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Shin Ja J. Hwang William R. Merrifield Editors

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Concerning Otomanguean Verbs of Motion

William R. Merrifield

Summer Institute of Linguistics and University of Texas at Arlington

A theory of language, like human language itself, is a tool. It is purposive and it is useful if it accomplishes the goal of communicating an understanding about the nature of human language or of one of its exponents. A linguistic theory is only a metaphor for truth, and due to the complexity of language is, in fact, GENERALLY UNTRUE if we try in any rigorous way to define the closeness of a match between metaphor and reality. But a certain level of understanding is attainable through theory building and that makes it worthwhile.

In any case, linguistic theorizing is fun if we do not take ourselves or our theories too seriously. The discovery and description of a linguistic system is a pleasurable experience. And yet the trend of linguistic argumentation in the last thirty-five years has also made it easier to sometimes forget (or try to cover up) how puny our theories actually are and how arrogant we can sometimes be in claiming what is TRUE or what "allows us to refute... a fallacious argument."

No one has had more fun than Bob Longacre in these past few years. Few have had the pleasure of discovering and describing such a wide range of linguistic systems from almost everywhere but Timbuktu as he. Long ago he enunciated his view of theory as follows:

Granted the centrality of patterning in human behavior it follows that we should require that a linguistic theory give centrality to linguistic patterns. In measuring the fit of a theory with the

¹This is an actual quote, but it can go unidentified since it typifies the kind of statement that any of us might fall into in today's theoretical climate.

empirical facts of individual languages we should require that a theory lead to a description in which patterns are thrown into bold relief. (Longacre 1964:13)

Some years ago, I had the privilege of working with Albertha Kuiper (Kuiper and Merrifield 1975) and David Westley (Westley and Merrifield 1990)² to discover and describe the way verbs of motion and arrival are used in two Otomanguean languages of Mexico—Diuxi Mixtec and Tepetotutla Chinantec. The latter is perhaps the closest of the Chinantec languages to Palantla Chinantec, the language of Mexico which has been my own special interest for thirty-five years, but my collaboration in the study of the former rested heavily on the first-hand knowledge of my colleague Albertha Kuiper and on our ability together to interact with her principal language associate from Diuxi, Sra. Amelia Martínez Pérez de Matías.

The more recent Chinantec report has not received comment that I know of, but the Mixtec study has enjoyed some attention because of the analysis we put forward concerning motion verbs in particular. This is gratifying and stimulating—to see others building upon your work or even criticizing it. After all, theories are just metaphors and, in the end (if not in the beginning) they are wrong. While our theory of Mixtec verbs of motion may be wrong in some respects, it has been shown to have merit in other respects.

The first response to Kuiper and Merrifield 1975 (hereafter K&M) was by my SIL colleagues Speck and Pickett (1976; hereafter S&P), who describe verbs of motion and arrival for Texmelucan Zapotec, an Otomanguean cousin of Diuxi Mixtec. S&P found a number of the concepts defined for Mixtec to be useful in the description of Zapotec. They also expanded on the way some of the concepts might be defined; but they challenged some of the Mixtec analysis on the basis of Zapotec patterns.

Subsequently, Monica Macaulay attempted to follow the Diuxi analysis for verbs of motion and arrival in Chalcatongo Mixtec (1982), but later decided (1985) that the s&P analysis for Zapotec was not only better for Diuxi and Chalcatongo Mixtec, but that it also supports the suggestion of s&P that, on the basis of the revised analysis, "a significant general statement might be made about Otomanguean verbs, at least at some historical level" (1976:59).

I will here comment briefly on the discussion of these questions concerning Mixtec, to the extent I feel I can do so (§1), and then describe

²In spite of the late date of Westley and Merrifield, both of these papers were written at about the same time.

the situation for Palantla Chinantec (§2) as further input to what a general statement for Otomanguean verbs might (in part) include.

1. The analysis of Diuxi Mixtec verbs of motion

In order that the ground should be level, I must say that my knowledge of Diuxi Mixtec today is for all practical purposes limited to the statements Kuiper and I made in the K&M report. Kuiper is the continuing student of Diuxi Mixtec and I have not discussed Diuxi verbs with her since 1975.³ Macaulay, on the other hand, is expert in the related Mixtec language, but not in Diuxi;⁴ S&P know Zapotec languages well; my strength is in Chinantec. Since the s&P analysis of Diuxi is an alternative that K&M themselves reported but rejected as being less attractive (K&M 34), I can merely discuss the merits of the arguments presented in the ensuing discussion in the hope of contributing to any general statement that might ultimately be forthcoming.

s&P took the same functional approach to description as K&M had done by asking "What do I need to know in order to use this form appropriately and to understand other people when they use it?" (s&P 58). This turns out to be the key, I think, to understanding the motivation for the K&M analysis. s&P then found a number of concepts in K&M appropriate to their description of Zapotec, adding very useful discussion, as did Macaulay (1985) in her description of Mixtec. These concepts include those of BASE, PLA, ROUND TRIP, and MOMENTARY.⁵

Base. It would seem that many Otomanguean languages distinguish motion by an agent to a random location from motion to a location often frequented by that agent as some sort of BASE OF OPERATIONS, such as

³As the senior linguist of the kem report, however, I do not imply by this that I can duck responsibility for the analysis reported. I happily accept responsibility for its shortcomings.

⁴C. Henry Bradley tells me that the two languages are geographically and linguistically remote. Forbidding terrain and numerous Mixtec communities where significantly divergent forms of Mixtec are spoken lie between them, and this has effectively inhibited any significant direct contact in recent times.

⁵PLA (place of the locutionary act), TLA (time of the locutionary act), and MOMENTARY were taken from Fillmore 1969. Other abbreviations used in this paper are AFF (affirmation modal), ANA (anaphoric), ASSEV (asseveration modal), c or COMPL (completive), COND (conditional), H or HAB (habitual), Hoo (hodiernal past), H (high tone), I (intentive), ITER (iterative), L (low tone), M (mid tone), P or PROG (progressive), PRF (perfect), PST (past), REFL (reflexive), REL (relative), s or STA (stative).

his/her home or home town. So that, for example, in Palantla Chinantec, the two related verbforms of (1) mark that distinction.

- (1) a. ka^L-ŋó^L huÿ^{LH} huu^{LM} hïa^H huïi^M
 PST-go^c3 John road amid town
 John went to Valle Nacional.
 - b. ka^L - $\eta a ?^L$ $hu \ddot{i}^{LH}$ $hu u^{LM}$ ha^H $kia ?^{LM}$ PST-go^BASE^C3 John road at of^3 John went home.

It is appropriate, therefore, to define a concept such as BASE to account for the difference between such verbs. K&M defined such a concept informally and discussed prototypical situations to which it would apply. S&P, in turn, discussed situations which are appropriate to the use of base in Zapotec, but then go on to say "that the general definition needs modification when two facts are brought into consideration." The specific facts they mention are not important here or at issue. I wish only to comment on the approach I think needs to be taken when a general definition might seem to need modification because of such additional facts.

Language is complex and a very powerful communicative tool. It is more and more understood, I think, that our attempts to define linguistic concepts must fall back upon the use of prototypes (Comrie 1981:100–4, Givón 1984:14ff). If we insist on air-tight and all-encompassing definitions that cover all situations, we are doomed to failure. In the analysis of the semantics of kinship terminologies, for example, Merrifield 1981 found useful what Scheffler and Lounsbury (1971:7) refer to as rules of extension,⁶ in which a kinship term has a primary reference but may, and more often than not does, have extended references as well.

A case in point is the Palantla Chinantec term ηiu^L 'my older collateral male kinsman'. The primary referent of this term is ego's older sibling—any male child of one or both of ego's parents born prior to ego's birth. Using well-defined conventions this primary reference can be encoded as ePCm (elder, Parent's Child, male). The term extends, however, to any male child, born prior to ego's birth, of any of ego's kinsmen, with two exclusions: the named kinsman may not be ego's lineal kinsman, nor can his birth have preceded that of ego by more than one generation (which would classify him as a 'grandfather'). It is fairly simple to straightforwardly define a rule of extension which extends ePCm to all the possible

⁶Lounsbury (1964:356) earlier wrote of expansion and reduction rules, the same phenomenon viewed from opposite vantage points.

I would take a similar approach to the semantics of verbs. It seems to me that many concepts might have a primary, or prototypical, range of reference to which it may be convenient to add extensions by way of conventionalized interpretations of complex circumstances. Whereas a person's home, his town, or his country, would be the prototypical references for base, it should by convention be possible to define contexts in which an agent could ESTABLISH a base for the purposes of a specific situation, when the language so permits.

s&P (62) describe such a situation for Zapotec in which a man arrives at a friend's house, leaves a bundle there, and returns later to retrieve it. At his first approach to the friend's house he interchanges greetings with his friend using a nonbase form of the verb 'come', but uses the base form of the verb upon his return. This Zapotec language permits the establishment of a temporary base for such circumstances.

I do not know if this is possible in Diuxi; but Macaulay (1985:58) describes a similar phenomenon in Chalcatongo, where regular motion to a particular place—such as a child going regularly to school—provides conditions sufficient to the use of motion verbs marked for base. She goes further to define nonbase as a "marked category which encompasses the meaning of the marked category, base" (1985:58f) which allows a person to choose a nonbase form of the verb for a sentence like 'I will go to my house'. I do not believe, but cannot categorically say that this is impossible in Diuxi; I can say categorically that this is not said in Palantla Chinantec. I can imagine situations in Chinantec, however, where a nonbase location might temporarily be treated as a base for rhetorical purposes. This is the kind of thing that skillful language use is all about.

Place of the locutionary act (PLA). The use of verbs of motion entails both source and goal of the motion in relation to the location of the speech act (PLA). K&M based their discussion of Diuxi motion verbs on a prototypical PLA (35f), with only minimal discussion of more complex speech situations, since their primary purpose was to lay out the distinctive core semantics of the motion verbs themselves. S&P (60) add useful discussion relating to three situations "in which the PLA is not the basic point of reference." Their first case describes a situation in which the interlocutors are at some distance from each other—whether in sight of each other but at a distance, or through the use of written communication. They suggest that each interlocutor may ground the PLA at his/her own

location or at that of the other party. So that, as in English, if mother calls her child to 'come', the child may respond with 'I am coming' by choosing mother's location as PLA.

This kind of language use seems to me, again, best treated as a matter of convention rather than as a departure from the primary meaning of a word. I would expect the semantic analysis of the verbs of any single language, such as Texmelucan Zapotec, to be more straightforward if we take the simple PLA situation as the prototype and then apply extensional conventions to account for more complex situations. This will certainly be true if we hope for a general statement to cover families of languages, since both Diuxi Mixtec (K&M 36, note 9) and Chalcatongo Mixtec (Macaulay 1985:60) disallow the use of a motion verb in such a response, requiring rather a verb of arrival.⁷

Round-trip verbs or momentary verbs. To this point, differences in analysis relate more to differences in semantic conventions than to the primary meaning of specific verbs. We now come, however, to two areas of critical difference in analysis between K&M, on the one hand, and S&P and Macaulay 1985, on the other.

K&M claim that Diuxi Mixtec has six verbs of motion: two that reference one-way motion of an agent away from base PLA or nonbase PLA, respectively, two that reference one-way motion of an agent to base PLA or nonbase PLA, respectively, and two round-trip verbs—one referencing motion of an agent from nonbase PLA and return back to PLA, the other referencing motion to nonbase PLA and return away from PLA. These are listed in (2), which is presented in four columns to accommodate both simple (noniterative) and iterative interpretations of each of the two aspects, potential and completive. Cells in the iterative columns are empty for K&M one-way verbs because, in this view, iterative one-way trips actually entail round trips and round-trip verbs, therefore, satisfactorily encode such situations.

On the other hand, sep claim that Texmelucan Zapotec has just four verbs of motion, all encoding round trips—two that reference motion of an agent from base PLA or nonbase PLA, respectively, and return back to PLA, and two that reference motion of an agent to base PLA or nonbase PLA, respectively, and return away from PLA.

⁷Lowe (1969, 1974a, 1974b) has described the kind of permutations a speaker uses in well-defined contexts for the use of personal pronouns. It is this kind of conventional permutation of the position of interlocutors in relation to PLA that I have in mind as extensions of the primary meaning of these verbs.

(2)	POTENTIAL		COMPLETIVE		
	SIMPLE nú ?ú	ITERATIVE	SIMPLE nú ?ú	ITERATIVE	Diuxi (к&м) 'go home'
	nara hį?į		nuru hwá?á		go nome 'go'
	ndiši		ndíši		'come home'
	(kiši)		váši		'come'
	$(h_{\tilde{t}}?_{\tilde{t}})$	šę?ę́	nšé?é	nšé?é	'go and return'
	kiši	kiši	nkíši	nkíši	'come and return'

s&P suggest that an analysis of Diuxi verbs along the lines of the Texmelucan analysis would lead to "a significant general statement... about Otomanguean motion verbs, at least at some historical level" (s&P 59). s&P present their reanalysis of Diuxi verbs of motion in their table 2 (s&P 63), which includes only the verbs that do not encode base. It is represented here as (3).

(3)	POTENTIAL	ITERATIVE	PROGRESSIVE	COMPLETIVE	Diuxi (s&p)
	hį?į́	šé?é	hwá?á	nšę?ę́	'go and return'
	kiši	kiši	váši	nkíši	'come and return'

One difference between the two analyses that does not appear directly in (2) and (3) is that K&M claim that Diuxi motion verbs are momentary verbs. No one disputes that both Mixtec and Zapotec verbs of arrival are momentary verbs, but s&P and Macaulay 1985 suggest that Diuxi verbs of motion are not. Although disagreements about the theory of Mixtec motion verbs may persist after this discussion is ended, I believe that part of the problem lies in differences in focus—between inflectional forms, on the one hand, and their uses in context, on the other.

Before discussing the crux of the difference between these two interpretations, note that Macaulay follows the s&P analysis, but also includes the verbs which encode base in her table 5 (1985:74), which is represented here as (4).

(4)	POTENTIAL	ITERATIVE	PROGRESSIVE	COMPLETIVE	Diuxi (Macaulay 1985)
	nú?ú		hwánú?ú	nú?ú	'go home'
	ndiši		hwándíši	ndíši	'come home'
	hį?į	šę?ę́	hwá?á	nšę?ę́	'go and return'
	kiši	•	váši	nkíši	'come and return'

Macaulay's claim is also different from that of s&P in at least one essential point. Whereas s&P propose a reanalysis of the Diuxi data, Macaulay implies, without directly saying so, that the k&M data are in

error as well as the analysis. First, $\kappa \& M$ (36) state that $ki \ddot{s}i$ has an iterative as well as a noniterative interpretation. This is apparently not accepted by Macaulay in that she leaves the last cell of her second column blank. Second, she indicates that the verbs $n \dot{u} ? \dot{u}$ and $n d i \ddot{s}i$ are progressive when occurring with the prefix $h w \dot{a}$ - and completive without it, in the face of specific statements by $\kappa \& M$ (41) that no difference in meaning or usage between such forms had been encountered. On the one hand, these claims are made by Macaulay without specific research in Diuxi. On our part, it would be foolish to claim that our understanding of the data was perfect when we wrote; but the statements we made were based on specific inquiries concerning the usage of the forms in question.

Returning now to more substantive matters, more comparative Mixtec data are now available in the series of Mixtec publications edited by Bradley and Hollenbach (1988, 1990, 1991, in press). While the sketches included in these studies do not focus on verbs of motion, as such, they do include some inflectional forms which are reproduced here in (5) for Jamiltepec Mixtec (Johnson 1988:103), Ocotepec Mixtec (Alexander 1988:252f), Silacayoapan Mixtec (Shields 1988:397), Ayutla Mixtec (Hills 1990:197), Coatzospan Mixtec (Small 1990:401), Alacatlatzala Mixtec (Zylstra 1991:109), and Yosondúa Mixtec (Farris in press).8 The corresponding Chalcatongo data from Macaulay (1985:67) are also included in (5).

The more recent data from Bradley and Hollenbach are presented within the single, unifying framework they designed to aid in the comparison of the several languages, which conforms closely to the s&p analysis, although Small (1990:401) references the discussion upon which these present comments are based, and Kuiper and Oram (1991:328), whose data from Diuxi-Tilantongo are the same as reported in k&m and are therefore not repeated in (5), indicate that the k&m analysis is a possible alternative. This arrangement is quite all right and, in fact, is probably the best one to show the morphological structure of the system from a historical and comparative point of view at the very least.

As s&P are careful to point out, the view they support of Diuxi structure is one which k&M themselves entertained on the basis of structure. They found hwá?á looking like a continuative verbform and cite Longacre's (1957:56) reconstruction of Proto Mixtecan w- (continuative) as evidence (k&M 34). k&M rejected this interpretation for contemporary Diuxi, however, on the basis of language use, as opposed to morphological history.

⁸A few compromises have been made to accommodate these data within a single chart to highlight the cognate forms. Please consult the original articles for specific matters of orthography, labeling of aspects, and glosses of verbforms.

(5)	POTENTIAL	HABITUAL	PROGRESSIVE	COMPLETIVE	
	a. 'go home'				
	nú?ū	kanu?u	kúnü?ú	nú?ū	Coatzospan
	no?ò		kwano?o	ninó?o	Chalcatongo
	b. 'go'				
	kµ?µ	čá?á	kwa?a	čą?ą	Jamiltepec
	k <u>į</u> ?į	šé?ę	kwa?a	šę?ę	Ocotepec
	kụ?u		kwa?a		Silacayoapan
	kū?u	šã?á	kwā?a	nìšā?a	Ayutla
	kį́?į̄	kañe?e	kwé?ē	ñé?ē	Coatzospan
	kolo		kwa?a	nišą?ą	Alacatlatzala
	k <u>į</u> ?į	šá?ą	kwā?a	šą?ą	Yosondúa
	kį?į	hą?ą	kwa?à	nihą?ą	Chalcatongo
	c. 'come home	·'			
	ndĩšĩ		ndíšī	ndiīšī	Ocotepec
	ndi?ši	kandi?ši	kúndī?ši	ndī?ši	Coatzospan
	d. 'come'				
	kīčī		vāči	kīčī	Jamiltepec
	kīšī	kíšī	vašī	nkiīšī	Ocotepec
	ķ īšī		vašī	nakīšī	Silacayoapan
	kiši	kīšī?	kwaši	nikiši	Ayutla
	ki?ši	kaki?ši	vé?šī	nkī?ši	Coatzospan
	kīšī		vašī	kišī	Alacatlatzala
	kíší, kíí		vāšī	kiši, kii	Yosondúa
	kii		bèì	nikii	Chalcatongo
	e. 'go and ret	urn'			
	J		sá?a	nasą?ą	Silacayoapan

As Longacre pointed out in the passage quoted earlier, we would like in our description to set out the linguistic patterns of a language in bold relief. The problem we find with verbs of motion in many languages of the world, including Otomanguean languages, however, is a strong tendency for assymetry, so that various patterns of a language may be in conflict.

It turns out, for example, that of the eight Mixtec languages cited above from the Bradley and Hollenbach volumes, all exhibit a pervasive pattern in which there are just three inflectional forms of the verb, which we can call potential, progressive, and completive, for the vast majority of verbs. But six of the languages are treated as having a small subclass of verbs with a fourth aspectual category, which we can call habitual. Interestingly enough, with two exceptions in the eight languages, all of the verbs with this fourth aspectual category are verbs of motion. Verbs of motion, in these languages, are presented as having a different inflectional pattern than all the other verbs of the language. Not finding a strong morphological pattern to follow in the analysis of Diuxi motion verbs, kem looked elsewhere.

It is difficult, probably impossible, to prove whether Diuxi motion verbs are momentary verbs or not. The kem claim is interpretive and was designed to elucidate the use of these verbs. We cited three collocational patterns of adverbs and verb prefixes which seemed to us to indicate a perfective or completive use of the forms in (6).

(6) váší-da come^compl-1s 'I have come.'

hwá?á-da go^compl-1s 'I am (already) going.'

These first-person forms are commonly used when a speaker is just arriving at or departing from a friend's home. It is possible to read a continuative or progressive sense into these forms, based appropriately upon their probable morphological antecedents; but it is also possible to see them as perfective, and to see a perfective-imperfective binary pattern as in focus in these highly defective verb paradigms. None of the discussion by either s&P or Macaulay 1985 favoring a progressive interpretation is any less speculative than the perfective analysis. The closest they come is for s&P (59) to claim that Texmelucan verbs of motion are not momentary

⁹CONTINUATIVE is the traditional term for this category in the Mixtec literature, but more recent discussion of tense-aspect categories (such as Comrie 1976 and Dahl 1985) would seem to point to PROGRESSIVE as a better choice.

¹⁰It would be a poor choice to call this category ITERATIVE in Mixtec, as set and Macaulay have done, since any number of verbs in Mixtec (and all other languages?) encode certain kinds of actions or events that can be interpreted iteratively irrespective of a wide range of inflectional categories. Linguists know better than most that it is possible to confess of iteratively knocking one's head against a wall by the use of past-, present-, and future-tense verbs in any number of languages.

¹¹In Jamiltepec (Johnson 1988:103), one nonmotion verb meaning 'exist' has five inflectional forms; but two of them appear to be suppletive, leaving just three that seem to be related morphologically. Coatzospan (Small 1990:402) has six verbs of position with a unique fourth inflectional form.

and for Macaulay (1985:65) to claim that the Chalcatongo cognate of váši is not momentary.¹²

I do not recall if we found $v\acute{a}$ si occurring with ?iku 'yesterday' but we did find $hw\acute{a}$? \acute{a} in this context (kem 34), as one of the elements leading us to favor a perfective interpretation.

In regard to whether all the motion verbs explicitly encode round trips, they will certainly have to be defined as doing so if they are not considered momentary verbs and if the various verbforms are grouped as just four verbs. Because of the importance of the concept base in Diuxi verbs of motion, which I do not recall as being the optionally-marked category that Macaulay reports for Chalcatongo (1985:58f), even the so-called one-way verbs entail a return toward or away from base. The question is whether they explicitly mark the return trip or whether it is simply real-world entailment. The question may be moot and depend upon the interpretation of the other factors already discussed.

Without insisting that K&M had it 100 percent right about Diuxi, I am not ready to acknowledge that we necessarily had it wrong either. I will settle for addressing the broader question of a general statement for Otomanguean verbs of motion by contributing a little more data from Palantla Chinantec and a few comments that need to be considered before adopting such a statement.

2. Palantla Chinantec verbs of motion

The structure of Chinantec verbal paradigms has been discussed now in a variety of places, Westley 1991 to take the most recent, so I will not belabor the point other than to say that it is normally useful to display twelve forms which are the intersection of three aspectual categories—termed for Chinantec Progressive (P), Intentive (I), and Completive (C)—and four person-number categories—first singular (1s), first plural (1p), second (2), and third (3). In the case of verbs of motion, however, they all show suppletive stems which distinguish singular and plural agents, with the

¹²It could be argued that even Macaulay's proof example (10) ndè?è-ri hà Juan a-bèì iči núu 'I see that John is now coming towards us' (1985:65), although translatable by the English present progressive, is actually perfective, not focusing upon the progressive movement of the agent. I am in no position to insist on such an interpretation for Chalcatongo, but would argue that the equivalent Diuxi sentence can have that meaning. I wonder if the Chalcatongo preverbal element a- 'now' is not cognate with Diuxi šā- 'already', which contributes perfective meaning to a sentence (Kuiper and Oram 1991:241).

result that each stem has up to nine forms for singular agents and nine forms for plural agents.

(7)	'go (move aw	ay from F	LA to nonb	ase)'		
	1s	2s	3s	1p	2p	3p
	Р <i>ŋо́^{LM}</i>	ziég? ^M	$\eta \acute{o}^{LM}$, $z\acute{a}g^{LM}$	ni ^L niag ^{LH}	H $ni^L ne^{-it}$	o? ^{LM} ŋi ^L lé ^M
	1 ŋó ^{LH} ,nei ^{LH}	gú? ^H	$n\acute{o}^L$, $z\acute{a}g^{L}$	$za^H niag^L$	H,zígH gu ^H n	
	c ŋó ^L	ziég? ^M	ŋó ^L	ŋi ^L niag ^L !	H ni ^L ne	01 ^{LM} ni ^L lé ^M
(8)	'go home (mo	ove away	from PLA to	base)'		
	1s	2s	3s	1p	2p	3p
	Р <i>ŋа?^{LM}</i>	zią́? ^M	ŋa? ^{LM}	ŋag? ^{LM}	ŋi ^L no? ^L	ŋi ^L lia? ^L
	I ne? ^{LH}	guį̇́? ^H	zá? ^L	zíg?H	gu ^H no? ^H	za ^L lia? ^L
	c <i>ŋáʔ^L</i>	zią́? ^M		ŋág? ^L	$\eta i^L no l^L$	ŋi ^L lia? ^L
(9)	'come (move	toward PI	La to nonba	se)'		
	1s	2s	3s	1p	2p	3p
	Р gio ^{LM}	ŋi? ^M	há ^{LM}		ha ^L no? ^L	ha ^L lę́ ^M
	I gio ^{LH}	ŋi? ^{LH}	hií ^L	hií ^H	hi ^H no? ^L	hi ^L lę́ ^M
	C gio^L	ŋi? ^L	há ^L	há ^L	ha ^L no? ^L	ha ^L lę́ ^M
(10)	'come home	(move tov	vard PLA to	base)'		
	1s	2s	3s	1p	2p	3p
	P giog? ^{LM}	ŋe? ^{LM}	hog? ^{LM}	hag? ^M	ha ^L no? ^{LH}	ha ^L lia ^{LM}
	I giog? ^{LH}	ne?LH	hiúg? ^M	hiág? ^H	hi ^H no? ^{LH}	hi ^L lia ^{LM}
	C gióg? ^L	ŋé? ^L	$h \acute{o} g ?^L$		ha ^L no? ^{LH}	
/4.4\	4		•	•		
(11)	'go and come	back (m	ove away tr	om and r	eturn back	to pla)'

Palantla Chinantec verbs of motion are presented in (7)–(11) in terms of four paradigms defined by the movement of an agent either away from or toward PLA and by the goal of that movement as being either the agent's base or not, and a fifth highly defective paradigm that defines a round trip without apparent reference to base.¹³ A great deal of suppletion

ne^H

ne?H

c ne^{H}

1p

ni^Hniag^{LH} ni^Hno?^{LM} ni^Hlé^M

¹³I need to do further study of the round-trip forms, and warn the reader that this listing is incomplete. Additional forms occur, such as $ma^Mna^Mu^H\eta e^L$ $h\ddot{i}a^H$ $hu\ddot{i}i^M$ 'I have already been to town (today)', which I will not discuss. The line between completed round trips for motion verbs is difficult to draw between round trips that focus on arrival.

is involved, even including a few competing forms in the paradigm for the verbforms naming 'motion away from PLA to nonbase'. The paradigms are complete in the sense that the three aspectual categories common to the majority of Chinantec verbs are represented in all the paradigms except the last.

Completive forms of these verbs are unremarkable in their interpretation, indicating completed motion prior to the time of the speech act (TLA). For verbs indicating motion away from PLA, the completive form simply states that the agent is out of sight at TLA, without any implication that s/he has reached any particular location away from PLA.¹⁴ For verbs indicating motion to PLA, the completive form is used after the agent arrives.

- (12) a. ma^M - ka^L - $\eta a ?^L$? io^{LH} $ha^H kia ?^{LM}$ PRF-PST-go^c3s woman home^3
 The woman already went home.
 - b. za^M ka^L - $ha^Ll\acute{e}^M$ huu^{LM} he^{2LM} $b\acute{a}^H$ lag^{LM} 3 PST-come^c3p road Usila AFF this This person has come from the town of Usila.

Intentive forms indicate action intended or predicted but which has not been initiated at TLA—the typical meaning of intentive verbs in Palantla Chinantec generally, which corresponds to the cross-linguistic semantic universal future proposed by Dahl (1985:103).

- (13) a. nei^{LH} bá?^H hní^M hïa^H huïi^M ?iá^L
 go^11s AFF 1s amid town tomorrow
 I WILL go to town tomorrow.

The progressive form of most verbs may ambiguously indicate habitual, iterative, or progressive action by an agent, or an existing condition (in the case of nonagentive verbs), with the context sometimes narrowing the interpretation to one or two of these. This is illustrated for nonmotion verbs in (14).

¹⁴In complex clauses ('I left before the lightning struck'), the time referenced by one verb may be the point of reference for the time of another verb, rather than TLA, which is the prototype for interpreting the tense-aspect of a simple clause.

(14) a. ?a^Mlá?^M lía^{LM} ha^H- ŋí?^H ?nig^M how? be p3 at sit p2 2s

How are things going at your house?

[PROG]

- b. ŋïa^{LM}-hni ?i^M të^M-hni ?ŋég^L
 walk^P1s-1s REL know^\$1s-1s REFL^1s
 I do what I please, or I am doing what I myself want
 to do. [HAB, PROG]
- c. $7a^Lh\acute{a}g^L$ hu^H $7i^M$ $l\acute{a}^{LM}$ -za si^M $ka^Lla^2Lh\'{a}^L$ $hmai^H$ not be cond rel be p3-3 light every day. It is not as if they [shooting stars] become lights every day. [ITER]
- d. $li^M liu ?^{LM}$ -hni hu^H $lá ?^M$ ha^M za^M ca^L - cia^M zia^{LM} babble $^{\circ}$ PIS-IS COND as one 3 NEG-be $^{\circ}$ s heart $^{\circ}$ 3 I am babbling like an idiot, or I babble like an idiot. [HAB, PROG]
- e. hį LM-za gių i LH kį gM i i hei i LH smoke P3-3 cigar one REL turn around
 He smokes very frequently. [ITER]
- f. kįg^M ?i^M hį^{LM}-za gių?^{LH}
 one REL smoke^P3-3 cigar
 He smokes continually. [HAB]
- g. $za^M h_i^{ILM}$ gi μ_i^{ILH} bá i_i^{IH} ná i_i^{ILM} 3 smoke^p3 cigar AFF that

 He is a smoker. [HAB]

In the case of verbs of motion, progressive forms may have a habitual or iterative reading, but not a progressive reading.

- (15) a. zág^{LM}-za hïa^H huïi^M kįg^M ?i^M hęi?^{LH}
 go^P3s-3 amid town one REL turn^around
 S/he frequently goes to town (Valle Nacional). [ITER]
 - b. zág^{LM}-za hïa^H kuïi^M
 go^p3-3 amid corn
 He (habitually, iteratively) goes to his cornfield. [HAB, ITER, *PROG!]
 BUT NOT: *He is going to his cornfield.

While interpreting forms like (15b) as nonprogressive might be challenged as subjective when they lack adverbials such as 'frequently', the use of plural verbforms provides further evidence that progressive forms of motion verbs do not have a progressive interpretation. Note that in (7)–(11) almost all plural forms of motion verbs are binomial, consisting of an unstressed element and a following stressed element, and note that the first element of the various plural verbforms is, in fact, a phonologically reduced singular motion verb. Students of Chinantec (Rupp 1989, Anderson 1989, Pace 1990, Westley and Merrifield 1990, Westley 1991) are currently referring to such prefixes as directional prefixes, which may be preposed, not only to form plural motion verbs, but to form directional verbforms of most any verb, as in (16).

- (16) a. hi^L - $kieg^M$ -za ? ma^M ha^H - la^M come^13-place^3s-3 wood at here

 He will come and place the piece of lumber here.
 - b. $ma^M ka^L \eta i^H ki\acute{e}g^H za$ $2ma^M ha^H kia^2 L^H za$ PRF-PST-go^come^c-place^3s-3 wood at of^3-3 He already went and placed the piece of lumber at his house and returned here.

Recall now that the Mixtec motion verbs are unique among Mixtec verbs in having a fourth inflectional form to mark HABITUAL (H) aspect. While there is no such fourth form for Palantla Chinantec verbs of motion in their full phonological forms, nor any such fourth form for any nonmotion verb (Merrifield 1968:28), there is a fourth aspectual form of the reduced motion verbs that form the directional prefixes. Table 1 of Merrifield 1968 (1968:23) lists all the one-way directional prefixes and is reproduced here as (17).

(17)	'go'		1s	1p	2	3	'come'	non3	3
, ,	_	Н	ηi^M	za^M	gu^M	za^M		ha^M	ha^M
		P	ηi^H	za^H	gu^H	ηi^L		ha^L	ha^L
		1	ŋi ^H	za^H	guH	za^L		ηi^H	hi^L
		С	ηi^L	ηi^L	ηi^L	ηi^L		u^L	u^L

Now note in (18) that habitual and progressive forms may be distinguished in nonmotion verbs by means of these directional prefixes, but in (19) that a plural motion verb may only occur with the habitual form of the directional prefix, the progressive form being ungrammatical in this context.

- (18) a. za^M - $ki\acute{e}g^L$ -za $?ma^M$ ha^H - $h\ddot{i}g^M$ go^H3-place^3s-3 wood at ANA

 He (habitually) goes to place wood at that (aforementioned) place.
 - b. ηi^L -kiég^L-za ?ma^M ha^H- hįg^M go^p3-place^3s-3 wood at ANA He has gone to place wood at that (aforementioned) place.
- (19) a. za^M - $l\acute{e}^M$ -za ha^H - $h\ddot{i}g^M$ go^H3-go^3p-3 at ANA

 They (habitually) go to that (aforementioned) place.
 - b. *nji^L-lé^M-za ha^H- hÿg^M
 go^P3-go^3p-3 at ANA
 They are going to that (aforementioned) place, or
 They have gone to that (aforementioned) place.

While the progressive form of a motion verb may be read as habitual or iterative, it may also occur with the prefix ma^{M} - (perfect). This prefix may occur with progressive or completive forms of verbs, as in (20).

- (20) a. ma^M - ka^L - $h\acute{a}i^L$ -hni si^M $kia?^{LM}$ -za PRF-PST-see C1s-1s paper of 3-3 I have seen his/her book(s).
 - b. ma^M - $k\ddot{i}g?^M$ $g\dot{i}g^M$ $?\acute{e}^{LM}$ PRF-chew^P3 baby tortilla

 The baby already eats tortillas.

This prefix is probably equivalent to the cross-linguistic universal ALREADY proposed by Dahl (1985:129), which he finds closely related to his universal PFCT (= perfect). The use of this prefix with a verb of motion is appropriate as soon as a trip is initiated away from PLA or at the completion of a trip to PLA. When I get up from my friend's house and begin to leave, I announce my departure by the use of (21a). Until the moment of moving to go, I may speak of my impending plan to depart for home by using the intentive form $ne?^{LH}$; but as soon as I make the move, the progressive form with ma^{M-} (perfect) is the verbform of choice. (21b) is also appropriate when a third person is seen on the way to his field. At the close of a trip, as in (21c), the completive verb with ma^{M-} is used,

although a progressive-form verb of arrival might be used in this context also (discussed below).

- (21) a. ma^M-ŋa?^{LM}-hni PRF-go^home^PIs-Is I am going home.
 - b. ma^{M} - $zág^{LM}$ -za $h\ddot{\imath}a^{H}$ $ku\ddot{\imath}i^{M}$ PRF-go^P3-3 amid corn

 He is on his way to his cornfield.
 - c. hni^M ma^M-na^M-gio^L giu?^{LH}

 1s PRF-HOD-come^C3 Sir

 It is I who have come, Sir.

As in the case of the ungrammatical progressive form of (19b), the progressive forms $\eta a l^{LM}$ or $z \dot{a}^{LM}$ may not be used without the perfect prefix to obtain a progressive reading of the sort we might wish to give them based on the English free translations of (21a) and (21b). And while (19b) is unacceptable, the progressive form of (19a) may occur with the prefix $m a^{M}$ -(perfect) with a noniterative and nonhabitual reading, as in (22).

(22) $ma^M-za^M-l\acute{e}^M-za$ $ha^H-h\ddot{g}^M$ PRF-go^H3-go^3p-3 at ANA They are going to that (aforementioned) place.

When the situation makes it clear that a perfective interpretation is implied, the perfect prefix is sometimes left unspoken. Thus, when the man of the house comes into view on his return from working in the gardens or from having gone to town to make purchases, either of the forms in (23) is appropriate without apparent differences in tense-aspect meaning.

- (23) a. ?¢i^H hu; LH hog? LM

 ANA John come^home^p3

 Here comes John now (he has returned home to PLA).
 - b. ?¿iH hu; hu; hog? maM-hog? LM

 ANA John PRF-come^home^P3

 Here comes John now (he has returned home to PLA).

While (21a) and (22) may translate best as progressive forms in English, the facts seem to disallow such an interpretation for the Chinantec forms themselves. And so we come to the point of all this. One way to account for this apparent anomaly is to consider chinantec verbs of motion as momentary verbs, of which there are many in Palantla Chinantec—verbs which occur in only intentive or completive form, as for example the verb gue^{M} 'go to sleep', which requires the stativizing prefix r_i^{M} - to yield anything near to a progressive reading (actually stative).

(24)
$$gu\dot{e}^L$$
- za sleep^13-3 's/he will go to sleep' ka^L - gue^M - za pst-sleep^23-3 's/he went to sleep' ri^M - $gu\dot{e}^L$ - za sta-sleep^s3-3 's/he is asleep'

It is insufficient to notice that Chinantec motion verbs have three inflectional forms, including progressive forms, without also noting that the progressive forms do not easily yield to a progressive reading. While the facts concerning the form of Diuxi Mixtec verbs of motion differ considerably in detail from those of the corresponding Palantla Chinantec verbs, it is striking to find a number of similarities in both form and even in usage between the two distantly related languages. These patterns of use of the verbs of motion, as well as their morphological patterning, need to be considered both in the description of the languages in their own terms, as well as in the formulation of a general statement that might encompass the larger family of languages of which they are part.

Verbs of arrival. The foregoing discussion has addressed only the verbs of motion. Verbs of arrival are listed in (25)-(28).

(25) 'arrive there (at nonbase away from PLA)'

	1s	2s	3s	1p	2p	3р
P	z ié g^L	ziég $\it ?^L$	ziég L	z i L niag LH	$zi^L no?^{LM}$	zi ^L lé ^M
1	ziég ^{LH}	ziég? ^{LH}	ziég ^{LH}	zi ^H niag ^{LH}	zi ^H no? ^{LM}	zi ^H lé ^M
С	$zi\acute{e}\mathrm{g}^L$	ziég? ^L	ziég ^L	zi ^L niag ^{LH}	$zi^L no i^{LM}$	zi ^L lé ^M

(26) 'arrive home there (at base away from PLA)'

	1s	2s	3s	1p	2p	3р
P	ziá i ^L	ziá? ^L	ziá? ^L	zi ^L niag? ^L	$zi^L no ?^L$	$zi^L lia^L$
I	zią? ^{LH}	zią? ^{LH}	ziá? ^{LH}	zi ^H niag? ^L	$zi^H no?^L$	$zi^H lia^L$
С	ziá? ^L	$ziá?^L$	ziá? ^L	zi ^L niag? ^L	$zi^L no ?^L$	zi L lia L

(27) 'arrive here (at nonbase PLA)'

	1s	2s	3s	lp	2p	3p
P	guį ^{LM}	guį̇̃? ^{LM}	guį̇́ ^{LM}	$u^L niag^{LH}$	$u^L no ?^{LH}$	$u^L l \acute{e}^M$
1	guį́ ^M	guį́? ^M	guį̇́ ^M	u^H niag LH	u ^H no? ^{LH}	u ^H lé ^M
С	gu \ddot{l}^L	guį̇̃ ? ^L	gu $\ddot{\it l}^L$	$u^L niag^{LH}$	u ^L no? ^{LH}	u ^L lé ^M

(28) 'arrive home here (at base PLA)'

	1s	2s	3s	1p	2p	3р
P	guįį? ^{LM}	guį ? ^{LM}	guį̃? ^{LM}	$u^L niag ?^L$	$u^L no ?^L$	$u^L lia^L$
1	guįį? ^L	guįį? ^L	guįį? ^L	$u^H niag ?^L$	u ^H no? ^L	u ^H lia ^L
С	guį́?L	guį́?L	guį́? ^L	$u^L niag ?^L$	$u^L no ?^L$	$u^L lia^L$

As mentioned earlier, all parties to this discussion about Otomanguean verbs of motion and arrival agree that verbs of arrival are momentary verbs. In the case of Palantla Chinantec, verbs of arrival do have morphologically progressive forms in the same way as verbs of motion do. Whereas the progressive form of a motion verb may occur with habitual or iterative readings in the absence of the prefix ma^{M_-} (perfect), verbs of arrival never have such readings and never occur without the prefix ma^{M_-} (perfect). The prototypical use of first-person progressive forms of the verbs in (27) and (28) are as greetings upon arrival at someone's house or upon returning home after an absence. (29a) is probably more commonly heard in this context than the completive form of the verb of motion cited in (21c).

- (29) a. hní^M ma^M-na^M-gu^{r̄LM} giu?^{LH}

 1s PRF-HOD-arrive^here^p3 Sir

 It is I who have come (arrived here), Sir.
 - b. ma^M - u^L niag? L hnii? H hmi H zág L Palantla Palantla

-kala? ná^H ?io^{LH} again Assev woman

We have come back again to Palantla, you see, Madame.

Note that plural verbs of arrival are binomial in the same way as plural verbs of motion and that the second element of these binomial stems is the same for corresponding verbs of the two sets (with minor inflectional differences). The fact that verbs of arrival are uncontestedly momentary

¹⁵This is also true in Tepetotutla Chinantec (Westley and Merrifield 1990:112).

verbs in Mixtec, Zapotec, and Chinantec supports the contention that verbs of motion are momentary verbs in Chinantec, at the very least, given the morphological relatedness of the two sets of verbs in their plural forms.

Inanimate intransitive verbs. All of the verbs discussed above occur with animate agents as subject, and are termed animate intransitive (AI) verbs in Chinantec studies. There are also inanimate intransitive (II) verbs of motion and arrival which take an inanimate patient as subject ('the package arrived'). They are closely related phonologically to their AI counterparts and are listed in (30)–(31). Since inanimate subjects are by definition third persons, these verbs have just three singular forms and three plural forms each.

These impersonal verbs have the same grammatical and semantic characteristics as their AI counterparts. Typical sentences with these verbs are presented in (32).

- (32) a. ma^M - $gog I^{LM}$ lio^{LH} pr-arrive home here p_{3s} package

 The package has come back (arrived back here).
 - b. $?\dot{e}i^H$ si^M $ka^L-zi^Llei^L$ ANA paper PST-arrive^here^C3p The books have arrived (here).
 - c. na^L $bi?^H$ $hiág?^M$ si^M now AFF come^13s paper The letter will come soon.

3. Final remarks

Most of the argumentation occurs throughout the paper, so that little needs to be said here by way of summing up beyond a reminder that a linguistic analysis should attempt to place the patterns of language in bold relief. As we attempt to do this, we need to remember that our analysis is but a theory of what a language is like, a metaphor that we hope will convey a measure of understanding of how a language is constructed and used.

Whether or not Diuxi Mixtec verbs of motion are momentary is not an ontological question. A statement to the effect that they are is instrumental in the sense that it accounts for the appropriateness of their use in well-defined situations in ways that other explanations do not. I continue to believe that the explanation we set forth for Diuxi was explanatory in this sense. I do not believe that the recognition of another pattern in which they participate—a morphological paradigm of undoubted historical value—necessarily falsifies the insight a momentary analysis brings to the data.

It is always possible, of course, that our understandings of the Diuxi data are partial or in error. The discussion so far has not shown this to be the case. As we learn more about these Otomanguean languages and gain experience in the comparison of tense-aspect systems in a wider range of human languages, we can hope that our metaphors about them will be PROGRESSIVELY more helpful and satisfying.

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