Sorting out grammatical relations in multi-object constructions in Upper Necaxa Totonac*

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Upper Necaxa Totonac (UNT), a member of the isolate Totonac-Tepehua language family spoken in the Sierra Norte of the state of Puebla, Mexico, has a rich system of valency-increasing morphology, including two causatives and four applicatives, which can be combined to license up to five grammatical objects in a single clause. The morphosyntactic behaviour of these objects is surprisingly uniform, making it difficult to determine their grammatical relation to the verb. The problem is illustrated in this paper with respect to agreement (Section 1) and voice (Section 2). Specifically, UNT transitive and underived ditransitive verbs agree in number and person with their direct (primary) objects, whereas in derived multi-object constructions, object-agreement can be controlled by *any* of the nonsubject arguments of the verb. Competition for the control of agreement seems to be resolved based on a number of "extra-syntactic" factors — a 1,2 > 3 person hierarchy, animacy, and the relative salience of third-person arguments in communicative structure. Similarly, diagnostics of objecthood based on promotion, demotion, and suppression of arguments in different voices also yields inconclusive results. The uniform behaviour of all non-subject arguments seems to indicate that grammatical relations in UNT are not unique. This has implications both for clause-structure and for typological models of grammatical relations and argument structure.

1 Agreement

Transitive verbs in UNT agree in person and number with their subject and direct object:¹

- (1) a. <u>ik</u>la'htziná:<u>n</u> <u>ik</u>-la'htzín-ya:-<u>n</u> 1SG.SUBJ-see-IMPF-2OBJ 'I see you'
 - b. <u>kinta</u>la'htzín <u>kin</u>-<u>ta</u>- la'htzín 10BJ-3PL.SUBJ-see 'they see me'

Subject and object agreement morphemes constitute distinct sets, with the subject-markers encoding both person and number of subject, and the object-markers encoding person and number separately. The full set of object markers is given in Table 1:

<u>Person</u>			<u>Number</u>	
<i>kin-</i> '10BJ'	-n '20BJ'	Ø '30BJ'	Ø 'SG.OBJ'	ka:- 'PL.OBJ'

Table 1: UNT object-markers

Any object in multi-object constructions can thus potentially control the verb for two separate inflectional categories — number of object and person of object.

^{*} Here's a bit of fun for Bernard Comrie on his 60th birthday. I hope he derives as much enjoyment from this work as I have derived inspiration from his. Happy birthday, Bernard!

¹ The abbreviations used here are: 1,2,3 = first-, second-, third-person; ALTV = allative; BEN = benefactive; CLS = classifier; CMT = comitative; CTN = containing instrument; FUT = future; IMPF = imperfective; INST = instrumental; OBJ = object; PL = plural; PFV = perfective; PO = possessive; SG = singular; ST.PL = stative plural; SUBJ = subject. Data are given in practical orthography ($x = /\int/$; h = /h/; h =

1.1 Agreement in ditransitive clauses

In ditransitive constructions, the verb may agree in person with a second object. Because the object markers used for the second object are the same as those for the first object, the result is an ambiguous form with two possible readings:

(2) a. wix, kuchí:lu, <u>ki</u>li:lhtukuyá:<u>n</u> cha:tín hótni'
wix kuchí:lu <u>kin</u>-li:-lhtuku-ya:-<u>n</u> cha:-tin hótni'
you knife 10BJ-INST-stab-IMPF-20BJ CLS-one drunk
'you, knife, a drunk stabs me with you'

b. wan kuchí:lu, <u>ki</u>li:lhtukuyá:<u>n</u> cha:tín hótni'
wan kuchí:lu <u>kin</u>-li:-lhtuku-ya:-<u>n</u> cha:-tin hótni'
say knife 10BJ-INST-stab-IMPF-<u>20BJ</u> CLS-one drunk
'says the knife, a drunk stabs you with me'

Both the verbs here agree in person with both an INSTRUMENT and a PATIENT, though context is necessary to disambiguate which person, first or the second, corresponds to which semantic role.

Although double agreement is possible, it occurs in relatively limited circumstances — specifically, only when the two objects are first- and second-person and only when they are both singular. There is never overt agreement with two objects if one or both objects are plural (cf., the situation in Misantla — MacKay & Trechsel, to appear)

(3) a. **kinka:**li:lhtukuyá:**n** cha:tín hótni'

kin-ka:-li:-lhtuku-ya:-**n** cha:-tin hótni' 10BJ-PL.OBJ-INST-stab-IMPF-**20BJ** CLS-one drunk 'a drunk stabs us with it'

'a drunk stabs him with us' (no other interpretation possible)

b. **<u>ka:</u>**li:lhtukuyá:<u>n</u> cha:tín hótni'

<u>ka:</u>-li:-lhtuku-ya:-<u>n</u> cha:-tin hótni' PL.OBJ-INST-stab-IMPF-<u>2OBJ</u> CLS-one drunk 'a drunk stabs you guys with it'

'a drunk stabs him with you guys' (no other interpretation possible)

As shown by the ambiguity of these forms, person agreement in ditransitives can potentially be controlled by either of two objects.

1.2 Agreement in derived multi-object constructions

In ditransitives formed with applicatives, there are also two potential controllers of agreement — the *basic object* which comes with the verb root, and the new *applicative object* added by the valency-increasing affix. As it turns out, either of these objects object can control agreement for number and for person, as shown by the following examples based on *halha:ni* 'steal X from Y' (= $\sqrt{halha:n}$ 'steal something' + -ni 'benefactive'):

(4) a. ika: halha:nílh a'htú: ixtapíxnu' tzamá: puská:t

ik-<u>ka:</u>-halha:n-ni-lh <u>a'h-tu:</u> <u>ix-tapíxnu'</u> tzamá: puská:t 1SG.SUBJ-PL.OBJ-steal-BEN-PFV CLS-two 3PO-necklace that woman 'I stole two necklaces from the woman'

b. ika:halha:nílh a'htín tapíxnu' puská:n

ik-<u>ka:</u>-halha:n-ni-lh a'h-tin tapíxnu' **puská:**-<u>n</u> 1SG.SUBJ-PL.OBJ-steal-BEN-PFV CLS-one necklace woman-PL 'I stole a necklace from the women' In (4a), the basic object controls the number agreement on the verb, while in (4b), the applicative object is the controller. Derived ditransitive verbs can also agree for person with either object:

(5) a. ikhalha:niyá:<u>n</u> mintapíxnu'

ik-halha:n-ni-yá:-<u>n</u> min-tapíxnu' 1sG.SUBJ-steal-BEN-IMPF-2OBJ 2PO-necklace

'I steal your necklace from you'

b. wix, tapíxnu', ikhalha:nín wamá: puská:t

wix tapíxnu' ik-halha:n-ní-<u>n</u> wamá: puská:t you necklace 1sg.subj-steal-ben-2obj this woman

'you, necklace, I stole you from this woman'

In (5a) the verbs agrees with the applicative object and in (5b) it agrees with the basic object. (4) and (5) both have one third person object. When there are two singular non-third person objects, *both* control agreement simultaneously:

(6) a. wix, kuchílu, kili:lhtukú:n kit wamá: hóni'

wix kuchílu kin-li:-lhtukú:-n kit wamá: hóni' you knife 10BJ-INST-stab-20BJ I this drunk 'you, knife, this drunk stabbed me with you'

wan kuchílu, kili:lhtukú:n wix wamá: hóni'
 wan kuchílu kin-li:-lhtukú:-n wix wamá: hóni'
 say knife 10BJ-INST-stab-20BJ you this drunk 'said the knife, this drunk stabbed you with me'

Thus, in derived ditransitives either the basic and/or the applicative object can control both number and person agreement, whereas in the underived ditransitives only the primary object is a legitimate controller of agreement.

The same pattern holds for more complex multi-object constructions: the basic or *any* applicative object is a legitimate controller of agreement. The verb *ta:li:tanká:* 'X fells Y with Z aided by W', for instance, has two applicatives and three objects. As shown in (7), any of these three objects can control number agreement:

(7) a. **pu:lakáuj kila:xáx**, nai**ka:**ta:li:tanká: kinta:sá:kwa wamá: hentín kimachí:ta'

pu:lak-kaujkin-la:xáxna-ik-ka:-ta:-li:-tanká:kin-ta:sá:kwaCLS-ten1PO-orangeFUT-1SG.SUBJ-PL.OBJ-CMT-INST-fell1PO-peon

wamá: hen-tin kin-machí:ta' this CLS-one 1PO-machete

'my peon and I will cut down ten orange trees with this machete'

b. hentu:tún machí:ta' naika:ta:li:tanká: pu:laktín kí'wi' wamá: chixkú

hen-tu:túnmachí:ta'na-ik-ka:-ta:-li:-tanká:pu:lak-tín kí'wi'wamá:chixkúCLS-threemacheteFUT-1SG.SUBJ-PL.OBJ-CMT-INST-fellCLS-onetreethisman'with three machetes I and this man will cut down a tree'

c. naika: ta:li:tanká: pu:laktín kí'wi' chixkuwín kimachi:tkán

na–ik–**ka:**–ta:–li:–tanká: pu:lak–tín kí'wi' **chixkú–win** kin–machi:t–kan FUT–1SG.SUBJ–PL.OBJ–CMT–INST–fell CLS–one tree man–PL 1PO–machete–PL.POS 'I and the men will cut down a tree with our machete'

The example in (7a) shows the basic object (Y) controlling agreement, while in (7b) the INSTRUMENT (Z) is the controller and in (7c) the COMITATIVE (W) controls number agreement. Similarly, any object can control person agreement:

(8) a. wix, kí'wi', nakta:li:tanka:yá:n tzamá: chixkú hentín kimachí:t

wixkí'wi'na-ik-ta:-li:-tanká:-ya:-ntzamá:chixkúhen-tinyoutreeFUT-1SG.SUBJ-CMT-INST-fell-IMPF-2OBJthismanCLS-one

kin-machí:t

1PO-machete

'you, tree, I and this man are going to fell you with my machete'

b. wix, machí:ta, naikta:li:tankayá:n tzamá: chixkú kí'wi'

wix machí:ta na-ik-ta:-li:-tanká:-ya:-<u>n</u> tzamá: chixkú kí'wi' you machete FUT-1SG.SUBJ-CMT-INST-fell-IMPF-2OBJ this man tree 'you, machete, I and this man are going to fell the tree with you'

c. wix nakta:li:tanka:yá:n kí'wi' hentín kimachi:tkán

wix na-ik-ta:-li:-tanká:-ya:-n kí'wi' hen-tin kin-machit-kan you FUT-1SG.SUBJ-CMT-INST-fell-IMPF-2OBJ tree CLS-one 1PO-machete-PL.POS 'I and you are going to fell the tree with our machete'

In (8a), the basic object controls person agreement, in (8b) the INSTRUMENT controls person agreement, and in (8c) the verb agrees with the COMITATIVE. In other words, all of the objects of the verb are legitimate potential controllers. The same holds for the verb ta:pu:la'hmakamín 'X directs Y at Z using W aided by A', which contains three applicatives and has four objects:

(9) a. a'htú: chiwíx ika: ta:pu:la'hmakamílh tzakát kistánku' tzamá: chixkú

<u>a'h</u>-<u>tu:</u> <u>chiwíx</u> ik-<u>ka:</u>-ta:-pu:-la'h-makamín-lh tzakát kin-stánku' CLS-two stone 1SG.SUBJ-PL.OBJ-CMT-CTN-ALTV-direct-PFV sling 1PO-brother

tzamá: chixkú that man

'I and my brother threw two stones at that man with a sling'

b. **chixkuwín** i**ka:**ta:pu:la'hmakamílh chiwíx kistánku' tzamá: tzakát)

chixku-wínik-ka:-ta:-pu:-la'h-makamín-lhchiwíxkin-stánku'man-PL1SG.SUBJ-PL.OBJ-CMT-CTN-ALTV-direct-PFVstone1PO-brother

tzamá: tzakát that sling

'I and my brother threw a stone at those men with a sling'

c. <u>a'htú: tzakát</u> i<u>ka:</u>ta:pu:la'hmakamílh chiwíx kistánku' tzamá: chixkú

a'h-tu:tzakátik-ka:-ta:-pu:-la'h-makamín-lhchiwíxkin-stánku'CLS-twosling1SG.SUBJ-PL.OBJ-CMT-CTN-ALTV-direct-PFVstone1PO-brother

tzamá: chixkú that man

'I and my brother threw stones at that man with two slings'

d. kinta:timin ika:ta:pu:la'hmakamílh chiwíx kintzakatkán tzamá: chixkú

<u>kin-ta:timín</u> ik-<u>ka:</u>-ta:-pu:-la'h-makamín-lh chiwíx kin-tzakát-kan 1PO-brothers 1SG.SUBJ-PL.OBJ-CMT-CTN-ALTV-direct-PFV stone 1PO-sling-PL.PO

tzamá: chixkú that man

'I and my brothers threw a stone at that man with our sling'

In (9a), the basic object (Y) controls agreement and in (9b) the verb agrees with the GOAL (Z); (9c) shows INSTRUMENT (W) agreement, and in (9d) the COMITATIVE (A) is the controller. Similarly, any of the four objects can control person agreement:

(10) a. wix, chiwíxni', ika:ta:pu:la'hmakaminá:n kintzakatkán kistánku tzamá: chixkú

wix chiwíx-ni' ik-ka:-ta:-pu:-la'h-makamin-ya:-n kin-tzakat-kán you stone-PL 1SG.SUBJ-PL.OBJ-CMT-CTN-ALTV-direct-IMPF-20BJ 1PO-sling-PL.PO

kin–stánku' tzamá: chixkú 1PO–brother that man

'you, stones, I and my brother throw you at the man with our slings'

b. ika:ta:pu:la'hmakaminá:n chiwíx kistánku' kintzakatkán

ik-<u>ka:</u>-ta:-pu:-la'h-maka-min-ya:-<u>n</u> chiwíx kin-stánku' kin-tzakat-kan 1SG.SUBJ-PL.OBJ-CMT-CTN-ALTV-direct-IMPF-2OBJ stone 1PO-brother 1PO-sling-PL.PO 'I and my brother throw stones at you guys with our slings'

c. wix, tzakát, ikta:pu:la'hmakaminá:n chiwíx kistánku' tzamá: chixkú

<u>wix</u> tzakát ik-ta:-pu:-la'h-maka-min-ya:-<u>n</u> chiwíx kin-stánku' tzamá: chixkú you sling 1SG.SUBJ-CMT-CTN-ALTV-direct-IMPF-2OBJ stone 1PO-brother that man 'you, sling, I and my brother throw stones at that man with you'

d. tzakát ikta:pu:la'hmakaminá:n chiwíx tzamá: chixkú

tzakát ik-ta:-pu:-la'h-maka-min-ya:-<u>n</u> chiwíx tzamá: chixkú sling 1SG.SUBJ-CMT-CTN-ALTV-direct-IMPF-2OBJ stone that man 'I and you throw stones at that man with a sling'

In (10a), the basic object controls person agreement and in (10b) the verb agrees with the GOAL; (10c) shows INSTRUMENT agreement, and in (10d) the COMITATIVE is the controller. Once again, any of the objects of a derived multi-object verb is a legitimate controller of agreement. But, with so many potential controllers, how is competition for control of agreement resolved?

1.2.1 1,2 > 3 person hierarchy

1 and 2 control agreement exclusively of and in preference to 3:

(11) a. wix nakta:li:tanka:yá:**n** kí'wi' hentú: kimachi:tkán

wix na-ik-ta:-li:-tanka:-ya:-<u>n</u> kí'wi' hen-tu: kin-machi:t-kan you FUT-1SG.SUBJ-CMT-INST-fell-IMPF-2OBJ tree CLS-two 1PO-machete-PL.POS 'I and you are going to fell the tree with our two machetes'

- *wix nai**ka:**ta:li:tanká: kí'wi' hentú: kimachi:tkán
- c. *wix naika:ta:li:tanka:yá:n kí'wi' hentú: kimachi:tkán

In (11a), the 2sg comitative object controls agreement in preference to the 3pL basic object (11b). As shown in (11c), simultaneous control is ruled out.

(12) a. wix kí'wi' nakta:li:tanka:yá:**n** tzamá: chixkú hentú: kimachi:tkán

wix kí'wi' na-ik-ta:-li:-tanka:-ya:-**n** tzamá: chixkú hen-tu: you tree FUT-1SG.SUBJ-CMT-INST-fell-IMPF-2OBJ that man CLS-two

kin-machi:t-kan

1PO-machete-PL.POS

'you, tree, I and that man are going to fell you with our two machetes'

- b. *wix kí'wi' naika:ta:li:tanká: tzamá: chixkú hentú: kimachi:tkán
- c. *wix kí'wi' naika:ta:li:tanka:yá:n tzamá: chixkú hentú: kimachi:tkán

In (12a), the 2sG basic object controls agreement in preference to the 3PL INSTRUMENTAL object (12b). Once again, simultaneous control is ungrammatical (12c). This points to a 1.2 > 3 person hierarchy.

1.2.2 Animacy

When both objects are third-person, there is a preference for an animate object to control agreement as opposed to an inanimate object, as in (13):

(13) a. tachílh **kinta:timín** nai**ka:**ta:putzá kimachí:ta'

ta-chín-lh <u>kin-ta:timín</u> na-ik-<u>ka:</u>-ta:-putzá kin-machí:ta' 3PL.SUBJ-arrive-PFV 1PO-siblings FUT-1SG.SUBJ-PL.OBJ-CMT-look.for 'my brothers are here, I'm going to look for my machete with them'

b. *chilh kimpuská:t naika:ta:putzá hentú: kimachí:ta'

chin-lh kin-puská:t na-ik-<u>ka:</u>-ta:-putzá hen-tu: kin-machí:ta' arrive-PFV 1PO-wife FUT-1SG.SUBJ-PL.OBJ-CMT-look.for CLS-two 1PO-machete *'my wife is here, we're going to look for my two machetes'

c. chilh kimpuská:t nakta:putzá hentú: kimachí:ta'

<u>chin-lh</u> <u>kin-puská:t</u> na-ik-ta:-putzá hen-tu: kin-machí:ta' arrive-PFV 1PO-wife FUT-1SG.SUBJ-CMT-look.for CLS-two 1PO-machete 'my wife is here, we're going to look for my two machetes'

In (13a), the animate 3PL COMITATIVE object obligatorily controls agreement. The sentence in (13b) was initially rejected by the consultant, who offered (13c). Thus, it seems sentences with inanimate controllers are dispreferred in neutral contexts, although this is only a preference (see, for example, the data in (7), (14), and (15) below).

1.2.3 Discourse saliency

Control of agreement also seems to depend on relative discourse saliency: the clause rejected in (13b) is accepted in a different context in (14):

(14) taa'htzanhá:lh **hentú: kimachí:ta'** akxní chilh kimpuská:t nai**ka:**ta:putzá

ta-a'htzanhá:-lh hen-tú: <u>kin</u>-<u>machí:ta'</u> akxní chin-lh kin-puská:t 3PL.SUBJ-get.lost-PFV CLS-two 1PO-machete when arrive-PFV 1PO-wife

> na–ik–<u>ka:</u>–ta:–putzá FUT–1SG.SUBJ–PL.OBJ–CMT–look.for

'My machetes got lost. When my wife comes she and I'll look for them.'

As it turns out, when the inanimate object is discourse topic, it becomes a legitimate controller, even when it occurs in a clause with an animate (non-topical) object. Similar contrasts are found in other situations:

(15) a. **cha:tín chixkú** ásta hentú: kuchílu li:htukúlh hó'ni'

cha:-tínchixkúástahen-tu:kuchíluli:-lhtukú-lhho't-ni'CLS-tinmanevenCLS-twoknifeINST-stab-PFVdrink-NML'the drunk stabbed a man with two knives'

b. ásta hentú: kuchílu cha:tín chixkú ka:li:htukúlh hó'ni'

ástahen-tú:kuchílucha:-tín chixkúka:-li:-lhtukú-lhho't-ni'evenCLS-twoknifeCLS-one manPL.OBJ-INST-stab-PFVdrink-NML'with two knives the drunk stabbed a man'

As (15) shows, focusing of the inanimate object makes it a legitimate controller, over-riding the animacy hierarchy. Discourse considerations, however, do not over-ride the person hierarchy. This points to a ranked set of constraints for selecting the controller of agreement in multi-object constructions:

The contrast in acceptability of the same clause (13b) vs. (14) in different environments suggests that control of object-agreement can not be automatically ascribed to a particular grammatical relation, but must be ascribed to one of a set of potential controllers, one of which is chosen according to "extra-syntactic" criteria — person, animacy, and communicative structure.

2 Voice

Voice is a tool commonly used by linguists to investigate the syntactic status of verbal arguments (among others, Keenan 1976; Comrie 1982; Dryer 1983, 1986; Mel'čuk 1988). Upper Necaxa has two voices, the *indefinite voice* and the *object-suppressive*, either of which might present potential diagnostics for distinguishing different grammatical object relations.

2.1 The indefinite voice

In the indefinite voice, the expression of the subject is suppressed and the verb continues to agree with its object(s) for person, as in (16):

(16) a. kintala'htzílh tzamá: chixkú'

kin—ta—la'htzin—lh tzamá: chixkú' 10BJ—3PL.SUBJ—see—PFV that man 'the men saw me'

b. **<u>ki</u>**la'htzínka'

<u>kin</u>-la'htzin-ka' 10BJ-see-IDF:PFV

'I was seen' or 'I saw myself'

The verb in the active voice in (16a) agrees with a first-person object, the PERCEPT; its indefinite form in (b) continues to agree with a first-person object, also the PERCEPT. Thus, the syntactic effect of the indefinite voice is to remove the expression of the subject from the clause, giving either a passive-like reading or a reflexive reading. This voice fits the definition of the *subject-suppressive voice* (Mel'čuk 1993), though the term "indefinite voice" has been chosen here because of morphological complications in the second person, where a second-person object is realized using subject morphology (Beck 2001, 2004).

The same agreement pattern is seen for number, as shown in (17):

(17) a. ika:la'htzílh tzamá: chixkú'

<u>ik</u>-<u>ka:</u>-la'htzin-lh tzamá: chixkú' 1SG.SUBJ-PL.OBJ-see-PFV that man 'I see the men'

b. ka:la'htzínka'

ka:_la'htzin_ka'
PL.OBJ_see_IDF:PFV

'they were seen'

Here, the verb in the active voice in (17a) agrees with a plural object, the PERCEPT, and its indefinite form in (b) also agrees with a plural object — again, the PERCEPT. Note that, unlike active voice forms, verbs in the indefinite voice can not have both an object-number and an object-person marker as first- and second-person plurals do not have indefinite voice forms.

In multi-object indefinites, the verb may agree for person with any of the objects, as in these forms based on *halha:ní* 'steal something X from someone Y':

(18) a. **kin**halha:níka' a'htín kintapíxnu'

kinhalha:n-ni-ka'a'h-tínkin-tapíxnu'10BJ-steal-BEN-IDFCLS-one1PO-necklace

'I had my necklace stolen'

b. kin halha:níka' cha:tín puská:t, wan tapíxnu'

<u>kin</u>-halha:n-ni-ka' cha:-tín puská:t wan tapíxnu' 10BJ-steal-BEN-IDF CLS-one woman say necklace 'I was stolen from a woman, says the necklace'

Either object can also control number agreement on the verb:

(19) a. **puská:n** ka:halha:níka' a'htín ixtapíxnu'

puská:t–n ka:—halha:n–ni–ka' a'h–tín ix–tapíxnu' women–PL PL.OBJ–steal–BEN–IDF CLS–one 3PO–necklace 'the women had their necklace stolen'

b. ka: halha:níka' cha:tín puská:t a'htú: tapíxnu'

ka:halha:n-ni-ka'cha:-tínpuská:ta'h-tú:ix-tapíxnu'PL.OBJ-steal-BEN-IDFCLS-onewomanCLS-two3PO-necklace'the woman had two of her necklaces/her two necklaces stolen'

Thus, unlike the passive voice in many languages, the indefinite voice does not single out any particular object as the direct object.

2.2 The object-suppressive voice

The object-suppressive voice (Mel'čuk 1993) blocks the syntactic expression of an object. As a result, it excludes person agreement with the object that controls agreement in the active form of a (mono)transitive verb:

(20) a. nakhalha:yá:n wix

na–ik–halhá:n–ya:–<u>n</u> <u>wix</u> FUT–1SG.SUBJ–steal–IMPF–2OBJ you 'I'm going to steal you'

b. nakhalha:nán

na–ik–halhá:n–nan–Ø FUT–1SG.SUBJ–steal–OBJ.SUPP–IMPF

'I'm going to steal'

The transitive verb in the active voice in (20a) agrees with a second-person THEME, while the object-suppressive form in (b) does not allow object-agreement (*nakhalha:naná:n) or the presence of an object pronoun (*nakhalha:nán wix). In a similar way, the object-suppressive voice makes number agreement with a object impossible, as shown in (21):

(21) a. **ka:**halha:mpá: **isandía**

<u>ka:</u>-halha:n-pa:' **ix-sandía**PL.OBJ-steal-PRG:2SG.SUBJ 3PO-watermelon 'you're stealing his watermelons'

b. halha: nampá: '

halha:n-<u>nan</u>-pa:'
steal-OBJ.SUPP-PRG:2SG.SUB
'you're stealing'

The transitive verb in the active voice in (21a) agrees with a plural THEME, while the object-suppressive form in (b) does not allow object-agreement (*ka:halha:nampá:') or the presence of an object NP (*halha:nampá:' isandía)

For ditransitive verbs and multi-transitive verbs, the object-suppressive voice blocks the expression of only the basic object. The applicative object continues to be an eligible controller of person agreement, as in these forms based on *halha:ní* 'steal something X from someone Y':

(22) a. kit ikhalha:nanín wix

kit ik-halha:n-nan-ni-<u>n</u> <u>wix</u> I 1SG.SUBJ-steal-OBJ.SUPP-BEN-2OBJ you 'I stole from you'

b. *kit ikhalha:naní<u>n</u> wix, tapíxnu'

kit ik-halha:n-nan-ni-<u>n</u> <u>wix</u> tapíxnu' I 1SG.SUBJ-steal-OBJ.SUPP-BEN-2OBJ you necklace *'I stole you, necklace'

In (22a), the verb in the object-suppressive voice agrees in person with the BENEFICIARY, while the THEME can not be realized in the clause (*kit ikhalha:nanín wix mintapíxnu'). As shown in (22b), suppression of the BENEFICIARY and agreement with the THEME is not possible. The same pattern holds for number agreement:

(23) a. kit ika:halha:nanílh puská:n

kit ik-<u>ka:</u>-halha:n-nan-ni-lh

I 1SG.SUBJ-PL.OBJ-steal-OBJ.SUPP-BEN-PFV woman-PL
'I stole from the women

b. *kit ika:halha:nanílh a'htú: tapíxnu'

kit ik-<u>ka:</u>-halha:n-nan-ni-lh <u>a'h-tú:</u> <u>tapíxnu'</u> I 1SG.SUBJ-PL.OBJ-steal-OBJ.SUPP-BEN-PFV CLS-two necklace *'I stole two necklaces'

In (23a), the verb in the object-suppressive voice agrees in number with the BENEFICIARY and the THEME can not be realized in the clause (*kit ika:halha:naní puská:n ixtapíxnu'). The sentence in (23a) shows that suppression of the BENEFICIARY and number agreement with the THEME is not possible.

The same patterns hold for verbs with three or more objects such as *ta:li:tanká:* 'fell something tall X with Y using Z':

(24) a. naika:ta:li:tanka:naná:n wixinán kimachíta

na–ik–<u>ka:</u>–ta:–li:–tanka:–nan–ya:–<u>n</u> <u>wixinán</u> kin–machíta' FUT–1SG.SUB–PL.OBJ–INST–fell–OBJ.SUPP–IMPF–2OBJ you.guys 1PO–machete 'I will go felling with you guys using my machete'

b. wixinán, machíta, naika:ta:li:tanka:naná:n tzamá chixkú'

wixinánmachíta'na-ik-ka:-ta:-li:-tanka:-nan-ya:-ntzamá:chixkú'you.guysmacheteFUT-1SG.SUB-PL.OBJ-INST-fell-OBJ.SUPP-IMPF-2OBJthisman'I will go felling with this man using you guys, machetes'

c. *wix, kí'wi', naikta:li:tanka:naná:n

wix kí'wi' na-ik-ta:-li:-tanka:-nan-ya:-n tzamá: chixkú' you tree FUT-1SG.SUB-INST-fell-OBJ.SUPP-IMPF-2OBJ this man *'I and this man will fell you using an instrument, tree'

d. *wix, kí'wi', naikta:li:tanka:naná:n kimachíta'

wix kí'wi' na-ik-ta:-li:-tanka:-nan-ya:-na kin-machíta' you tree FUT-1SG.SUB-INST-fell-OBJ.SUPP-IMPF-2OBJ 1PO-machete *'I and another person will fell you using my machete, tree'

As show in (24), this verb can agree in person and number with the COMITATIVE (24a) or the INSTRUMENT (b); however, suppression of the INSTRUMENT and agreement with the THEME is not possible (c), nor is suppression of the COMITATIVE and agreement with the THEME (d). Thus, it seems that the object-suppressive voice does single out the basic object over applicative objects, making this seem like a potential diagnostic of a direct object.

2.3 Problems with the object-suppressive voice diagnostic

Although the object-suppressive diagnostic looks promising, it is not entirely satisfactory as a way of defining a direct object. The major difficulty is that in multi-object forms such as those in (24), there are still two objects left, both of which are potential controllers of agreement. Similarly, multi-object verbs formed on basic verbs of motion such as that shown in (10) — ta:pu:la'hmakamín 'X directs Y at Z using W aided by A', based on min 'come' — do not have object-suppressive forms at all, yet these can also have multiple objects which are eligible controllers of agreement. In either of these cases, taking the basic object as the first object would force us to say that these and multi-object constructions like that in bold in (25) do not actually have a direct object — that is, that they are intransitive.

(25) [tajatatlá:ya' he: natama'haxtó'ha mintzumaját] nakta:ka:xya:wa:nanín kimpuská:t

tajatatlá:-ya' he: na-tama'haxtó'h-a min-tzumaját be.sick-IMPF:2SG.SUBJ and FUT-marry-IMPF 2PO-girl

na-ik-ta:-ka:xya:wa:-nan-ni-n kin-puská:t

FUT-1SG.SUBJ-CMT-dress-OBJ.SUPP-BEN-2OBJ 1PO-wife

'you're sick and your daughter's getting married, I with my wife will provide [her] wedding clothes for you'

In the second clause in (25) (based on the object suppressive form of the verb *ta:ka:xya:wa:nú* 'dress X up with Y for Z'), there are two objects ('you', 'my wife'), either of which can control agreement and both of which show the full range of remaining object properties (Beck 2006). Calling a clause like this with so many syntactically active objects intransitive seems like a stretch, and would certainly require a serious rethinking of the notion of transitivity. An alternative approach which treats the object-suppressive as promoting an oblique object to direct object in place of the suppressed basic object runs into problems because it is not clear which of the objects is so promoted, given that the ability to control agreement fails to differentiate between them.

Rather than run the risk of adding so many complications to our analysis, it might be preferable to argue that the targeting of the basic object by the object-suppressive voice has less to do with its higher ranking as an object than it does with its "origin". Of all the objects in a multi-object construction, only the basic object is not licensed by an overt derivational affix and for any given root, stems that do not license a particular applicative object already exist. Suppression of the applicative object can thus be accomplished by "stripping" the licensing applicative (that is, by lexical choice) rather than by grammatical voice. According to this view, it is not the relative syntactic "privilege" (that is, its status as a direct object) of the basic object that causes it to be targeted by the object-suppressive voice so much as the fact that it is unnecessary for the object voice to target any other object — if this object is not wanted in the clause, a verb stem without the corresponding applicative is chosen. Thus, it is far from clear that the object-suppressive voice is a good indicator of which of the arguments of a verb in a multi-object construction is its direct object.

3 Conclusion

UNT builds complex predications from transitive and ditransitive roots, allowing up to five objects in a clause. According to most theories of grammar, each of these objects should be assigned a grammatical relation or position in the argument structure of that predication. Most theories require that the grammatical relation assigned to an argument be unique — as per, for example, the Stratal Uniqueness Law (Perlmutter & Postal 1983). The grammatical relations assigned to different types of objects should also be identifiable in terms of their morphosyntactic properties (Keenan 1976; Comrie 1982; Dryer 1983, 1986), and from a methodological point of view, in order to be considered distinct argument-types each object should show some sort of differentiated morphosyntactic behaviour.

A "classic" property for the differentiation of object types (particularly, direct vs. indirect object) is the potential to control agreement: in many languages, direct objects control agreement, indirect (and other) objects don't. However, in UNT multi-object constructions, *any* object can control agreement and, furthermore, UNT object-agreement

seems to be somewhat independent of argument-structure. The same effects of person, animacy, and communicative structure that control agreement also affect a number of other syntactic processes in the language such as control of object agreement in the indefinite voice, scope of floating quantifiers, EQUI NP-deletion, co-ordination, and gapping-collapsibility. This uniformity of behaviour casts doubt on the uniqueness of the grammatical relation assigned to basic and applicative objects.

Non-unique grammatical relations are recognized in some theories and have been argued for in some particular cases (e.g., Gary & Keenan 1977), but non-unique relations for most theorists are restricted to oblique objects and adjuncts. Adjuncts, however, are generally treated as being "outside" argument structure (i.e., they are not subcategorized for by the verb), while obliques are part of argument structure, but are considered "peripheral" and optional. Both obliques and adjuncts are syntactically "inert" and are generally excluded from control of agreement, voice operations, quantification, and other syntactic processes. The fact the UNT applicative objects are not syntactically peripheral, optional, or inert, and that they are clearly arguments subcategorized for by the derived verb stem, marks them as non-oblique objects.

Another common tool used by linguists to differentiate objects in this way is grammatical voice. In many languages, for instance, voices such as the passive target particular objects. Given that UNT has two grammatical voices, the indefinite and the object-suppressive, we might expect that these voices could give us clues as to the grammatical relations of the various objects in multi-object constructions. As it turns out, however, the indefinite voice does not target any particular object. The object-suppressive voice, on the other hand, targets only the basic object for suppression, suggesting that this basic object might be considered to be the direct object in a multi-object construction.

This idea is not as promising as it seems at first blush. Although the object-suppressive does single out the basic object in certain constructions, it is by no means clear that this makes it a direct object in the sense that this term is used to describe the grammatical relations of more familiar languages — as an object that is more "highly-ranked" or privileged in syntactic structure. It may simply be the case that the object-suppressive voice targets the basic object because it is only way to remove an "unwanted" object from the clause. And even if we accept the object-suppressive diagnostic, the larger problem does not go away: when one object is suppressed in a multi-object construction, this can leave up to four more non-oblique objects which seem not to be assignable unique grammatical relations. The fact that these applicative objects are not syntactically peripheral, optional, or inert, that they can control agreement and that they are clearly arguments subcategorized for by the derived verb stem, marks them as non-oblique objects. Their apparent non-uniqueness may thus force us to reconsider the universality of the requirement that (non-oblique) grammatical relations be unique.

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