PERSON-HIERARCHIES AND THE ORIGIN OF ASYMMETRIES IN TOTONAC VERBAL PARADIGMS*

David Beck
University of Alberta

ABSTRACT

Transitive verbs in Totonac-Tepehua languages show apparent irregularities in agreement in verb forms where both subject and object are speech act participants (that is, 1 ↔ 2 combinations) and one or both are plural. Data from Upper Necaxa Totonac indicate that source of this asymmetry is a 2 > 1 person-hierarchy which also has ramifications for patterns of language use, in particular the use of plural and reciprocal forms to avoid direct expressions of affectedness of the speaker by the action of the addressee. This pattern of social practice seems to support an analysis of the origin of these paradigmatic asymmetries in what Heath (1998) terms 'pragmatic skewing' whereby grammatical systems evolve to avoid violating pragmatic restrictions on discourse.

1. INTRODUCTION

Although it has long been recognized that discourse and sociolinguistic factors play an important role in describing and modeling the use of highly formal features of the grammar such as particular person or number inflections, relatively little work has been done to document the ways in which discourse and language use might actu-

---

ally shape these features. Indeed, certain levels of the grammar such as inflectional paradigms are often considered to be inaccessible to the effects of language use, at least insofar as their form is concerned. The motivation for this assumption is, of course, that inflectional paradigms are the most highly grammaticized portion of a language and the forms within these paradigms are synchronically invariant, leaving the speaker the choice of using them or not as deemed appropriate but not allowing the speaker the option of altering the form itself. From a diachronic perspective, however, such alternations are clearly a possibility and, in fact, can easily be shown to have taken place in a wide range of familiar and unfamiliar languages. This in turn implies that inflectional paradigms may be open to the influence of sociolinguistic and other factors and that these forces do, in fact, play a role in the shaping of the form as well as the use of inflectional morphology. This paper is a study of how sociolinguistic factors—more specifically, the linguistic practice of deference to addressees, as realized by a 2 > 1 person-hierarchy—has shaped the person-agreement system of a particular language, Upper Necaxa Totonac.

Upper Necaxa Totonac (UNT) is a member of the Totonac-Tepehua family, a linguistic isolate of East-Central Mexico, consisting of two branches—Tepehua, concentrated in a small region of Northeastern Puebla State and the adjacent areas of Hidalgo and Veracruz, and Totonac, spoken in the Sierra Norte of Puebla State and the Northern Lowlands of Veracruz. Although little in-depth reconstructive work has been done, the current picture of the family tree is shown in Figure 1 (based on Arana Osnaya 1953; García Rojas 1978; Reid 1991):

Figure 1: Totonac-Tepehua family tree
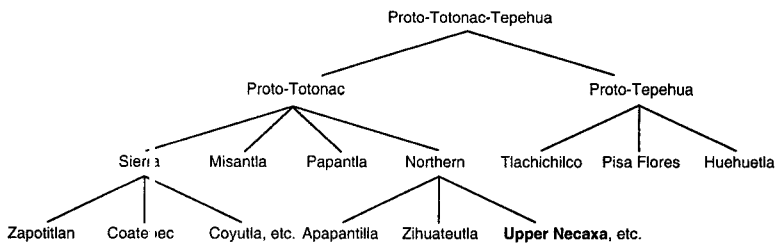
The Totonac branch consists of four divisions—Sierra, Northern, Papantla, and Misantla; differences among languages within these four divisions, particularly Sierra and Northern, may in some cases

be great enough to prevent naïve mutual intelligibility. Upper Necaxa (a.k.a. Patla-Chicontla) is a member of the Northern group spoken by about 3,000 people in four villages in the Necaxa River Valley in Puebla State; the dialects spoken in the two main villages, Patla and Chicontla, show some variation—where relevant, these are noted in the text.

While the languages of the Totonac-Tepehua family show a good deal of variation both in terms of phonology and lexicon, they are easily recognizable as a family and share a great deal of obviously cognate morphology and highly similar grammatical patterns. One area in which the languages of the family resemble each other very strongly is in the area of person-paradigms (Section 1). Transitive verbs in these languages agree for subject and direct object using sets of distinctive and transparent object- and subject-morphemes, and the forms of verbs with first-, second-, and third-person subjects and singular objects of all persons (as well as those with third-person plural objects) are regular and predictable, forming a highly symmetrical verbal paradigm. However, verbs with first- or second-person objects and second- or first-person subjects (that is, 1 ↔ 2 combinations), where one or both of these is plural, appear to be irregular or, more accurately, asymmetrical in that they seem to be formulated along different lines than the other elements of the transitive paradigm (Section 2). The usual explanation for such asymmetries lies in person-hierarchies, but in the case of Totonacan languages this seems problematical in that the two sets of unexpected verbforms, the 1 → 2 forms and the 2 → 1 forms, each seem to point to a different person-hierarchy, the former indicating a ranking of 2 > 1 and the latter 1 > 2. Evidence from discourse, however, reveals some interesting patterns of language-use that may help to resolve this apparent conflict: in speech and narrative, speakers consistently avoid direct expressions of affectedness of the speaker by the action of the addressee (Section 3), a practice that seems consistent with that of using relatively more opaque verbforms in the 2 → 1 portion of the paradigm. This process of sociolinguistic avoidance seems to be a very clear-cut example of the process Heath (1998) terms 'pragmatic skewing' whereby grammatical systems evolve to avoid violating pragmatic restrictions on polite or socially acceptable modes of discourse (Section 4), and serves as a nice example of how discourse and sociolinguistic patterns can influence the development of inflectional systems.

2. VERBAL PARADIGMS

The Totonacan verb is extremely complex both in the formation of the verb stem (Levy 1994) and in its inflectional paradigms, which mark tense, aspect, and agreement for subject and (in transitive verbs) direct object. In order to help the reader sort out some of the intricacies of the Upper Necaxa person-marking system, in the following three sections I will examine the subject-object paradigms in some detail, beginning with the intransitive subject paradigm (Section 1.1), which will help us to identify the forms and meanings of the subject series of verbal affixes and also serve to illustrate some of the important properties of UNT morphological and morphophonemic processes. Following this, Section 1.2 outlines the active-transitive person-paradigm, identifying the object-markers and detailing the asymmetries that will be the focus of the discussion in Sections 2 and 3. Finally, Section 1.3 sets out the indefinite agent and reciprocal paradigms with an eye to uncovering some further asymmetries in the verbal agreement patterns and highlighting the semantics of the reciprocal marker, something that will become crucial in the final stages of our investigation.

2.1   Intransitive paradigms

Before undertaking an examination of the complex transitive paradigms, a look at intransitive verb forms will be a great deal of help in sorting out some of the intricacies of the subject and aspect morphology and the accompanying morphophonemics. Subject markers are identical for transitive and intransitive verbs and can be readily identified in the intransitive perfective forms given in Table 1:[1]

---

[1]   The consonantal inventory of Upper Necaxa is p, t, k, ʔ, c, č, s, š, ł, x, s', š', ł', m, n, l, v, y; the vowels are i, e, u, a, and show distinctions for length and laryngealization (creaky voice). The transcription system used here is a standard Americanist IPA where /c/ is a voiceless alveolar affricate; the acute accent is used to indicate stress. The symbol √ designates a root.

Table 1: UNT intransitive perfective paradigms[2]

Class 1 perfective √taštú 'leave'	Class 2 perfective √paš 'bathe'	Class 3 perfective √la?awa:nán 'dream'
ik–taštú–ł 'I leave'	ik–páš–li̠ 'I bathe'	ik–la̠?awa:ná–ł 'I dream'
ik–taštú–x 'we_EXC leave'	ik–páš–wi̠ 'we_EXC bathe'	ik–la̠?awa:ná–x 'we_EXC dream'
taštú–x 'we_INC leave'	páš–wi̠ 'we_INC bathe'	la̠?awa:ná–x 'we_INC dream'
táštu̠ 'you leave'	páš–ti̠ 'you bathe'	la̠?awá:na̠ 'you dream'
taštu–tít 'you_PL leave'	páš–tít 'you_PL bathe'	la̠?awa:na–tít 'you_PL dream'
taštú–ł 'he/she/it leaves'	páš–li̠ 'he/she bathes'	la̠?awa:ná–ł 'he/she/it dreams'
ta–taštú–ł 'they leave'	ta–páš–li̠ 'they bathe'	ta–la̠?awa:ná–ł 'they dream'

As indicated in the table, Totonac verbs fall into declension classes based on the final segment of the root. Most Totonac languages (and other varieties of Northern Totonac) have three verb classes (those ending in a stressed vowel, those ending in a consonant, and those ending in a nasal); UNT, on the other hand, has for the most part conflated the consonant- and nasal-final classes, distinguishing only those verbs that end in a stressed vowel (Class 1) from those that end

---

2 Totonac distinguishes three tenses—past, present, and future—and four aspects—imperfective, perfective, perfect, and progressive. In total there are nine possible tense-aspect combinations (the future appears only in imperfective aspect) plus an additional paradigm formed from the perfective stem with the optative prefix *ka-*. The unmarked tense is the present and the unmarked aspect is the imperfective, although the zero-marking of the imperfective is the result of a widespread syncope process that eliminates the imperfective suffix *-ya:* except in the first- and second-person plural. In this article we will be concerned primarily with the perfective aspect, which (in the transitive paradigms) is morphologically the most transparent.

in a consonant (Class 2); the remaining Class 3 verbs are not predictably members of this class.[3] Because Class 2 verbs are more transparent in the transitive paradigms, these will be the focus of our discussion, although the person-marking patterns discussed here and below apply to all three verb classes.

From Table 1 we can deduce (provisionally) that the subject-markers are as follows:

(1)   ik- '1SG'   -x '1PL'
            -t/- ̯ '2SG'   -tit '2PL'
            Ø '3SG'   ta- '3PL'

These forms are largely transparent in the Class 1 paradigm, although the second-person singular is somewhat enigmatic in that it is marked in UNT Class 1 verbs ending in long vowels only by a leftward shift in stress. In the neighbouring Apapantilla, second-person singular is also marked by laryngealization of the final vowel if the last consonant in the root is not a stop or an affricate (Reid 1991: 20). Laryngealization also appears in conjunction with the second-person in other aspectual paradigms in UNT, Apapantilla, in the Sierra languages (Aschmann 1983), and in Tepehua, where second-persons (both singular and plural) frequently trigger regressive laryngealization of vowels in the verb stem (Watters 1994). All Totonacan-Tepehuan languages also show some suppletion and irregularity in the second person of a small set of common verbs, as well as in the progressive aspectual paradigm.

The identifying the perfective suffix in Table 1 also presents a few complications, as it interacts with the person-markers in instructive ways. Given that 3SG subjects are zeros, the basic form of the perfective marker is likely to be that which surfaces in 3SG.SUBJ forms. If we posit the basic form of the suffix to be the one that surfaces with Class 2 verbs, -li, we can then invoke syncope and word-final devoicing to derive the Class 1 and 3 form, -ł, as shown in (2):

(2)   -li → -l / V_#
            -l → -ł / _#

---

[3] An exception to this statement are intransitive verbs derived using the indefinite-object suffix, -nVn (where 'V' is a harmonic vowel taking the place specifications of the last vowel in the stem), which are always conjugated as Class 3 verbs.

Word-final syncope of vowels and continuants is a common morphonemic process in Totonac verbal paradigms. The second rule may seem a bit unusual, but Levy (1987: 103) also notes [-l] ~ [-ł] alternations in Papantla and final-devoicing of vowels (or the second mora of vowels) seems to be an important dialect feature of UNT. The final devoicing of a liquid may be an extension of this process.

Given the basic form -*lį* for the perfective marker, we can then posit the following interactions with the person-affixes to derive the Class 2 non-third-person singular perfective forms:

(3)   -x '1PL.SUBJ' – -lį 'PFV' → -wį / C_
        -t '2SG.SUBJ' – -lį 'PFV' → -tį / C_

Phonetically, the first-person plural suffix is realized as a voiceless [ų], although phonologically the suffix can be shown to be consonantal. The Class 2 allomorph of the second-person subject-marker seems to be /-t/ (and may form a part of the second-person plural -*tit*); it is possible that the Ø Class 1 allomorph is underlyingly /-t/ and undergoes syncope. The syncope of final stops (so far) hasn't turned up synchronically in other environments, although it has occurred historically in a number of forms and is responsible for some of the variation between the Patla and Chicontla varieties of UNT (e.g., Pt. *škiwák* 'army ant' vs. Ch. *škiwą́*).

Table 1 also illustrates the existence of the inclusive/exclusive distinction in the first-person plural, formed by the combination of *ik-* '1SG.SUBJ' with -*x*, what has been glossed up to now as the first-person plural subject-marker. Consider the forms of √*tuks* 'hit' given in (4):

(4)   a.   ik–túks–lį
               1SG.SUBJ–hit–PFV
               'I hit him'

        b.   túks–wį
               hit–1PL.SUBJ:PFV
               'we_INC hit him'

        c.   ik–túks–wį
               1SG.SUBJ–hit–1PL.SUBJ:PFV
               'we_EXC hit him'

(4a) shows the 1SG.SUBJ → 3SG.OBJ form. Because third-person objects are zero, it bears only the subject-prefix *ik-*. The next example, (4b), is the first-person plural inclusive, which has the subject-suffix -*x*. Finally, (4c) shows the first-person plural exclusive form, which

bears not only the suffix -*x* found in the first-person plural inclusive, but also the first-person singular prefix seen in (4a).[4]

Although -*x* has been glossed up to now as a first-person plural marker, such an interpretation seems in some ways at odds with its co-occurrence with *ik*- '1SG.SUBJ' in exclusive forms. However, if we re-cast the gloss of -*x* slightly to mean 'SPEECH-ACT PARTICIPANTS' this pattern begins to make some sense. First-person plural inclusive forms would thus denote an event in which all of the parties to the speech act participated in some action—that is, forms such as (4b) would mean literally 'the participants in this speech-act hit him'. The function of *ik*- in first-person exclusive forms could then be regarded as a form of further specification of the subject. Given that exclusivity implies a subdivision of the speech-act participants into two parties—the speakers (obligatorily plural) and the addressee(s)—(4c) can be interpreted as meaning 'of the speech act participants, the speaker's party hit him'. This is represented in (5):

(5)

ik- 'speaker(s)'

addressees

-x ' speech-act participants'
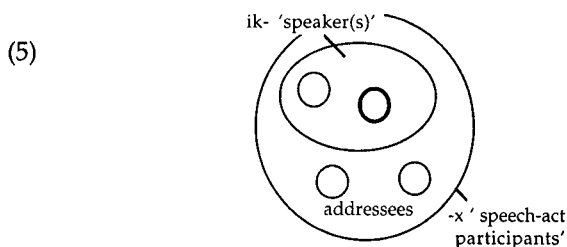
In this diagram, the large outer circle represents the set of participants designated by the subject suffix -*x* 'speech-act participants'. Within this set, a smaller subset of participants containing the speaker is singled out by the first-person singular subject prefix *ik*-. Because *ik*- is a subject-marker, the further specification is understood to apply to the subject of the clause; the plurality of the expression is derived from the subject suffix, 'SPEECH-ACT PARTICIPANTS' being necessarily plural. Looked at in this light, the use of the first-person sin-

---

4 Note that both Cree (Dahlstrom 1991) and Sayula Popoluca (Clark and Clark 1960) make use of the first-person singular subject marker in the formation of the first-person exclusive. In Cree, the inclusive is formed with the second-person singular subject prefix, whereas in Popoluca a different affix entirely comes into play.

gular subject-marker as a part of the first-person plural exclusive form is an example of the 'incremental' nature of UNT morphology, whereby each additional morpheme combined with a stem adds an additional layer of meaning—a sort of semantic agglutinativity. This notion will play an important role in our understanding the complex transitive paradigms to be considered in Section 1.2 below.

2.2   Transitive paradigms

As noted above, the Upper Necaxa transitive paradigm makes use of essentially the same subject- and aspect-markers as the intransitive paradigm and simply adds object-markers to the mix. The Class 2 perfective paradigm is shown in Table 2.

Aside from the highlighted areas of the paradigm, the person-morphology on the transitive verb is highly compositional and regular. Based on the ordinary-looking forms, the object-markers can be analyzed as (6):

(6)   kin- '1OBJ'   -n '2OBJ'[5]   Ø '3OBJ'

What is immediately striking about (6) is the absence of inherently plural object forms: plurality of objects is marked by a separate prefix, *ka:-*. Generally speaking, direct plural-marking of NPs is dispreferred, as shown in (7):

(7)   a.   ik–ka:–puca⁻yá–ux čičí
            1SUBJ–PL–search–IMPF–SAP dog
            'we_exc look for the dogs'

      b.   ik–ka:–puca–yá–ux čičí–n
            1SUBJ–PL–search–IMPF–SAP dog-pl
            'we_exc look for the dogs'

      c.   ik–puca–yá–ux čičí–n
            1SUBJ–search–IMPF–SAP dog–PL
            'we_exc look for the dogs'

---

5   The surface form for the second-person perfective object suffix, *-ni*, can be accounted for by a rule simplifying an /nl/ cluster to [n]—that is, -n '2OBJ' + -li 'PFV' → -ni.

Table 2: Upper Necaxa Class 2 transitive perfective paradigm (√tuks 'hit')

3PL.SUBJ	2PL.SUBJ	1PL.SUBJ (INC)	1PL.SUBJ (EXC)	3SG.SUBJ	2SG.SUBJ	1SG.SUBJ	
kin-ta-túks-li̱ they hit me	ki-la:-túks-w-i̱ you_PL hit me	—	—	kin-túks-li̱ 3SG hit me	kin-túks-t-i̱ you hit me	—	1SG.OBJ
ta-túks-n-i̱ they hit you	—	—	i-ka:-túks-n-i̱ we hit you	túks-n-i̱ 3SG hit you	—	ik-túks-n-i̱ I hit you	2SG.OBJ
ta-túks-li̱ they hit 3SG	tuks-tít you_pl hit 3SG	túks-w-i̱ we hit 3SG	ik-túks-w-i̱ we hit him/her	túks-li̱ 3SG hit 3SG	túks-t-i̱ you hit 3SG	ik-túks-li̱ I hit 3SG	3SG.OBJ
kin-ka:-ta-túks-n-i̱ they hit us	ki-la:-túks-w-i̱ you_pl hit us	—	—	kin-ka:-túks-n-i̱ 3SG hit us	ki-la:-túk-w-i̱ you hit us	—	1PG.OBJ
ka:-ta-túks-n-i̱ they hit you_pl	—	—	i-ka:-túks-n-i̱ we hit you_pl	ka:-túks-n-i̱ 3SG hit you_pl	—	i-ka:-túks-n-i̱ I hit you_pl	2PL.OBJ
ta-túks-li̱ they hit them	ka:-tuks-tít you_pl hit them	ka:-túks-w-i̱ we hit them	i-ka:-túks-w-i̱ we hit them	ka:-túks-li̱ 3SG hit them	ka:-túks-t-i̱ you hit them	i-ka:-túks-li̱ I hit them	3PL.OBJ

As shown in (8a), object-plurality is most commonly marked on the verb alone, although it can optionally be marked on both verb and noun (b). _kaː-_, however, is omissible with overtly pluralized objects, as in (8c). The (8b) and (c) forms are relatively rare. When both subject and object are plural and third-person, _kaː-_ and _ta-_ '3PL.SUBJ' are mutually exclusive:

(8) a.   šla–kán ta–pucá–Ø čičí(–n)
           3SG–PL 3PL.SUBJ–search–IMPF dog(–PL)
           'they look for the dogs'

     b.   šla–kán kaː–pucá–Ø čičí(–n)
           3SG–PL PL–search–IMPF dog(PL)
           'they look for the dogs'

     c.   *šla–kán kaː–ta–pucá–Ø čičí(–n)
           3SG–PL PL–3PL.SUBJ–search–IMPF dog(PL)

When the object is first- or second-person, however, this restriction does not hold, which gives us the analytical and regular third-person subject series in (9):

(9)   túksni̱   kaːtúksni̱   kinkaːtúksni̱
       'he hit you'   'he hit you_PL'   'he hit us'

       tatúksni̱   kaːtatúksni̱   kinkaːtatúksni̱
       'they hit you'   'they hit you_PL'   'they hit us'

Here, the plurality of second-person objects is marked by _kaː-_ plus _-n_ '2OBJ', and the plurality of first-person objects is marked by _kaː-_ plus a combination of _kin-_ '1OBJ' and _-n_ '2OBJ'.[6] This is interesting in that it is an iconic recognition of the fact that 'we' = 'you' + 'me' and illustrates once again the additive nature of Totonac morphological processes: as meanings grow more complex, additional morphemes are used to add successive layers of meaning.

In spite of the fact that most of the forms shown in Table 2 are transparent combinations of the person-marking affixes identified in (1) and (6), several members of the paradigm are unexpected. The first of these, marked in Table 2 by single-bordered boxes, occurs in sentences in which the subject is first-person, the object is second-

---

6 Note that the exclusive/inclusive distinction is lost in the object paradigm. The combination of the pluralizer with the first- and second-person markers is reminiscent of Dakota, which combines the dual marker with a pluralizer to get first-person plurals (Boas and Deloria 1941).

person, and one or both of these is plural. Here, the paradigm contains only a single form (that expected for 1SG acting on (→) 2PL) to represent all three possible combinations of event-participants (1SG → 2PL, 1PL → 2PL, 1PL → 2SG). In much the same vein, the second set of novel forms (marked by double-bordered boxes) are those in which the object is first-person, the subject is second-person, and one or both of these is plural. Here again a single form is used for all three possible scenarios (2SG → 1PL, 2PL → 1PL, 2PL → 1SG), although in this case the verbform is not the expected form for any of the subject-object combinations it represents, but instead makes use of the reciprocal marker, *la:*- and the SAP suffix, -*x*. As pointed out in Beck (1999), these asymmetries in the verbal paradigm look like the results of some kind of person-hierarchy, although what that hierarchy might be is not immediately apparent—indeed, the two sets of asymmetric forms seem to indicate conflicting hierarchies in that the 1 → 2 forms require the number-marking of the second person to be greater than or equal to that of the first-person (a 2 > 1 hierarchy), whereas the 2 → 1 forms seem to rule out the case where a second-person subject takes a first-person object (1 > 2). This seems like quite a remarkable situation, but before considering it in detail in Section 2, let's turn our attention to two additional aspects of UNT verbal morphology, the indefinite agent and reciprocal paradigms, which will be of some importance in the discussion that follows.

2.3   Indefinite agent and reciprocal paradigms

In addition to the intransitive and transitive-active paradigms shown in Tables 1 and 2, verbs in Totonac have two additional person-paradigms, the indefinite agent paradigm and the reciprocal. The former, based on the indefinite-agent suffix -*kan*, applies to both intransitive and transitive verbs; when applied to transitive stems, -*kan* forms the translation equivalents of passives and reflexives in Spanish and English, as shown in Table 3:

Table 3: The UNT indefinite-agent paradigm

kin–tuks–kán–Ø	tuks–kán–**a̱**	**Ø**–tuks–kán–Ø
1OBJ–hit–IDF–IMPF	hit–IDF–**2SG.SUBJ**:IMPF	**3OBJ**–hit–IDF–IMPF
'I was hit'	'you were hit'	's/he was hit'
'I hit myself'	'you hit yourself'	's/he hit her/himself'
		Ø–ka̱:–tuks–kán–Ø
		3OBJ–PL.OBJ–hit–IDF–
—	—	IMPF
		'they were hit'
		'they hit themselves'

One interesting feature of the paradigm shown here is that 1PL and 2PL patients are excluded altogether from IDF-clauses. This appears to be true of another variety of Northern Totonac (Apapantilla—Reid 1991), though 1PL and 2PL forms are found in Sierra (McQuown 1990), Papantla (P. Levy, p.c.) and Misantla (1999). More to the point, however, is the fact that the morphological treatment of second-persons is distinct from that of first- and third-persons: while first- and third-person patients make use of the object-markers identified in Section 1.2, second-person patients are treated morphologically as subjects. This is illustrated quite strikingly in the serial agreement pattern seen in (10):

(10) a.   a̱n–kán–Ø kim–puca–kán–Ø
             go–IDF–IMPF 1OBJ–look.for–IDF–IMPF
             'they_IDF go to look for me'

      b.   a̱n–kán–Ø Ø–puca–kán–Ø
             go–IDF–IMPF 3OBJ–look.for–IDF–IMPF
             'they_IDF go to look for him/her'

      c.   pina̱–kán–a̱ puca–kán–a̱
             2SG.SUBJ:go–IDF–2SG.SUBJ:IMPF look.for–IDF–2SG.SUBJ:IMPF
             'they_IDF go to look for you'

In (10a) and (b) the first (intransitive) verb in the series, *a̱n* 'go', is marked only for the indefinite agent. In (10c), however, the intransitive *a̱n* 'go' takes its second-person suppletive form *pína̱*, agreeing with the patient/subject of the second verb, *pucá* 'look for', rather than with its own semantic actant, the indefinite agent. Although marking of second-persons in IDF-clauses as subjects is also found in Papantla Totonac (P. Levy, p.c.) and Apapantilla (Reid 1991), there is some variation on this point within the rest of the family. In Sierra (McQuown 1990), all patients are treated as subjects (effectively making -*kan* a passive, as it is in Tepehua—Watters 1988), whereas in

Misantla (MacKay 1999) subject-markers are used only when the intended reading is the reflexive one.

The final set of inflections to be considered here is the reciprocal paradigm, which makes use of plural subject or indefinite agent person-markers and the reciprocal prefix *la:-*, as in (11):

(11) a.   la:–túks–w–i̱
           RCP–hit–SAP–PFV
           'we$_{IN}$ hit each other'

      b.   ik–la:–túks–w–i̱
           1SUB–RCP–hit–SAP–PFV
           'we$_{EX}$ hit each other'

      c.   la:–túks–tít
           RCP–hit–2PL.SUBJ
           'you guys hit each other'

      d.   ta–la:–túks–li̱
           3PL.SUBJ–RCP–hit–PFV
           'they hit each other'

      e.   la:–túks–ka̱
           RCP–hit–AS:PFV
           'they$_{IF}$ hit each other'

In these examples, the semantic endpoint of the event is encoded by the reciprocal marker, *la:-*, which replaces the ordinary object suffixes and indicates that the (necessarily plural) syntactic subject of the clause corresponds both to the agent and the patient of the event. In (11a), for example, *la:-* combines with the SAP subject-marker *-x* to indicate that the speech act participants function simultaneously both as agents and patients—that is, each acts on the other. When the subject of the sentence is the first-person inclusive, *la:-* indicates the division of the speech act participants into (minimally) two groups, each of which acts on the other, as illustrated in (12):

(12)
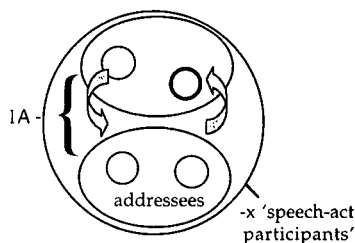
Again, the large circle here denotes the speech-act participants, marked as the subject of the clause by -*x*. The smaller subdivisions within this set indicate the partition of the subject into groups by *la:-*, and the arrows indicate the direction of the action—in this case, from each of the groups to the other. The individual speaker (small dark circle) is contained within one of the two subdivisions, the other of which containers the addressee(s). In the case of first-person exclusive reciprocals such as (11b), on the other hand, the addressee is excluded from the reciprocal action, as indicated by the use of the first-person subject prefix, *ik-*, which serves to single out only the speakers as being involved in the event.

Like the majority of UNT verbal inflections, the true reciprocal forms are morphologically transparent and semantically incremental in nature, as are the indefinite agent forms, although in the latter case things are complicated by an apparent person-hierarchy prohibiting a verbform in which an indefinite subject takes a second-person object (*IDF → 2). This is reminiscent of the person-hierarchies favouring second-persons found in divers languages such as Cree (Dahlstrom 1991) and Bella Coola (Nater 1994), although unlike Cree and other Algonkian languages (and like Bella Coola) the person-hierarchies in UNT seem to be historical remnants of a system which is presently seen only the asymmetries in verbal paradigms noted here, and in certain sociolinguistic practices of avoidance. We will turn our attention to these topics in detail in Sections 2 and 3 below.

3. ASYMMETRIES IN UNT VERBAL PARADIGMS

As noted in the previous section, Upper Necaxa morphology is on the whole highly regular and agglutinative, showing only limited and fairly standard types of morphophonemic alternations. Totonacan morphology is also incremental in the sense that it works on the principle of morphemes adding successive layers of meaning to the stems to which they attach (as opposed to combining to form meanings which are not strictly the sum of their semantic parts). There are, however, exceptions to these principles, as can be seen by looking at Table 2. There are two major asymmetries found in this paradigm, one in those forms with a first-person subject and a second-person object (where one or both is plural) and the other with a second-person subject and a first-person object (again, where one or

both is plural). Each of these cases will be examined in more detail in Section 2.1 and 2.2, respectively.

3.1 First-person subjects with second-person objects—*ika:túksni̱*

The first set of asymmetries in the transitive paradigm that need to be dealt with are those that arise in sentences with a first-person subject and a second-person object in which one or both of the subject and the object is plural (outlined in single-bordered boxes in Table 2). As noted in Section 1.2, in such cases a single form, that expected for a 1SG subject acting on a 2PL object, is used for all three possible combinations of 1SUBJ, 2OBJ, and PLURAL, as shown in (13):

(13) a.   i-ka:-túks-n-i̱
        1SG.SUBJ–PL.OBJ–hit–2OBJ–PFV
    (i)   'I hit you guys'
    (ii)   'we$_{EXC}$ hit you'
    (iii) 'we$_{EXC}$ hit you guys'

One possible analysis of this phenomenon, advanced in Beck (1999), is that the single form arises as a result of morphophonemic processes of syncope, a common feature of Totonacan verbal morphology. Examination of the progressive forms of transitive verbs, however, reveals that the subject in all readings of (13) and like sentences is, in fact, morphologically singular regardless of whether the subject is semantically singular or plural. This is shown in (14):

(14) a.   ik–tuks–má:ł
        1SUBJ–hit–PRG
        'I am hitting him/her'

    b.   ik–tuks–má:–n
        1SUBJ–hit–PRG–2OBJ
        'I am hitting you$_{SG}$'

    c.   ik–tuks–ma̱:–**ná:**–ux
        1SUBJ–hit–PRG–**PL.PRG**–1PL.SUBJ
        'we$_{EXC}$ are hitting him/her'

    d.   ik–ka̱:–tuks–má:–n
        1SUBJ–PL.OBJ–hit–PRG–2OBJ
        'I am hitting you guys'
        'we are hitting you guys'
        'we are hitting you'

    e.   *ik–ka̱:–túks–ma̱:–**ná:**–n
        1SUBJ–PL.OBJ–hit–PRG–**PL.PRG**–2OBJ

The Totonac progressive marker, shown in (14a) and (b), is based historically on the stative verb *maːɬ* 'lie' which, like other stative verbs, shows number agreement over and above that provided by the person-marker, adding the plural-morpheme *-naːn-* to its stem. Thus, progressive forms with plural subjects (14c) take *-naːn-* to mark the plurality of the subject (*cf. maːɬ* 'it lies' > *tamaːnáːɬ* 'they lie').[7] As (14d) and (e) demonstrate, however, transitive verbs in the progressive aspect with 1SUBJ and 2OBJ, do not take the *-naːn-* number-marker even when the subject is notionally plural, ruling out morphophonemic syncope as the source of the three different readings of (13).

Another difficulty with the morphophonemic analysis of the form in (13) is that it fails to account for the presence of *kaː-* 'PLURAL OBJECT' when the sentence has reading (13-iii), that of 1PL.SUBJ → 2SG.OBJ. As it turns out, this is not the only circumstance in which *kaː-* signals the plurality of something other than a direct object. Consider the following examples, which show the use of *kaː-* with a ditransitive stem formed with the applicative suffix, *-niː*:

(15) a.   kaː–maː–puːpic–iː–ni–máːɬ lakstín kóko
             PL.OBJ–CS–split–CS–APPL–PRG children coconut
             'he is breaking open the coconuts for the children'
             'he is breaking open the coconut for the children'

      b.   kaː–maː–puːpic–iː–ni–máːɬ lakstín a̰ʔ–túː kóko
             PL.OBJ–CS–split–CS–APPL–PRG children CLS–two coconut
             'he is breaking open two coconuts for the children'

      c.   kaː–maː–puːpic–iː–ni–máːɬ lakstín a̰ʔ–tín kóko
             PL.OBJ–CS–split–CS–APPL–PRG children CLS–one coconut
             'he is breaking open one coconut for the children'

      d.   kaː–maː–puːpic–iː–ni–máːɬ čaː–tin ʔawáča̰ kóko
             PL.OBJ–CS–split–CS–APPL–PRG CLS–one boy coconut
             'he is breaking open the coconuts for the boy'

The direct object of an applicative verb in UNT is the actant licensed by the applicative marker (usually a semantic benefactor or recipient) and the plurality of this actant generally triggers number agreement on the verb, as shown in (15a), which has two possible readings, one in which the coconut (an oblique or indirect object) is

---

7   The progressive morpheme has diverged somewhat from the plural form of the stative verb in that it has preserved the historical laryngealization of /-maː-/ in /-ma̰ːːnaɬ/.

singular and the other in which it is plural. The situation can be dis-
ambiguated by quantifying (or pluralizing, though this was difficult
to elicit) the oblique object, as in (15b) and (c). In (15d), on the other
hand, we find that a sentence with a notionally singular direct object
and a plural oblique object still bears the plural-marker *ka:-*, indicat-
ing that this morpheme is unselective (in the sense of Partee *et al.*
1987, Bach *et al.* 1995) for which of the two objects of a ditransitive
verb it quantifies. Note that this is only case when both of the actants
are third persons; when the direct object of the verb is first- or sec-
ond-person, *ka.-* may only signal the plurality of that actant, as in
(16):

(16)   a.   kin- ka:–ʔała:–wa–ni–ni–yá–n ki–sandiya–kán
            1OBJ- PL.OBJ–steal–eat–INDO–APPL–IMPF–2OBJ 1PO–watermelon–PL:PO
            'he steals from us and eats the edible parts of our watermelons'
            'he steals from us and eats the edible parts of our watermelon'

       b.   *kin -ka:–ʔała:–wa–ni–ní–Ø ki–sandíya
            1OBJ- PL.OBJ–steal–eat–INDO–APPL–IMPF 1PO–watermelon
            *'he steals from me and eats the edible parts of my watermelons'

       c.   *ka:–ʔała:–wa–ni–ní–n mi–sandíya
            PL.OBJ–steal–eat–INDO–APPL–2OBJ 2PO–watermelon
            *'he steals from you$_{SG}$ and eats the edible parts of your$_{SG}$ watermel-
            ons'

       d.   kin– ʔała:–wa–ni–ní–Ø ki–sandíya
            1OBJ- steal–eat–INDO–APPL–IMPF 1PO–watermelon
            'he steals from me and eats the edible parts of my watermelons'
            'he steals from me and eats the edible parts of my watermelon'

       e.   ʔała –wa–ni–ní–n mi–sandíya
            steal -eat–INDO–APPL–2OBJ 2PO–watermelon
            'he steals from you$_{SG}$ and eats the edible parts of your$_{SG}$ watermel-
            ons'
            'he steals from you$_{SG}$ and eats the edible parts of your$_{SG}$ watermelon'

Because *ka:-* marks only the plurality of the direct object when the
direct object is first- or second-person, (16a) has either of the two pos-
sible readings in which the direct object is plural—that is, it does not
mark the number of the oblique object. Sentence (16b), in which the
direct object is singular ('I' rather than 'we', as indicated by the ab-
sence of the 2OBJ-suffix) but in which the plural object-marker is pre-
sent, is rejected as explicitly ungrammatical. Similarly, (16c) is un-
grammatical with the reading of a plural oblique and a second-
person singular direct object, though the same verbform was ac-
cepted with *misandiyakán* 'your$_{PL}$ watermelon(s)', giving the direct

object a second-person plural reading. The correct forms for sentences (16b) and (c), without *ka:-*, appear in (d) and (e), respectively; like (a), these are ambiguous with respect to number of the oblique object.

While this sort of ambiguity or unselectivity of plural markers seems strange from an Indo-European perspective, it is not terribly unusual cross-linguistically: it is attested in a number of languages including Dakota/Lakhota (Boas and Deloria 1941; van Valin 1977) and Mixe (Clark and Clark 1960; R. Zavala, p.c.), as well as in Georgian and the Paleo-Siberian language Alutor, as shown in these examples:

(17) <u>Georgian</u>

      a.   g–cem–t
             2OBJ–beat–PL
             'I beat you guys'
             'we beat you'
             'we beat you guys'
             'he beat you guys'
             (Mel'čuk 1986: 431)

     <u>Alutor</u>

      b.   n–jəlqat–tkə–na–wwi
             3SG.SUBJ–sleep–PRS–3SG.SUBJ–PL
             'they are asleep'

      c.   Ø–tawəjatə–tkə–nina–wwi
             3SG.SUBJ–feed–PRS–3OBJ–PL
             'he feeds them'
             (Mel'čuk 1986: 426 – 27)

In Georgian, the pluralizer's scope seems simply to be vague, while in Alutor the scope of the pluralizer *-wwi* depends on the verb's transitivity, applying to the subject of intransitives and the object of transitives. UNT seems more like Georgian in this respect, although it resembles Alutor in not having plural object morphemes (Georgian has them in other persons). UNT differs from Georgian, however, in that *ka:-* seems only to be unselective in a limited number of contexts such as applicatives with two third-person objects and in 1PL.SUBJ–2OBJ forms. This selective unselectivity seems like yet another vestige of a person-hierarchy that, on the one hand, prevents oblique third-persons from 'usurping' the direct-object quantifying role of *ka:-* (a 1PL, 2PL > 3PL hierarchy), and, on the other hand, rules out forms in which the morphological number-marking of a first-

person subject is greater than that of a second-person object (a 2 > 1 hierarchy). The net result of this second constraint seems to be the use of what is normally the object-pluralizer to mark the plurality of the syntactic subject.[8] This also seems to be consistent with the restrictions observed above on the indefinite-agent marker -*kan*, which does not appear with first- or second-person plural patients (1PL, 2PL > IDF), and which marks second-person patients as subjects and first- and third-person patients as objects (2 > 1, 3, IDF). It does, however, seem to be at odds with the person-hierarchy indicated by the second major asymmetry observed in the transitive-active paradigm, those forms with second-person subjects and first-person objects, which appear to give precedence to 1 over 2. This issue will be dealt with in Section 2.2.

3.2   Second-person subjects with first-person objects—*kila:túkswi̱*

Like the sentences discussed in Section 2.1, sentences in which the subject is second-person, the object is first-person, and one or both is plural (outlined in double-bordered boxes in Table 2) make use of a single verbform which is three-way ambiguous, as shown in (18):

(18)   ki–la:–túks–w–i̱
            1OBJ-RCP–hit–SAP–PFV
      (i)   'you hit us'
      (ii)   'you guys hit us'
      (iii)   'you guys hit me'

Unlike the 1SUBJ → 2OBJ form, the verbform in (18) is not the expected form for any of the readings it has—instead of being marked morphologically for a second-person subject, it bears the SAP subject-suffix -*x* and the prefix *la:-* found in the reciprocal forms given in (11) above. Unlike true reciprocals, however, (18) also makes use of the first-person object prefix, *kin-*. While the presence of this latter prefix is what we would expect semantically, given the 1OBJ reading of the verbform, its co-occurrence with the reciprocal *la:-* is a bit puzzling, especially given the usual function of *la:-* to indicate that the syntactic

---

8   Judith Aissen (p.c.) has suggested to me that this data would be highly amenable to a constraint-based Optimality Theory analysis, an observation with which I completely concur. Given the constraints of space and time, however, I'll leave problem of modeling these data formally aside in the interest of pursuing the larger exposition.

subject of the utterance (here marked with -x 'SAP') is at once an agent and patient in the event, something completely at odds with the intended reading in which the speaker(s) (one division of the speech act participants) is(are) exclusively patient(s).

On further reflection, however, it seems that the 1OBJ prefix, *kin-*, might be treated in the same way as the 1SG.SUBJ prefix, *ik-*, is treated in first-plural exclusive forms—that is, as a further specification of one of the verbal actants, its role being purely additive. Under this interpretation, the role of *la:-* is, as in the diagram in (12), to divide the speech act participants (-x) into (minimally) two groups, one the speaker's group and the other the addressee's. The addition of the 1OBJ prefix *kin-*, then, serves to specify the syntactic object/semantic patient as the subdivision of speech act participants pertaining to the speaker, in precisely the same way as the 1SUBJ prefix *ik-* is used to single out as a subject/agent the division of the speech act pertaining to the speaker in 1PL.EXC forms (cf. the role of *ik-* '1SUBJ' in the first-person plural exclusive form illustrated in (5) above). This gives us the configuration in (19), which can be interpreted as 'the addressee's division of the speech act acts upon the speaker's division':

(19)
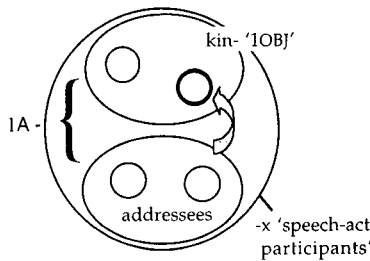
As in the previous diagrams, (19) represents the successive subdivision of the subject, the set of speech-act participants, into progressively finer groups—first by the reciprocal-marker, which establishes that the speech-act participants have been split into separate groups of actors, then by the 1OBJ prefix, which tells us that one of these groups, that containing the speaker, is the semantic patient of the event. The ambiguity which results in multiple readings of this verb form—*kila:túkswi*—stems from the fact that there are multiple possible combinations of first- and second-persons which correspond to the compositional meaning of these affixes, depending on the number of participants that fall into each of the agent-patient subdivi-

sions. The gloss in (18-i) corresponds to the situation in which the speaker's group consists of the speaker alone, while that in (18-ii) corresponds to a situation in which there is more than one participant in each of the speaker's and addressee's parties. (18-iii) designates a situation in which there is only a single participant in the addressee's group and there are multiple members of the speaker's group. In all of these cases there is some plural actant—either subject or object or both—but which of the two is plural is underspecified.

An interesting corollary of our analysis of the *la:- -wi̱* form in (18) is that it seems to open the door rather naturally to another possible set of inflections—those in which a subject-marker is used to specify the *agent's* group rather than the patient's. This, in fact, seems to be the person-marking pattern shown in Tepehua, which not only has the form analogous to (18), shown in (20a), but also uses the 1SG prefix *k-* in combination with the reciprocal marker to express 1 → 2 forms (where one or both are plural), as in (20b):

(20)   Tepehua

    a.   ki–la:–ʔaqtayhu:–ya:-w
            1OBJ -RCP–help–IMPF–SAP
            'you help us'
            'you guys help us'
            'you guys help me'

    b.   k–la:–ʔaqtayhu:–ya:-w
            1SG. SUBJ–RCP–help–IMPF–SAP
            'I help you guys'
            'we help you guys'
            'we help you'
            'we$_e$ help each other'
            (Watters 1988: 292)

The form in (20a) is parallel to the form in (18) and open to the same set of interpretations. (20b), on the other hand, replaces the first-person object prefix in (20a) with the first-person subject prefix. This form not only gets the three readings we find for the Totonac form in (13), but also the true reciprocal reading; *cf.* the Totonac first-person exclusive reciprocal form in (11b). Clearly the first three glosses stem from exactly same type of compositional process we saw illustrated in (19), the use of the subject-suffix specifying the speaker's group as the agent, rather than the patient of the action. The fourth reading seems somewhat at odds with this, although it does not violate the most literal interpretation of this combination of affixes—the speaker's group is still an agent in the event. It is just that

it is also a patient. The Tepehua reciprocal marker, then, is not a polysemous morpheme but rather a highly unselective one, with a remarkable vagueness of scope. Its semantics are consistent and its uses, though unusual, are systematic and completely in line with the overall morphological system of Totonac-Tepehua languages.

The analysis of these data presented here has the advantage of revealing the UNT 2 → 1 forms to be consistent with the morphological and semantic strategies employed in other parts of the grammar; the major difficulty with it, however, is that even though the verbform in (18) is semantically transparent (or at least not totally opaque), it is less so than the expected forms for any of its readings—that is, *kinka:túksa 'you hit us', *kintukstít 'you guys hit me', *kinka:tukstít 'you guys hit us'. These forms are not ruled out by any morphophonemic processes that I am aware of, but they are consistently and unequivocally rejected by consultants as ungrammatical. This seems to indicate, as in the case of the asymmetries examined in the sections above, a hierarchy of person which rules out second-person subjects acting on first-person objects (when one or both is plural), although in this case the hierarchy seems not to favour second-persons over first persons as it does in the IDF paradigm and with 1 → 2 forms, but instead seems to rank first-persons higher than second-persons. This is a problematic result in that, if it turns out to be correct, UNT would represent the only case I am aware of in the literature of a language that makes use of two different, diametrically opposed hierarchies in their grammar, let alone within the same grammatical paradigm. Fortunately (or not, depending on one's taste for the exotic), closer examination of some additional sociolinguistic facts allows us to reconcile these apparently contradictory person-hierarchies as artefacts of a single system which consistently favours second-person over first-person. This idea will be explored in more detail in the section that follows.

4. PERSON-HIERARCHIES AND SOCIO-LINGUISTIC STRATEGIES OF AVOIDANCE

Verbal paradigms, as part of the inflectional morphology of the language, are generally considered to be the most highly grammaticized and, hence, most formal parts of the grammar—and, as such, are often considered the most insulated from the effects of discourse, pragmatics, and sociolinguistic practice, at least in terms of their in-

ternal make-up (as opposed to their patterns of use). Still, morphol-
ogy is widely accepted as having its origins in freer, more pragmati-
cally-conditioned elements, and it does not seem unreasonable that
aspects of language-use or linguistic practice might have had some
influence on the development of morphological patterns. By the same
token, it does not seem unreasonable that the same aspects of lan-
guage use that influenced the grammaticization of morphological
patterns might be present in other parts of the grammar as well, or
that by looking at discourse we might find some clue as to the forces
at work in the shaping of grammatical paradigms. In the present case,
a close look at some of the unusual properties of imperatives and re-
ciprocals in narrative and discourse furnish important clues to the
origins of the asymmetries in UNT subject-object inflection, and point
to a solution to the dilemma faced at the end of the previous section,
where we saw evidence pointing to not one but two contradictory
person-hierarchies at work in Totonacan grammar.

Imperatives in UNT are taken from the second-person series of the
optative paradigm, formed by adding the optative prefix *ka-* to the
perfective form of the verb stem. The imperative forms of the transi-
tive verb *lakam ısú:* 'kiss (amorously)' are given in Table 4:

Table 4: UNT Class 1 second-person optative (imperative)
transitive paradigm (laka- 'face' √musú: 'kiss')

	2SG.SUBJ	2PL.SUBJ
1SG.OBJ	ka–ki–lakamúsu: 'kiss me!'	ka–ki–la:–lakamusú:–x '(you guys) kiss me!'
2SG.OBJ	ka–lakamusú:–ka̜ 'kiss yourself!'	—
3SG.OBJ	ka–lakamúsu: 'kiss him/her!'	ka–lakamusu:–tít '(you guys) kiss him/her!'
1PL.OBJ	ka–ki–la:–lakamusú:–x 'kiss us!'	ka–ki–la:–lakamusú:–x '(you guys)kiss us!'
2PL.OBJ	—	—
3PL.OBJ	ka–ka:–lakamúsu: 'kiss them!'	ka–ka:–lakamusu:–tít '(you guys) kiss them!'

In addition to these forms, there is also an imperative-reciprocal, *kala:musu:tít* 'kiss each other!'. Optative verbforms, including those with potentially imperative readings, are used in a wide variety of contexts, including expressions of future desires or expectations, hortatives—e.g., *kala̜ʔcináux* (ka + la̜ʔcin 'see' + ya: 'IMPERFECTIVE' + x 'SAP') 'let's see!'—and, in conjunction with the counterfactual prefix *ti-*, in certain types of contrary-to-fact and potential statements.

As we would expect from the transitive paradigm in Table 2 (on which the paradigm in Table 4 is based), all three combinations of second-person subject with first-person object in which one or both is plural (enclosed in double-bordered boxes) make use of the reciprocal prefix *la:-* and the SAP suffix *-x*. What is especially interesting about this form, however, is that it is extremely difficult to elicit in imperative contexts. Unless consultants are offered a specifically non-imperative optative frame (e.g., *iklakaskín kakila:lakamusú:x* 'I want you to kiss us') they very consistently give either a true reciprocal-optative form (*kala:lakamusú:x* 'let's kiss each other') or a simple active-transitive form (*kila:lakamusú:x* 'you$_{SG/PL}$ kiss me/us', although when the forms in Table 4 are suggested they are readily accepted as

grammatical. By the same token, 2 → 1 imperative forms are unattested in the seventeen traditional narratives (representing about 3 hours of recorded speech) I have analyzed to date, despite the existence of appropriate contexts. As in elicitation, speakers consistently make use of either true reciprocal-optative forms or simple active-transitive verbforms such as in (21):

(21)   ki–la:–ki:–tasati:–ní–uj
         1OBJ–RCP–RT–call–APPL–1PL.SUBJ:PFV
         'go call him for me'
         (lit. 'you$_{SG/PL}$ go call him for me/us')   (Manuel Romero, *Clever Pedro*)

In stories, the reluctance to use optative-imperative forms with first-person objects even extends to circumstances in which both the subject and the object are singular, as in (22):

(22)   pus ka–la:–škút–w–i na–k–to?o?é:–Ø
         INTJ OPT–RCP–UNTIE–1PL.SUBJ–PF FUT–1SG.SUBJ–pursue–IMPF
         'so untie me then and I'll go after him'
         (lit. 'so let's untie each other and I'll go after him')
         (Manuel Romero, *Tiger and Rabbit*)

Although the utterance in (22) is addressed to a single individual, the speaker uses a true reciprocal like that shown in (11) combined with the optative prefix, creating an hortative "let's ..." type of expression and avoiding a direct command. In everyday speech, the regular 2SG → 1SG form—*kakiškúti* 'untie me!'—is used quite freely, and in both narrative and everyday speech, imperatives with non-first-person objects are entirely normal.

Further examination of the distribution of reciprocals in text also reveals that speakers make use of reciprocal forms for expressions of obligation of second-person to first-person. This is seen in (23), taken from a story in which a man loses his wife to the Devil in a card game. When the man expresses regret at having made the bet, the Devil asks him why he did so, using the reciprocal form of the verbs *wan* 'say' and *maškí:* 'give':

(23)   či: lí wa la:–wa–ni–ni:tá–ux
         how intent RCP–say–APPL–PF–1PL.SUBJ

         na–la:–maški:–yá:–ux?
         FUT–RCP–give–IMPF–1PL.SUBJ
         'so why did you say you would give her to me?'
         (lit. 'so why did we say to each other we'd give her to each other?')
         (Manuel Romero, *The Card-player*)

The use of reciprocals in such situations seems to be quite standard in everyday, spoken UNT as well. Even in elicitation, consultants asked for the 2SG → 1SG form of verbs such as *maːlaknuːní* 'promise' often give them as reciprocals—*laːmaːlaknuːníx tumíːn* 'we promised each other money'—rather than as (the grammatical) *kimaːlaknúːni tumíːn* 'you promised me money'.

In addition to avoiding direct expressions of obligation, the reciprocal is often pressed into service to avoid expression of affectedness of the speaker by the addressee's action, particularly where the effect was adverse. In a subsequent line from the same story cited in (23), for instance, the Devil asks the man if he will renege on their deal, and the man backs down:

(24)   xaː–cá aliːstáːn laː–sʼawi–ux–cá, mat wan
          NEG–now after RCP–defeat–1PL.SUBJ:PFV–now QTV say
          '"not now, after you've beaten me," he says'
          (lit. 'not now, after we've defeated each other')
          (Manuel Romero, *The Card-player*)

Here, as in (23), the reciprocal is used to avoid a direct statement of affectedness of 1 by 2, a pattern familiar as a politeness strategy in a number of languages. In UNT, however, the practice goes well beyond the bounds of simple politeness, as shown in this exchange between Tiger (T) and Rabbit (R), two characters in an antagonistic relationship:

(25) T: man–cá laː–aʔsʼawí–ux čuːwá kuwésa
           self–now RCP–trick–1PSUBJ now must

           cax na–k–wa–yáː–n
           only FUT–1SUBJ–eat–IMPF–2OBJ
           'all you do is trick me, now I really am going to eat you'
           (lit. 'we only trick each other ...')

      R: ʔeː na–laː–wa–yáː–ux pero
           and FUT–RCP–eat–IMPF–1SUBJ but

           ka–ti–wá–ux waː k–wa–wíːɬ
           OPT–CTF–eat–1SUBJ REL 1SUBJ–eat–sit
           'and you will eat me, but first let's eat what I'm sitting here eating'
           (lit. 'we will eat each other ...')
           (Manuel Romero, *Tiger and Rabbit*)

In this story, Rabbit is pursued by Tiger, who he continually tricks into dangerous and painful situations (being stung by wasps, trapped under heavy rocks, choking on unripe fruit, etc.). Here Tiger has no particular reason to be polite to Rabbit or to be indirect about the

negative impact of Rabbit's behaviour, yet he still uses an indirect expression of affectedness even though the harm Rabbit has done him is the motive for Tiger's next statement ('I am going to eat you'). Note that there is no avoidance of the expression of adverse effects when the subject is first-person and the object is second-person: Tiger says very directly *nakwayá:n* 'I'm going to eat you'. In contrast, when Rabbit replies and reverses the statement, he uses the indirect form *nala:wayáux* 'you are going to eat me' (lit. 'we will eat each other ...') because such a statement is an expression of affectedness of the speaker by the addressee.[9]

The fact that UNT disfavours direct expressions of affectedness and obligation of 2 to 1 is not only interesting from a sociolinguistic point of view, it is also a potential solution to the problem of the asymmetries observed in the verbal paradigms in Section 2 above and the apparently contradictory person-hierarchies needed to motivate the unexpected forms While the forms in other parts of the grammar point towards a 2 > 1 person-hierarchy, the 2 → 1 forms seem to argue for a 1 > 2 ranking in that the paradigm excludes morphologically transparent verbforms with 2SUBJ and 1OBJ (when one or both is plural). The sociolinguistic facts presented in this section, however, point to a slightly different analysis: rather than expressing a ranking of 1 > 2, the 2 → 1 forms may in fact be a manifestation of the linguistic deference to the addressee seen in the UNT reluctance to express direct affectedness of 1 by 2. In other words, the motivation of the 2 → 1 forms may be a very strong ranking of 2 > 1 which rules out transitive clauses that are direct expressions of the addressee affecting the speaker. Given that the canonical transitive verb is an expression of the affectedness of the object (patient) by the subject (agent), it seems quite possible that a language like UNT, which disfavours direct ex-

---

9 Just as with imperatives, another strategy for avoiding expression of adverse affectedness of 1 by 2 is to treat the singular second-person as plural. As an example, when one of my older consultants was asked in elicitation for the form 'you dirty me', the response was *wiš kila:ma:maktiyąwíux* (wiš 'you$_{SG}$' ki + '1OBJ' + la: 'RECIPROCAL' + ma: + 'CAUSATIVE' + mak 'body' + tiyą 'earth' + wi: 'CAUSATIVE' + x 'SAP') rather than the expected *ki-ma:maktiyąwi:* with a singular subject, although this form was readily accepted as 'the same' when it was offered as an alternative. Pluralizing the second-person subject, like using the reciprocal, is a way of removing direct individual responsibility for the event from the addressee.

pressions of affectedness of 1 by 2, would grammaticize this dispreference by eliminating transparent 2 → 1 forms from the verbal paradigms in favour of a new, less-transparent form. The fact that the new form is based on the reciprocal is entirely consistent with the uses of the reciprocal in discourse, while the appearance of the first-person object-prefix *kin*—which we saw in Section 1.2 to be consistent with the additive nature of UNT morphology—can be motivated by the need to disambiguate between truly reciprocal and ordinary active-transitive statements. So, rather than two hierarchies we have one—one which not only accounts for all of the asymmetries observed in the verbal paradigms, but also helps to explain some of the unusual properties of imperatives and reciprocals in discourse, thereby illustrating the far-reaching impact that sociolinguistic practice can have on what is often considered to be the most formal part of the grammar, the realm of inflectional morphology.

5. PRAGMATIC SKEWING AND THE DEVELOPMENT OF GRAMMATICAL SYSTEMS

Careful analysis of the asymmetries shown in Upper Necaxa verbal paradigms show remnants of what once may have been a fairly robust person-hierarchy ranking second-persons over first- and third-persons and plural number over singular. The effects of this hierarchy are still seen in the indefinite-agent paradigm, which excludes IDF-subjects with plural first- and plural second-person patients and which treats second-person singular patients as syntactic subjects (as opposed to first- and third-person patients, which are syntactic objects). The same person-hierarchy also influences the form of verbs with first-person subjects and second-person objects where one or both is plural in that these require the subject to be morphologically singular even when semantically it is plural, effectively ruling out forms in which the morphological number-marking of the subject is greater than that of the object. Forms with second-person subjects and first-person objects where one or both of these is plural, on the other hand, seemed to favour first-persons over second-persons in excluding transparent 2 → 1 forms in favour of a more opaque verb form making use of the reciprocal marker, *la:-*. When considered in light of the use of reciprocals in discourse, however, it seems that a more consistent analysis of the 2 → 1 forms is that they are the result of sociolinguistic deference of speakers to addressees. This deference

requires speakers to avoid the direct expression of affectedness of first persons by the actions of second persons—resulting in a sociolinguistic practice that ranks second-persons over first persons, the same 2 > 1 hierarchy observed in other parts of the grammar.

The fact that the non-transparent forms in the verbal paradigm occur in those cases where the subject and object are both speech act participants (first- and second-persons) and where one or both of these is plural is significant, though not surprising. Formal analyses based on markedness have long recognized that this portion of the person-paradigm, bearing the maximal number of marked features ([+plural], [+SAP], etc.), is likely to be the most variable across languages, and such analyses have successfully modeled those asymmetries in person-paradigms that arise from a ranking of 1 or 2 > 3. Unfortunately, at least for those interested in broad cross-linguistic generalizations universal criteria from markedness that account for asymmetries due to the rankings of 1 vs. 2 are somewhat harder to come by: there are well-documented case of languages that rank 1 > 2 and others that rank 2 > 1, and—as pointed out by Heath (1998)—in languages of both these types the methods of deployed to conform to these rankings differ wildly, making a formal treatment of the problem in terms of markedness somewhat problematical. In two separate studies of a range of languages from Australia and the Americas, Heath (1991, 1998) argues that many asymmetries in subject-object paradigms are a consequence of what he refers to as 'pragmatic skewing'. On this view, opaque or unusual combinations of person-markers are the result of a sort of deliberate obfuscation in which speakers seek to avoid certain combinations of person-markers as being inappropriate in polite discourse. Across languages, transparent 1 ↔ 2 combinations are frequently avoided because they "form negative or taboo targets and are often replaced by more opaque surface forms" (Heath 1998: 84). This seems clearly to be the case of the two UNT 1 ↔ 2 forms, each of which neutralize the finer person-number distinctions in their respective portion of the paradigm by employing a single, ambiguous form to cover three specific cases. Even more significantly, taken alongside evidence from the use of the imperative and reciprocal forms of verbs in discourse, the data from the 2 → 1 portion of the paradigm seem to argue for the origins of 1 ↔ 2 asymmetries in precisely the kind of social taboos that Heath is referring to.

As observed in Section 3, UNT has a number of strategies for avoiding the direct expression of 2 → 1 imperatives or affectedness of 1 by 2, including treating a singular second-person subject as plural and expressing (adverse) actions of a second-person towards a first-person as reciprocal (mutual) actions. The net effect of both of these strategies is to minimize direct individual responsibility of addressees for the effects of their actions on the speaker, and the grammaticization of the 2 → 1 forms as 1PL.EXC reciprocals with first-person objects seems like a semantically plausible way of meeting this goal as well. In Upper Necaxa, this would mean that all actions of a second-person affecting a first-person (when one or both of these is plural) are treated as mutual actions (as indicated by *la:-* and *-x*) whose patient is the speaker (indicated by *kin-*). The same use of the SAP, reciprocal, and first-person object affixes are found in other Totonacan languages and, as shown above in (20), Tepehua seems to have extended this logic to include verb forms with 1SUBJ and 2OBJ (again, where one or both is plural) by combining the first-person inclusive reciprocal forms with a first-person subject prefix.[10] To date, however, the use of politeness and avoidance strategies has not been carefully documented in any of these other languages and until further comparative work is done, the historical hypotheses underlying the analysis of UNT offered here will have to remain uncertain. Never-

---

10 Another possible diachronic path for these developments is suggested by data from Misantla Totonac (MacKay 1999) where *la:-* serves as the comitative marker (*ta̯-* in UNT and *ta̯:-* or *ta:-* in other Totonac and Tepehua) and combines with *ta-* '3PL.SUBJ' and *-kan* 'IDF' to form reciprocals. If Misantla were found to be conservative in this respect and the use of *la:-* on its own as a reciprocal marker were innovative, then the discourse uses of this affix to express reduced responsibility of the second-person (by including the first-person patient as a co-actor with the second-person subject) seem perfectly natural, as do the readings of the 2 → 1 verb forms (e.g., *kila:túkswi̯* lit. 'you and I hit me'). The major obstacle to pursuing this idea is that it would require the same innovation (shift of *la:-* to a reciprocal marker) to have occurred in both the Tepehua branch of the family and in all three of the other Totonacan branches as well. Of course, it could be argued that this was due to areal spread of the innovation (Misantla is geographically isolated from its sister languages), or, perhaps, that we need to reconsider the Totonac-Tepehua family tree, something that will have to wait until some serious historical reconstructive work on the family has been completed.

theless, these hypotheses do seem consistent both with the internal grammatical system of Upper Necaxa and with the typological data examined by Heath (1991, 1998). If they do prove to be correct, Upper Necaxa will stand as an especially clear example of the pragmatic skewing of morphological systems by sociolinguistic practice, and of the intimate relation between discourse, language use, and the development of grammatical systems.

REFERENCES

ARANA OSNAYA EVANGELINA. 1953. Reconstrucción del prototonaco. In Ignacio Bernal and Eusebio Dávalos Hurtado (eds.), *Huastecos, totonacos y sus vecinos. Revista mexicana de estudios antropológicos* 13. Mexico City: Sociedad Mexicana de Antropolgía, 23 – 130.

ASCHMANN, HERMAN P. 1983. *Castellano-totonaco, totonaco-castellano (Vocabulario totonaco de la Sierra). Vocabularios (y Diccionarios) Indígenas "Mariano Silva y Aceves"* 7. Mexico City: Summer Institute of Linguistics.

1973. *Diccionario totonaco de Papantla. Vocabularios (y Diccionarios) Indígenas "Mariano Silva y Aceves"* 16. Mexico City: Summer Institute of Linguistics.

BACH, EMMON, ELOISE JELINEK, ANGELIKA KRATZER, AND BARBARA PARTEE (eds.), 1995. *Quantification in Natural Languages*. Dordrecht: Kluwer.

BECK, DAVID. 1999. Person, plurality, and speech-act participant in Totonac verbal paradigms. In M. Caldecott, S. Gessner, and E.-S. Kim (eds.), *Proceedings of the 4th Workshop on Structure and Constituency in the Languages of the Americas*. Vancouver: UBC Working Papers in Linguistics, 1-10.

BOAS, FRANZ, AND ELLA DELORIA. 1941. *Dakota Grammar. Memoirs of the National Academy of Sciences, vol. XXIII*. New York: National Academy of Sciences.

CLARK, LAWRENCE, AND N. D. CLARK. 1960. *Popoluca de Sayula. Vocabularios (y Diccionarios) Indígenas "Mariano Silva y Aceves"* 4. Mexico City: Summer Institute of Linguistics.

DAHLSTROM, AMY. 1991. *Plains Cree morphosyntax*. Garland: New York.

GARCÍA ROJAS, BLANCA. 1978. *Dialectología de la zona totonaco-tepehua. Tesis de licenciatura.* Ms, Escuela National de Antropología e Historia, Mexico City.

HEATH, JEFFREY. 1991. Pragmatic disguise in pronominal-affix paradigms. In Frans Plank (ed.), *Paradigms: The Economy of Inflection.* Berlin: Mouton de Gruyter, 75–89.

    1998. Pragmatic skewing in 1 ↔ 2 pronominal combinations in Native American languages. *International Journal of American Linguistics 64*, 83 – 104.

LEVY, PAULETTE. 1987. *Fonología del totonaco de Papantla, Veracruz.* Mexico City: Universidad Nacional Autónoma de México.

    1994. La base verbal en totonaco. In Carolyn J. MacKay and Verónica Vásquez (eds.), *Investigaciones lingüisticas en mesoamérica.* Mexico City: Universidad Nacional Autónoma de México, 228 – 262.

MACKAY, CAROLYN J. 1997. *A Grammar of Misantla Totonac.* Salt Lake City: University of Utah Press.

MCQUOWN, NORMAN A. 1990. *Gramática de la lengua totonaca.* México City: Universidad Nacional Autónoma de México.

MEL'čUK, IGOR A. 1986. The dualizer and pluralizers in the Alutor verb. In B. F. Elson (ed.), *Papers in honour of the 50th anniversary of the Summer Institute of Linguistics.* Dallas: Summer Institute of Linguistics, 421 – 38.

NATER, HANK F. 1984. *The Bella Coola Language.* Hull: National Museum of Man.

PARTEE, BARBARA, EMMON BACH, AND ANGELIKA KRATZER. 1987. *Quantification: A cross-linguistic perspective.* Ms, NSF grant proposal, University of Massachusetts, Amherst.

REID, AILEEN A. 1991. *Gramática totonaca de Xicotepec de Juárez, Puebla.* Mexico: Summer Institute of Linguistics.

VAN VALIN, ROBERT D., JR. 1977. *Aspects of Lakhota syntax.* PhD dissertation, University of California, Berkeley.

WATTERS, JAMES. 1988. *Topics in Tepehua grammar.* PhD dissertation, University of California, Berkeley.

    1994. Forma y función de la morfología de segunda persona en tepehua. In Carolyn J. MacKay and Verónica Vásquez (eds.), *In-*

vestigaciones lingüisticas en Mesoamérica. Estudios sobre lenguas americana: 1. Mexico City: Universidad Nacional Autónoma de México, 2l1 – 226.

ZAVALA, ROBERTO. 1994. Inverse alignment in Huastec. *Function* 15/16, 27 – 81.