Conjunctions and Reference Tracking in Yuma

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1. Conjunctions

Langdon (1985:491-492) observes that many Yuman languages have function words that appear between clauses and are translated ‘and’, ‘so’, or ‘then’ and thus can be considered "some type of ‘conjunction‘." She finds "a diversity of sources" for these conjunctions, noting that most of them come from either (i) a nominal source consisting of a sequence of demonstratives followed by a case marker, or (ii) a verbal source, consisting of a verb, often an auxiliary verb, sometimes marked with a temporal prefix, and typically followed by a switch reference marker (1985:493).

This paper examines a set of conjunctions found in Yuma, a Yuman language spoken along the Colorado River. Yuma has a variety of conjunctions which come from verbal sources, most remain analyzable as verbs synchronically. Of particular interest are a set of three conjunctions which Halpern (in prep.) translates 'so': adu, awf, and a?f. These conjunctions are composed of the verb stems adu 'be', awf 'do', and a?f 'say' respectively, plus a suffix =m, and they come from a set of auxiliaries known in the Yuman literature as "behavioral" or "existential". The relation of the 'be', 'do', and 'say' conjunctions to the corresponding auxiliaries is discussed in section 2. In section 3 I demonstrate that the choice among the 'be', 'do', and 'say' conjunction forms is useful in the tracking of action and subject reference. In the present section I describe some of the ways in which the three conjunctions as a group are used in discourse.

First, 'be', 'do', and 'say' can indicate a return to the main thread of the narrative after a digression of some sort, which might include descriptive or background material. Consider (1.a): in the first line, we are told that a messenger comes to a particular place to collect clothes. The second and third lines constitute a digression describing the scene which the messenger encounters at his destination. At the end of the third line we find the conjunction adu, and in the fourth line the speaker returns to the main thread of the story.

1.a n'a:-s-i-k adu-k
that-far-loc-from come.after-K
'the comes from the distance to get [the clothes],

pa?i:pá: ?ac-k*a-madá:v-n'-c
people things-rel-grieve-def-sj
and the people who are sorrowing,

u:vá-k u:vá-k vi:dv-k adu=m
be.locd-SS be.locd-SS be.(locd-SS be.here.col-SS be=m
they are here and here and here [in little groups], and so,

pa?i:pá ?aqent-k avá:-k vi:dv-k n'a:-vá:-k cakak'è-k
person be.one-SS walk-SS come-SS when.arrive-SS ask.question-K
[this] one person comes walking up, and when he arrives he asks ...' (TK 1)
In (1.b), the first line refers to the gathering of certain feathers needed for ceremional purposes. Lines 2 through 6 constitute a digression which provides details about the types of feathers needed. The conjunction aʔf:m in the seventh line marks the end of the digression, after which the speaker returns to the main thread of the story.

1.b  n’á:štúː = m  van’a:vá-km
      when-gather = m  when.be.here-KM
      ‘when he has collected [the feathers that he needs], then —

?aspá:  aʔé-t-m-a
  eagle  say-assrt-M-end
  it’s eagle, they say.

?aspá:  aʔfː = m
  eagle  say = m
  They call it eagle,

taʔpó  aʔfː = m
  roadrunner  say = m
  they call it roadrunner,

kʷalxóː:  aʔé-tnti-m-a
  woodpecker.sp  say-assrt-again-M-end
  and they call it woodpecker, too.

aʔfː = m
  say = m
  So,

n’á:va
  this
  as for these [feathers],

awfː = m
  do = m
  he does it,

aštúː = m
  gather = m
  he gathers them,

awfː  vu:nóː-k  n’-a:ví:r-k
  do  be.around.here.pl-SS  when-finish-K
  he goes on doing [this], and when he finishes, …’  (HC 2)

A second function of the ‘be’, ‘do’, and ‘say’ conjunctions is to mark the point at
which the speaker begins to summarize, rephrase, or elaborate on what he has been saying. In (2.a), for instance, the speaker is discussing a cycle of songs and explaining how they fit into the mourning ceremony. The first six lines of (2.a) identify and describe the contents of two songs in the cycle. The conjunction aʔifm appears in line 7, and the material which follows this conjunction is a summary of the material which precedes it.

2. a  vada-nʔ
this nr-def
‘as for these [next two songs],

amafk
behind
after [the two i:mdʔy songs],

u:mmc  kanafv-k
nom weep describe-SS
they describe weeping,

"ama:=m"  aʔif:=m
weep=m  say=m
"He cries," [the songs] say,

donasa  kanafv-k
tears describe-K
[the songs] describe tears,

aʔʃ-t
say assrt
they say,

aʔif=m
say=m
and so,

₄a:v[r xaːf[k  nʔi:dəw-nti-xa
song be two be there col again irr
there will be two more songs.’  (IC 20)

In (2.b), the conjunction awf:mn occurs in line 2. The material which follows this conjunction (lines 2-4) elaborates on the material which precedes it (line 1).

2. b  iʔʃe  nʔa:-dəw-k
scalp when take SS
‘When he takes the scalp,
awí:=m
do:=m
so,

a:k’q-k vu:nó:-k vu:nó:-k vu:nó:-k
cut-SS be.around.here-SS be.around.here-SS be.around.here-SS
he goes on and on and on cutting it

n’a:-dáw-k
when-take-SS
and when he takes it,

tasót-k n’a:-dáw-k awí:=m
pull.off-SS when-take-SS do:=m
when he pulls it off and takes it, ...’ (HC 21)

The ‘be’, ‘do’, and ‘say’ conjunctions also appear at a change in subject, as exemplified in (3). In (3.a), the subject of the first line is understood to refer to the people who make ceremonial shields. A conjunction appears in the second line. The third line has a new subject: the singer.

3.a ʔak*él’-va n’i:ca:mán-k acéw-k
shield-this start.there-SS make-SS
‘as for these shields, they start there and make them,

awí:=m
do:=m
and so,

k’-a:svá:r-n’-c a:svá:r-nti-m
rel-sing-def-sj sing-again-DS
the singer sings again, ...’ (IC 12)

While in (3.a) the new subject is lexically specified, in other cases, such as (3.b), the new subject is understood. The first two lines of (3.b) describe the actions of a group of people known as image handlers. The conjunction awím appears in the third line. The subject of the fourth line is a different group of people, the shield handlers, who are present in the house at the same time as the image handlers; this line tells us that they too gather their up gear and take it out of the house. The conjunction awím in the third line marks a shift in focus from one set of participants to another within the same scene.

3.b aštú: vu:nó:-k vu:nó:-km
gather be.around.here.pl-SS be.here.pl-KM
‘They go on and on gathering [the images],
cacpá:cm-k
take.them.out-SS
and they take them out,

awí=m
do=m
and so,

?ak"él avá-n' awl:z=m awí=m
shield this.md-def do=m do=m
they [the shield handlers] do it [the same thing] with these shields, and so,

awí=m
do=m
and so,

n'í:ca:mán-k
start.there-SS
they begin there,

cacpcám-k vi:wá:-k
take.out-SS go.towards.here-K
they take them out and go along,' (IC 28)

Notice that more than one conjunction can be found in this example. A second instance of awí:m occurs at the end of the fourth line and a third in the fifth line (these two conjunctions are italicized). Immediately following them, in lines 6 and 7, the image handlers and the shield handlers are referred to jointly. The italicized conjunctions mark the shift from a narrow focus on one or the other sets of participants to a wider perspective in which the two sets are described as a single group.

Finally, the 'be', 'do', and 'say' conjunctions appear at changes in temporal setting, as exemplified in (4). As background to (4.a), people have been making a ceremonial procession around the house. The second and third lines of (4.a) tell us that they stop during this procession. A conjunction awí:m appears at the end of line 3, and in line 4 we are told that the procession resumes again. In fact, some time passes between the time the procession stops and the time it resumes; several songs are sung during the interval. The conjunction at the end of line 3 is a signal of the temporal shift that takes place between the events described in lines 1-3 and those in lines 4-5. Likewise, in (4.b), an unspecified amount of time passes between the event of the first line and that of the third line, and the conjunction in line 2 marks the point at which the temporal setting changes.

4.a  avá Pu:vé:v-k
house be.halfway-SS
'They are halfway to the house [and halfway to the pyre],
Thus far I have shown that the 'be', 'do', and 'say' conjunctions are used (i) at the end of a digression, (ii) at the point at which the speaker begins to summarize or rephrase or elaborate on what he has been saying, (iii) at a change in subject, and (iv) at a change in temporal setting. While these are not the only uses of the conjunctions, they are the most prevalent. They have in common the fact that each marks a type of discontinuity: for instance, the conjunctions exemplified in (3) mark discontinuity of subject, while those in (4) indicate temporal discontinuity in the flow of events. Others mark discontinuity in the flow of the narrative itself, as in (1.a), where the speaker shifts from background to foreground, or in (1.b), where he ends a digression, or in the examples in (2), where the speaker summarizes or elaborates on what he has been saying.

Strikingly similar functions have been found for morphemes in certain other languages, including the Voltaic language Supyiré (Carlson 1987) and the Uto-Aztecan languages Pima and Papago (Scancarelli 1988). In these languages, the morphemes in question sometimes are or have been analyzed as different-subject markers; however, they mark not just change in subject but a more general discontinuity which might also include a change in place or a change in time or a shift from description or elaboration back to action (Carlson 1987:16, Scancarelli 1988:137-142). Curiously, the morphemes which mark general discontinuity in Yuma are not putative different-subject markers. Yuma does have
the remains of a switch reference system (see section 4), but what marks general discontinuity is not this system but the 'be', 'do', and 'say' conjunctions.

2. Auxiliaries and conjunctions

While these three conjunctions as a group signal various types of discontinuity, the choice among the 'be', 'do', and 'say' forms can be manipulated to track action and subject reference. In order to describe this special function, I must first discuss the 'be', 'do', and 'say' auxiliaries that are the source of the conjunctions.

Like most auxiliaries in Yuma, the 'be', 'do', and 'say' auxiliaries occur in a grammaticalized multiclausal construction. This construction consists of a clause containing a main verb followed by a clause containing an auxiliary. Both main verb and auxiliary inflect for person of subject (with third person zero-marked). They always have the same subject. Typically the main verb takes the suffix -k (often analyzed as a same-subject switch reference marker). Main verb and auxiliary occur together under a single intonation contour.

Exactly what information the 'be', 'do', and 'say' auxiliaries contribute to the construction is not entirely clear. What is known is this: First, 'say' has several uses not shared by 'be' and 'do': for instance, as quotative and as a modal. Second, in a comparative study of Yuman auxiliaries, Norwood (1981:140-141) found that in Yuma the auxiliary adúm 'be' systematically followed stative verbs, verbs of motion, and active verbs affecting only the subject. She found that awfím 'do' followed active transitive verbs, and that a?íío 'say' followed verbs of communication and verbs of internal state. Her analysis accurately reflects the use of auxiliaries in texts collected in the 1930's. Numerous examples supporting Norwood's analysis can be found in a text collected in 1935 and published as Halpern (1976); a sample is given in (5).

(5.a,b) demonstrate the use of 'be' with stative intransitive verbs and stative transitive verbs. (5.c,d) show that 'be' is used with active intransitive verbs, including motion verbs and reflexives. (5.e) exemplifies 'do' with active transitives, and (5.f) shows 'say' with a verb of vocal activity.

5.a  "asá:ty-k  adú-t[a
    be.fat-assrt-SS  be-truly
    'indeed he was fat.' (Halpern 1976:19)

5.b  kʷa?akú:c-n?  n³a:padít:nti-k  adú-t[a,  n³a:-vatá:ck
    grown.ones-def  be.like.that-again-SS  be-truly  when-be.big.col-SS
    'They resembled the grown-up ones when they got big.' (ibid p.13)

5.c  n³i:pák-t-k  adú-t[a
    arrive.there-assrt-SS  be-truly
    'indeed he arrived there.' (ibid p.5)

5.d  ?amá:y-k  mat-ca?ór-t-nti-k  adú-t[a
    top-on  refl-go.around.on-assrt-again-SS  be-truly
    'indeed they squirmed on top of each other again.' (ibid p.13)
5.e ʔaʔi: adáw-t-k  awif-t’a
      wood  pick.up-assrt-SS  do-truly
      ‘Indeed they picked up wood.’  (ibid p.8)

5.f ʔá:vi casmá=t-k  aʔi-t’a
      here  insult-assrt-SS  say-truly
      ‘Here indeed he insulted him.’  (ibid p.18)

Texts which Halpern collected in 1978, however, reveal changes in the way auxiliaries are used. First, the choice between ‘be’, ‘do’, and ‘say’ is based on different criteria in the 1970’s than it was in the 1930’s. The criteria relevant in the 1970’s are not yet fully understood, and the matter merits careful investigation; however, one tendency stands out: active verbs, whether transitive or intransitive, generally take the auxiliary ‘do’. In particular, both verbs of motion and reflexive verbs (which in the 1930’s took ‘be’) now take ‘do’. This is exemplified in (6.a,b); compare (5.c,d). ‘Be’ still tends to be used with stative verbs (transitive as well as intransitive), as it was in the 1930’s, and ‘say’ to be used with verbs of vocal activity and internal state. However, in the 1970’s these patterns are just tendencies, whereas in the 1930’s they were the rule.

6.a vi:ya=n’pat-k  awif-t’a
      go-in.turn-SS  do-truly
      ‘they go too.’  (HC 22)

6.b maṭ-tavē:r-k  awif-t’a
      refl-chase-SS  do-truly
      ‘they chase one another.’  (HC 21)

An even more striking change in the use of these auxiliaries concerns frequency of use. A text collected in 1935 (Halpern 1976) averages four ‘be’, ‘do’, or ‘say’ auxiliaries per page, while a text collected in the 1970’s averages one such auxiliary per 2-1/4 pages; thus auxiliary use appears to have decreased by about 90% in forty years. Coinciding with this decline is the innovative use of ‘be’, ‘do’, and ‘say’ as discourse conjunctions.

The ‘be’, ‘do’, and ‘say’ conjunctions are similar in many respects to the corresponding auxiliaries. First, both are based on the same three stems: adú ‘be’, awif ‘do’, and aʔi ‘say’. Second, the conjunctions, like the auxiliaries, inflect for person of subject. First and second person subject are overtly marked, while third person subject is zero-marked. The texts in my database are for the most part third person narratives, so most conjunctions in them occur in third person contexts and take the zero third person subject prefix. (All the examples in 1-4 were of this type.) First- or second-person passages are sufficiently rare that I had to venture outside my database to find an example containing a conjunction without unwanted distractions. That in (7) comes from a text collected in 1976.

7. n’á:va ʔá:svá:r-k ʔu:xáy-m-t-k ʔaʔi=m ʔa:svá:r ʔapʔaʔem-xa
    this  1-sing-SS  1-know.how-neg-assrt-SS  1-say=m  1-sing  1.not.say-irr
    ‘I don’t know how to sing that [song], so I won’t sing it.’  (Emerson and Halpern 1978 ¶ 26)
The ‘be’, ‘do’, and ‘say’ conjunctions also resemble the corresponding auxiliaries in their syntactic behavior. The conjunction has the same subject as the lexical verb which precedes it (a fact that is most clearly demonstrated in examples where person of subject is overtly marked, such as 7), and the lexical verb is marked with the suffix -k, as may be seen in many of the examples above, for instance, in (3.a).

Especially important to the remainder of this paper is the fact that the conjunctions, like the corresponding auxiliaries, typically reflect the active, stative, or vocal (or internal-state) nature of the lexical verb with which they are associated. This may be seen in (1.a), where the ‘be’ conjunction follows a chain of stative verbs; in (3.b), where the ‘do’ conjunction follows an active verb; and in (2.a), where the ‘say’ conjunction follows a verb of vocal activity.

These morphological, syntactic, and semantic facts argue that the ‘be’, ‘do’, and ‘say’ conjunctions have their source in the corresponding auxiliaries. It should be pointed out that conjunctions are nonetheless easily distinguished from auxiliaries on the basis of function and in that they exhibit subtle syntactic, morphosyntactic, and intonational differences. Because conjunctions link one bit of discourse with another, they occur either in medial position (cf. 1.a), or at the beginning of a new syntactic "sentence",12 where they form a link with the preceding one (e.g. 1.b). Auxiliaries, on the other hand, never begin syntactic "sentences". They are sometimes found in medial position, as in the fifth line of (2.b), but more often they appear at the end of a "sentence", as in the examples in (5). Consequently, an auxiliary can take either medial suffixes (usually =m) or suffixes which identify the ends "sentences" (such as -t), while conjunctions take only those suffixes that are appropriate in medial position.13 A final difference between auxiliaries and conjunctions is that auxiliaries are always intonationally bound to their main verb, while conjunctions can — and often do — occupy an intonation unit distinct from that of the associated lexical verb; cf. (2, 3, 4.b).

For the sake of completeness it must be mentioned that ‘be’, ‘do’, and ‘say’ are used not only as auxiliaries and conjunctions but also as lexical verbs. An example of ‘say’ used as a lexical verb may be seen in the second line of (1.a), and examples of lexical verbs ‘be’ and ‘do’ are found in the first line of (1.b). Lexical uses of ‘be’, ‘do’, or ‘say’ are easily identified on the basis of their meaning.

3. Conjunctions and reference tracking

While the choice between the ‘be’, ‘do’, and ‘say’ conjunction forms generally reflects the active, stative, or vocal nature of the preceding verb, it is nonetheless quite common to find instances of ‘be’, ‘do’, and ‘say’ conjunctions which deviate from this norm. Examples are given in (8). In (8.a), the conjunction ‘do’ appears in the third line. The material in the third line, however, is descriptive in nature, leading one to expect ‘be’ rather than ‘do’.

8.a ca:m n’am-cal’vu:-k acéw-k
all thereby-make.even-SS make-SS
they make it all even [in length],

arúv-m
be.dry-DS
and it’s dry,
awf = m
do = m
and so,

n'ú:n'
that
that [stuff],

a:menamén-k awf = m
make.a.roll-SS do = m
they make it into a roll,‘ (TK.SHI 9)

Let’s consider (8.a) more closely. As background, one should know that certain people are in the process of making ceremonial shields. They have acquired a special kind of grass and are going to wrap bundles of it around the perimeter of each shield frame. These people are the subject of line 1, which tells us that they make the bundles of grass all even in length. Line 2 gives a brief description of the grass. Line 3 contains a conjunction which marks the end of the descriptive passage, and the action resumes in lines 4 and 5. When the meaning of each line is considered, it becomes clear that the conjunction is semantically associated not with the descriptive verb in line 2 but rather with a verb further back in the discourse — specifically, with the active verb acéw in the first line. By virtue of this semantic association, the ‘do’ conjunction creates a link between the active material in line 1 and that in lines 4-5, thus bridging the descriptive digression in line 2. In other words, while the mere presence of a conjunction marks the end of the descriptive digression, the use of the ‘do’ form (rather than ‘be’ or ‘say’) specifies the active nature of the material interrupted by the digression and explicitly connects the pieces.

Another example can be seen in (8.b). In the first line we are told that people put down poles. The second line provides descriptive information about the poles, followed by the conjunction awf ‘do’, and the thread of the story resumes in the third line. The verb with which the conjunction is semantically associated is not one of the descriptive verbs in line 2; rather, it is the active verb camf:m in the first line. The choice of the ‘do’ form of the conjunction explicitly links the action in line 1 with the action in line 3.

8.b  ?a?f: camf: = m
    wood put.down.long.obj = m
    ‘and they put down poles,

?aqól lóq vi:dk-m awf = m
be.long be.real.long lie.here-DS do = m
there are long ones, real long ones, lying here, and so,

?a?f: tatsá:t-k va:wf: = m
wood set.up.many-SS do.thus = m
they set up poles like this,’ (IC 6)

‘Say’ is used in a similar capacity to indicate continuity of vocal activity across a
digression. In (8.c), vocal activity is described in lines 1-2. Lines 3 and 4 provide
background information about other people present on the scene. The conjunction 'say'
appears in line 5, where it marks the end of this digression, and vocal activity resumes in line
6. Notice the semantic mismatch between the 'say' conjunction and the stative verbs in lines
3 and 4. The verbs with which the 'say' conjunction are semantically associated are 'sing' in
line 1 and 'go on [singing] from here' in line 2. The choice of the 'say' form of the
conjunction specifies the vocal nature of the events interrupted by the digression, thus
explicitly connecting lines 1-2 with line 6.

8.c  a:sVá:r-k
     sing-SS
     he sings,

ná:vi:yém-k
go.from.here-SS
he goes on [with his song] from here,

?u:tfs  k*-awfó-c-n?-c  u:v?ó:-k
bow  rel-nom.use-def-sj  stand.col-SS
and the bow handlers stand,

k*-i:má:c  u:v?ó:-k
rel-nom.dance  stand.col-SS
and the dancers stand,

a?éf= m
say=m
and so,

a:sVu:vár-k  va?:é  vá:rua:wá:-k  vá:rua:wá:-k
sing.dp-SS  do.thus  when.go.towards.here-SS  when.go.towards.here-K
they sing like this, and as they go along and go along, ...’ (TK.CIR 7)

Marking continuity of physical or vocal action appears to be the primary function of
conjunction choice in (8.a-c). Notice, however, that in each case continuity of action implies
continuity of subject: in (8.a), the understood subject of the verbs in the first line is the same
as that of the active verbs in line 5; in (8.b) the understood subject of the active verb in the
first line resumes as that of the active verbs in line 3; and in (8.c), the subject of the verbs in
lines 1-2 is included among the referents of the plural subject of the verbs in line 6. This is
not surprising, given that subject continuity is normal when action is continuous. However,
other data in which continuity of action is crucially lacking show that subject continuity alone
is sufficient to motivate conjunction choice. Examples are given in (8.d.e).

The first line of (8.d) and the first clause in the second line describe the actions of a
group of people: they bundle clothes into a shawl and put them down. The second clause in
line 2 provides information not about these people's activities but about the bundles: here
they are, as a result of having been put down. The third clause in line 2 is the 'do'
conjunction. ‘Do’ semantically links the active verbs in line 1 and in the first clause in line 2 with the material in line 3. Notice that the use of ‘do’ here does not indicate a return to action; what follows ‘do’ is not physical action at all but a passage in which the people who were the subject of the action in the first line and in the first clause of the second line talk. Instead, the choice of ‘do’ serves to indicate that the talking in line 3 is somehow connected with the actions in line 1: specifically, that the people who do the talking are the same as those who performed the actions in line 1 and in the first clause of line 2. Thus it indicates subject continuity across a descriptive digression.

8.d ma:ská:r-f' asó:-k vu:nó:-k
shawl-in wrap-SS be.around.here.pl-SS
‘they go about wrapping [the clothes] in a shawl,

acá:c vi:dáw-m awí=m
put.them.away be.here.col-DS do=m
they put them aside and here they [the clothes] are, and so,

van'a:dáw-m
when.be.here.col-M
then,

"vadá-c Paví:-k-adó-a"
this.nr-sj be.ready-SS-be-evid
"This is ready for them," [they say];' (IC 5)

In (8.e), the conjunction used is adúm ‘be’. In the first two lines of (8.e), stative verbs are used to describe people who carry images in the mourning ceremony. In line 3 there begins a long quotation addressed to these people, followed in line 8 by the lexical verb ‘say’. The quotation and the lexical verb ‘say’ together constitute a digression which I will refer to as the speech report. The lexical verb ‘say’ is in turn followed by the conjunction ‘be’. The presence of a conjunction here signals the end of the speech report, and the choice of the ‘be’ conjunction form recalls the stative clauses in line 2, creating a link between these clauses and with the material which follows the conjunction. Notice that ‘be’ does not indicate a return to stative description: the material which follows it in line 9 is active. Instead, ‘be’ tells us that line 9 picks up where line 2 left off — and has the same subject as line 2. In this example, then, conjunction choice is used to indicate continuity of subject across a speech report.

8.e pa?i:pí: u:céw k"-a:víšéw vaddá-c
person nom.make rel-carry this.nr-sj
‘these who carry the "constructed people" [i.e. the image carriers]

n'ú:nó:-k vu:nó:-ntí-m
be.around.there.pl-SS be.around.here.pl-also-DS
they are here and there too;
"paʔi:pa: ma: -k" -asf:nt-c
person  2-rel-be.one.pl-sj
"You people,

nʔa:yú:
thing
well,

mask"é ma: -k" -a:vkéw
image  2-rel-carry
you who carry the images,

k-antamák apʔkaʔêm-k vi:kadáw-k
imp-leave.col imp.not.do-K imp.be.here.col-K
don’t leave, stay here,

k-a:cví:r-k"
imp-finish.dp-K
and finish,"

aʔf: = m adů: = m
say = m be = m
he says, and so,

katán-k vi:dáw-k vi:dáw-k
arrive.col-SS be.here.col-SS be.here.col-K
they [the image carriers] come and stay here and stay here,’ (IC 13)

In summary, the examples in (8) demonstrate that the choice among the ‘be’, ‘do’,
and ‘say’ forms of the conjunction may be manipulated to indicate continuity of action and
subject reference. While reference tracking may have originated as a derivative of the action-
tracking function of conjunction choice, it has become an important function in its own right.

For the sake of completeness it should be pointed out that in some cases the choice
among ‘be’, ‘do’, or ‘say’ appears to be motivated by neither the immediately preceding
clause nor material further back in the discourse; in fact, I have yet to find any motivation
for it at all. Some such data tempt me to conclude that ‘be’ is being grammaticalized as the
default conjunction form, while other such data convince me that ‘do’ or ‘say’ is being
grammaticalized as the default conjunction form. I hope that further work will lead to an
explanation of these apparent exceptions.

4. A note about switch reference marking

The Yuma switch reference system is often unreliable in reference tracking, and
Miller (1992) argues that the suffixes -k and -m, often analyzed as ‘same-subject’ and
‘different-subject’ respectively, are in the process of being reanalyzed as verb class markers.
This reanalysis is ongoing, however, and some occurrences of -k and -m still appear to be
motivated by reference tracking considerations. For this reason it is not clear to what extent
the switch reference system plays a part in reference tracking in the examples in (8). Let us for the sake of argument follow the conservative course of analyzing -k and -m as switch reference markers whenever possible. (Towards this end I have glossed -k and -m as ‘SS [potentially analyzable as same-subject marker]’ and ‘DS [potentially analyzable as different-subject marker]’ whenever consistent with the interpretation of the examples.) Under such an analysis, switch reference marking alone proves sufficient to track reference in (8.a) and perhaps in (8.c). In (8.b) and (8.d), however, the lexical verb with which the conjunction is semantically associated either obligatorily takes the verb class marking suffix =m (cf. 8.b) or is unsuffixed (cf. 8.d), so that switch reference marking fails to track reference across the descriptive digressions found in these examples. In (8.e), furthermore, switch reference marking provides no help at all in tracking the reference of the image carriers across the speech-reporting digression. 14

Thus, even when -k and -m are analyzed as switch reference markers wherever possible, they fail to track subject reference in a majority of the examples in (8). It is perhaps because of their unreliability that conjunction choice has emerged as an important device for tracking subject reference.

5. Conclusion

In this paper I have attempted to make two points. First, the presence of a ‘be’, ‘do’, or ‘say’ conjunction signals a discontinuity in the focus of attention, in the flow of events, or in the flow of the narrative itself. Second, the choice among the ‘be’, ‘do’, and ‘say’ forms may be manipulated to track action and subject reference — and in some cases subject reference alone — across digressions and other discontinuities. There is irony in this situation: Since the presence of a conjunction marks discontinuity, conjunctions are functionally parallel to different-subject marking in certain other languages. However, since the choice of conjunction is useful in tracking subject reference across intervening material, conjunction choice is functionally similar to same-subject marking in certain other languages.

It is also ironic that in a language which is often considered to have a switch reference system, functions such as reference tracking and general marking of discontinuity should be accomplished not by the switch reference markers but by conjunctions. This, I believe, has to do with the fact that the switch reference system is breaking down and being reanalyzed as a verb class marking system. It is not surprising that, coincident with this breakdown, the ‘be’, ‘do’, and ‘say’ conjunctions should take over functions typically associated with switch reference systems.

Notes

1. Unless otherwise indicated, data come from texts collected by Abraham M. Halpern in 1978 and presently being prepared for publication as Halpern (in prep). The texts were transcribed and originally translated by Halpern. I am responsible for the analysis; I have also divided the text into lines which coincide with intonation units and I have slightly revised the translation.
2. Several conjunctions meaning ‘then’ are found, including vanpa:vak, composed of the auxiliary verb stem vi:vą 'be here' plus the temporal prefix ma:- and a suffix -k, and its plural counterpart vanpa:dąwį, composed of auxiliary verb stem vi:dąw 'be here (col)' with the same affixes. There is also a conjunction a?f:sa (or a?f:sa:) 'but' composed of the auxiliary verb 'say' plus dubitative suffix -s (and, sometimes, the emphatic suffix -k).

3. 'Be', 'do', and 'say' belong to a small class of verbs which always take the suffix =m, unless an intervening suffix is present; for discussion see Halpern (1947b:157-158) and Miller (1992:71-73). When suffixed with =m, members of this class are subject to alternations in the length of the stressed vowel (these alternations are not yet understood); see Halpern (1947b:157 note 9). 'Be', 'do', and 'say' are also subject to alternations in the quality of the stressed vowel before certain suffixes; see Halpern (1947a:21, 1947b:157-159).

4. This is similar to a use of English 'so' described by Schiffrin (1987:191-201).

5. A code following each example identifies the speaker and section of text from which it is drawn. The following abbreviations are used in examples: asrt 'assertive'; col 'collective plural'; dp 'distributive plural'; def 'definite'; DS 'potentially analyzable as different-subject marker'; evid 'evidential'; imp 'imperative'; irr 'irrealis'; md 'middle distance'; nom 'nominalized form'; nr 'near'; pl 'plural'; rel 'subject relative clause'; sj 'subject'; sp 'species'; SS 'potentially analyzable as same-subject marker'. =m glosses the verb class marker =m, and -K and -M gloss suffixes which cannot be analyzed as switch reference markers and may be verb class markers. The functions of -A and -KM are not yet clear.

The character d represents the phoneme ð, t represents ò, and s represents the post-alveolar fricative ñ, which Halpern transcribed as ŝ.

6. See also Dahlstrom (1982), who argues that in Lakhota a set of conjunctions previously analyzed as switch reference markers does not mark switch reference at all but rather continuity vs. discontinuity of action.

7. Auxiliary constructions of this type are widespread in the Yuman family were first described by Langdon (1978). The Yuma auxiliary construction is actually somewhat more complicated than I have described it here. In fact it may consist of a chain of clauses all having the same subject, and it is possible for one or more clauses in this chain to separate the clause containing the main verb from that containing the 'be', 'do', or 'say' auxiliary.

8. In the examples in (6), I have replaced Halpern’s (1976) literal glosses with morpheme-by-morpheme glosses. The translations are Halpern’s.

9. This generalization applies more to the speech of two of Halpern’s three consultants (IC and HC) than to the speech of the third (TK).

10. In one narrative randomly chosen from Halpern (in prep.), I found an average of one auxiliary per 5-1/2 pages. However, pages formatted for Halpern (in prep.) hold about half as much text as the pages of Halpern (1976). In an attempt to achieve comparability, I counted each page of Halpern (in prep.) as half a page.
11. It should be noted that the text collected in 1978 was tape recorded, while the 1935 text was probably dictated. It is likely that dictation required the text to be broken up into more and smaller "sentences" than are typical in ordinary narration. The larger number of "sentences" would result in an increase in the number of unit-final auxiliaries. I thank Geoff Kimball for pointing this out.

12. It is not clear that the traditional notion of sentence corresponds to a genuine structural category in Yuma discourse. I use the term in scare quotes to refer to an often long syntactic unit that is perhaps more like a paragraph than a traditional sentence.

13. See note 3. In addition to -m, conjunctions sometimes take the assertive suffix -t followed by -k or -m.

14. If treated as a switch reference marker, the -m in line 2 of (8.d) must be analyzed as marking different subject with respect to the lexical verb 'say' in line 8; thus it tracks reference into, rather than across, the speech report.

References

REPORT 8

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cover design by Leanne Hinton (Santa Barbara Chumash rock painting)
This volume is dedicated to

JAMES E. REDDEN

on the occasion of his retirement

for his enduring commitment to the publication

of the results of research on Yuman, Hokan, Penutian and

other American Indian languages

and also

for his contributions to the

documentation of the Hualapai language
INTRODUCTION

This volume includes a number of papers presented in conjunction with the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio, at two conferences on American Indian Languages: the meeting of the Society for the Study of the Indigenous languages of the Americas, held July 2-4, 1993, and the meeting of the Hokan-Penutian Workshop, held on the morning of July 3, 1993.

This continues a tradition initiated during the Linguistic Institute at the University of Arizona in 1988, of offering conferences on American Indian languages during the summer Linguistic Institute of the Linguistic Society of America, which is held every two years on the campus of the host institution. The interaction thus afforded between students and faculty of the Institute and specialists in American Indian languages has proved mutually profitable.

We gratefully acknowledge the dedication of Catherine Callaghan in making these meetings thoroughly enjoyable, as well as the hospitality of Ohio State University.

The Hokan-Penutian Conference has a tradition of meetings dating as far back as 1970, when the first Hokan Conference was hosted by Margaret Langdon at UCSD. Since 1976, the Hokan (and later Hokan-Penutian) Conference proceedings were published most years by James Redden, as part of the series *Occasional Papers on Linguistics*, out of the department of Linguistics at Southern Illinois University at Carbondale. Beginning this year, with James Redden’s retirement, the reports of these conferences are being published as part of the *Survey Reports* out of the Survey of California and Other Indian Languages at the University of California at Berkeley.

Margaret Langdon
Volume Editor

Leanne Hinton
Series Editor
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