Out of sight, out of mind: person, perception, and function in Mopan Maya spatial deixis

EVE DANZIGER

Abstract

Using spontaneous speech data, elicitation, and native speaker exegesis, the spatial deictic system of Mopan Maya is described here for the first time. Mopan spatial deixis is built — and built highly systematically — on semantic distinctions primarily relevant not just to social life but to speech itself. On this basis, and in contrast to the situation described for other Yucatecan languages, there is semantic convergence in Mopan between locative and nonlocative spatial deictic usage. Mopan reconciles a semantics of perception with a semantics of space through the use of both to encode distinctions of shared knowledge relevant to the act of speech. In a move that in turn aligns semantic contrasts of perception with those of speech participation, Mopan speakers' statements about their spatial deictic system assign different default modes of perceptual access to different types of interactive situations. The semantics of space, of perception, and of speech participation interpenetrate with one another in this system in such a way that no reference to physical location can be made without invoking semantic contrasts relevant both to the interactive situation in which reference is made, and to the state of shared knowledge of the discourse participants.

1. “Spatial language” in Mopan Maya

In many areas of current semantic theory, meaning contrasts related to physical space are seen as basic to other kinds of meaning (cf. Jackendoff 1983, 1987; Langacker 1987). Rigorous cross-linguistic work on this hypothesis requires that the domain of “space” itself be problematized as a semantic universal. In seeking “spatial language” in Mopan, therefore, we clearly cannot proceed simply by isolating a set of forms for study on notional grounds. Instead, I take as a point of departure the stative predicate ke'en- ‘be located’.
This predicate may occur with or without a lexicalized noun phrase as argument, but it always requires a complement that specifies the location of the argument. Where this complement is not simply the interrogative or relative *tuba* 'where' (example [1]), it is either a prepositional phrase (example [2]) or a locative adverb (example [3]), which may have deictic properties (examples [4] and [5]). It is with these latter that we will be concerned.

1. Pere m in -wel *tuba* ke’en -0 -i.
   but NEG 1A -know where be.located -3B -SCOPE
   ‘But I don’t know where it is.’

2. *Chen ich ka’tok* ke’en -0.on.
   only in bush be.located -1B.PI
   ‘We were just (living) in the bush.’

3. *Naach* ke’en -0.
   far be.located -3B
   ‘It is far away.’

4. *Te* toj ke’en -0
   DX.L1 still be.located -3B
   ‘It was still located there,
   ich u yotoch u na’.
   in 3A{POSS} home 3A{POSS} mother
   in her mother’s home.’

5. Oh *waye* ke’en -0
   oh DX.L1 be.located -3B
   ‘Oh, it’s here.’

1.1. The deictic locatives

The four deictic locative complements of Mopan *ke’en* ‘be located’ (see Table 1) are *waye* ‘deictic locative 1st person’ (DX.L1), *ta’kan* ‘deictic locative 2nd person’ (DX.L2), *tilo* ‘deictic locative 3rd person visible’ (DX.L3V), and *te* ‘deictic locative 3rd person invisible’. These forms can usually be translated with some version of English ‘here’ or ‘there’.

<table>
<thead>
<tr>
<th>1st person (DX.L)</th>
<th>2nd person (DX.L2)</th>
<th>3rd person visible (DX.L3V)</th>
<th>3rd person invisible (DX.L3I)</th>
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<tbody>
<tr>
<td><em>waye</em></td>
<td><em>ta’kan</em></td>
<td><em>tilo</em></td>
<td><em>te</em></td>
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<td><em>here</em></td>
<td>‘right there’</td>
<td>‘over there’</td>
<td>‘thereabouts’</td>
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Although initially defined by their occurrence with *ke’en* ‘be located’, these forms of course also occur readily with other predicates.

1.1.1. The semantics of the speech situation. The two deictic locative adverbs *waye* (DX.L1) and *ta’kan* (DX.L2) indicate regions associated with the first and second persons of the speech situation respectively. The form *tilo* (DX.L3V) indicates a location visible in the circumstances of speech, but not associated with either speaker or addressee. These are not occasional pragmatic correlations, but consistent semantic properties of the forms. After prolonged reflection in the context of extended elicitation sessions, Mopan informants themselves arrive at this interpretation of the forms. One informant provided this summary:

*Tilo*, I think it should mean ‘it’s over there’ [pointing laterally out from the table at which we are seated facing one another]. *Ta’kan*, [pointing at the investigator] ‘it’s near you’. *Waye* [tapping a small object in front of himself] ‘it’s over here’.

The exchange below illustrates how these three forms articulate with one another in natural speech:

Three young Mopan are collecting the edible shoots of the *kála* plant. Antonia, the eldest, has found *kála* in a location previously searched by Benita and little Carlos. Standing at this location, Antonia accuses Benita of laziness or lying, in having claimed that there was none to be found here. From his position about five meters distant, Carlos now addresses Antonia in order to defend Benita, who herself stands at a third point equidistant from the other two. Carlos’s argument is explicitly spatial: he contends that the location that he and Benita had previously searched was not in fact precisely the one in which Antonia now stands.

   Man -0 -i *waye* ix Ben.
   pass.by -INTR.COMPL -3B DX.L1 F Benita
   ‘Benita passed by here.’
   (Waye refers to Carlos’s location, i.e. ‘where I am.’)
   *Chen waye* man -0 -i.
   only DX.L1 pass.by -INTR.COMPL -3B
   ‘She only passed by here.’
   (Waye refers to Carlos’s location, i.e. ‘where I am.’)
   *Ma* man -0 -i *ta’kan* -i.
   neg pass.by -INTR.COMPL -3B DX.L2 -SCOPE
   ‘She didn’t pass by there.’
   (Ta’kan refers to Antonia’s location, i.e. ‘where you are.’)
(7)  Antonia to Benita (preparing to forgive):
Jaj -0 waj
be.true -3B Q
‘Is it true
tī man -0 -e’ex tilo’ -i?
PREP pass.by -INTR.COMPL -2B.PI DX.L3V -SCOPE
that you went over there?’
(Tilo’ refers to Carlos’s location, i.e., ‘where he is’.)

1.1.2.  The semantics of prior knowledge.  The fourth form in the deictic locative series, te’ (DX.L3I), is frequently encountered in narrative.⁵ Te’ (DX.L3I) expresses a location not concurrent with the situation of its utterance, but known to the speech participants. This location may simply be a far-off physical one — for example, the site of the events in a historical tale. It may also, however, represent a location close to the scene of speech but of uncertain or not-yet-realized physical properties. For reasons that will become clear (see section 1.2.1. below), I gloss this location as ‘invisible.’

(8)  Yaj -aj -0 -i,
ripe -INCH.COMPL -INTR.COMPL -3B
‘When it has ripened,
b u kaa ti top’ a la’ -a.
go 3A FUT PREP flower DET.N DX1 -TOPIC
this will flower.’
Chālk -0 chāk -0.
be.red -3B be.red -3B
‘It will be bright red.’
Ti’ k’ax -ik -0 u with
PREP fall -TR.INC -3B 3A{POSS} fruit
‘When its seeds fall,
ti’ tun ulaak’ meen kāla’
DX.L3I then another small kāla’
then (there’ll be) another one there, a small kāla.’
(At ti’, the speaker’s machete moves in a pointing gesture from the plant itself to the ground next to it — the location where the seeds may one day fall.)

1.2.  The morphological context of Mopan deictic locatives

Four morphemes having the syntactic properties of independent stative predicates, but largely similar in form and meaning to those that function

in the deictic locative series, occur transparently in Mopan syntagms appropriate for presenting or calling attention to an object (ostensives), for specifying a referent (demonstratives), and for describing an action (manner adverbs).⁶ These forms are la’ (DX.S1) ‘deictic stative 1st person’, ka(na)’ (DX.S2) ‘deictic stative 2nd person’, lo’ (DX.S3V), ‘deictic stative 3rd person visible’ and be’ (DX.S3I) ‘deictic stative 3rd person invisible’ (see Table 2). These deictic forms constitute their own predication rather than occurring as complements to the locative predicate ke’en. I refer henceforth to the entire set of forms as the ‘spatial deictics’ of Mopan.

Stative forms in la’ (DX.S1) refer to objects that the speaker holds or manipulates or to the speaker’s own behavior. Statives in ka(na)’ (DX.S2) refer to objects, regions, and behaviors associated with the addressee. Lo’ (DX.S3V) forms are appropriate when referring to objects, places, and behaviors not associated with speaker or addressee, but visible within the speech situation context. Be’ (DX.S3I) forms are appropriate when a referent is audible but not visible.⁷

Referring to the fact that the peeping of chickens was audible next door, an informant observed that one might wish to comment that the birds were making too much noise. “And then you could say be’,” she explained. Another informant simply told me, “Be’ means ‘I think I heard something.’”

1.2.1.  Perception and prior knowledge.  As part of its reference to that which is heard, be’ (DX.S3I) may refer to prior discourse, thus taking on an anaphoric function.

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<th>Table 2. Spatial deictic forms of Mopan</th>
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<td>1st person</td>
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<td>DX1</td>
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<td>Locative (L)</td>
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<td>Ostensives (OST S)</td>
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<td>Demonstr (DET.N S)</td>
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<td>Manner (MAN S)</td>
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"888 E. Danziger Mopan Maya spatial deixis 889"
(9) Ti bet -aj -0 a paaskwa
1A.PI make -TR.COMPL -3B DET.N Christmas
'We used to keep Christmas
uch -0 -i laj -i.
happen -INTR.COMPL -3B all -SCOPE
right enough in the old days.'
Paaskwa, kinte eneero, dies i nweeve maarso,
Christmas fifteen January nineteen March
'Christmas, the fifteenth of January, the nineteenth of March,
Walak tak ti bet -ik -0 a be'
HAB full 1A.PI make -TR.INC -3B DET.N DX.S3I
we used to keep those.'

The be' (DX.S3I) forms contrast in narrative with forms in lo' (DX.S3V), which occur at first mention of a referent. 8

(10) Walak in t -al pach -oo' aj tz'on.
HAB 1A come -INTR.INC behind -3B.PI DET.M hunt
'I used to go out with the hunters.'
Tal -0 -en in wil -ik -0
come -INTR.COMPL -1B 1A see -TR.INC -3B
'I came upon
a lugar a lo'.
DET.N place DET.N DX.S3V
this place.'
(First mention of the site of a future village. I use English "this"
in the colloquial first-mention sense of "There was this guy ...".)

The similarity of the occurrence pattern of anaphoric be' (DX.S3I) to that of locative te' (DX.L3I) is quite striking. The exchange below, for example, shows how an interruption by a second speaker uses te' (DX.L3I) to maintain reference to the first speaker's topic (the cabildo or community center building) as a LOCATION. Immediately afterward, the first speaker resumes, using be' (DX.S3I) in exactly analogous fashion, to maintain reference to the cabildo — this time as a PHYSICAL OBJECT:

(11) A. Le'ek a kabildo
   it DET.N cabildo
   'The cabildo
   a paye' paat -aj -i.
   DET.N first finish -INCH.COMPL -3B
   was the first to be finished.'

B. Te' tun walak ti kun -tal
   DX.L3I then HAB 1A.PI remain -INCH.INC
   'So we stayed there
ti tan ti bet -ik -0 tak
   PREP DUR 1A.PI make -TR.INC -3B fully
   while we were still building
ti wotoch ino'on.
1A.PL{POSS} home 1PL.IND
our own homes.'
A. Ti naj a be'.
1A.PL{POSS} house DET.N DX.S3I
'That was our house.'

The link between anaphora (prior knowledge) and audition is not difficult to make. Quite apart from the lexical conflation in Mopan of 'to hear' with 'to understand', to know', it is a fact that, especially in nonliterate societies, access to knowledge often depends specifically upon audition in the verbal mode. An object that is heard without being seen (be' (DX3A)) is indeed one that is not present but is known. And phenomena that are known without being concretely present (te' (LOC3I)) may not always be "heard" but they are certainly often "heard about." 9

1.3. Spatial deixis in Mopan Maya

Before pursuing the main argument I now pause to describe and exemplify more fully the functional and syntactic occurrence patterns of the static (nonlocative) spatial deictic forms of Mopan Maya, and to draw out the parallels and contrasts with previously described systems of spatial deixis in Mopan's sister languages (Bruce 1968; Hanks 1990, 1993; Hofling 1982, 1991).

1.3.1. Ostensive. Ostensive usage accompanies literal presentation or the calling of the addresser's attention to an object or region. The deictic morpheme may occur alone or with a general ostensive particle je' (inadmissible with kana' (DX2)). In this usage, the deictic morpheme functions syntactically as a bare static predicate, often taking third person pronoun inflection.

(12) Je la' -oo'!
   OST DX.S1 -3B.PI
   'Here they are!' (Speaker places some chili peppers into addressee's hand.)
(13) Je la' -0 le' che' tukaye!
OST DX.S1 -3B leaf tree again
'Here are some more leaves!'
(Speaker, having discovered leaves, calls to addressee, who is a short distance away.)

(14) Kana' -0 ik -il
DX.S2 -3B pepper -SCOPE
'There's some chile pepper!'
(Uttered in indication to addressee that she should go and pick some of the plant.)

(15) K' uxtun in maaska
what regarding 1A(POSS) machete
'And what about my machete, tuba bin -0 -i?
where go -INTR.COMPL -3B
where has it gone?'
Lo' -0 xa'ak.
DX.S3V -3B well
'Oh, there it is!'
(Speaker, in ruminative monologue, surveys the area and locates
the machete on the ground a short distance away.)

(16) Je be' -0 a pek' u chib ak -al -a!
OST DX.S3I -3B DET.N dog 3A bark -INTR. INC -TOPIC
'There's the barking of a dog!' (Elicited.)

In ostensive usage, the deictic morpheme also occurs with first and
second person pronoun inflection, but such occurrence is restricted to
the appropriate person-associated deictic.10

(17) Je la' -o'on!
OST DX.S1 -1B.PI
'Here we are!'

(18) Kana' -e'ol
DX.S2 -2B.PI
'There you are!'

(19) *Kana' -en
DX.S2 -1B
'*There(2) I am'

(20) *Je lo' -ech
OST DX.S3V -2B
'*There(3) you are'

The be' {DX.S3I} form accepts the second person pronoun but not
the first.

(21) Be' -ech!
DX.S3I -2B
'There you are!'

This (elicited) form is appropriate to a situation in which, for example,
the speaker hears the addressee in the next room. In the complementary
situation, in which the speaker announces him or herself, the appropriate
expression remains.

(22) Je la' -en!
OST DX1 -1B
'Here I am!'

1.3.2. Demonstrative. Mopan deictic demonstratives both function as
and modify nouns and noun phrases. Like other stative predicates in
Mopan (Ulrich et al. 1986: 42), the deictic morpheme may form a
substantive through postposition to the neuter determiner a:

(23) A la' mun -0 toj.
DET.N DX.S1 be.unripe -3B still
'This is still unripe.'
(Speaker taps plant fragments in her hand.)

(24) M in k' at -0 a kana! Jan -t -ej!
NEG 1A want -3B DET.N DX.S2 eat -TR -1MP
'I don't want that! You eat it!'
(Addressee has offered to present a piece of food to speaker.)

(25) A lo' le' che' -il
DET.N DX.S3V leaf tree -REL
'Those are the tree-leaves!' (Speaker indicates a heap on the ground a short distance away.)

(26) Mmmm te' ti bet -aj -0 a be',
mmmm DX.L3I 1A.PI do -TR.COMPL -3B DET.N DX.S3I
'Yes, that's where we did that.'
(Speaker has just described a series of ceremonial actions that
took place at the founding of a new village.)

Relative clause NP modifiers may also be formed in Mopan through postposition of the relativized predicate to the neuter determiner a. The
entire segment then follows the head NP (cf. Hofling 1991: 14, 45-46):

(27) Käx -t -aj a tz'ub
find -TR -TR.IMP DET child
'Find the child'
The deictic stative follows this pattern in perfectly regular fashion. In the resulting relative construction it occurs as a modifier of nouns and noun phrases. As will be apparent from the examples below, the NP-modifying demonstrative cluster of Mopan consistently shows the syntax (NP + DET.N + DX).

(28) ... in wástan -t -aj -0 ix ch'up a 1A wife -TR -TR.COMPL -3B DET.F woman DET.N la'.

DX.S1

'... I married this lady.'
(Speaker's wife is sitting beside him.)

(29) Walak u tza'j -0 kolor a viido a kana? 3A give -3B color DET.N video DET.N DX.S2

'Does that video give color (pictures)'
(Addressed to the investigator, who is using a video camera.)

(30) T u yit a che' a lo' PREP 3A(POSS) bottom DET.N tree DET.N DX.S3V

'At the bottom of that tree
yan -0 wich -il
exist -3B fruit -SCOPE
there's fruit!
(The tree is in the middle distance ahead of the speaker.)

(31) Bin -0 -oo' go -INTR.COMPL -3B.PI

'They went
u màch -a' -0 a lu'um a be' 3A seize -TR.SUBJ -3B DET.N earth DET.N DX.S31
to lay claim to that land.'
(Speaker is telling the story of the founding of a village.)

In many cases, the NP that is modified in this way is the third person independent pronoun le'ek 'it'. Modification by the deictic morpheme gives a common location translatable into English as 'this one', or as 'that one' (cf. Hanks's 1990 DNOM ID Base).

(32) Chaan -t -ej nukuch kákaj -0 le'ek a la'.

look -TR -TR.IMP big cacao -3B it DET.N DX.S1

'Look what a big cacao (fruit) this one is!' (Speaker stops walking to point the fruit out to her companions.)

(33) Chen le'ek a kana' only it DET.N DX.S2

'Only this one
u lik' -s -aj -0 kweentaj -il
3A rise -CAUS -TR.COMPL -3B idea -REL
had the idea
a b -el ti kâx kaj te' -i.
DET.N go -INTR.INC PREP seek village DX.L3I -SCOPE
to go and start a village there.'
(Speaker indicates her husband, prompting him to tell the story to her current addressee.)

(34) Pes ti gobyerno -0 ma' le'ek a well 1A.PI(POSS) governor -3B NEG it DET.N lo'.

DX.S3V

'Well our governor was not that one.'
(Speaker is specifying a time before the present prime minister came to power.)

(35) San Joose. Aj!
San Jose ah
'San Jose. Ah!
le'ek a be' k'aba kaj -0 a be'.
it DET.N DX.S3I name village -3B DET.N DX3A
That's a name for a village, that is.'

1.3.3. Manner. When the noun modified by the relativized deictic morpheme is the general ba'al 'thing', there may be reduction of the internal syllable.

(36) A ba'al a la'.

DET.N thing DET.N DX.S1

'This thing
ki' -0 ilik u jan -t -ab -al.
be good -3B same 3A eat -TR -PASS -INTR.INC
is also good to eat.'
(Speaker shows a plant in her hand.)

(37) Ki' -oo'

be good -3B.PI

word u wich ah meen tz'ub a ba'al
PREP 3A(POSS) face DET.M small child DET.N thing
-a'.

-DX.S1

'These things are nice for little boys.'
(Speaker indicates a plant she is holding.)
(38) A ba'al a lo' yâj -0
DET.N thing DET.N DX.S3V be.ripe -3B
'That thing is ripe!'
(Speaker is moving away from a plant she had inspected but found too mature for eating.)

(39) K' u k'aba a ba'al -o'
what 3A{POSS} name DET.N thing -DX.S3V
'What's the name of that thing
k in wad -â' -0?
CONJ 1A say -TR.SUBJ -3B
so I can say it?'
(Speaker seeks paraphrase or English translation for a Mopan word in his story; addressee is the investigator.)

When ba'al combines with the demonstrative phrase a be', the phonological variation entailed by reduction of the internal syllable is appreciably greater. Such reduction yields boo be'.

(40) Ki' -0 a ba'al a be',
be.good -3B DET.N thing DET.N DX.S3I
'Those things are good.'
(Spoken in response to a persuasive argument. We might render this sentence into idiomatic English as 'Sounds good!'.)

(41) Bik u tâkîn -t -0 -'on a baalche'
CTN 3A follow -TR -TR.SUBJ -1B.PL DET.N animal
'Be careful that animals don't follow us, a boo -be' -a-men
DET.N thing -DX.S3I 2A-because
because of you making that noise.'
(Speaker believes that making a noise with a certain plant attracts snakes.)

Used without the article a (but sometimes with the preposition ti), these reduced phonological forms of the demonstratives with ba'al are identical to the manner adverbs of Mopan.

(42) "..." ke -en ti ba'al-a' ti -joo'.
quote -1B PREP MAN.DX1 PREP -3B.PL
"..." I said to them like this.
(A direct quotation precedes this utterance.)

(43) Ma' ba'a-kan toj!
NEG MAN.DX2 still
'Not like that!'
(Speaker corrects her companion's method of collecting the edible part from a particularly difficult plant.)

(44) Ba'al-o' ti bet -aj -0
MAN.DX3V 1A.Pl do -TR.COMPL -3B
'That's how we did things
uch -0 -ij -i.
happen -INTR.COMPL -3B -SCOPE
in the old days.'

(45) Ma' tun way -âl.
NEG DUR 3A sleep -INTR. INC
'He didn't go to sleep.'
Pves boo-be' boo-be'
well MAN.DX3I MAN.DX3I
'So like that, like that,
asta k u yub -aj -0 -a
until CONJ 3A hear -TR.COMPL -3B -TOPIC
until he heard
k'och -0 -0 a baalche',
arrive -INTR.COMPL -3B DET.N animal
the animal had arrived.'

1.3.4. Mopan spatial deixis in the Yucatecan context. As we have now described it, the Mopan system of spatial deixis exhibits quite profound differences from the cognate systems described for its mutually intelligible sister languages. All of the Yucatecan languages retain a recognizable cognate for te' {DX.L31}, but descriptions of Lacandón (Bruce 1968: 76–79) and Itzá (Hofling 1982: 115-135, 269-293; 1991: 15-16, 21-23) do not report any uses of be' {DX.S3I} cognates. In modern Yucatec, be' exists but it is not used anaphorically. No other Yucatecan language displays a second person deictic comparable to Mopan (ta') kan(a) {DX2}.

No equivalent exists in modern Mopan for the notion of corporeal field encoded in the Yucatec noun ikanal, which evidently underlies spatial deictic reference in that language (Hanks 1990: 406). The cognate Mopan term ikanal, however, offers a highly suggestive parallel to the use of Mopan locatives to distinguish among speech roles rather than among physical spaces. Mopan ikanal refers to the totality of an individual's kinship and respect-greeting relations (Danziger forthcoming).

On the basis of his observation of Yucatec, Hanks (1990: 92) has remarked, "What is noteworthy about Maya is that perception is irreducibly distinct from space as a domain within the deictic field, as reflected in the formal difference between the OSTEVs and the DLOC adverbs."

Formal differences in the spatial deictic system in Mopan, on the contrary, are not so great as to compel consideration of separate semantic
dimensions in the analysis of locative and of nonlocative (stative) terms. We have seen that there is strict semantic, as well as considerable morphological, parallel of the forms in Table 2 across syntactic and functional contexts.11

In all cases, Mopan spatial deictis distinguishes on the one hand between first and second persons of the speech situation, and on the other, between visible and “invisible” referents not related to the speech participants. In particular, in using both locative te ’ (DX.L3I) and stative be’ (DX.S3I) for anaphoric purposes in narrative, an apparent semantics of space on the one hand (present/nonpresent), and of perception on the other (visible/invisible) can be reconciled. Both forms are used to index the state of participants’ knowledge with respect to discourse referents.

2. Person, perception, and function in Mopan spatial deixis

Although Mopan spatial deictis is morphologically and semantically quite different from that of Yucatec, the Mopan data by no means vitiate the central thesis of Hanks’s description (1990: 292): “Irreducible to physical space and time, the deictic field embodies modes of access to the world that are both preconditions and products of communicative practice.”

On the contrary, the Mopan data support and strengthen Hanks’s conclusion. Even in a system like this one, where locative and nonlocative uses are morphologically and semantically similar to one another, we will see, through interpretation of Mopan speakers’ metalinguistic statements (cf. Hanks 1993), that the result is not reduction of nonlocative usage to physical space and time, but rather “elevation” of locative specification to take account of social and communicative variables. Contrasts between perceptual modes of access (visible, audible) are translated into contrasts between different speech participation contexts (copresent, not copresent). The semantics of physical space, already fully reconciled with the semantics of perception through parallel use of “audible” be’ (DX.S3I) and “nonpresent” te’ (DX.L3I) to signal known referents, now becomes explicitly interwoven also with the semantics of discourse context and speech participation.

2.1. Perception and the speech participants

Exploitation of the audible properties of speech for anaphoric purposes is far from inexplicable, nor indeed is it unheard of elsewhere among the world’s languages (cf. Jarvella and Klein 1982; Weissenborn and Klein 1982). More startling in Mopan is the fact that the same pattern of alignment of perception with epistemology, through the vehicle of audible speech, exists also with respect to the first and second person deictic forms.

In discussing their spatial deictic forms, Mopan speakers insist that the second-person-associated forms ((DX2)), whether locative or stative, contrast with first person ((DX1)) and with third person ((DX3R)) forms by denoting objects and regions beside or behind — but never in front of — the speaker. On one occasion, for example, an informant (P.) explained to the investigator (E.):

(46) P. T a teel is ta’kan.
    PREP 2A (POSS) side is DX.L2
    ‘At your side is ta’kan.’

E. T in pach ilik?
    PREP 2A (POSS) back also
    ‘At my back also?’

P. Yes.

E. And t in taan?
    and PREP 1A (POSS) front
    ‘And in front of me?’

P. Tilo’
    DX.L3V
    ‘Tilo’.

The crucial variable in this kind of exegesis Mopan “spatialization” of the interactive field is perceptual. Matthew and Rosemary Ulrich (1976: 196) list in their dictionary of Guatemalan Mopan a locative adverb taca, which they define as “algo cerca pero no visto” ‘something nearby but not seen’. In elicitation with Belize Mopan, both la’ (DX.S1) and lo’ (DX.S3V) forms are rejected in contexts of reference to invisible objects. Kana’ (DX.S2) is accepted in these contexts:

My informant (C.) and myself (E.) sit at the corner of a table in the middle of a room (10 meters long). C. faces east and I face south. I ostentatiously place a cloth at the far side of the room, behind myself, (i.e. to the north and about 5 meters away). I return to my position at the table and suggest the first person demonstrative:

(47) E. Ya’ax -0 a nok’ a la’.
    be.green -3B DET.N cloth DET.N DX.S1
    ‘This cloth is green.’

C. unhn Ma’ ki’ -0
    unhn NEG be.good -3B
    (disapproves) ‘That’s not good.’
E. Ma’ ki’ -0?
NEG be.good -3B?
‘It’s not good?’

C. Ma’ ki’ -0
NEG be.good -3B
‘It’s not good’

Por ke ma’ tan a wil-ik -0 -i.
because NEG DUR 2A see -TR.INC -3B -SCOPE
because you can’t see it.
Leek ti ka’ a sut -0 -0 a bajil
when PREP CONJ 2A turn -TR.SUBJ -3B 2A(POSS) self
‘When you turn around,
leek ti ka’ a wil-a’ -0
when PREP CONJ 2A see -TR.SUBJ -3B
when you see
ti naach ke’en -0
PREP far be.located -3B
that it’s far away,
‘Naach ke’en -0 a nok’ a lo’.
far be.located -3B DET.N cloth DET.N DX.S3V
(you’ll say) ‘That(3V) cloth is far away…’

E. K’ uxtun waj in k’at -i kuchij
what regarding Q 1A want -SCOPE just
‘What if I just want
in wad -a’ -0
1A say -TR.SUBJ -3B
to say
‘Ya’ax -0 a nok’ a kana’.”?
be.green -3B DET.N cloth DET.N DX.S2
‘That(2) cloth is green’?

C. mnhmm (approves).
E. Yeah?
C. Yeah, uhunh (approves).
E. Kax ma’ t in wil-ik -0
even.though NEG DUR 1A see -TR.INC -3B
-? -SCOPE
‘Even though I can’t see it?’

C. Kax ma’ tan wil-ik -0.
even.through NEG DUR.2A see -TR.INC -3B
‘Even though you can’t see it.’

The semantic contrast between the persons of the speech situation is thus fully cross-cut in Mopan by that of visibility and invisibility in perception. This creates a two-by-two matrix (see Table 3) in which the forms appropriate for visible referents (waye’/la’ (DX1) and lo’ (DX3V)) oppose the forms appropriate for invisible referents (ta’/kan(a) (DX2) and te’/be’ (DX31)) in perfectly symmetrical fashion.

Referents of (ta’/kan(a) (DX2), like those of be’ (DX.S3V), are felt by Mopan informants to be accessible primarily through audition, in a way directly related to the physical properties of speech.12 As speech-participant-related forms, however, the audibility of (DX2) occurrences cannot be that of previous mention. On the contrary, the audibility of (ta’/kan(a) (DX2) is that of actual mention in the current stream of speech. As one informant (C) succinctly put it, kana (DX.S2) is “the one you are talking about.”

(48) E. A baalche’ a be’
DET.N animal DET.N DX.S3I
‘That animal’
C. mnhmm (approves). That’s referring to the type of animal.
E. And you could say
A baalche’ a kana’?
DET.N animal DET.N DX.S2
‘that animal?’
C. You are talking about the actual animal that they are talking about.

(49) E. A ba’al a be’
DET.N thing DET.N DX.S3I
‘That thing’
C. That’s “something.”
E. “Something.” And if I say
A ba’al a kana’?
DET.N thing DET.N DX.S2
‘that thing?’
C. You’re talking about that thing.

Table 3. Perception and speech participation

<table>
<thead>
<tr>
<th>Speech participant</th>
<th>Visible</th>
<th>Invisible</th>
</tr>
</thead>
<tbody>
<tr>
<td>waye’/la’ (DX1)</td>
<td>(ta’/kan(a) (DX2)</td>
<td></td>
</tr>
<tr>
<td>lo’ (DX3V)</td>
<td>te’/be’ (DX31)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-speech participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ti)lo’</td>
</tr>
<tr>
<td>te’/be’</td>
</tr>
</tbody>
</table>


2.2. Shared knowledge and the speech participans

In all languages, second-person associated locutions enter into speech when the addressee is not yet aware of some referent that is nevertheless relevant to him or her. In many cases of Mopan usage (informants' metapragmatic statements notwithstanding), the object or location referred to with *ta'kan* or *kana'*(DX2) is actually in front of and visible to the speaker. Either it is, however, literally not visible to the addressee or else it can be understood as indicating new information, not yet part of the addressee's field of awareness.13

(50) Ayl kana' kákák
ay DX.S2 caaco
‘Ayl! There's a cacao
ma’ a mol -aj -eex -0 -i!
NEG 2A gather -TR.COMPL -2A.PL -3B -SCOPE
you guys didn't pick up!' (The valuable cacao fruit is behind the addressee's foot. It had been forgotten and, if it had not been for this utterance, it would have been left behind.)

The second-person spatial deictic is thus associated with new information in a way that, on reflection, appears fully compatible with the facts of communication.14

Since we know that (DX2) forms are associated in Mopan with audition as well as with new information, we must now return to the equation between perceptual medium and state of shared knowledge that we established in our examination of narrative uses of be' (DX.S3I) and te' (DX.L3I) above. Mopan be' (DX.S3I) with its double gloss of 'audible' and of 'known/anaphoric' established the canonical sensory medium of apprehension in situations of non-copresence (narrative) as audition. New information was signalled in narrative through use of a form associated elsewhere with the contrasting medium — that of vision. In a similar equation of perception with epistemology, Mopan conversational use of *(ta')kan(a')*(DX2) also signals new information — but this time through the medium of audition. Such usage apparently and not unreasonably assumes that the canonical perceptual medium of apprehension in situations of copresence is vision.

Mopan speakers' metapragmatic statements thus create a symmetry of information-structuring contrasts (see Table 4) in which conversational *(ta')kan(a')*(DX2) as unknown) opposes *wayne'la'*(DX1) as known) in just the way that *lo'*(DX3V as unknown) opposes te'/be'(DX3I) as known) in narrative. In each copresence context, the function of

<table>
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<tr>
<th>Table 4. Communication and discourse context</th>
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<tbody>
<tr>
<td><strong>Medium:</strong> when referent is</td>
</tr>
<tr>
<td><strong>showing</strong> (vision)</td>
</tr>
<tr>
<td>Present in speech situation</td>
</tr>
<tr>
<td>default medium: vision</td>
</tr>
<tr>
<td><em>wayne'la'</em></td>
</tr>
<tr>
<td>(DX1)</td>
</tr>
<tr>
<td>NEW</td>
</tr>
</tbody>
</table>

For old information, use the mode of presentation that harmonizes with the default medium. For new information, use the mode of presentation that contrasts with the default medium.

signalling new information devolves onto that form not associated with the canonical medium of perception. In narrative, this canonical medium is audition — hence the use of visual *lo'* (DX.S3V) to signal new information. In interaction, it is vision, and the form used to present new information (DX2) is glossed in awareness as 'invisible'.

2.3. Conclusion

We have seen how, in Mopan spatial deixis, physical space is systematically represented through linguistic filters that encode the status of an object or region along two dimensions: (1) its presence or absence with respect to the speech situation (Benveniste 1966: 235) and (2) the nature of the medium (including the textual one) through which it is pointed out. Even in apparently clear-cut cases, however, choice along the two dimensions is not merely semantic but involves pragmatic considerations as well. In particular, an object may be glossed as visible or otherwise, not always according to its actual perceptual status, but according to whether the speaker intends to present it as new or as old information and according to the copresence context in which it is presented.

Association of the second person deictic forms with audition in the current stream of speech is particularly noteworthy in that it means that in Mopan awareness the second person (and not the third person) forms encode the referent that “you are talking about.” The Mopan speech participant-associated forms *wayne'la'*(DX1) and *(ta')kan(a)*(DX2) recapitulate in reverse the equivalence of perception and epistemology which is found in the third person forms. For the Mopan, different interactive situations have different default media of perceptual apprehen-
sion. In each case, new information is presented using the form associated with the contrasting medium.

The analysis has shown how the semantics of perception, of speech participation, and of shared knowledge are tightly bound together in Mopan to create a highly systematic — and a highly social — semantics of deictic “space” in this language. The fact that the locative and nonlocative (static) use share semantic and morphological features, however, does not appear to mean that the semantics of physical location intrudes upon other aspects of the system. Rather the opposite. No reference to deictic location can in fact be made in Mopan without invoking semantic contrasts relevant both to the social situation in which reference is made, and to the medium of reference and state of shared knowledge of the discourse participants. Meaning contrasts relevant to physical space are not in this case separable from meaning contrasts relevant to the social, perceptual, and communicative worlds.

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Notes

1. My thanks are due to Balthasar Bickel and to John Lucy for helpful comments in the course of writing this paper. I am also grateful for the close attention that William F. Hanks gave to the initial manuscript. Remaining flaws are of course my own responsibility. The fieldwork that led to this paper was conducted in 1992 and 1993 and was supported by the Cognitive Anthropology Research Group of the Max Planck Institute for Psycholinguistics. The Department of Archaeology, Belizean, also provided support and during fieldwork. I am grateful to all of my Mopan hosts and informants; special thanks for intensive work on spatial deixis are due to Crescencio Cho and to Cyrila Cho. Unless otherwise indicated, Mopan examples are drawn from video and audiotapes of naturally occurring interaction and of conversational interviews. Correspondence address: Max Planck Institute for Psycholinguistics, P.O. Box 310, 6500 AH Nijmegen, The Netherlands.

2. Mopan is a Yucatecan language spoken by several thousand peasant cultivators in Belize and in northeastern Guatemala. Although my Mopan examples come from Belize, the orthography used is modeled on that of the Academia de las Lenguas Mayas de Guatemala. Forms from the other Yucatecan languages appear in the orthography of the scholars who first documented them. Belizean Mopan speak English and not Spanish as their second language. Metaphorical statements made in English are given in conventional English spelling.


4. Mopan spatial deictic forms often show alternation of /l/ and /d/ without apparent semantic or syntactic consequences. Were it not for one or two expressions borrowed from Spanish (e.g. Dyus, ‘the Christian God’) /dl/ could be considered an allophone of /ld/ in Mopan. I here render all forms with /ld/ and omit further reference to the alternation.

5. The phonology, semantics and usage of this term, and even its vestigial syntactic specialization — when clause-final it must occur as e`te' — are strongly reminiscent of nonconcrete locatives in the other Yucatecan languages (Hanks 1990: 448–455; Hofling 1994: 19; Bruce 1968: 77). The e`te' form may be the original root of the Mopan locative series, as I have been told that “the old people” pronounce te`kan as te`kan, and I have myself heard tilo’ render as te`lo’.

6. These forms are cognate respectively with the OSTEV, the DNOM, and the DMAN forms of Yucatec as described by Hanks (1990: 19). There is no Mopan form that corresponds to Hank's DMOD, and the topicalizing elicit (Hanks 1990; Hofling 1994: 14) does not occur as e`te' in Mopan. Instead, topicalization is indicated through non-clitic repetition (“echo”) of the final vowel of the topicalized form. Mopan spatial deixis does not exhibit the characteristic Yucatecan pattern of initial-terminal structure. They always occur as invariable usages, although they may combine with a scope- Specifying elicit particle -i' (Durbin and Ojeda 1978; Hofling 1994: 13–15), which also occurs with nondeixis.

7. Mopan opposes sight (ji) to hearing, smell, taste, touch, and understanding together (uy-uy-ux). In my informants' explanations and examples when discussing be', however, audition seemed especially important among the uy-uy-ux-senses.

8. Narrative anaphora in the other Yucatecan languages is accomplished through use of the -o' terminal, and new information is signaled with the -o terminal (Hanks 1990: 284–285). This pattern is also present in certain of the Mopan texts collected by Rosemary and Matthew Ulrich in Guatemala (Ulrich and Ulrich 1982). The standard Belize Mopan pattern reported here is, however, apparently not an innovation. Barrera Vasquez reports (1980: 47) a Colonial suffix -be 'eso que se ha tratado' 'that which has been treated of'. He gives the example habibe ‘es verdad eso que se ha tratado’ 'what has been treated of is true'. In modern Yucatec an expression habibeulbe' 'that's all' is used to end conversations (Hanks, personal communication).

9. Hauenhuis (1982: 179) goes to some pains to distinguish "semantic deixis" from "pragmatic deixis" in anaphora. In the former, the deictic element refers to a prior phrase having the same referent as itself. In the latter, the referent of the deictic element is the preceding text itself. The confusion of these two senses in Mopan anaphora is a noteworthy one, to which we will return.

10. A reviewer asks whether these coincidences might be different under circumstances made possible by electronic media (for example, when listening to one's own voice on tape). This is indeed possible, although I have not investigated deictic usage under these conditions.
11. Although we note that specifically locative forms in *tilo‘* (DX.L3L) apparently do not have the “new information” discourse function of nonlocative *lo‘* (DX.S3L),
12. Recall in this connection that ostensive *kan‘a‘* (DX.S2), like *be‘* (DX.S3L), but unlike *la‘* (DX.S1L), is acceptable when a person announces himself or herself from outside a
13. The possibly related modern Yucatec interjection (*he‘*). *Bakan also has an epistemologi-
14. Mopan speakers’ own exegetic model of their system in fact leads us to question the
assumptions about human motivations for speech that underlie our current theoretical
models of language function (Jakobson 1980: 83; see also Halliday 1976; Jakobson
1971 [1968]). Bühler (1990 [1934]: 114) surmised, for example, that the fact that in the
Indo-European languages the second-person spatial deictic is not well developed is
“not an historical accident,” but is “psychologically quite intelligible” and in keeping
with the assumptions about the communicative situation. The model of spatial deictics
implicit in Mopan usage and awareness suggests otherwise. Mopan speakers’ awareness
of their spatial deictic system reminds us (with Silverstein 1987) that the idea of a truly
context-free referential function, in which semantic encoding is a purely third-person
affair unrelated to social goals and purposes, may indeed result from the historical
accident of Indo-European linguistic development.

References

Cordemex.

Benveniste, Emile (1966). *Structure des relations de personne dans le verbe*. In *Problèmes de


Bühler, Karl (1990 [1934]). *Theory of Language: The Representational Function of Language*,
Donald Fraser Goodwin (trans.). Foundations of Semiotics 25. Amsterdam and
Philadelphia: Benjamins.

Danziger, Eve (forthcoming). *Semantics on the Edge: Language as Cultural Experience in the
Acquisition of Social Identity Among the Mopan Maya*. Oxford Studies in Anthropological

Durbin, Marshall; and Ojeda, Fernando (1978). Negation in Yucatec Maya. *Journal of
Mayan Linguistics* 1(1), 53–60.

Halliday, Michael Alexander; and Kirkwood (1976). Functions and universals of language. In
University Press.


Hauenschild, Christa (1982). Demonstrative pronouns in Russian and Czech — deixis and
anaphora. In *Here and There: Cross-Linguistic Studies on Deixis and Demonstration*,