, they do lend weight to the notion that the relation between signifier and signified is less than arbitrary, and that in this respect ideophones are different, at least in degree, than other words in the lexicon.

Conventionalized sound symbols

UNT uses consonantal alternations that correlate with relative size, intensity, or force, a pattern found in other Totonacan languages (Bishop 1984; Levy 1987; McQuown 1990; MacKay 1999; Smythe Kung 2005), and in other parts of the Americas (Nichols 1971; Aoki 1994).

- the alternation *s* ~ *x* ~ *lh* (and occasionally *tz* ~ *ch/x*) is correlated with increasingly more energetic or forceful action, or size of an event-participant
- (5) (a) *lanks* 'hand hitting something hard'
lanhx 'a blow striking with great force'
lanhlh 'something being kicked with great force'
(b) *spipispipi* 'something small trembling'
xpipixipi 'something shivering or shaking slightly'
lhpipillpipi 'someone shaking, someone having convulsions'

- the same pattern is found in a number of verbs and adjectives as well

Consonant alternations have been found in relatively few ideophones so far, but I suspect further investigation will turn up more instances of this and sound symbolic alternations.

1.2) Reduplication

Reduplication as a morphological process seems not to be a feature of the grammar of UNT — other than in ideophones, where it is the norm. Ideophones follow two reduplicative patterns:

Full reduplication:

- fully reduplicated ideophones are those that are most punctual or cyclical in meaning
- the reduplication tends to signal iteration rather than intensification

- (6) *chikchik* 'tree shaking in wind'
po'hpo'h 'someone making tortillas'
kalanlhkalanlh 'a person biting through hard food'
laksliwilaksliwi 'a four-legged animal limping along on three legs'
pa'nlhupa'nlhu 'a toothless person chewing food'

- full reduplication can be applied more than once:

- (7) *kunikuni* 'caterpillar crawling'
kunikunikuni a'n-ní:
IDPH go-PF
'the caterpillar had crawled off' (LC)

Partial reduplication:

- -CV suffixation more frequently marks intensity, locative distributivity, and/or duration

- (8) *chululu* 'water trickling'
lununu 'a person strutting around showing off'
milili 'wind blowing'
mululu 'water welling up out of the ground'
spatata 'a viscous substance oozing (mud, pus)'

- like fully reduplicated words, these ideophones may undergo multiple reduplication:

- (9) *swatata* 'many small things moving in a line'
(a) *swatatata ta-a'n-ma:-'ná:lh cha:n*
IDPH 3PL-go-PRG-PRG.PL ant
'the ants march in a line' (PS)

tzanna 'insects buzzing'

- (b) *tzannannanna kin-a'ha'-wán*
IDPH 1OBJ-ear-say
'it buzzed in my year' (LB)

Reduplication is not otherwise productive in UNT, although a few adverbs do reduplicate. Unlike ideophones, these adverbs are more frequent in unreduplicated form and participate in ordinary word-formation processes such as the affixation of the semblative suffix *-wa*:

- (10) (a) *laktáj la:* (b) *laktajlaktaj xak-á'n* (c) *ka:ná: laktáj-wa*
limping do limping PST:1SG-go truly limping-SEM
'he's limping' (RB) 'I went limping' (RB) 'he's really lame' (RB)

- no ideophones accept affixation or appear with clitics *-tunka* 'much', *-tza* 'now', or *-kus* 'still'

(*lantáj* is the only polysyllabic adverb I have found that can be reduplicated. Its meaning is closely related to a number of ideophones to do with limping, and so perhaps the analogic application of a morphological operation typical of ideophones is not surprising.)

2) Syntactic properties

Syntactically, ideophones pattern with adverbs in that they immediately precede the verb as in (1), usually occupying clause-initial position. Adverbs follow the same pattern, as in (11):

- (11) *palh ti: ma'hchu:yá-lh chi: lhi:-kán ho'lh tantu:-chi:-waka'-kán*
 if REL make.mistake-PFV how dance-IDF roped leg-tie-be.high-IDF
 'if there was someone who made a mistake dancing, he was hung by the leg by rope' (LB)

A common distributional feature ideophones is that they tend to occur in collocations with a restricted set of generic verbs such as 'do', 'say', or 'go' (Childs 1994; Creissels 2001).

- (12) (a) *tenene* 'a bright light or flame flickering or shimmering'
ja: ka-ti-lá'htzi' palh chiwíx tzaj tenene la: wachí makskút
 NEG OPT-CTF-see:2SG if stone only IDPH do like fire
 'can't you see that stone? it's shimmering like a flame' (LC)
- (b) *slupslup* 'an object falling into water'
slupslup ta-la:-ma:-ná:lh tampu:chúm nak-ix-hélni' xka:n
 IDPH 3PL-do-PRG-PRG.PL minnow LOC-3PO-mouth water
 'the minnows swim along jumping out of (and falling back into) the water' (LC)

- *la:* 'do' contributes little to meaning, most comes from the ideophone
- *la:* serves a primarily syntactic function, marking tense, aspect and, number of the subject

Stative bases *wi:lh* 'sit', *ya:lh* 'stand', *ma:lh* 'lie', and *waká'lh* 'be high':

- (13) (a) *pampam* 'clouds piling up high in the sky'
lakatú:nu' pampam waká'lh po'hlnú'
 everywhere IDPH be.high cloud
 'there are piles of clouds everywhere' (LB)
- (b) *tanhalala* 'something crawling along like an insect'
tanhalalala ta-la:-waka'-ná:lh chixku-wín nak-há'lh chik ja: ta-laka-jikwán
 IDPH 3PL-do-be.high-PL man-PL LOC-big house NEG 3PL-face-fear
 'they work high on the building crawling like insects, they aren't afraid' (LB)

Basic motion verbs and their derivatives:

- (14) (a) *tanlunxtanlunx* 'a person hopping along on one foot'
tu:-tayá:-lh lhtúku he: chu:wá tanlunxtanlunx a'n
 foot-stand-PFV thorn and now IDPH go
 'he stepped on a thorn and now he's hopping around on one foot' (LC)
- (b) *wayaya* 'person leaving after doing something the speaker didn't like'
chu:n ma:n-tzá chu:ntzá kin-te:-wan-ní-lh wayaya a'lh
 PRT only-now thus 1OBJ-PATH-say-APPL-PFV IDPH go:PFV
 'he just came by to insult me and took off' (MR)
- (c) *lintilinti* 'something rustling through the underbrush'
lintilinti ta-á'lh x-tampín ka:'-kapéj
 IDPH 3PL-go:PFV 3PO-base PLACE-coffee
 'they went running through the coffee orchard underneath the branches' (LC)

Verbs denoting sound:

- (15) (a) mululu 'a person snoring'
mululu wan
IDPH say
'he snores' (LB)
- (b) kalanlhkalanlh 'a person biting through hard food'
kalanlhkalanlh na-wán tzi'lm
IDPH FUT-say pork.rinds
'the pork rinds are going to crunch (as they are bitten)' (LC)

wan 'say' – bodypart:

- (16) (a) jilhihilhi Pt. 'stones, etc., crackling underfoot'
jilhihilhi tantu:-wán akxní lha:wán
IDPH foot-say when wander
'he makes noise with his feet as he walks along' (PS)
- (b) jilhihilhi Ch. 'something hard and fine crunching in one's food'
jilhihilhi li:-kilh-wán
IDPH INST-mouth-say
'the food is crunchy' (lit. 'he mouth-says with crunching food') (LC)
- (c) sla:tasla:ta 'a snake flicking its tongue'
sla:tasla:ta kilh-wán lú:wa
IDPH mouth-say snake
'the snakes flicks its tongue' (LB)

Some morphologically ordinary adverbs also specify properties of clausal actants and evoking concrete images when used with relatively generic or stative verbs in this way:

- (17) (a) **lhapó'h** ta:pa:-ya:wá: tzamá: chixkú
fatly belly-rise that man
'that man is pot-bellied' (LC)
- (b) **chi: taláj** waká'lh a'ha'-chixít já:'ka
how voluminously be.high ear-hairy sapote
'there's a lot of red sapote (fruit) up there!' (LB)
- (c) **kanlhít** kilh-wan-hó:'-lh chichí
showing.teeth mouth-say-all-PFV dog
'the dog bared all of its teeth' (LC)

- these adverbs add either some characteristic of the clausal subject (17a), a characteristic and a manner (b), or a manner and some additional feature of the scene (the dog's teeth in (c)).

Ideophones, on the other hand, can serve adverb-like functions by specifying manner and other characteristics of an event used with less generic verbs:

- (18) (a) lhenlh 'a large object falling heavily'
lhenlh ma'hxtéh-li' hawácha ix-stánku
IDPH let-PFV boy 3PO-younger.brother
'the boy dropped his little brother' (LB)

- (b) *lam* 'a bright light flashing, a fire flaring up'
lam ma'hliḗp-li'
IDPH lightening.strike-PFV
'the lightening flashed' (AB)

Thus, the functions of ideophones seem to overlap with those of adverbs, but not in the sense that ideophones do the job of adverbs so much as each can potentially do the other's job.

3) The semantics of ideophones and adverbs

Perhaps the most striking thing about UNT ideophones for the researcher when they are first encountered is the semantic specificity of so many of them.

- they do not refer to specific objects, events, or manners, but instead evoke entire scenes with specified types of actors participating in specified manners in particular types of event

(19) *chenhechenhe* 'a large bottle filled with liquid being shaken'

jalajala 'red-hot rocks crackling from heat'

halahala 'someone crawling along on all fours'

lamama 'coals glowing red'

lhanalhana 'someone running around in a panic because they are late'

pa'nlhupa'nlu 'a toothless person chewing food'

tampilili 'a long object rolling away'

tanholulu 'a round object rolling away'

wayaya 'person leaving after doing something bad or which the speaker didn't like'

- meanings are surprisingly consistent across speakers and are easily elicited without context
- ideophones are often the only means of expressing concepts such as buzzing, heartbeats, dripping, etc., that are ordinary lexical items in more familiar languages such as English
- many ideophones have the semantic content of entire clauses, and (as shown above) frequently combine with generic verbs to express highly specific types of event

In contrast, not all ideophones are quite as specific in their meanings as those shown in (19):

(20) *lhtun* 'object coming with force or great speed'

lujlhulujlhu 'an object bouncing up and down'

pilipili 'an object rolling'

swilaswila 'someone or something running about quickly'

Such ideophones are difficult to distinguish semantically from phonologically and morphologically ordinary adverbs like those in (17). Compare the examples in (20) and those in (21):

(21) *jú:luj* 'hanging in bunches (small objects)'

kanlhít 'with teeth showing'

la:tá'ha 'looking greasy, shiny with grease'

lujchúj 'rearing up and jumping (of crickets and frogs)'

lha:mánh 'rounded, full'

lh'at 'close together, tight'

lh'é'he' 'having the smell of burnt hair, fingernails, horn, meat, or beans'

snu:n 'on the verge of death'

stilh 'spreadout (small objects), distributed evenly'

willh'é'h 'having long, messy hair; being jumbled up (clothes)'

- some of the adverbs in (21) denote not only a manner of event but also a kind of participant

- each of these adverbs seems in some respects more specific and evocative of a scene than an ideophone like *lhtun* ‘object coming with force or speed’ or *pilipili* ‘an object rolling’

These words go a step beyond the traditional notional characterization of adverbs as specifying time, place, and manner, and add an extra dimension to the expressions in which they appear by evoking specific imagery in a manner reminiscent of the ideophones.

4) Ideophones and adverbs as predicate-qualifiers

Ideophones in UNT possess, as a group, properties that set them apart from other words:

- phonologically,
 - they have marked phonotactics and prosodic properties
 - they make use of sound symbolic strategies such as onomatopoeia and synesthesia
 - they resist affixation and regular derivational processes
 - they are reduplicated to mark number, intensity, duration, or iteration
- syntactically, ideophones resemble adverbs in that
 - they appear in the sentence immediately to the right of the verb, often clause-initially
 - they can serve an adverbial function, qualifying the action or event designated by a verb
- semantically,
 - they are not straightforwardly predicative nor do they name objects
 - instead they evoke a particular scene specified for actor, action, and manner

Although these last two characteristics are commonly taken as definitive of ideophones in other languages, in UNT they seem also to apply to a number of what are otherwise ordinary adverbs. The conflation of adverbs and ideophones into a single word class, however, is not unproblematic:

- semantically, it is not clear that prototypical ideophones are the same types of entities as prototypical (from the Indo-European perspective) adverbs
 - adverbs are semantic predicates that take other predicates as their semantic arguments
 - ideophones at the semantic level do not seem to be predicates with open argument slots to be filled by other semantic predicates (if anything, they seem to have empty or under-specified slots that may be filled or elaborated by semantic NAMES or objects)
 - instead, the most ideophone-like ideophones in UNT seem to combine with a verb by overlapping with a verb’s meaning and elaborating it in some significant way
 - thus, it seems that UNT doesn’t have a class of words which are modifiers of verbs in the traditional sense, but instead has a class of words (subsuming adverbs) whose meanings combine with verbs to form complex syntactic predicates — predicate qualifiers

Whether one chooses to refer to these as adverbs or not depends ultimately on how determined one is to cling to the familiar Indo-European sense of the word; however, given the utility of definitions of the lexical class of adverb in terms of predicate modification, it seems to me that it might be well to recognize an over-arching category of predicate-qualifiers. This approach has the advantage that, rather than dismissing ideophones as odd-ball adverbs, it treats them — and the unusual Upper Necaxa type of adverb — on equal-footing with Indo-European-style adverbs, which are simply another (more familiar) member of a diverse class found in the lexica of every human language.

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