Studies in Native American Languages IV
Kansas Working Papers in Linguistics
Volume 10, number 2, 1985

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FOREWORD

It is indeed gratifying to recognize the degree of acceptance the *Kansas Working Papers in Linguistics* has come to enjoy, and this is especially true for the series of *Studies in Native American Languages*. Even before the call for papers went out in the fall, we had received inquiries from prospective contributors, and the response to the call itself was remarkable in quality as well as diversity.

This year the *KWPIL* marks its first decade of existence, and we are publishing two numbers. Number one is devoted to theoretical issues, general linguistics and old-world languages, while number two is the fourth in the *Studies in Native American Languages* series. This number includes articles representing seven different Language families from all over North America (Uto-Aztecan, Muskogean, Yuman, Siouan, Otomanguan, Athabaskan and Algonkian), and a great deal of original scholarship.

We wish to thank the contributors, both those whose papers appear in this volume, and those whose papers we did not include. We also wish to thank the faculty of the Linguistics department of the University of Kansas for their support and encouragement for the *KWPIL* throughout the year.
THE SEMANTICS OF 'COME,' 'GO,' AND 'ARRIVE' IN OTOMANGUEAN LANGUAGES

Monica Nacuay

Abstract: Kuiper and Merrifield (1975) have analyzed Diuxi Mixtec verbs of motion and arrival in terms of the notions "base," "one-way," and "round trip." This paper compares their analysis with Speck and Pickett's (1976) work on the same domain in Tzotzil-Maya Zapotec, and presents an analysis parallel to the latter for Chalcatongo Mixtec. A reanalysis of the Diuxi data along these same lines is then shown to be much more explanatory, and also allows a general statement to be made about verbs of motion and arrival in the Otomanguean language family.

Introduction

Several discussions of verbs of motion and arrival in Otomanguean languages have been published in the last decade. Most notably, Kuiper and Merrifield (1975) described this domain for the San Juan Diuxi dialect of Mixtec, while Speck and Pickett (1976) described it for Tzotzil-Maya Zapotec. This paper will present the verbs of motion and arrival which are found in the dialect of Mixtec spoken in the town of Chalcatongo, Oaxaca, and, based on that data, will address issues raised by Speck and Pickett about the correct analysis of Kuiper and Merrifield's Diuxi Mixtec data. The Chalcatongo Mixtec verbs were originally analyzed (Nacuay 1982) in a framework parallel to that presented by Kuiper and Merrifield, but a reanalysis of that data along the lines suggested for Diuxi Mixtec by Speck and Pickett is found to be much more satisfactory. This reanalysis is consistent with the analysis of the Zapotec verbs that Speck and Pickett present, supporting their hypothesis that a general statement about Otomanguean verbs of motion may be made.

Kuiper and Merrifield (hereafter K&M) give a definition of Mixtec verbs of motion as follows: Motion of an Agent through space and time to a Goal (K&M 1975: 22), and of the verbs of arrival as: Arrival of an Agent at a Goal (K&M 1975: 33). Their analysis defines the verbs with respect to the following three properties:

(a) the Place of the Locutionary Act (PLA)
(b) the Location of the Goal
(c) the Location of the Agent's Base

In addition, K&M claim that the verbs of motion are further differentiated by incorporation of the notions "one-way" and "round trip" in their semantic descriptions.

K&M also claim that the verbs of motion and arrival are "momentary" verbs. That is, while regular Diuxi Mixtec verbs are inflected for three aspects - potential, continuous, and complete - they claim that the verbs of motion and arrival occur only in potential and complete forms. The focus is thus on the initiation of the action, with the verb in potential form if the action has not yet been initiated, and in complete once it has been. Analysis of the entire domain as "momentary" is one of the aspects of K&M's analysis which is challenged by Speck and Pickett (hereafter S&P), who claim that while the domain of arrival is conceived of as momentary by speakers of Otomanguean languages, the domain of motion is not. As we will see, the data from Chalconotongo Mixtec strongly support S&P's claim.

The concepts "Base" and "FIA" will be discussed in some detail below, and then the data on Diuxi Mixtec, Texmelucan Zapotec, and Chalconotongo Mixtec will be presented. Discussion of the alternative analyses will then follow.

Base
K&M's definition of "Base" is as follows:

It is sufficient to think of "Base" as the 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 (p. 42).

K&M point out that the notion of Base is semantically related to the more general idea of "repetition" of action in Mixtec. This claim is supported by morphological identity in the coding of the two concepts. The verbal prefix na- is used (semi-productively) to indicate repetition of action, and also appears in the domain of motion and arrival to indicate Base as Goal, as the following Chalconotongo Mixtec examples show:

(a) ma7a - Do it!
(b) na-ma7a - Do it again!

(2a) kata-r1 - I sing
(2b) na-kata-r1 - I sing again
The verbs hab (Arrive at neutral Goal away from PLA) and na-hab (Arrive at Base away from PLA) are the clearest examples in Chalcatongo Mixtec of the link between Repetitive na- and the morpheme which indicates Base. The only other verb of motion in this dialect for which Base is specified is no? (Go to Base and return Toward PLA), for which it is possible to hypothesize that the prefix na- has undergone some process of phonological change, leaving only the initial consonant n- as a reflex. Certainly of the Díaz Mixtec verbs involving Base show a similar phonological reshaping, as in:

Go to non-Base and return: h?P
Go to Base and return: n?P
Come to non-Base and return: k?i
Come to Base and return: n?i

There are various extended uses of the verbs involving Base which further support the idea that Base presupposes repeated return. For example:

My son will go back to school next week (Chalcatongo Mixtec)

The conditions for appropriate use of such a sentence (one which includes a verb incorporating Base into its definition) do not require that the son live at school, only that he go there regularly. SAP point out that it is possible for an agent to establish a temporary Base for a single excursion, as well. As long as the notion described by the verb involves a return to a designated and non-arbitrary starting point, that starting point may be considered a Base.

A final point to be made about Base actually involves clarification of what both sets of authors have called "non-Base." Reference to Base has been set in opposition to reference to non-Base as the characteristic which distinguishes various pairs of lexical items. The relationship between the two categories is not an opposition, however. The type of Base which has been called "non-Base" is actually an unmarked
category which encompasses the meaning of the marked category, base. It is perfectly acceptable in Cholactongo Mixtec, for example, to say:

(6) kuT-ri be7e-wi
  yo(P)-1Sg house-1Sg
  I will go to my house

Example (6) has the verb which was previously defined as Go to non-base in it, yet one's home is always, by definition, one's base.

It is not clear from KAN nor from SAP, whether "non-base" can encompass "base" in Dixi Mixtec and Texmelucan Zapotec as it can in Cholactongo Mixtec, or whether in those languages the distinction is more rigid. Therefore, I will continue to use the term "non-base" when referring to verbs in the other languages. The reader should bear in mind, however, that this is likely to be something of a misnomer.⁸

PLA

The prototypical use of most of the verbs of motion and arrival to be described involves reference to PLA (the place at which the speaker and hearer are located) as either the source or goal of the movement. For the sake of simplicity, in the descriptions that follow that situation will be assumed. Yet it is certainly possible to use these verbs under a range of other conditions, as noted by both KAN and SAP. In this section I will enumerate their observations on variation in reference point, and discuss a more general theoretical viewpoint from which we can describe these cases.

First, KAN mention the use of a verb of motion in a situation where PLA and source are not identical. Their example involves a case in which the source of the motion lies between PLA and goal, and the motion is away from both PLA and source. They point out that the same verb is used to describe this situation as would be used to describe the more normal case in which PLA and source are identical.

This case is unproblematic. Consider English, in which Go (unlike Come) is a verb with fairly simple conditions for use. Fillmore (1970) summarizes appropriate use of this verb as follows: "go... indicate(s) motion toward a location which is distinct from the speaker's location at coding time" (p.34). This condition seems to hold for Mixtec as well as for English. It stipulates nothing about identity of source and PLA, and therefore a situation like the one described above does not deviate significantly from the typical case.

SAP discuss three other cases in which PLA is not the basic point of reference. The first is a situation in which there is no single PLA, due to the fact that the speaker and the addressee are separated by some distance (this includes the use of a verb of motion in correspondence). In such cases in Texmelucan Zapotec, the verb Come is used to indicate
motion toward whichever participant is at Goal, regardless of the PLA of the Speaker (or writer). Thus, in Texmelucan Zapotec we might find the following dialogue:

**Mother:** gyed3 a (Come!)
**Child:** bi yap8 (Already I am coming!)

In a situation like this, both participants speak as if they were located at the same place: the Goal.

This is the reverse of what KAM report for Dixi Mixtec, and of what I have found in Chalcatongo Mixtec as well. In these languages, each speaker considers him or herself at PLA:

**Mother:** na h3a ka (Come here!)
**Child:** bi na m3na k'áw-haan na
(Right now I am arriving there!)

This example is from Chalcatongo Mixtec, but KAM report the same question-answer formula in Dixi Mixtec. My consultant indicated that an imperative like "Come!" can never be answered with a verb of motion, no matter what direction with respect to PLA it designates. I think this difference between zapotec and Mixtec is simply a matter of conventionalization of response, rather than an indication of any deep difference in reference to deictic categories.

The second case that SAP mention is that in which Come is used for motion towards the location of a participant in the discourse at a past or future time. Following is a Texmelucan Zapotec example that SAP give, and then a similar example from Chalcatongo Mixtec:

(7) lagu wankid ru y9al y9al seba rleza8 ru
Why didn't you come to my house? I earlier was waiting for you.
(PLA = Speaker's house)

(8) 9g8 kil-ri be9e-r1
tomorrow come(P)→75g house→15g
Come to my house tomorrow
(PLA = Speaker's house)

Finally, SAP discuss the use of a verb of motion in conjunction with a verb of seeing. They claim that the Agent of the action always comes to the Observer of the motion. For example:

(9) Karp b8ak yu yap na
Policarpo saw us coming (towards him)
These three cases are not the random examples of assignment of reference point that such a list might make them seem. All three situations have in common that they involve the Speaker taking the point of view of another participant in the discourse (or the point of view of him or herself at another time). A similar phenomenon in English has been the subject of discussion by Fillmore (1970, 1972). For example, in "how to know whether you're coming or going" (1972) he describes an English case much like SAP's second Zapotec case in terms of "some sort of affiliation between the place taken as the goal of the movement and one of the participants in the communication act" (p. 373).

In The Santa Cruz Lectures on deixis (1970), Fillmore develops the following hypothesis concerning the appropriateness conditions for use of the verbs Come and Bring:

*C*ome and *b*ring indicate motion toward the location of either the speaker or the addressee at either coding time or reference time, or toward the location of the home base of either the speaker or the hearer at reference time.... *C*ome and *b*ring also indicate motion at reference time which is *i*n the *c*ompany of either the speaker or the addressee... (and) also indicate, in discourse in which neither speaker nor addressee figures as a character, motion toward a place taken as the subject of the narrative, toward the location of the central character at reference time, or toward the place which is the central character's home base at reference time (pp. 61, 66, 67).

This principle is the relevant generalization for the individual cases involving Come presented by SAP, and summarized above. While Fillmore makes no claim as to the universality of this principle (and indeed, points out that it would not be accurate for certain other languages), it is in fact appropriate for the languages discussed in this paper.

PLA, then, will be cited as the basic reference point for most of the verbs to be considered in the remainder of this paper, but it must be remembered that this is a simplification of an extremely complex factor in the description of the domain of motion and arrival.

**Dixxi Mixtec**

The Dixxi Mixtec verbs of motion and arrival are described by K&M as follows:

- **khi**: Move to non-Base toward PLA and return away from PLA
- **yam**: Move to non-Base toward PLA
(a) **kiŋi** can be interpreted iteratively, as well as non-iteratively.

(b) **vaŋi** occurs only with completive aspect. In situations in which one would expect to find a potential form of this verb, speakers use **kiŋi** (which differs only in that it is "round trip" whereas **vaŋi** is "one-way").

(c) **hštš** is analyzed as occurring in both potential and completive aspects, yet K&M observe that the "potential" form can only be interpreted iteratively. **hštš** is replaced by **nštš** in situations which call for potential aspect. Note that in the case of **kiŋi** and **vaŋi** the "round trip" verb replaces the "one-way" verb, while in the case of **hštš** and **nštš** the "one-way" verb takes the place of the "round trip" one.

(d) **hštš** has a suppletive completive form, **hwSštš**. K&M state that the first person **hwSštš-oš** is "most appropriate to the leave-taking situation where the speaker has just begun to leave for his destination" (K&M 1975: 40). That is, under K&M's momentary verb analysis of this data, as the speaker walks out the door he or she says, **I went** (or, **I'm gone**), rather than something corresponding to **I am going**.

(e) **ndiši**, **mbšši**, and the four verbs of arrival all exhibit fairly regular behavior with respect to their potential and completive forms, as well as in their aspectual uses. The minor irregularities certain of these six verbs show will not concern us here.

**Texmelucan Zapotec**

SAP present an analysis of six Texmelucan Zapotec verbs: two each for **Go**, **Come**, and **Arrive**. They are defined in terms of the same
orientation features that K&M use (PLA, Goal, and Base). The three pairs are crucially differentiated in the following manner:

(a) Go and Come are distinguished by direction with respect to PLA.

(b) Go/Go and Arrive are distinguished by their relation to Goal. That is, Go and Come are defined as "round trip," and the use of one of these verbs with completive aspect indicates that the Agent has reached the Goal and returned again. In contrast, Arrive is defined as indicating "one-way" motion, and completive aspect signals only that the Agent has reached the Goal.

(c) The two members of each pair of verbs are distinguished with respect to direction in relation to Base.

An important difference between these verbs and the analysis of Mixtec presented by K&M is that Texmelucan Zapotec verbs of motion are not momentary verbs. They may be inflected for five aspects, including progressive. (Arrive, however, is a momentary verb, and may not take progressive aspect).

The Texmelucan Zapotec verbs are presented below.10

Go-1: Move to Base away from PLA and return toward PLA
Go-2: Move to non-Base away from PLA and return toward PLA
Come-1: Move to Base toward PLA and return away from PLA
Come-2: Move to non-Base toward PLA and return away from PLA
Arrive-1: Arrive at Base (irrespective of PLA)
Arrive-2: Arrive at non-Base (irrespective of PLA)

A Reanalysis of the Duxi Mixtec Data

SAP sketch an alternative analysis for K&M's data which is parallel to that which they give for the Texmelucan Zapotec data. It consists of the abandonment of the momentary analysis of the verbs of motion, and a reanalysis of several lexical items into fewer sets with a greater proliferation of inflectional forms associated with each one.

What SAP suggest is that the separation of the verbs of motion in terms of "round trip" and "one-way" motion is artificial. The apparent "one-way" status of certain forms is a result of the fact that they are non-completive forms, which may not be as explicit in their characterization of the motion as "round trip" as the completive and iterative forms are.11 Once the claim of momentariness is abandoned, parallel sets
may be combined into larger categories. For example, what KAM call Move to non-Base away from PLA and Move to non-Base away from PLA and return toward PLA are reanalyzed as different aspectual forms of the same verb. The basis for this reanalysis is presented below.

Table 1 (equivalent to SAP's Table 2, p. 53) contrasts the original (KAM's) analysis with the suggested reanalysis of eight forms of the Duexi Mixtec verbs of motion.

<table>
<thead>
<tr>
<th>KAM</th>
<th>Round Trip</th>
<th>One-way</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMPL POT</td>
<td>COMPL POT</td>
</tr>
<tr>
<td>SAP</td>
<td>Round trip</td>
<td>COMPL ITER PROG POT</td>
</tr>
<tr>
<td>Go to non-Base</td>
<td>n9878</td>
<td>b978</td>
</tr>
<tr>
<td>Come to non-Base</td>
<td>nki61</td>
<td>b61</td>
</tr>
</tbody>
</table>

SAP point out that the possibility of such an analysis is briefly mentioned by KAM in their footnote 6 (KAM 1975: 34). KAM's reasons for rejection of this alternative are not explicitly answered by SAP, but will be below, in light of the data on Chichatico Mixtec presented in the next section. Instead, SAP briefly present a few independent arguments for their alternative analysis. These are summarized below.

(a) Phonological shape: given only the data presented in Table 1 for Go to non-Base, it would seem that KAM's division of these four forms into two verbs is the most reasonable analysis. Yet, as SAP point out, in other dialects of Mixtec the four forms that would appear in this row are considerably closer in phonological shape, increasing the plausibility of the SAP analysis.

(b) Semantic and syntactic considerations:

(b-1) The description of complete aspect is not uniform across verbs under KAM's analysis. For example, n9878 is used only when the action of the "round trip" verb is complete - a situation which is similar to the conditions for use of the complete form of Go2 in Tonatepe- can Zapotec. However, h978, also a "complete" form, is not only used when the action is complete, but is actually described as most appropriate for use when the action has just been initiated. SAP claim that this situation is more aptly described as "progressive."
The range of uses for potential aspect is not uniform, either. is labeled "potential," yet K&M state that it is always interpreted iteratively. on the other hand, is reported to have the full range of potential uses, but is claimed to be replaced by in iterative contexts.

These points are not offered by S&P as conclusive evidence supporting their position. They only claim that they are suggestive of a need for reevaluation of the data. In the remainder of this paper, I will present new data which require an analysis like that proposed by S&P for Diuxi Mixtec, indicating that their suggestions are in fact correct. I will also give additional theoretical arguments supporting this approach.

Chalcatongo Mixtec

In Macaulay (1982) I presented an analysis of the Chalcatongo Mixtec verbs of motion and arrival, done along the lines of K&M's analysis for Diuxi Mixtec. There were several points about it, however, that remained unsatisfying.

The most puzzling fact (and the strongest evidence motivating a reanalysis of the data similar to that proposed by S&P) was that there is a form in Chalcatongo Mixtec, , which is clearly the progressive form of the verb meaning *Come to Neutral Goal*:

(10) \[ \text{en-tla-ri} \ b\hat{a} \text{ Juan } \text{a-bb\={l} } \text{ik\=i ntu} \]
    \[ \text{see}(\hat{R})-15g \text{ that Juan now-comes(PROG) path face} \]
    \[ \text{I see that Juan is coming towards us now} \]

Even in my original analysis of the Chalcatongo Mixtec data I was forced to acknowledge as progressive, although doing so contradicted that preliminary analysis of the domain as "momentary." The fact that is cognate with \[ \text{v\={b}\={l}} \], precisely the form S&P suggest for the "progressive" slot on their chart (see Table 1), provides strong evidence for the correctness of their approach.

Another area of unclarity involved certain uses of (new of the forms meaning *go to neutral goal*), although reanalysis of it as a progressive form is not as obvious a solution as for . The reason for this is that is translated both with present and past tense in English:

(11) \[ \text{w\={l}} \text{ \#b\=l} \]
    \[ \text{there go} \]
    \[ \text{There he goes now} \]
There are two immediately apparent ways of looking at such data. On the one hand, the data are compatible with an analysis of Go as a momentary verb: the same form can be translated by progressive and completive because the two aspects are actually not distinguished. But this leaves us with a highly unsatisfactory result: we find ourselves analyzing Go as a momentary verb, while being forced to analyze Come as a non-momentary verb due to its distinct progressive form. Another possibility is to discard the momentary verb analysis altogether, and claim that the progressive and completive stems of Go are homophonous. This, however, leads to a different imbalance in the overall verbal paradigm (see Table 2): for Come the completive form consists of ni-, the usual completive morpheme, attached to the potential stem ki:. But for Go, we find that affixation of ni- to the potential stem kiri is impossible, and instead find homophony with the progressive form.

<table>
<thead>
<tr>
<th>COMPL</th>
<th>PROG</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to non-Base</td>
<td>kiri</td>
<td>kiri</td>
</tr>
<tr>
<td>*ni-ki!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Come to non-Base</td>
<td>ni-ki</td>
<td>bi</td>
</tr>
<tr>
<td>*ni-bëbi</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Neither solution is satisfactory. There is, however, a third possibility. The iterative form of Go to neutral Goal, hiri (see (13), below), may also occur inflected for completive aspect. My first analysis of this was as a completive iterative form, based on sentences like (14), below. However, further elicitation showed that the form also appears in completive non-iterative aspect (as in (15)), and should in fact be analyzed simply as the completive form of the verb. While uninflected hiri has inherent iterative aspect, sentences like (14) have an iterative interpretation only by virtue of the accompanying iterative adverbial phrase.

(13) Juan hiri skwëlsa
Juan go(ITER) school
Juan goes to school (habitually)\textsuperscript{15}
(14) Juan ni-h87a xartzés nuk87u u8ki h87a
Juan COMPL-go Tuesday market ten time
On Tuesday, Juan went to the market ten times

(15) ni-h87a nunb51 la8
COMPL-go Oaxaca yesterday
He went to Oaxaca yesterday

It is important to note that the completeive, as in (15), is used when a round trip has been completed. That is, it is only appropriate for use when the Agent has gone and returned. These are exactly the conditions for use of n3878, the Mixtec counterpart of ni-h87a.

Bearing the above in mind, then, the Chalcatongo Mixtec verbs of motion and arrival are summarized in Table 3, and then discussed in detail.

<table>
<thead>
<tr>
<th>COMPL</th>
<th>ITER</th>
<th>PROG</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go-1</td>
<td>ni-m67o</td>
<td>---</td>
<td>k8W8-m67o</td>
</tr>
<tr>
<td>Go-2</td>
<td>ni-h87a</td>
<td>h878</td>
<td>k8W8-h87a</td>
</tr>
<tr>
<td>Come-1</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Come-2</td>
<td>ni-k81</td>
<td>---</td>
<td>b81</td>
</tr>
<tr>
<td>Arrive There-1</td>
<td>ni-na-h88e</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Arrive There-2</td>
<td>ni-h8b</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Arrive Here-1</td>
<td>(ni-88b)</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Arrive Here-2</td>
<td>ni-h8b</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Table 3: Chalcatongo Mixtec

At this point one might ask why the category Go to neutral Goal should have an iterative form, while the parallel category Go to Base (n07b) does not have a separate form to describe iterative motion. Why is it more likely that one would repeatedly go to a non-Base location than to one's Base? The answer lies in the fact that these are "round trip" verbs of motion. Consider the three possible situations: one could move between two neutral (non-Base) points, one could make a trip with Base as Source, or one could make a trip with Base as Goal. The first two situations can be described with the verb Go to neutral Goal. This verb entails a return to Source, and when that Source is Base we have the quite likely situation of repeated return to Base, which can be
described by the distinct iterative form. The third situation may be described with Go to neutral Goal or with Go to Base. The latter is, of course, also "round trip," and so entails a return to non-Base. An iterative form of this marked version of Go, Go to Base, would thus describe the highly unlikely situation in which the same non-Base location is the Source of repeated trips to Base. Such a form would be in a sense doubly marked, which may explain its non-occurrence. 17

Examples and discussion of the verbs in Table 3 follow.

Go-1: Move to Base away from PLA and return toward PLA

noʔo (Potential):

(16) noʔo beʔe həbag go-1(F) house tomorrow
He will go home tomorrow

ni-məʔo (Completive):

(17) ni-məʔo beʔe lekə
COMP-go-1 house yesterday
He went home yesterday (and has returned)

Go-1 provides certain problems for this analysis of the Cholco-tongo Mixtec verbs. It is the one verb of motion which appears to be lacking an independent progressive form. There is a form which is used with this meaning, however, made up of an auxiliary form 18 of LQA (the progressive of Go-2), plus noʔo: 19

(18) a-ʔaməʔo beʔe
now-AUX-go-1 house
He's on his way home right now

Thus, Go-1 has a derived progressive, rather than no progressive form at all.

In addition, the notion "round trip" is somewhat problematic with this verb. While the completive does explicitly mean "go home and return," the potential may occur with the meaning "one-way." Perhaps this is explicable by the same factor which explains the lack of an iterative form of this verb. It may simply be that the unmarked, uncompleted case is to return to Base and stay there; there is no reason to presuppose return to PLA after motion to Base.
Go-2: Move to unspecified Goal away from PLA and return toward PLA

kii (Potential):

(19)  kii skw'ela
   go-2(P) school
   He will go to school (and return)

kwa? (Progressive):

(20)  waka kwa?
   there go-2(PROG)
   There he goes now

hwa? (Iterative):

(21)  Juan hwa? skw'ela
   Juan go-2(ITER) school
   Juan goes to school (habitually)

ni-hwa? (Completive):

(22)  ni-hwa? nundla ik' COMPL-go-2 Oaxaca yesterday
   He went to Oaxaca yesterday (and has returned)

Come-1: The Cholcatongo Mixtec paradigm lacks a verb meaning Move to Base toward PLA (and return away from PLA).

Come-2: Move to unspecified Goal toward PLA and return away from PLA

kii (Potential):

(23)  Pedro kii wa?
   Pedro come-2(P) here
   Pedro will come here (and leave again)

bbi (Progressive):

(24)  Pedro bbi wa?
   Pedro come-2(PROG) here
   Pedro is coming here (and will leave again)
ni-kìi (Compleitive):

(25) Pedro ni-kìi be?e-rá
Pedro COMPL-come-2 house-1Pl
Pedro came to our house (and has left)

Note that Come-2 does not have an iterative form. Iterativity can
be expressed for this verb by use of any aspect with an iterative adver-
bial, as in (26) and (27) below. Also note that in general there are
fewer lexical items marked for motion or arrival toward PLA than there
are for motion or arrival away from PLA. Furthermore, the verbs that do
exist tend to have less elaborate paradigms than their opposite-
direction counterparts.

(26) tìa-ri kà-kìi ndì?e rì?u kììsì nì kììsì
parent-1Sg PL-come-2(P) see(P) 1SgObj year face year
My parents come to visit me every year

(27) ni-kìi yìì sòkìì
COMPL-come-2 here every day
He used to come here every day

Arrive There-1: Arrive at Base away from PLA

na-hììb (Potential):

(28) Wïì na-hììb-nì
Tomorrow REP-arrive there-2(P)-1Sg(Polite)
Tomorrow I’ll be home

ni-na-hìì (Compleitive):

(29) iku ni-na-hìì-nì
yesterday COMPL-REP-arrive there-2-3SgF
She arrived home yesterday

Arrive There-2: Arrive at unspecified Goal away from PLA

ba (Potential):

(30) Wïì haìa-ri be?e-rá
Tomorrow arrive there-1(P) father-1Sg house-2Sg
Tomorrow my father will arrive at your house
ni-hab (Completive):

(31) ne?u ni-hab-ri bë?e-ro iku
1SG COMPL-arrive there-1LSG house-2SG yesterday
I arrived at your house yesterday

Arrive Here-1: Arrive at Base toward PLA

There does not seem to be an independent verb of arrival with this meaning, but it is worth noting that it is possible to use a locative verb meaning to reside in situations where Arrive here-1 would be appropriate:

(32) Juan yaa bë?e nisn
Juan reside(P) house tomorrow
Juan will arrive home (here) tomorrow

(33) Juan ni-yëb bë?e iku-nub
Juan COMPL-reside house day-before-yesterday
Juan arrived home (here) day before yesterday

I find the fact that this verb is phonologically quite similar to the three true verbs of arrival intriguing, but establishing any link between the domains of location and motion is beyond the scope of this paper.

Arrive Here-2: Arrive at unspecified Goal toward PLA

kab (Potential):

(34) kab iki yaa nisn
arrive here-2(P) path here tomorrow
He will arrive here tomorrow

ni-yëb (Completive):

(35) Pedro ni-yëb yaa ikab
Pedro COMPL-arrive here-2 here yesterday
Pedro arrived here yesterday

In Defense of This Analysis

As mentioned before, K&M briefly discuss the possibility of doing an analysis of their data such as that presented here. Their reasons for rejection of such an analysis and a reply to those reasons follow:
(a) They point out that hxam7, as well as nhax7, collocate with words like 7iku (yesterday), claiming that this is incompatible with analysis of hxam7 as progressive.

This distribution is also observed for km7 and ni-hhx7 (the corresponding Chalcatongo Mixtec forms), but does not have to be considered as evidence against analyzing km7 as the progressive. Consider the following minimal pair:

(36) km7 nund6 1k6
    go-2(FRPG) Oaxaca yesterday
    He went/was going to Oaxaca yesterday

(37) ni-hhx7 nund6 1k6
    COMPL-go-2 Oaxaca yesterday
    He went to Oaxaca yesterday

My consultant explains the difference between (36) and (37) as a matter of the Speaker's assertion concerning the completion of the round trip. (36) only says that the Agent left and is or was making the trip in question. (37) reports that the Agent went to his destination and has returned. Both situations are unambiguously placed in the past by use of the temporal adverb 1k6.

There is, however, an additional difference between the two verbal forms in terms of time reference. While ni-hhx7 has completive aspect by virtue of its inflection, and so is most appropriate to a past time reference, km7 has no inherent time reference at all. The action of (36) is situated in time solely by virtue of the adverb. Collocation with words like 1k6, then, does not preclude analysis of km7 (and its Diux Mixtec cognate hax7) as a progressive form. On the contrary, such collocations simply point up the necessity for the distinction between temporal reference and aspect in analysis of the verbal systems of these languages.

(b) K&M claim that hxam7 indicates completive aspect when it occurs in reduced form as an auxiliary verb in construction with ndih and nh67, and so must be a completive in its full form as well.

Their explanation for the existence of both hxam-n67 and nh67 as synonymous completive forms of Go to Base hinges on their claim that there exists a need for disambiguation of homophonous potential and completive forms. That is, since in Diux Mixtec completive aspect is marked by an initial n-, a verb with an n-initial stem will have homophonous potential and completive forms. K&M believe that the form hxam-n67 exists solely to avoid the confusion which might arise due to this homophony.
That this explanation cannot be correct is shown by the existence of a form parallel to $hwu-n\tilde{e}7\tilde{e}$ in a dialect in which no such homophony is possible, i.e. in the Chalcacutogo dialect. While Chalcacutogo Mixtec does not have a verb with the meaning of $n\tilde{e}ki$ (and so nothing can be said about the auxiliary's interaction with that verb), it does have a verb cognate to $n\tilde{e}ki$: $n\tilde{e}7\tilde{e}$. In this dialect we find the potential form $n\tilde{e}7\tilde{e}$ alongside the regular (and distinct) complete form $ni-n\tilde{e}7\tilde{e}$, and, in addition, the complex form $hwu-n\tilde{e}7\tilde{e}$. The latter is clearly not needed to disambiguate the potential and complete forms, because they are not homophonous. And in fact, use of $hwu-n\tilde{e}7\tilde{e}$ and use of the complete are appropriate under different conditions. The fact that $hwu-n\tilde{e}7\tilde{e}$ is a progressive form supports analysis of $hwu-n\tilde{e}7\tilde{e}$ as a progressive, and refutes analysis of Diuxi $hwu-n\tilde{e}7\tilde{e}$ as a complete form.

A final point to be made on this subject is that K&M report that the form $\tilde{e}ki\ddot{e}$ (Arrive there at Base), which is also ambiguous between potential and complete aspects, may not be combined with $hwu-$ to resolve the ambiguity, despite the homophony of forms. Speakers of the language have no trouble disambiguating the temporal or aspectual reference of this form; therefore there is no reason why such trouble should arise with other forms such as $ndi\ddot{e}$ and $n\tilde{e}7\tilde{e}$. Clearly, a reanalysis of the aspectual functions and use of the Diuxi Mixtec forms $hwu-ndi\ddot{e}$ and $hwu-n\tilde{e}7\tilde{e}$ is needed.

(c) K&M's third argument concerns the use of a morpheme $\tilde{e}ke-$ (imperfect), which usually occurs with continuable stems. They report that it occurs with $n\tilde{e}7\tilde{e}$ "in the absence of a continuative form, rather than with $hwu\tilde{e}7\tilde{e}$" (K&M 1975: 34). Since Chalcacutogo Mixtec has no form parallel to $n\tilde{e}ke-$, this will have to remain an open question at this point.

(d) K&M's final reason for rejection of the analysis of $hwu\tilde{e}7\tilde{e}$ as a progressive form is as follows:

Our analysis provides a symmetrical system of aspects for all verbs of motion and arrival and a better basis for the interpretation of the semantic categories which distinguish the several verbs of the set from one another; namely the categories of "round trip" and "Base" (p. 34).

The system that K&M propose is symmetrical only in terms of the labels assigned to the various verbal forms. As shown above, however, their system is not internally consistent. Forms assigned to the same category are reported to have different aspectual uses. The analysis proposed in this paper avoids this inconsistency while maintaining the categories "round trip" and "Base" as criteria to the definitions of the lexical items involved. Tables 4 and 5, below, contrast the two analyses of the Diuxi Mixtec verbs and show that there is no loss of symmetry under the reanalysis proposed here (analysis of the verbs of arrival is unchanged and so is shown only in Table 4).
<table>
<thead>
<tr>
<th>COMPL</th>
<th>ITER</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to Base</td>
<td>(hwW-)n6ʔ6</td>
<td>---</td>
</tr>
<tr>
<td>Go to non-Base</td>
<td>hwWʔ6</td>
<td>---</td>
</tr>
<tr>
<td>Go to Base and return</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Go to non-Base and return</td>
<td>nʔ6ʔ6</td>
<td>n6ʔ6</td>
</tr>
<tr>
<td>Come to Base</td>
<td>(hwW-)ndiʔ1</td>
<td>---</td>
</tr>
<tr>
<td>Come to non-Base</td>
<td>vʔ6ʔ1</td>
<td>---</td>
</tr>
<tr>
<td>Come to Base and return</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Come to non-Base and return</td>
<td>nʔ6ʔ1</td>
<td>---</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPL</th>
<th>ITER</th>
<th>PROG</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to Base and return</td>
<td>n6ʔ6</td>
<td>---</td>
<td>hwW-n6ʔ6</td>
</tr>
<tr>
<td>Go to non-Base and return</td>
<td>n6ʔ6</td>
<td>n6ʔ6</td>
<td>hwWʔ6</td>
</tr>
<tr>
<td>Come to Base and return</td>
<td>ndiʔ1</td>
<td>---</td>
<td>hwW-ndiʔ1</td>
</tr>
<tr>
<td>Come to non-Base and return</td>
<td>nʔ6ʔ1</td>
<td>---</td>
<td>vʔ6ʔ1</td>
</tr>
</tbody>
</table>

Table 4: Duxi Mixtec – K&M’s Analysis

Table 5: Duxi Mixtec Reanalyzed

These tables show that a reanalysis of the data as suggested here does not sacrifice symmetry; on the contrary, symmetry is enhanced. This is especially noticeable in the Complete column, where removal of vʔ6ʔ1 and hwWʔ6, as well as removal of forms with the auxiliary hwW-, have resulted in complete regularization of the column. Nor has the reanalysis caused a lessening of the usefulness of the categories "round trip" and "Base" in description of the verbs in the domain. These categories are still clearly necessary elements of the analysis.

Finally, one last point remains to be made in regard to K&M’s rejection of the analysis adopted in this paper. They make a fairly minor error in their interpretation of what a multi-aspect analysis of these forms would imply, embodied in the following:

In [a multi-aspect] interpretation, hʔ7ʔ is considered
potential, indicating a motion as in progress (the Agent has left PLA and whether he reached Goal or not is not known)... (p. 34, fn 6).

In fact, the potential never indicates an action in progress. It encompasses various possibilities; all of which have in common their potentiality - the state of not yet having been initiated. The situation they describe is one in which progressive aspect would be used. While this is not a major error on K&M's part, if it in some way influenced their decision to reject such an analysis, then clarification is necessary.

Conclusion

Data on verbs of motion and arrival in three Otomanguean languages have been presented, and two alternatives for their analysis have been discussed. The major difference between the two analyses under consideration involves claims concerning incorporation of the notions "momentariness" and "round trip" into description of the items in the domain. K&M claim that both motion and arrival are conceived of as momentary by speakers of Diuxi Mixtec, and that the many forms which are found in the domain of motion are differentiated by (among other things) inclusion of the notions "one-way" and "round trip" in their definitions. SAP present relevant data on Texmelucan Zapotec in which the element "round trip" is present in the description of all motion verbs, and serves to distinguish those verbs from the verbs of arrival, which are all, necessarily, "one-way." In addition, the Texmelucan Zapotec verbs of motion are not momentary verbs, allowing for inflection with any of five aspects, including progressive. SAP argue that a similar analysis could be made of the Diuxi Mixtec data, and that such an analysis would better explain the facts presented by K&M.

Accordingly, a reexamination of the Diuxi Mixtec data has been made in this paper, in light of new data from the dialect of Mixtec spoken in the town of Chalcatongo, Oaxaca. The data presented support SAP's hypothesis that the Mixtec system is organized in a manner consistent with the analysis presented for Texmelucan Zapotec.

The primary argument from the Chalcatongo Mixtec data concerns the existence of a clear case of progressive aspect in the domain of motion. Existence of such forms strongly contradicts analysis of the domain as "momentary." The ease with which this data can be fitted into the paradigm drawn up by SAP, and the degree to which such an analysis is an improvement over the original analysis (in Macaulay 1986) indicate that the SAP approach is also correct for Diuxi Mixtec.

Another argument for reanalysis of the Diuxi Mixtec data concerns regularization of the paradigm. As Tables 4 and 5 showed, the paradigm for the verbs of motion is more symmetrical after reanalysis. K&M argued that divergence from their approach would result in a loss of
Finally, the most unsatisfying aspect of K&M's analysis is resolved after reexamination of the data. What appeared to be considerable inconsistencies among the uses of various forms grouped together in the same aspectual classes are shown to be due to simple misregistration. For example, \textit{\textbf{kii ki}}, which K&M designate as the "potential" form of \textit{Go to non-Base} and \textit{return}, but which is restricted to iterative contexts, is reclassified as an iterative form. \textit{Kii}, which under K&M's analysis doubled as the potential of \textit{Kii} (the complete of \textit{Come to non-Base}) and of \textit{Kii ki} (the complete of \textit{Come to non-Base} and \textit{return}), becomes the potential form of a single lexical item which includes the forms \textit{Kii} and \textit{Kii ki}. Reanalysis of \textit{Kii ki} as progressive allows us to refute K&M's fallacious argument concerning its function as an auxiliary verb.

The fact that the Duxte Mixtec data are amenable to the same analysis as is presented for both Chalcatongo Mixtec and Temmelucan Zapotec supports S&F's hypothesis that a significant generalization may be made about Otomanguean verbs of motion and arrival. While the paradigms for some of the Otomanguean languages (Chalcatongo Mixtec and Láhuas Zapotec among the ones discussed in this paper) are lacking certain lexical items or specific forms of a given lexical item, from the data that has been presented in this paper we can make a general characterization of the parameters of definition for the domain, as follows:

(I) Verbs of motion inherently describe round trip motion; verbs of arrival refer to the endpoint of one-way motion.

(II) Verbs of motion may be inflected for whatever aspects are appropriate to the language in question, but verbs of arrival are momentary and may not be inflected for progressive aspect.

(III) Verbs of motion and arrival may be defined with respect to the following categories:

(a) Place of locutionary act (PLA)
(b) Location of goal
(c) Location of agent's base

The correspondence or non-correspondence of PLA and goal dictates direction of motion. When they are identical we have \textit{Come} or \textit{Arrive here} and when they are distinct we have \textit{Go} or \textit{Arrive there}. \textit{Base} is an optional marked category of goal. When it is specified, goal must be the agent's base, but when it is unspecified, goal may be any place, including agent's base.

Investigation of the historical development of such a system requires further research. I believe, however, that the data presented in this paper strongly support a general synchronic statement such as
the one above for verbs of motion and arrival in Oceanguean languages.

APPENDIX: Summary of the Data

Dixui Mixtec (Kuiper and Merrifield (1975))

Table I (Table 4 in the text) illustrates Kuiper and Merrifield's analysis of the Dixui Mixtec verbs of motion and arrival.

<table>
<thead>
<tr>
<th>COMPL</th>
<th>1'ER</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to Base</td>
<td>(hwa-)n67b</td>
<td>---</td>
</tr>
<tr>
<td>Go to non-Base</td>
<td>hwa77b</td>
<td>---</td>
</tr>
<tr>
<td>Go to Base and return</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Go to non-Base and return</td>
<td>n8877b</td>
<td>---</td>
</tr>
<tr>
<td>Come to Base</td>
<td>(hwa-)nd181</td>
<td>---</td>
</tr>
<tr>
<td>Come to non-Base</td>
<td>nd81</td>
<td>---</td>
</tr>
<tr>
<td>Come to Base and return</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Come to non-Base and return</td>
<td>nd181</td>
<td>---</td>
</tr>
<tr>
<td>Arrive Here at Base</td>
<td>n88e</td>
<td>n88e</td>
</tr>
<tr>
<td>Arrive Here at non-Base</td>
<td>n8898e</td>
<td>k188e</td>
</tr>
<tr>
<td>Arrive There at Base</td>
<td>n88e</td>
<td>n88e</td>
</tr>
<tr>
<td>Arrive There at non-Base</td>
<td>n88e</td>
<td>88e</td>
</tr>
</tbody>
</table>

Table 1: Dixui Mixtec - KLM's Analysis

Texmelucan Zapotec (Speck and Pickett (1976))

Go-1: Move to Base away from PLA and return toward PLA
Go-2: Move to non-Base away from PLA and return toward PLA
Come-1: Move to Base toward PLA and return away from PLA
Come-2: Move to non-Base toward PLA and return away from PLA
Arrive-1: Arrive at Base (irrespective of PLA)
Arrive-2: Arrive at non-Base (irrespective of PLA)
Chalcatongo Mixtec

Table II (Table 3 in the text) shows the verbs of motion and arrival in Chalcatongo Mixtec. Examples of the verbs follow, numbered as in text.

<table>
<thead>
<tr>
<th></th>
<th>COMPL</th>
<th>ITER</th>
<th>PROG</th>
<th>POE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go-1</td>
<td>ni-nê?o</td>
<td>---</td>
<td>k'wâ-no?o</td>
<td>no?b</td>
</tr>
<tr>
<td>Go-2</td>
<td>ni-hêâ</td>
<td>hêâ</td>
<td>k'wê?b</td>
<td>kî?î</td>
</tr>
<tr>
<td>Cone-1</td>
<td></td>
<td></td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Cone-2</td>
<td>ni-kîî</td>
<td>---</td>
<td>bêl</td>
<td>kîl</td>
</tr>
<tr>
<td><strong>Arrive There-1</strong></td>
<td>ni-na-hâa</td>
<td>na-hâa</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Arrive There-2</strong></td>
<td>ni-hâb</td>
<td>hâb</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Arrive Here-1</strong></td>
<td>(ni-ñêb)</td>
<td>(ñêb)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Arrive Here-2</strong></td>
<td>ni-ñêb</td>
<td>ñêb</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table II: Chalcatongo Mixtec

(16) no?b be?e k'êb
go-1(F) house tomorrow
He will go home tomorrow

(17) ni-nê?o be?e k'ê
COMPL-go-1 house yesterday
He went home yesterday (and has returned)

(18) k'wâ-no?o bê?e
now-AUX-go-1 house
He's on his way home right now

(19) kî?î sk'êlê
go-2(F) school
He will go to school (and return)

(20) wêb k'wê?b
there go-2(PROG)
There he goes now
(21) Juan b?b? sk’ela
    Juan go-2(ITER) school
    Juan goes to school (habitually)

(22) ni-h impaira 1xá
    COMPL-go-2 Oaxaca yesterday
    He went to Oaxaca yesterday (and has returned)

(23) Pedro xii ñá?
    Pedro come-2(P) here
    Pedro will come here (and leave again)

(24) Pedro bel ñá?
    Pedro come-2(PROG) here
    Pedro is coming here (and will leave again)

(25) Pedro ni-kii bel ñá?
    Pedro COMPL-come-2 house-1PL
    Pedro came to our house (and has left)

(26) Ųb nam-haa-ná
    Tomorrow REP-arrive there-2(P)-1Sg(Polite)
    Tomorrow I’ll be home

(27) iku ni-na-haa-ná
    yesterday COMPL-REP-arrive there-2-2Sg?
    She arrived home yesterday

(28) Ūb haa bála-ri be-te-rá
    Tomorrow arrive there-1(P) father-1Sg house-2Sg
    Tomorrow my father will arrive at your house

(29) Ūb ni-hab-ri be-te-rá iku
    1Sg COMPL-arrive there-1-1Sg house-2Sg yesterday
    I arrived at your house yesterday

(30) Juan ñá b?e?e Ūb
    Juan reside(P) house tomorrow
    Juan will arrive home (here) tomorrow
Juan ni-Wâbê bâ?ê liKu-RRê
Juan COMPL-reside house day-before-yesterday
Juan arrived home (here) day before yesterday

Wâb iki YA?ê Wâb
arrive here-2(F) path here tomorrow
He will arrive here tomorrow

Pedrô ni-Wâb YA?ê ikê
Pedro COMPL-arrive here-2 here yesterday
Pedro arrived here yesterday

Dixui Mixtec (Reanalyzed)

Table III (Table 5 in the text) displays the verbs of motion and arrival in Dixui Mixtec, reanalyzed along the lines proposed in this paper.

<table>
<thead>
<tr>
<th>COMPL</th>
<th>ITER</th>
<th>PROG</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go to Base and return</td>
<td>nâ?ê</td>
<td>---</td>
<td>huâ-nâ?ê</td>
</tr>
<tr>
<td>Go to non-Base and return</td>
<td>nâ?ê</td>
<td>nâ?ê</td>
<td>huâ?ê</td>
</tr>
<tr>
<td>Come to Base and return</td>
<td>ndiâ?ê</td>
<td>---</td>
<td>huâ-ndiâ?ê</td>
</tr>
<tr>
<td>Come to non-Base and return</td>
<td>ndiâ?ê</td>
<td>---</td>
<td>vâ?ê</td>
</tr>
</tbody>
</table>

Table III: Dixui Mixtec Reanalyzed
NOTES

1. My work on Mixtec has been funded by a Graduate Fellowship from the National Science Foundation, a grant from the Tinker Foundation and the Program in Mexican Studies of Berkeley, and the survey of California and Other Indian Languages. I would like to thank Claudia Burgman for her valuable comments on an earlier draft of this paper. While she is responsible for many of the insights contained herein, any errors in the analysis are of course my own. The Chalcatongo Mixtec data presented in this paper were provided by Nicolás Cortés, a native of Chalcatongo, Oaxaca, Mexico.

2. In addition, Velma Pickett (1976) has written a short article on this subject in Isthmus Zapotec, and a preliminary analysis of the data in Chalcatongo Mixtec appears in Muñoz (1983).

3. "Agent's Base" refers to any place to which a person often returns, usually his or her home. This topic will be discussed in the next section.

4. The segmental phonemes of Chalcatongo Mixtec are as follows: stops b, t, k, kʷ, ?; prenasalized stop nd; nasals n, n, N; oral resonants l, r (the latter phonetically a flap); fricatives d (symbol used for voiced interdental fricative), s, X, y (phonetically [?] and [y], in free variation); h; affricate Y; continuant w, oral vowels i, u (high central unrounded), u, e, o, a; nasal vowels i, u, o, l.

5. Abbreviations which will be used in the tables are as follows: F (or PHY, in tables) - Potential, S - Realized, REP - Repetitive, ADD - Additive, SG - Singular, PL - Plural, PROG - Progressive, COMPL - Complete, ITER - Iterative, Aux - Auxiliary, and F - Feminine. Tones are marked as follows: high - 'y, low -', and mid - unmarked.

6. That na- may indicate something which is somewhat more complicated than simple "repetition of action" is shown by the following examples:

(i) kíku - To new
(ii) na-kíku - To mend
(iii) okáš - To unfold
(iv) na-ókáš - To stretch

A precise analysis of the relationship between these examples, the straightforward Repetition examples, and the "Base" examples, however, is beyond the scope of this paper.
7. The high tone on the Repetitive na- in this example is due to tone sandhi, conditioned by the preceding word. It is not lexically or grammatically significant.

8. There is also some evidence that use of the verbs that specify Goal as Base may be on the decline. While Texmelucan Zapotec and Diuxi Mixtec have symmetric paradigms, the paradigm for Cholactongo Mixtec is defective. It lacks an entry for Come to Base, and has what appears to be substitution of another item from a different domain, that of location, for Arrive at Base toward PLA (see below in text for discussion). In addition, Zelma Pickett (1976) describes another Otomanguean language, Istmeus of Tehuantepec Zapotec, which is completely lacking Base as a category in the domain of motion and arrival. Clearly in these cases the Goal is simply undefined, and can be base or any other location.

9. Regrettably, SAP do not give glosses for their examples, and so I can not provide any more detail on the meaning of the Zapotec sentences than is provided by the English translations.

10. SAP adopt the convention of calling them, e.g., "Form-1" and "Form-2", where a "1" indicates motion towards Base, and a "2" indicates motion away from Base. They do not list the bare stems of these verbs at any point in the paper; rather, they give a table with the third person form of each stem inflected for all aspects. Because I am not a student of Zapotec, and hesitate to extrapolate from the data they give, I will follow their convention (instead of attempting to give a bare stem, as was done for Diuxi Mixtec and will be done for Cholactongo Mixtec). The reader is referred to SAP's Table 3 (SAP 1976: 63) for data on the actual phonological form of the third person of each stem.

11. That is, use of a verb of motion in a non-completive aspect (progressive or potential) only commits the speaker to predication of movement on the part of the subject, and is vague with respect to the fact that it is "round trip" motion. Only in completive aspect is it explicit that the motion was necessarily "round trip."

12. In Ayutla Mixtec, the equivalent of vaky is kavk, while that of kawot is kwot (SAP 1976: 63, footnote 13). As we will see, the Cholactongo Mixtec forms are even closer in phonological shape.

13. Cf. (d) of the section of Diuxi Mixtec above.

14. In regards to the analysis of the forms vamiti and vamiti, analysis of vamiti as progressive (rather than completive) actually clarifies a pair of examples given by K&M (p. 38). These are given below, with K&M's glosses:
(i) vaŋû daʔû - It is going to rain
   (lit. "Come rain")
(ii) kiŋû daʔû - It is going to rain
   (lit. "Will-come rain")

Kah state that (i) is appropriate when rainclouds can be seen in the
distance, and that (ii) would be used when clouds are not yet in sight.
The use of vaŋû in the situation described makes a great deal more sense
with reanalysis of the form as a progressive. Under this analysis, (i)
would be glossed as To coming rain.

15. The iterative aspect in Chalcatongo Mixtec includes habitual
    action as well.

16. SAP's naming convention for these verbs is adopted here, with
    a slight change. Form-1 will indicate Base as Goal, while Form-2 will
    indicate a neutral Goal, rather than non-Base.

17. Were this situation to arise it could of course be described
    by the iterative form of Go to neutral Goal, since this unmarked form
    may encompass situations in which Goal is Base.

18. Cliticization of disyllabic forms is extremely common in Mix-
tec, and various of the verbs of motion appear in clitic form as auxili-
ary verbs.

19. In fact, this lends further support to the analysis of kîŋû
d as a progressive form.

20. By "appropriate" I mean whatever aspectual categories are
    generally found in the language, and possibly more. The reason for this
    waffling is the problem of the iterative. In Chalcatongo Mixtec, for
    example, the iterative shows up in no other domain than that of motion.
    I would like to see data from a greater number of Otomanguean languages
    before making the specific claim that the verbs in this domain can be
    inflected for the usual aspects plus the iterative.

21. This is admittedly a simplification, as discussed above.
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