

### Verb-verb compounds in Tlachichilco Tepehua

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#### Abstract

I have proposed elsewhere (Watters 1993) that constructions that appear to be verb-verb compounds in Tlachichilco Tepehua are of two kinds: VV-compounds and verb-as-operator constructions. In VV compounds, the second V is the head of the construction and the two verbs may or may not be separated by inflection. These compounds parallel adverb-incorporation constructions and are subject to a constraint: if the first verb is transitive, the second verb must also be formally transitive, even if its semantic contribution is intransitive. Beyond this transitivity constraint, verb selection is only restricted by pragmatics. In verb-as-operator constructions, the head verb is the first member of the construction, the modifying verb is a member of a closed class, and it may not be separated from the head verb by inflection. It is a verb with the status of a suffix. The feature of allowing a closed class of verbs to function as suffixes has made it possible for a what was historically a verb root, *chuqu*, to become a productive suffix in Tepehua.

#### Verb-verb compounds in Tlachichilco Tepehua (Totonacan)

There are two major types of verb-verb compounds in Tlachichilco Tepehua: right-headed compounds and left-headed compounds. As will be seen below, each type of compound presents specific constraints on the argument structures of the verbs involved.

The left-headed compounds are limited to verbs in which the second member of the compound belongs to a closed set of stative verbs or a form derived from such a stative. The right-headed compounds have a constraint involving the transitivity of the two verbs. Otherwise, there is no apparent grammatical restriction on the particular verbs that may be involved in right-headed compounds, the constraints on compounding being primarily pragmatic.

##### 1. Right-headed compounds

Right-headed compounds frequently manifest an epenthetic [h]. This [h] occurs seemingly irregularly when the first member of the compound ends in a vowel or a nasal; in the latter case the nasal is lost and [h] appears in its place:

- (1) milpaa+min → milpajmin  
sing+come come.singing  
achan + chiwiini-y → achajchiwiini-y  
smile + speak speak.smiling

Compounds in which the first member has the unspecified object suffix, *-nVn* invariably display this epenthetic [h]:

- (2) st'aa-nan + tawla-y → st'aaanjtawla-y  
sell-UO + sit-IMPF sell.sitting  
(3) sk'in-nin + min-ta → sk'inijmin-ta  
request-UO+come-PF come.requesting

However, its occurrence in other compounds is somewhat erratic. The generalization appears to be that the more lexicalized the compound, the less likely the epenthetic [h] is

to occur. In fact, for some speakers it is obligatorily absent from some compounds, including the following.

- (4) st'aa+lhaa'an-ta \*st'aj+lhaa'anta  
sell+take-PF  
'X goes selling Y.'
- (5) t'ajqajuu+lakawaanan \*tajqajujlakawaanan  
tumble.down+look(IMPF)  
'X is looking from top to bottom.'

Others allow alternate pronunciations of such forms, with or without the epenthetic [h] (orthographic *j*).

The most productive instances of right-headed compounding, however, appear to regularly require the epenthetic [h], as in the following forms:

- (6) sqolij+tapaatsaa-y  
whistle+work-IMPF  
'X works whistling.'
- (7) milpaj+skiti-y  
sing+stone.grind-IMPF  
'X grinds singing.'

The safest generalization, then, is the fairly vague one mentioned above: the epenthetic [h] occurs irregularly vowel- final and n-final members of right-headed verb compounds, tending to be more often present in productive forms.

However, a more restrictive account appears possible. We can posit two levels of compounding: level I ('tighter,' more lexicalized) compounds and level II ('looser,' more compositional) compounds. (There are some compounds of both "levels" that are idiomatic constructions, and, hence noncompositional.) The rule of h-epenthesis is then a Level II rule: [h] is inserted following a V or a nasal C and preceding stem.

There is independent support for the distinction between Level I and Level II compounds. Certain inflectional prefixes may occur on the second member of the compound only in Level II compounds. Thus in the following examples, the third person plural prefix *lak-* can appear either preceding the entire compound or the second member with a Level II compound. However, with a Level I compound it may only be prefixed to the entire compound:

***Level I compounds:***

- (8) lak-st'aa+lhiimin-ta puulaqlhi  
3PLOBJ-sell+come-PF tamales  
'X comes selling tamales.'  
\*st'aa+lak-lhiimin-ta puulaqlhi  
sell+3PLOBJ-come-PF tamales
- (9) lak-tapaatsaa+tawla-ni-y s-as'at'a-n  
3PLOBJ-work+sit.down-DAT-IMPF 3POSS-child-PL  
'X works sitting with his/her children.'
- (10) \*tapaatsaa+lak-tawla-ni-y s-as'at'a-n  
work+3PLOBJ-sit.down-DAT-IMPF 3POSS-child-PL

**Level II compounds:**

- (11) laq-soqo[j]+chuk'u-l  
3PLOBJ-hurry[h]+cut-PFV  
'X cut them quickly.'
- (12) soqo[j]+lak-chuk'u-l  
hurry[j]+3PLOBJ-cut-PFV  
'X cut them quickly.'
- (13) lak-milpaa[j]+tawla-ni-y  
3PLOBJ-sing[j]+sit.down-DAT-IMPF  
'X sits by his younger siblings singing.'
- (14) milpaa[j]+lak-tawla-ni-y  
sing[j]+3PLOBJ-sit.down-DAT-IMPF  
'X sits by his younger siblings singing.'

Only Level II compounds have synonymous constructions in which the first person subject prefix occurs preceding what is the second verb. These are actually two distinct constructions, a verb-verb compound (15) and an adverb-verb construction (16):

- (15) k-paxka[j]+laqts'in  
1SUB-care.for+see  
'I appreciate / am grateful to X.'
- (16) paxka[j]+k-laqts'in  
care.for+1SUB-see  
'I appreciate / am grateful to X.'

**Productivity**

The process of forming right-headed compounds appears upon initial inspection to be virtually unconstrained: one can go on eliciting a seemingly endless string of acceptable possibilities. The constraints are largely pragmatic and in this manner parallel the conclusions reached in the literature regarding noun-noun compounds in English (Zimmer 1971, Downing 1977). The semantic-pragmatic constraints are somewhat tighter than those in English noun-noun compounds, however. Specifically, the first (non-head) member of the compound must modify the head verb, specifying the manner in which in which the action was carried out. Note the following examples:

- (17) a. alaw-maaxtu-y 'X takes out Y, stealing it'  
steal-take.out-IMPF  
b. ch'aqx-p'ux-a 'X picks off Y, cutting it'  
cut-pick.off-IMPF  
c. milpaj-wajin 'X eats, singing'  
sing-eat(intr)(IMPF)  
d. milpaj-skiti-y 'X grinds Y, singing'  
sing-grind-IMPF  
e. takyaw-min 'X comes, running'  
run-come(IMPF)  
f. talaqsta-lakawaanan 'X looks, face upwards'  
turn.face.up-look(IMPF)  
g. paataxtu-lakawaa nan  
ascend-look(IMPF)  
'X looks, from the bottom up'

- h. t'ajqajuu-lakawaa nan  
descend-look(IMPF)  
'X looks, from the top down'  
i. sqolij-tapaatsaa-y `X works, whistling'  
whistle-work-IMPF  
j. tapasa-'ii-y `X got it, passing by'  
pass.by-get-IMPF

In each of these examples, the verb on the left modifies the action denoted by the verb on the right. That these are, in fact, right-headed compounds is suggested by two facts. First, the standard translations for such forms into Spanish by native speakers of Tepehua parallel the English translations above. (Thus, (d) is translated 'lo muele cantando,' (e) is 'viene corriendo,' etc.) Assuming such translations reflect native speaker intuitions this clearly suggests that the head verb is the second member of the compound and the first verb specifies the manner in which the second action occurs.

Second, the structure and interpretation of these compounds exactly parallels that of the adverb-verb compounds (discussed in 2.5.3, below). The fact that those parallel adverb-verb compounds are clearly right-headed (the resulting compound is a verb) supports the analysis of these verb-verb compounds as right-headed.

The only structural constraint on right-headed verb compounding can be stated initially as the following:

- (i) *The modifying verb cannot be transitive if the head verb is intransitive.*

Note the following pairs of forms:

- (16) a. chaqx-lhaa'an `X goes along, cutting it'  
cut-take(IMPF)  
b. chaqx-'an  
cut-go(IMPF)
- (19) a. ch'an-lhiimin-ta `X is coming, planting it'  
plant-bring-PF  
b. \*ch'an-min-ta  
plant-come-PF  
c. ch'a-naj-min-ta  
plant-UO-come-PF
- (20) a. saa-naj-min-ta  
hit-UO-come-PF  
'X is coming, beating/playing music'  
b. \*saa-min-ta  
hit-come-PF  
c. saa-naj-lhiimin-ta hit-UO-bring-PF  
'X is bringing it, playing/ beating it'
- (21) a. oq-lhiimin-ta `X is coming, drinking it'  
drink-bring-PF  
b. \*oq-min-ta  
drink-come-PF  
c. oq-nuj-min-ta `X is coming, drinking'  
drink-UO-come-PF

The (a) examples are acceptable since in each case, the transitivity of the head verb is equal to or greater than the transitivity of the modifying verb. The (b) examples, however, are ungrammatical since the the modifying verb is transitive and the head verb intransitive. Note that in (20c) and (21c) the addition of the unspecified object suffix (UO), *-nVn*, makes the modifying verb intransitive, allowing it to occur with an intransitive head verb.

The head verb determines the transitivity of the resulting compound. Thus, the syntactic arguments of the modifying verb can only occur if they can map onto the argument positions of the head verb or are licensed by the presence of a valence-increasing affix on the head verb. The result is that an otherwise intransitive head verb must be 'transitivized' to occur in a compound with a transitive modifying verb; or, the modifying verb must be made intransitive.

The occurrence of the unspecified object suffix in such compounds brings up another issue: the possibility of compounding verb stems with derivational affixes. The only attested derivational suffix that occurs on the first member of these compounds is the unspecified object suffix, *-nVn*. The dative suffix, *-ni*, though ordered closer to the stem than the unspecified object suffix, does not occur as freely on the modifying verb in these constructions. Thus the following two forms are judged as clearly ungrammatical:

- (22) \*milpaa-ni+lhiimin-ta  
sing-DAT+bring-PF  
'X brings Y singing to him/her'  
\*tapaatsaa-ni+lhaa'an-ta  
work-DAT+take-PF  
'X takes Y working for him/her'

The only constructions in which the dative suffix can occur on the first member of a verb-verb compound are those for which the first verb has a corresponding "frame-internal", i.e. an argument that is implicit but not a syntactic argument of the verb root:

- (23) laq-[xtaq-ni+lha'an]-ta tumin  
3PLOBJ-give-DAT-take-PF money  
'X is going giving them money'  
(24) kin-ta-[sk'in-i+lhiimin]-ta  
1OBJ-3,PL-request-DAT-bring-PF  
'They're coming asking us for it.'

While the dative suffix apparently occurs on the left member of right-headed compounds only when marking frame-internal arguments, the prefixes on the left member of the compound are not so restricted. They are subject to no special restriction other than that implied in (i); i.e., they cannot increase the transitivity of the modifying verb beyond the transitivity of the head verb. Thus, though apparently a novel form, the following was considered grammatical:

- (25) lhii-milpaj-lhiimin-ta  
DIR-sing-bring-PF  
'X brings Y, singing to/about Y'

Other forms occur in which the prefix to the left of the first member of the compound is best analyzed as a prefix on the compound as a whole:

- (26) ix-[puu-[[ch'aqx-naj]+[min]]]-ta  
PT-MN- cut-UO +come -PF  
'X came cutting by means of Y'

Note that in (26) if the VIA prefix, *puu-*, were part of the first member of the compound, this would be a counter-example to the constraint on transitivity; that is, the first member (*puu-chaqx-nan*, 'cut by means of X') would be transitive, and the second member (*min*, 'come'), intransitive. If the constraint (i) is correct, *puu-* here must be prefixed to the entire compound and not just the left member. This then predicts that a possible interpretation should be one in which the argument of *puu-* is the means by which X came, which, in fact, is the case. The other interpretation is also possible, i.e., the argument of *puu-* is the means by which cutting was done. Thus, morphologically, *puu-* is attached to the entire compound but its argument can be interpreted as marking the means by which either action occurred.

Similarly, in (27), below, the (a) and (b) forms are considered roughly synonymous:

- (27) a. Ni maestro laq-[xaqalaa+lhii-min]-ta ni s'at'a-n  
the teacher 3PLOBJ-speak.to+bring-PF the child-PL  
'The teacher comes, speaking to the children.'  
b. Ni maestro lak-t'aa-[chiwij+min]-ta ni s'at'a-n  
the teacher 3PLOBJ-COM-speak+come-PF the child-PL  
'The teacher comes, speaking with the children.'

In (a) both stems of the compound are transitive, *xaqalaa*, being a transitive root, and *lhiimin*, 'bring,' derived from *min*, 'come'. In (b) both stems of the compound are intransitive, the comitative prefix, *t'aa*, prefixed to the entire compound stem

As would be expected (and as already alluded to above), some compounds have very idiosyncratic interpretations. Note the following examples:

- (28) a. paaxkaj+laqts'in  
care.for+look.at(IMPF)  
'X appreciates, is grateful to Y'  
b. laqts'in+tanuu-y  
look.at+enter-IMPF  
X investigates, examines Y'  
c. puuxkaw+laqts'in  
look.for+look.at(IMPF)  
'X searches for Y'  
d. che'e+waa-y  
break+feed(<waawaa-)-IMPF  
'X breaks Y and feeds Y to Z', or, more commonly, 'X gives Y to Z freely, as a gift'

The form in (d), *che'ewaay* is used by most speakers of Tlachichilco Tepehua and is given the Spanish gloss, 'lo regala.' That this has wandered quite far from any compositional meaning is evident from the fact that the theme (the gift) may be any item,

food or non-food, and is never understood to be 'broken.' (For speakers the subdialect spoken in Tecomajapa it only has its compositional meaning, "X breaks Y and feeds Y to Z"; for "give as a gift," these speakers use the form *t'aa'u-*, literally, "eat with".) The form in (28d) contrasts with a parallel form that retains a purely compositional meaning:

- (29) lakts'ak'aa+waa-y  
bite.into.pieces+feed-IMPF  
'A feeds Y to Z by biting Y into bits.'  
(As a mother feeding a tortilla to a baby)

Turning from the least predictable compounds, the most productive and compositional right-headed compounds appear to be of two types: those in which the head is the transitive verb, '*ii-*, 'get' and those in which the head is a verb of motion, especially either *min*, 'come,' or *an*, 'go.' Compounds headed by these two motion verbs merit special comment.

As is evident in many of the examples above, these two verbs often occur with the prefix *lhii-*, rendering them transitive. *lhii-* is a prefix that usually takes an argument with some specific semantic role. When it occurs with the verbs for 'come' and 'go', the resulting translations are usually 'bring' and 'take', the argument of *lhii-* being, in such cases, the secondary theme. (Hence the glosses given *lhiimin* and *lhaa'an* in the examples.)

However, when *an* or *min* occur as the head of right-headed compounds *lhii-* most often has the purely syntactic effect of increasing the transitivity of the head verb, thus meeting the constraint in (i). That this is the case can be inferred from the translations of the forms above; i.e., the subject is said to be simply 'coming,' not 'bringing' the object. Compare also the following sentences:

- (30) maqatal+lhiimin-ta waakax  
throw.at+bring-PF cow  
'X comes throwing (something) at the cows.'
- (31) laqts'in+lhaa'an-ta ts'o'o-n  
look.at+take-PF bird-PL  
'X goes looking at birds.'
- (32) [[chaqx+p'ux]+lhii-min]-ta  
[[cut + pick]+bring]-PF  
'X comes along picking it by cutting it.'

Clearly, then, the prefixation of *lhii-* on the head of these compounds only serves the syntactic purpose of increasing the valence of the head verb and thus meeting the constraint in (i). It does not perform its usual additional function of assigning a semantic role to the object.

### **3 Left-headed compounds**

What appear to be left-headed compounds in Tepehua, unlike the right-headed compounds, have a closed class of verbs that can occur in the post-head (modifying) position the second member of the compound belongs to a closed set of stative verbs or a form derived from such a stative.

These are compounds in which the second verb often has a grammaticalized function, similar to a suffixes. A clear example can be found in Totonacan verb paradigms. In most varieties of Totonac the standard translation of the Spanish progressive is a particular instance of what I'm calling left-headed compounds: the occurrence of the stage-level stative *-maa*, 'lie, be horizontal' (in its non-derived form).

In Tlachichilco Tepehua the entire class of stage-level statives and their derived achievement and accomplishment verbs can occur as the modifier in these left-headed compounds. Note the following examples:

- (33) *laqts'in+tanuu-y*    `X examines Y'  
 see(trans)+enter-IMPF
- (34) *maqñii-maa-l*    `X kills Y laying it down'  
 kill-lay.down-PFV
- (35) *xkaw+kyaju-y*    `X chases Y away'  
 (<*akyaju*)  
 search.for+run-IMPF
- (36) *xkaw-knuu-y*    `X searches for Y under ground'  
 (<*aknuu*)  
 search.for-be.under.surface-IMPF
- (37) *tapaatsaa+wil*    `X is sitting, occupied' (inanimate)  
 work+sit
- (38) *tapaatsaa-tawla-y*    `X works sitting down'  
 work+sit.down-IMPF
- (39) *maqñii+'ula-y*    `X sets Y and kills it'  
 kill+set-IMPF

A particularly interesting case is a morpheme that in Totonac (and presumably prototonacan) was a verb root but has clearly become a verb suffix in Tlachichilco Tepehua. The following examples show the use of *choqo-* as a verb root in Totonac:

(40)

<p><i>a. Totonaco de la Sierra (Aschmann 1962:78)</i>  <i>ta-choqo-y</i>                  INCH-detenerse-IMPF "se detiene; se vuelve atrás"</p>	<p><i>c. Totonaco de Papantla (Aschmann 1973:104)</i>  <i>tachoqoy</i>                  "se detiene"</p>
<p><i>b. Totonaco de Misantla (Mackay &amp; Trechsel 2005:312)</i>  <i>ta-laqa-choqoo tachoqó</i>                  "regresa"</p>	<p><i>d. Totonaco de Apapantilla (Reid et al 1974:126)</i>  <i>tachoqó</i>                  "se queda"</p>

In these Totonac varieties, *choqo* behaves as a standard verb root and member of a prominent class of statives that commonly take the inchoative prefix, *ta-*. As a member of that class, it would qualify to occur in Tlachichilco Tepehua as the second member of an apparent left-headed compound. However, apart from very restricted polymorphic verb stems (e.g. *maqachoqo-* "parade around"), *-choqo* serves only as a verb suffix—a very common one, in both Tlachichilco and Pisaflores Tepehua:

(41)

<i>Tepehua de Tlachichilco</i> milhpaa-choqo-y sing-AGAIN-IMPF "canta otra vez"	<i>Tepehua de Pisaflores</i> a'tsam-cho'o-lh fill.up-AGAIN-IMPF "se llenó otra vez"
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(In Tlachichilco Tepehua (unlike Pisaflores or Huehuetla Tepehua), the suffix –choqo is now much more common than the suffix, *-pal(a)*, which historically served the same function.)

#### 4 Summary

We can summarize the possible combinations of argument structure in verb-verb compounds in the following way (marking the head of the compound in bold print):

- (130) *Right-headed:*  
intransitive + intransitive  
intransitive + transitive  
transitive + transitive  
\*transitive + intransitive  
*Left-headed:*  
intransitive + intransitive  
transitive + intransitive  
transitive + transitive  
\*intransitive + transitive

The most obvious generalization is that which has been already established: the transitivity of the head verb must be greater than or equal to the transitivity of the modifying verb. Furthermore, any argument of the modifying verb is also an argument of the resulting compound verb.

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