TEZOATLÁN MIXTEC MOTION AND ARRIVAL VERBS

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1. Introduction. In this article I propose a set of three semantic features useful for the description of motion and arrival verbs in Tezoatlán Mixtec (hereafter TM).[1] These three features are "point," "base," and "deictic center." I show how they account for the distinctions among eight verbs of motion and arrival in TM. I also show how these three features differ in significant ways from the features proposed for the analysis of motion and arrival verbs in other Otomanguean languages.

The earliest study of motion and arrival verbs in an Otomanguean language was Kuiper and Merrifield's study of Diuxi Mixtec (1975). This study introduced the features of base, goal, and the place of locutionary act. The authors also claim that verbs of motion are further differentiated between those that indicate one-way motion and those that indicate round-trip. Speck and Pickett (1976) adapted these features to Texmelucan Zapotec and suggested a reanalysis of the Diuxi data. Macaulay (1985) adapted this analysis to Chalcatongo Mixtec and suggested a reanalysis of the Diuxi data similar to Speck and Pickett's.

Each study utilized a feature called "the place of locutionary act" (PLA). PLA is a term which is sufficient for describing motion and arrival verbs in conversation, since it is always defined in relation to where the speaker is

Abbreviations appearing in the glosses are: COM completive aspect; CON continuative aspect; DC deictic center; DUR durative; HAB habitual aspect; IMP imperative; INT intensifier; POT potential aspect; PROG progressive aspect; QUES question; SUB subjunctive; 1s first singular; 2s second singular; 3 third respect; 3m third masculine; 3c third child; 3t third thing; 3a third animal; 3m third metal; 3s third spherical; 1p(ex) first plural exclusive; 1p(in) first plural inclusive.

located. But the term is less useful for describing the uses of these verbs in nonconversational material, such as narrative or exhortation, which was not treated in the three studies cited. I have therefore chosen to use the more general concept "deictic center" instead of PLA. In this study, the deictic center refers to the place the speaker has chosen as "here." Verbs that are [+DC] indicate movement toward or arrival at the deictic center; verbs that are [−DC] indicate motion toward or arrival at an unmarked or unspecified place. The deictic center of a conversation is the place where the speakers are located, and the speaker cannot choose to place it somewhere else. In nonconversational text material, however, the narrator can project the deictic center to various places mentioned in the text.

I also introduce a feature I call "point" in this study. Arrival verbs, which are [+point], indicate arrival at a point, while motion verbs, which are [−point], indicate movement between two points. Therefore, this feature defines the primary distinction between motion and arrival verbs. The three studies cited above propose the feature goal and also a difference between one-way vs. round-trip to account for these differences. Speck and Pickett (1976:59) state that the direction in relation to **goal** constitutes the primary distinction between 'go/come' and 'arrive' in Texmelucan Zapotec, and that 'arrive' is defined as indicating one-way motion (1976:60), while motion verbs indicate two-way motion. In TM, there is no motion implied at all for arrival verbs, only arrival at a specific point. A motion verb must be used to express the motion to that point. I use "point" as the feature to show these differences between motion and arrival verbs; I do not explain the differences in terms of one-way vs. round-trip, nor in reference to the direction in relation to the goal.

The third feature which is needed to differentiate the set of eight motion and arrival verbs is "base." Verbs that are [+base] indicate movement toward or arrival at a base, i.e., usually the home area of the subject; verbs that are [−base] indicate movement toward or arrival at an unmarked place. With respect to this feature, my description of TM is in substantial agreement with the other studies. I do, however, expand on some details that are not mentioned in the other studies.

This set of eight verbs in TM, classified according to these three features, is given in (1).[2]

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[2] TM has the following phonological units: stops and afficates *p t č k kw*; prenasalized stops *mb* and *nd*; fricatives *v θ s š ž x*; nasals *m n ñ*; lateral *l*; flaps *r*; laryngeal *ʔ*; vowels *i u e o a*; tones ´ (high), ` (low), and mid (unmarked).

In this dialect of Mixtec, nasalization is a feature which may occur only once in a word; therefore, a word is either completely oral or completely nasal. All of the vowels except *u* appear in nasal words, but the vowel *e* is relatively rare in a nasal word. Nasalized words are

(1) *ko?ò^n* 'go'   *kiši* 'come'
     [−point]   [−point]
     [−base]   [−base]
     [−DC]   [+DC]

     no?ò 'go home'   *ndiši* 'come home'
     [−point]   [−point]
     [+base]   [+base]
     [−DC]   [+DC]

     saà 'arrive'   *kasaà* 'arrive here'
     [+point]   [+point]
     [−base]   [−base]
     [−DC]   [+DC]

     nasaà 'arrive home'   *ndusaà* 'arrive home here'
     [+point]   [+point]
     [+base]   [+base]
     [−DC]   [+DC]

Note the way these verbs are glossed to reflect the three features. All verbs that are [+point] contain the word 'arrive'. The two that are [+point] and [+DC] also contain the word 'here'. Both verbs that are [−point] and [+DC] contain the verb 'come', and both verbs that are [−point] and [−DC] contain the word 'go'. All four verbs that are [+base] contain the word 'home'.

2. Aspect. Each of the eight verbs discussed in this study has three or four aspect forms. Most TM verbs have three aspects: continuative, completive, and potential.[3] The continuative form is used for both progressive

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marked by a raised morpheme-final ^{n} in this study, unless the word contains a nasal consonant (*m n ñ*), which also indicates the word is nasal.

This variety of Mixtec exhibits extensive tone sandhi, in which the basic tones of words are changed to a different contrastive tone after or before certain words. The tones written on the examples in this paper show the result of these sandhi rules, rather than the underlying forms.

[3] An alternative analysis has been proposed by Bickford and Marlett (1988), who analyze Mixtec in terms of both aspect and mood. They claim that Mixtec has two moods: irrealis, which replaces potential aspect, and realis. The realis mood is divided into two aspect categories: perfective, which replaces completive aspect, and imperfective, which replaces continuative aspect. They also say there is a small class of motion verbs which makes a further aspectual distinction between two types of imperfectivity, habitual and progressive.

and habitual actions. The paradigm for a typical nonmotion verb, *kata* 'dig', is given in (2).

(2) Potential   *kata*
     Completive   *nì sata*
     Continuative *sáta*

In contrast, the four motion verbs each have four aspectual forms (not just two as Kuiper and Merrifield claim Diuxi Mixtec has). Instead of a continuative form, there are separate habitual and progressive aspects, as seen in (3), which gives the paradigm for *ko?o^n* 'go'.

(3) Potential   *ko?ò^n*
     Completive   *nì sa?à^n*
     Habitual   *sá?à^n*
     Progressive   *kwa?à^n*

The completive aspect is used only after the agent has reached his/her destination and returned. The habitual aspect is used to indicate that the agent makes habitual trips back and forth to a destination. The potential aspect is used when the movement has yet to begin. The progressive aspect is used once the agents have left. They may be on their way to their destination, may have reached it, or may be on their way back to their point of origin, but they have not yet arrived back at the point of origin. (See Speck and Pickett 1976:61.)

Kuiper and Merrifield's claim that motion verbs in Diuxi Mixtec are momentary, i.e., that they exclude progressive readings, is not true for TM. This can be seen especially clearly in the progressive aspect forms, which are used for progressive movement in both present and past. Example (4) is used by a speaker to express the motion of an agent whose location at the moment of the speech act is unknown. The agent could be anywhere between the point of origin and his/her destination, traveling in either direction. The speakers have no way of knowing, since they cannot see him/her.

(4) **kwa ?à^n**   *ši*   *čóo^n*
    PROG.go   3c   work

    'He went to work (and has not returned)'.

Example (5) illustrates progressive motion in the past (see also 21).

(5) *θá*   *nì*   *kee*   *ndu?u*   **kwa ?à^n**   *ndù*
    then   COM   leave   1p(ex)   PROG.go   1p(ex)

       ší?í^n   *ná*   *čapultepée*
       with   3   Chapultepec

    'Then we left going with him to Chapultepec Park'.

kwaʔàⁿ also has a special grammaticalized use following nonmotion verbs in the continuative aspect to force a progressive, rather than a habitual, reading, as seen in (6).

(6) *kándéé*   *rá*   ***kwaʔàⁿ***   *rà*
      CON.win   3m   PROG.go   3m

     'They are (in the process of) winning'.

Arrival verbs, unlike motion verbs, have only three aspects. Since arrival verbs are momentary, the progressive meaning does not occur, and there are no progressive aspect forms. (There is one exception to this generalization, the form *kòsaà* 'PROG.arrive', which is discussed in **4**.) The three aspect forms of arrival verbs are therefore labeled potential, completive, and habitual, as seen in the following paradigm for *kasaà* 'arrive here'.

(7)   Potential   *kasaà*
      Completive   *nì kasáà*
      Habitual   *kásaà*

Table 1 contains all verb forms included in this study. Note that there are no gaps in the motion verb paradigms, unlike those presented for Diuxi and Chalcatongo Mixtec.[4] This complete set of forms means that each combination of features is represented by a different form, and that each form differs from the others precisely as the features claim, which provides strong support for the analysis.

3. The deictic center. As mentioned above, it is not difficult to determine whether motion or arrival is toward/at or away from the deictic center in everyday conversation or in a dialogue within a narrative or hortatory text, since it is always defined in relation to where the speaker is located (as the original term PLA implies). In nonconversational material, however, an author can "project" the deictic center. One way this is done is when the author is relating a personal experience story, another way is when telling a story about other people or characters. The deictic center is also projected in one way for motion verbs and in a somewhat different way for arrival verbs.

3.1. The deictic center with motion verbs. In conversation, the deictic center is always the place where the conversation is taking place, which is equivalent to the PLA of the other studies. Examples (8) and (9) illustrate motion verbs used in conversation; (8) shows movement away from the deictic center, while (9) shows movement back to it.

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[4] See Appendix A.

TABLE 1
TM MOTION AND ARRIVAL VERB PARADIGMS

Verbs which indicate motion [−point]

Aspect	motion away from deictic center [−DC]	motion toward deictic center [+DC]	
	'go'	'come'	
Potential	$ko\textit{ʔò}^n$	kiši/kii	mover moves
Completive	nì sa$\textit{ʔà}^n$	nì kiši/nì kii	to unmarked place
Habitual	sá$\textit{ʔà}^n$	kíši/kíi	[−base]
Progressive	kwa$\textit{ʔà}^n$	vàši/vèi	
	'go home'	'come home'	
Potential	noʔò	ndiši/ndii	mover moves
Completive	nì noʔò	nì ndiši/nì ndii	to base
Habitual	nóʔò	ndíši ndíi	[+base]
Progressive	kwa$\textit{ʔà}^n$ nóʔò	kòndii/kwèndiši	

Verbs of arrival [+point]

	arrival away from deictic center [−DC]	arrival at deictic center [+DC]	
	'arrive'	'arrive here'	
Potential	saà	kasaà	arriver arrives at
Completive	nì saà	nì kàsáà	unmarked place
Habitual	sáà	kásaà	[−base]
(Progressive	kosaà)		
	'arrive home'	'arrive home here'	
Potential	nasaà	ndusaà	arriver arrives
Completive	nì nàsáà	nì ndùsáà	at base
Habitual	násaà	ndúsaà	[+base]

(8) *ko ʔòⁿ* *ì* *kwiiⁿ* *i* *ñàʔa* *kasáʔaⁿ* *žó*
POT.go 1s POT.buy 1s thing POT.eat 1p(in)

'I'm going to go so I can buy things for us to eat'.

(9) *iiⁿ* *kà* *kuù* *θá* *kiši* *óⁿ*
one more day then POT.come 2s

    ná *kaθikí* *à*
    SUB POT.play 1p(in)

'Come here another day and we will play'.

Although it is possible to project the deictic center in conversation in English, it is not possible in TM. For example, in English, Bill and Paul could be in Bill's house and Paul might say to Bill, "When you come to my house. . . . " In this case, Paul has projected the deictic center to his own house. In Mixtec, one would have to say, "When you arrive at my house . . . ," using an arrival verb which is [−DC] and also [−base] to convey this idea. Because the deictic center is always where the speaker is located, the use of a [+DC] verb in TM could indicate Paul coming back to Bill's house, and the possessor of the house would have to be changed to produce a cohesive sentence in the discourse context.

In texts of personal experience, the motion is toward or away from where the narrator is at the time of relating the story. Example (10) was written in the town of San Andrés; therefore a 'come' ([+DC]) verb was used. If a 'go' ([−DC]) verb had been used, the sentence could not have been written in San Andrés. The same applies to (11), which had to be written in Tucson.

(10) *iiⁿ* *kuù* **nì** **kii** *iiⁿ* *komisíòn* *nì* *keè*
one day COM come one agency COM do

    čóoⁿ *ra* *ñoo* *san* *andres*
    work 3m town San Andrés

'One day an agency came here to do work in San Andrés'.

(11) *θá* *nì* *kee* *nduʔù* **vèi** *ndu* *túksòn*
then COM leave 1p(ex) PROG.come 1p(ex) Tucson

'Then we left coming [here] to Tucson'.

These examples confirm my claim that in a personal experience story the main reference point (i.e., the deictic center) when using motion verbs is always the place where the narrator is at the time of relating the story, not where he/she is during any episode of the story, as is the case when telling a story not involving a personal experience. The place where the narrator is

located when telling the story therefore serves as the deictic center for the story, and all motion is described in relation to this place. It is as if there were an invisible line stretching from the location of the beginning point of the story to the place where the narrator is telling it. Therefore, all motion along that line which is toward the narrator as he/she relates the event is described with [+DC] verbs, while all motion along that line away from the narrator is described with [−DC] verbs. This is especially clear in stories that describe the narrator taking a trip (as seen in 11).

In a story which is not relating a personal experience, and in which, therefore, the narrator is not one of the participants, the narrator projects the deictic center onto the main scene or the main character. As the scenes change in the story, the narrator changes the deictic center. The most common pattern is to tie the deictic center to the location of the main character; whenever that character moves, the deictic center changes with him/her. Every scene of a text must have a deictic center if motion verbs are used. In (12) the narrator regards the city mouse as the deictic center. As a result, the movement of the country mouse toward the city mouse is movement toward the deictic center.

(12) θá   nì   nàndiókòo   tiẑótò   sioθáà   ñoó   nì
     then   COM   turn.around mouse   city   that   COM

     sà   ndè?é   rí   nòó   vèi   amigó   rì
     DUR   look   3a   face   PROG.come   friend 3a

'Then the city mouse turned around toward where his friend was coming'.

The hunter in (13) is the main character of the story. He serves as the deictic center for all action.

(13) ta   kúú   nì   kàsá?á   ndéi?ì   ndiẑi?ì
     and   CON.be   COM   start   CON.cry   tiger

     vèi   rí   keì   rì   tà   kini   ñoó
     PROG.come   3a   POT.eat   3a   3m   HAB.shoot   that

'And the tiger started howling, coming to eat the hunter'.

3.2. The deictic center with arrival verbs. Speck and Pickett (1976:60) claim that PLA is not relevant in defining arrival verbs in Texmelucan Zapotec. In TM, however, this concept is highly relevant. The deictic center feature distinguishes two of the four arrival verbs from the other two. Also, like motion verbs, arrival verbs can be used to project the deictic center differently in conversation, personal experience stories, and stories in which the narrator is not a participant.

Examples (14) and (15) illustrate conversational uses of arrival verbs; the verb in (14) is [−DC], and the verb in (15) is [+DC].

(14) | θá | ná | saà | ilo. | θá | ná | tìi^n |
| --- | --- | --- | --- | --- | --- | --- |
| then | SUB | POT.arrive | rabbit | then | SUB | POT.grab |

rí	kanda?à	rì	šaà^n
3a	POT.hang	3a	there

'Then the rabbit will (most likely) arrive [there]. Then he will (most likely) be grabbed and stuck there'.

(15) | kwa?á^n | θá | kasaà | ò^n | na?a | taà^n |
| --- | --- | --- | --- | --- | --- |
| IMP.go | then | POT.arrive.here | 2s | early | tomorrow |

ší?í^n	ší
with	3c

'Go and then arrive back here early tomorrow with him'.

Even though TM and other Otomanguean languages differentiate arrival **away** from the deictic center from arrival at the deictic center, only the [+DC] verb is marked. It is possible to use a [−DC] arrival verb to indicate arrival **at** the deictic center when such arrival is implied from the context, is not important for understanding, or is not in focus. However, the reverse is never true. It is not possible to use a [+DC] verb when arriving at a place which is **not** considered the deictic center. In (16), which is taken from a tarbaby story, all the previous action occurred at the location of the tarbaby. The owner of the beanfield where the tarbaby is located now arrives onto this main scene and captures the rabbit, who is stuck to the tarbaby. Because the tarbaby is the deictic center, we would expect a [+DC] verb, but the narrator chooses to use the unmarked [−DC] verb instead, because the context clearly indicates the location to where the owner arrives.

(16) | θá | nì | saà | sato?o | ndúčì | θá | nì |
| --- | --- | --- | --- | --- | --- | --- |
| then | COM | arrive | owner | beans | then | COM |

ki?i^n	ra	rì
get	3m	3a

'Then the owner of the beans arrived. Then he got it (the rabbit) . . .'.

The deictic center of a personal experience story for arrival verbs is the place where the narrator personally **appears** in the story, rather than the place where he/she is telling the story. This is different from the deictic center for motion verbs, which is the place where the narrator is at the time of telling about the experience.

In (17), the deictic center for the motion verb is Mexico City (where the author wrote the story), while Huajuapan (where he appears in the story) is the deictic center for the arrival verb.

(17) θá   ví   **nì**   **kàsáà**   autovús   kiró   **kíi**
      then INT   COM   arrive.here bus   3m   HAB.come

     ñàko²ožó
     Mexico City

     'Then the bus arrived [here] (in Huajuapan), the one that comes here to Mexico City'.

In (18), the author was in the jail when the wives arrived, but not at the time he wrote the story.

(18) θá   **nì**   **kàsáà**   ñaθi²í   tàa   ñó²o
      then   COM   arrive.here wife   man   CON.be.in

     ve²ekàa   ñoó
     jail   that

     'Then the wives of the men in jail arrived [here]'.

As with motion verbs, the deictic center of a nonpersonal experience story is projected onto the main character or the main scene. In the text preceding (19), the story describes how a rabbit had arrived at the house of a snake to hide there. Then in (19), a coyote appears on the main scene, which is also the place where the main character, i.e., the rabbit, is located.

(19) θá   **nì**   **kàsáà**   tà   θito   ndigwè²í
      then   COM   arrive.here 3m   uncle   coyote

     'Then uncle coyote arrived here'.

In (20), the story has been describing a scene in which a man and an old woman are in her house. The man leaves and then this sentence appears, containing the [+DC] arrival verb, marking the house and/or the old woman as the deictic center.

(20) θùú   sà   too   čáá   ó   kwa²à^n rà   kúú
      then   just   a.bit   little INT   PROG.go   3m   CON.be

     nì   **kàsáà**   tačì   θéè^n
     COM   arrive.here wind   strong

     'And he had just been gone a little while and a strong wind arrived here'.

4. Point. The second feature I use to define the verbs in this study is "point." This feature makes the primary distinction between motion and arrival verbs. In TM, the most obvious difference between motion and

arrival verbs is the fact that motion verbs imply potential, partial, or completed motion (depending on the aspect), from one place to another place and back again, while arrival verbs are momentary and simply state an arrival at one place. This distinction has led me to state that the defining feature of the arrival verbs is [+point]. The "point" is simply the place of arrival. In contrast, motion verbs are labeled [–point], since they indicate motion between two places. As mentioned earlier, Speck and Pickett state that direction in relation to goal constitutes the primary distinction between 'go/come' and 'arrive' in Texmelucan Zapotec, and that 'arrive' is defined as indicating one-way motion, while motion verbs indicate round-trip. I distinguish these ideas with the concept "point."

Example (21) contains a motion verb in the progressive aspect and an arrival verb in the completive aspect. The arrival verb indicates that the subject has reached his destination. If the narrator had not used an arrival verb, the implication would be that the trip was still in progress. The listener would not know if the subject had arrived at his destination.

(21) *θá*   *nì*   *kee*   *ra*   **kwa ʔàⁿ**   *rà*   *kastòʔoⁿ*
     then   COM   leave   3m   PROG.go   3m   POT.tell

      ra   *šíʔíⁿ*   *θutì.*   *θá*   **nì**   **saà**   *rà*   *nì*
      3m   with   priest   then   COM   arrive   3m   COM

      kasáʔá   *rá*   *kastòʔoⁿ*   *ra*   *šíʔíⁿ*   *θutì*
      start   3m   POT.tell   3m   with   priest

    'Then he left going to tell the priest. Then he arrived and he
       started to tell the priest . . .'.

A second difference between motion and arrival verbs is the meaning of the completive aspect forms. The completive aspect of the two motion verbs labeled [–DC] indicates a completed round-trip, for example, motion from the speaker's home, to the market, and back home, as in (22), while the completive aspect of a [–DC] arrival verb indicates completed arrival at a point.

(22) **nì**   **sa ʔàⁿ**   *ì*   *noò*   *žáʔi*
     COM   go   1s   face   plaza

    'I went to the market'.

The completive aspect of motion verbs labeled [+DC] indicates that the subject has come **and gone**. Arrival verbs indicate that the subject is still there. An affirmative answer to the question in (23) indicates Emilio has come and gone, while an affirmative answer to the question in (24) means that Emilio is still around.

(23) á   nì   kii   emilió
     QUES   COM   come   Emilio

'Did Emilio come here?'

(24) á   nì   kàsáà   emilió
     QUES   COM   arrive.here Emilio

'Has Emilio arrived here?'

A third difference between motion and arrival verbs is that a speaker projects the deictic center differently in a personal experience story for motion verbs and arrival verbs. This was discussed in **3**.

Finally, because arrival verbs are [+point] and motion verbs are [–point], there is a difference in their inflection. As was stated in the section on aspect, motion verbs are inflected for potential, completive, habitual, and progressive aspects. Arrival verbs are inflected only for potential, habitual, and completive aspects.

There is, however, one exception: the progressive aspect form of arrive, *kosaà*.

This form is of particular interest, since all other TM arrival verbs are momentary. In fact, Speck and Pickett (1976:59) suggest that all Otomanguean arrival verbs are momentary. Merrifield (1992:493–94) also states that verbs of arrival are uncontestedly momentary in Mixtec, Zapotec, and Chinantec.

The exceptional form *kòsaà* consists of *kò* and *saà* 'POT.arrive'. *kò* is almost certainly a shortened form of *kwa?á*^{n} 'PROG.go', which means that *kòsaà* refers to a progressive movement and potential arrival away from the deictic center. A single pronoun occurs after *kòsaà*, serving for both.

In support of this etymology for *kòsaà*, consider the progressive aspect forms of the verbs 'go home' and 'come home'. The progressive aspect of *no?o* 'go home' is a two-word form, *kwa?à*^{n} *nó?ò*, and the progressive aspect of *ndiši/ndii* 'come home' is the fused form *kwèndiši/kòndii*.[5]

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[5] The prefix *kò* is also joined to the potential form of several other verbs that reflect movement to create a progressive form.

Potential Form		Progressive Form	
kù?u	'POT=enter'	*kòku?u*	'PROG=enter'
ndù?u	'POT=enter'	*kòndu?u*	'PROG=enter'
kaa	'POT=go.up'	*kòkaa*	'PROG=go.up'
ndaa	'POT=go.up'	*kòndaa*	'PROG=go.up'
noo	'POT=go.down'	*kònoo*	'PROG=go.down'
kee	'POT=do'	*kòkee*	'PROG=go.inside'
yà?a	'POT=pass.through'	*kòya?a*	'PROG=pass.through'

Further evidence that the *kò* prefix is a shortened form of *kwaʔàn* is found in related Mixtec languages. Macaulay (1985:60) gives a Chalcatongo Mixtec example *kwa-haa*, which seems to have the same meaning and etymology as *kòsaà*. Also, Santa María Zacatepec Mixtec has a form *kwa-saa*, which seems to have the same range of meaning as *kòsaà* (Doug Towne, personal communication).

The *kòsaà* form is used only for situations in which the speaker and listener are **not** at the same place. The speaker considers his/her location the deictic center and uses *kòsaà* for motion away from the deictic center and toward the listener at the time of the speech act. In conversation, *kòsaà* indicates that the subject is in the process of arriving at the time of the speech act.

For example, during a basketball game, one player threw the ball toward a teammate and shouted:

(25) **kòsaà**   rì
    PROG.arrive   3s

    'It is arriving'.

In another instance, a girl climbed up into a tree to pick avocados and began throwing the avocados to the ground. As she did so, she shouted *kòsaà rì* to the people on the ground to let them know when each avocado was 'arriving' to them, so the avocados would not be lost in the grass or hit someone on the head.

In still another example, a rooster was coming near a baby, and a girl (who was closer to the rooster than he) shouted *kòsaà rì* to let him know the rooster was arriving to where he was.

A final example of the use of *kòsaà* in everyday speech is seen in (26). A small boy was running toward a baby yelling this to indicate that he was in the process of arriving from where he was to the baby.

(26) **kòsaà**   ì
    PROG.arrive   1s

    'I am arriving'.

The progressive can be used to make a statement more vivid. In an example from a narrative, a rabbit is threatening to hit the tarbaby. Before it hits the tarbaby the first time, it says that its fist will arrive (potential aspect), but then, for the second hit, it uses *kòsaà* 'PROG.arrive' to show that its fist is in the very process of arriving toward the tarbaby's face.

(27) **kòsaà**   iiⁿ   kà   ndáʔà   í   kaá   rì
    PROG.arrive   one   more   hand   1s   CON.say   3a

    '"Another fist of mine is arriving," says the rabbit'.

5. Base. The third feature for defining the verbs of this study is base, which can broadly be thought of as the home area of the subject. Base is a concept first applied to Mixtec by Kuiper and Merrifield (1975) in their analysis of Diuxi Mixtec. They say that base can be "a place to which the agent of an action returns at the end of the day or at the end of a trip—his home, his hometown, his home district, etc.—the size and precise location in space of the base being a function of the order of magnitude of the trip in question." Similarly, Speck and Pickett (1976:61) say that base can be thought of as "the place where the person in motion normally or expectedly returns." These definitions describe well the way base is understood in TM.

It is also possible to establish temporary bases (Speck and Pickett 1976:62). Many people from the village of San Andrés have moved to Huajuapan, a large market town about a two-hour bus ride away. For them, both San Andrés and Huajuapan are considered bases. It is also possible to have at least three bases. People have referred to me with verbs indicating I have a base in the United States, in a nearby town where I rented a house, and in the town of San Andrés.

The major difference between [+base] verbs and [−base] verbs is that verbs designated as motion toward a base, or arrival at a base, require a reading with base as goal; they thus specify where the subject is going. In contrast, [−base] verbs are unmarked with regard to goal and thus provide no information about where the subject is going. We can know where the subject is going only if other words are added to the sentence or if the information is given in a wider context.

In (28), there is no doubt that the subjects are going to what is considered a base.

(28) *kaà   iì^n sàkwaá   θá   **no ?ò**   ndù*
      bell   nine   night   then   POT.go.home   1p(ex)

    kuθì   ndù
    POT.sleep   1p(ex)

    'At 9:00, then we will go home and sleep'.

Even though it is never possible to use a verb which is [+base] when going to a place which is not considered a base, [−base] verbs may be used for goals that are [+base] if the base is not in focus for the speaker. This was first noted by Macaulay (1985:58–59), who gives an example where a subject uses a [−base] verb while also stating explicitly that he is going to his own house. The same thing may also be done in TM, as seen in (29).

(29) **ko ?o^n**   i^n ve?e   i
      POT.go   1s   house   1s

    'I am about to go home'.

Macaulay states that such examples have a "verb which was previously defined as Go to non-Base in it, yet one's home is always, by definition, one's home base."

When two people are together, and the place to which they are going is a base for one of them but not for the other, a [−base] verb is used.

(30) tá   nì   saà   à   nì   kù$^{\textit{ʔ}}$u   ó^n ini
     when   COM   arrive 1p(in)   COM   enter   2s   in

     ve$^{\textit{ʔ}}$e   žu$^{\textit{ʔ}}$ù
     house   1s

'When we have arrived and you have entered my house . . .'.

6. Summary and discussion. TM data confirm several of the concepts presented in earlier articles on motion and arrival verbs in Otomanguean languages. For example, the TM data suggest that motion verbs are not momentary verbs. This confirms what Speck and Pickett and also Macaulay suggested in their reanalysis of Diuxi Mixtec. Also, Speck and Pickett's view that each aspect of 'go' needs to be thought of as implying two-way action (1976:61)—be it potential, habitual, in progress, or completed motion—works well for understanding the data of TM.[6] And, Macaulay's insight that [−base] verbs are default verbs and can sometimes be used to indicate motion to a base is evident in TM.

In addition, the TM data reveal several things not mentioned in any of the other studies. Deictic center has proved to be a more useful theoretical construct than PLA because it accounts for the uses of both motion and arrival verbs in conversational and nonconversational material. The study has shown how the deictic center can be projected in several types of nonconversational narrative. To use motion and arrival verbs, a deictic center must be established. In personal experience stories, however, there are two different deictic centers, one for motion verbs and another for arrival verbs. The deictic center is, however, never projected in conversation. It is always the "PLA."

I also introduce the concept of "point" and use it instead of what others have referred to as "goal" and the distinction between round-trip and one-way motion. This is not merely a change of terminology. This feature helps clarify that no motion is involved in arrival verbs. Arrival verbs are momentary, which in itself excludes the idea of motion, so they cannot be said

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[6] Kuiper and Merrifield (1975) reject the round-trip analysis and declare all motion verbs as momentary, partly because the Diuxi forms šé$^{\textit{ʔ}}$é^n and hwá$^{\textit{ʔ}}$á^n do not seem to be the same stem. But in TM, the stems are clearly related: sá$^{\textit{ʔ}}$à^n 'HAB=go' and kwa$^{\textit{ʔ}}$à^n 'PROG=go'. Speck and Pickett (1976:63) cite an example in Ayutla Mixtec where the progressive and habitual forms of 'go' are also clearly related.

TABLE 2
DIUXI MIXTEC MOTION AND ARRIVAL VERBS

	COMPL	ITER	PROG	POT
Go to Base and return	nuʔu	—	hwa-nuʔu	nuʔu
Go to non-Base and return	nšeʔe	šeʔe	hwaʔa	hiʔi
Come to Base and return	ndiši	—	kwa-ndiši	ndiši
Come to non-Base and return	nkiši	—	vaši	kiši
Arrive Here at Base	nšee			nšee
Arrive Here at non-Base	nkišee			kišee
Arrive There at Base	našee			našee
Arrive There at non-Base	nšee			šee

TABLE 3
CHALCATONGO MIXTEC MOTION AND ARRIVAL VERBS

	COMPL	ITER	PROG	POT
Go–1	ni-noʔo	—	kwa-noʔo	noʔo
Go–2	ni-haʔa	haʔa	kwaʔa	kiʔi
Come–1	—	—	—	—
Come–1	ni-kii	—	bei	kii
Arrive There–1	ni-na-haa			na-haa
Arrive There–2	ni-haa			haa
Arrive Here–1	(ni-žaa)			(žaa)
Arrive Here–2	ni-čaa			čaa

to indicate "one-way motion." Arrival verbs focus on arrival, at the expense of motion, that is, they focus on the "point" of arrival.

While Macaulay called [–base] a default value for motion verbs, TM data shows that [–base] is also a default value for arrival verbs. In addition, [–DC] can also be used as a default value for arrival verbs in some contexts.

TM also has a progressive arrival verb, which had previously been thought not to exist in Otomanguean languages. TM data also suggest that both the 'come' verbs as well as the 'go 'verbs imply round-trip, as was illustrated in the examples in **4**.

Finally, this study has highlighted the need to study various discourse genres in order to determine the semantic features of motion and arrival verbs. TM data reveal uses in narrative discourse which are different from conversation and which give us a fuller understanding of these verbs. Per-

haps a study of motion and arrival verbs in a variety of discourse contexts would modify the analysis proposed for other Otomanguean languages.

APPENDIX A

Tables 2 and 3 show motion and arrival verbs in Chalcatongo and Diuxi Mixtec, as analyzed by Macaulay (1985:67, 74). Note the gaps in each.

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