ABSTRACT  A study of the Mopan Maya verb tal (coming) shows that ideal adult usage makes reference to the speaker’s own location. Child acquisition, however, proceeds by a process of refinement toward rather than a process of extension from this ideal. The moment at which linguistically expressed “point of view” is understood to be ideally restricted to the speaker is critical in social interactionist developmental accounts. It is only after this moment (in the current data, perhaps around eight years of age) that children might be able to use language to see themselves “through the eyes of the Other.”

If I were John and John were me, then he’d be six and I’d be three. If John were me and I were John, I wouldn’t have these trousers on.

—A. A. Milne

POINT OF VIEW AND CHILD DEVELOPMENT

Language systems that use right- and left-hand coordinates to identify locations in space are “viewpoint-dependent” or sensitive to rotation on the part of the speaker (Levelt 1984; Levinson 1996; Miller and Johnson-Laird 1976). As a consequence, for English-speaking conversation partners under normal face-to-face conditions, the word left refers to two quite distinct spatial regions. This is a fact that novice users of such systems do not find easy to learn. In a study that has since been well-replicated cross-culturally, Piaget showed that children can identify the right-left coordinates
of an interlocutor standing opposite only long after they can do so for their own body parts (Elkind 1962; Laurendeau and Pinard 1970; LeVine and Price-Williams 1974; Luong 1986; Piaget 1928; Price-Williams et al. 1977). Children tend to make what has been called an “egocentric error” (Huttenlocher and Presson 1973, 1979; Piaget and Inhelder 1963; Presson 1980) in this context, identifying the interlocutor’s right hand as the one on the same side as their own right.¹

This problem of the interlocutor’s right and left is partly a strictly spatial one. Since humans are symmetrical across the right-left axis, the problem involves distinguishing a true copy from a mirror image, when the distinction must be made under 180 degrees of rotation. This is a difficult problem even for well-educated Western adults.² It is not surprising, therefore, that right/left rotation problems are especially difficult for children—more difficult, for example, than those that involve spatial locations designated by terms that contrast across nonsymmetrical axes, such as in front of/behind (Clark 1973; Harris 1972). But mere difficulties with spatial asymmetry will not completely account for the difficulty of the interlocutor’s right-left problem. In English and other languages, translation equivalents of in front/behind themselves show a lag in acquisition, when compared to yet other words indicating spatial location, such as translations of English in, on, and under (Bavin 1990; Johnston and Slobin 1979). Similarly, English come is notorious in language-acquisition circles for its very late mastery.³ This verb enters users’ linguistic awareness with the gloss “motion-toward-speaker,” and that is how native speakers tend initially to define it. But it is actually regularly used also for motion toward the addressee (in locutions like I’m coming! see Fillmore 1966 for full discussion).

Piaget’s own (1928) interpretation of the difficulty of the interlocutor’s right and left hands was based on the supposition that the young child allows for only one point of view on the world—his or her own. Until the Piagetian child is able to admit the existence of alternative points of view, therefore, he or she cannot be expected to solve “perspective-taking” problems such as this one. Since Piaget’s original formulation, however, many language-acquisition studies have in fact demonstrated that children’s early linguistic behavior does not conform to an account based on early egocentricity (see esp. de Villiers and de Villiers 1974). Personal pronouns, for example, also encode “point of view” on the situation in which they are uttered (whoever speaks is “I”), yet young children come to understand extremely early that various others, and not just themselves, are legitimately referred to by this pronoun (Charney 1979, 1980; Chiat 1982, 1988; de Villiers and de Villiers 1974; Oshima-Takane 1992; Tanz 1980). Deictic demonstratives (this, that) and locatives (here, there) are also acquired quickly during the preschool years (Charney 1979; Clark and Sengul 1978;
de Villiers and de Villiers 1974; Tanz 1980; Tfoni and Klatzky 1983; Webb and Abrahamson 1976). All of this takes place long, long before classic nonlinguistic perspective-taking problems are solved, and also before correct identification of the interlocutor’s right and left hands. If there exists any uniformly timed nonlinguistic development of cognitive decentration, it actually postdates acquisition of the early-acquired linguistic forms that encode “point of view.”

On the other hand, the finding that correct perspective-taking in linguistic performance precedes the child’s ability to solve classic nonlinguistic perspective-taking problems is just what Vygotskian and social interactionist theories would predict (Mead 1974:134, 194 and passim; Vygotsky 1962). In this paradigm, internal cognitive developments, including the development of the social or “objective” self, are held to derive from previous social experience. In particular, the development of the concept of the self is held to develop directly from experience with the social use of linguistic forms that encode point of view. Such use exposes the child not only to the point of view of others, but also to the point of view of others on him or herself. Vygotskian theorists predict that correct use of language will precede nonlinguistic cognitive developments. This paradigm must, however, in turn provide an explanation of the especial difficulty and late mastery of the linguistic aspect of the particular problem of the interlocutor’s right and left. In short, if, on the one hand, for Piagetians the question is why all forms of perspective-taking language are not late in acquisition, for Vygotskyans it is the reverse: why is all perspective-taking language not mastered early in child acquisition?

In what follows I attempt to clarify the nature of the perspective-taking that is involved in language use, and to argue that there is a principled linguistic difference between the kind of perspective-taking language that is mastered early by children, and the kind that is mastered late. Terms of the latter type belong to a class of previously unidentified linguistic switcher forms that, while not deictic themselves, nonetheless are deictically anchored and share certain important properties with deictic terms. In support of the theoretical argument, I report a study carried out in Mopan Maya—a language of the Yucatecan Maya family, which is spoken by several thousand peasant cultivators in Southern Belize and Eastern Guatemala. 4

**SPACE AND SPATIAL DESCRIPTION IN MOPAN**

The Mopan Maya of Central America are peasant farmers living in a dramatic landscape where hilly rainforest meets flat coastal plain. Their territory is bordered on the south and east by the farms and towns of other ethnic groups, and on the north and west by dense rainforest. Mopan know their local space intimately, but this intimate local knowledge is coupled
with a sense of adventure and mystery when it comes to surrounding areas, which are often known hardly at all. One man of advancing years, for example, told me that his principal fear in contemplating an airplane flight from his region to the capital city was that the plane would fall to the ground somewhere between his village and the city—perhaps in dense bush. Not knowing where he was, he would then be unable to find his way home and would be likely to starve to death. This man has actually made a number of plane trips to the capital, for his wife’s health. He has always been careful while in the air to monitor the ribbon of road, visible down on the ground, in order to maintain a sense of his whereabouts and orientation, which otherwise he feels would have been irretrievably lost.

The Mopan understanding of their known and local space meanwhile is intensely social. Each Mopan village controls by tradition a large tract of farmland, from which the men of that village may select their plots for planting in a given year. Access to village membership is strictly controlled and is available only by way of counterprestations of labor and of civic obligation (Danziger 1996b). Village members who leave the area and later wish to return must literally buy their way back in, with a cash payment for the privilege of access to village space, including farmland.

But beyond this, individual natural features such as hills, rock formations, pools, or just fields are said to be closely associated with supernatural personages. In characterizing this association between features of landscape and personages, Mopan consultants consistently use the expression Yan u yumil (It has an owner). In former times the term uyumil meant both “someone’s father” and “someone’s lord” (Barrera Vasquez 1980:982–983). It might today be translated into English in this landscape usage as “its patron” or “its guardian.” Mopan speakers themselves, however, also use this term in very everyday contexts, where English would use perhaps “someone’s boss” or “something’s owner.”

With these “owners” or “lords” of the landscape, Mopan individuals and communities must negotiate for use of natural resources. Much of Mopan prayer and sacrifice (Thompson 1930) takes the form of entreaty to and payment of these “owners” of spatial resources. Prayers to the owners of places, for example, ask the yumil to send or not to send wild animals, depending upon whether it is farming or hunting that is at issue. Prayer of this kind comes under the heading of tzik (respect)—a term also used to characterize the best kind of relations with one’s kindred and other humans (Danziger in press). Such prayer, explained one Mopan woman to me, is st’ool (free gifts), given in thanks for the use of the land or other resources. “Tz’aj ti payachi” [we must pray], she explains, “por ke yan u yumil” [because these things have owners].

Tz’aj-Ø ti-payachi, por ke yan-Ø u-yum-il
Is-necessary our-prayer, because there-exist their-own-lords
Within such an intimately known and multiply inhabited landscape, verbal directions rarely need to be given. When the occasional visitor (such as myself) seeks directions to some local spot, these are given by making reference to what are assumed will be familiar landmarks, often the locations of the houses of named individuals. In verbal descriptions that have been recorded, deictic demonstratives (translation equivalents of here and there) figure prominently. The Mopan have an elaborate linguistic system in this area (Danziger 1994), and make many more distinctions than does English. But terms for “right” and “left” are rarely used in this sort of context, and terms for cardinal directions are largely unknown (Danziger 1996b). Such terms certainly do not suggest themselves for use in the Mopan context, since Mopan villages do not consist of streets (although roads lead through some of them), and Mopan houses are not arranged in a grid or other regular geometrical pattern or orientation within the village. In practice, it is far more usual for a Mopan speaker to send a local child to show any unknown path to a visitor than to attempt to explain it verbally.

In keeping with this sense of physical space as something intimately and personally known, the Mopan verb tal (coming) is one that is commonly heard in Mopan discourse about space. This verb is, for example, used routinely when individuals encounter one another in public, in the first turn following the obligatory respectful greeting exchange. The question “Tub’a tal-ech?” [Where are you coming from?], which often occurs in this context, serves to move the conversation from the level of ritual and greeting to that of everyday talk.

To use this verb is to make the immediate locality of the act of speaking a central ingredient of the spatial world, since the verb typically identifies motion toward the person who is speaking. At times, however, tal is also used by Mopan adults to indicate motion toward the addressee, or indeed toward any animate being whose “point of view” is momentarily taken. In this textual example (Ulrich and Ulrich 1984:66), for instance, the main character of the story—a frog—is described as seeing a truck “coming” toward him in the middle of the night:

Pwes aj-muchu u-yilaj-Ø ti tun-tal-el a kamion ti ak’äl.
well Mr-frog he-saw-it as it-was-coming the truck at night.

The Mopan verb tal therefore incorporates perspective-taking possibilities much like those of English come. In contrast to the large number of cross-cultural and cross-linguistic studies of translation equivalents of right and left, the acquisition of translation equivalents of English come has not been widely investigated across languages (although see Platt 1986). Nor, by and large, have linguistic analyses of “point of view” in language (Benveniste 1966a; Jakobson 1957; Langacker 1985; Lyons 1990; Silverstein 1976) been brought to bear upon the language-acquisition data. Finally, it is striking that, while acquisition studies of children’s use of
"Point of View" in Mopan Maya

"point of view" in language continue to address themselves to Piagetian theories (Charney 1979, 1980; Clark and Sengul 1978; Cox and Isard 1990; Loveland 1984) despite various criticisms, setbacks, and recastings (de Villiers and de Villiers 1974; Tanz 1980:14; Webb and Abrahamson 1976:365), language-acquisition findings have not been as systematically considered in the light of Vygotskian and social interactionist accounts. The present study aims to bring linguistic analyses of subjectivity and perspective-taking to bear on the acquisition of Mopan tal. It then undertakes an investigation of Mopan children's understandings of this verb, with a view to illuminating the issues of conceptual development raised by the general fact of children's differential acquisition of different forms of perspective-taking language. The study aims in particular to move the Vygotskian project forward by making explicit the linguistic parameters of its claims as to the role of situated language in the creation of the self concept, and by examining existing and new data on the acquisition of perspective-taking language in the light of these claims.

**POINT OF VIEW IN LANGUAGE**

The perspective-taking problem of the interlocutor's right and left hands is related to the linguistic fact that words like English *right*, *left*, *come*, or *behind* encode a perspective on the scene that they describe (Cox and Isard 1990; Tanz 1980:98-99, 145; Richards 1976:656; Webb and Abrahamson 1976:364), while terms translating English *on* do not. When the referent of a linguistic expression cannot be identified without recourse to information from the situation in which it was uttered (for example, *What time is now?*, *Where is left?*, *Who is I?* To whom should one *come?*), the expression in question has been called a deictic or a shifter term (Jakobson 1957; Silverstein 1976). The referent of such expressions actually shifts with the identity and situation of the individual who utters them. The personal pronouns, for example, indicate the identity of the individual who occupies a particular social role at any given moment (the social roles are those of speech: speaker, addressee, and various forms of bystander). Deictic demonstratives and locatives (*here*, *this*) are also shifters in that they derive part of their meaning from association with the speech roles (*here* is the place where the speaker speaks); their referent, therefore, also shifts with a shift in the identity of the individuals occupying these roles.

In addition to signalling the identity of speech-role occupants, however, the personal pronouns and other shifters universally across languages also encode an element of specific perspective on the situation in which they occur (Benveniste 1966b:232, 235). To utter *I* is to do more than to refer to the individual who speaks—it is to denote the ineffable but
inescapable subjective experience of being oneself. To make this point clear, Lyons (1990:642–645) invites us to imagine a language in which there are no personal pronouns—in which the speaker always refers to him or herself as “the speaker,” and to the addressee as “the addressee.” This convention captures all of the speech-role shift properties of the personal pronouns, and yet, because no element of subjectivity is encoded in the forms that indicate speech-role occupants, it does not adequately capture the nature of personal pronoun use in actual language.

In fact, no human language of Lyons’s hypothetical sort exists. Forms translating English / around the world uniformly indicate more than the identity of the individual who undertakes the act of speaking; they also indicate that individual in his or her phenomenologically subjective aspect—that is, from his or her own “point of view.” Forms translating English you, meanwhile, indicate the addressee, not from his or her own point of view, but from that of the speaker (Benveniste 1966b). In participating in acts of discourse in which the personal pronouns and other shifter terms appear, speaker, addressee, and bystander together accept the linguistic convention that ascribes subjectivity only to the person currently speaking.6

Note that no “perspective shift” is therefore involved when a particular speaker switches from using “I” to “you” in a single utterance. As long as one individual retains his or her turn at talk, the locus of subjectivity conventionally remains with him or her. But once another individual takes a speech turn, and in turn produces “I” and “you,” the conventional locus of subjectivity for all concerned shifts to the new speaker. The previous speaker, once “I,” now accepts designation as “you,” and with it, the loss of conventionalized subjectivity. The individual who accepts address as “you” not only renounces his or her own claims to subjectivity but also acknowledges that the conventional locus of subjectivity resides in the one who says “I.” That is, in classic social interactionist terms, the person who accepts address as “you” also accepts the existence of a subjectivity to which his or her own subjectivity is an object.

Thus the critical step in claiming, as Mead and Vygotsky do, that language plays a role in the development of the objective self concept lies not only in the fact that certain forms of language shift with the social roles of speech, so that the child is not continually “I.” It also depends crucially on the claim that these very forms also encode a semantics of subjectivity, and that subjectivity is in all languages differentially distributed across the social roles of speech such that the phenomenological perspective taken in any interaction is by default that of the speaker. If this were not the case, the view of oneself from the point of view of another’s subjectivity could not be achieved, since one’s own phenomenological subjectivity would continue to hold sway, even while the Other spoke.
Linguistic Subjectivity outside the Speaker Role

In the everyday use of shifters, change in speech-role occupancy precisely accompanies the change in subjective perspective. One ceases to occupy the locus of conventionalized subjectivity at exactly the same moment that one ceases to occupy the social role of speaker: these are the two ways in which one ceases to be "I." Change in the locus of conventionalized subjectivity, however, can also occur within the turn of a single speaker, through a phenomenon known as deictic "transposition" (Bühler 1990; see also Haviland this issue). Many shifter terms can, under particular circumstances that differ somewhat from language to language (Hanks 1990; Lee 1993), be used to convey a subjective point of view other than that which they normally encode. English I, for example, indicates the subjectivity of an individual other than the literal speaker when it is used in direct quotation.\(^7\)

Transposition often takes place in narrative, where it is accompanied or framed by explicit semiotic signals. In the case of direct quotation in English, for example, the fact of transposition is signalled through subordination to a quotation clause or gesture. In literary transposition, this signalling takes place through conventionalized and elaborately constructed dissonances between the various shifter elements of the sentence, including verb tense. Without some form of explicit signalling (consisting of at least a gesture or change in tone of voice) and outside narrative contexts, transposition of most true shifters is not normally possible.\(^8\) Certain terms in language exist, however, which do not encode the speaker/nonspeaker-role shift directly, but which do allow something very like transposition to occur—without explicit signalling, and often in nonnarrative contexts. Cross-linguistically, these terms include terms glossed as the familiar right/left and in front/behind, but also terms like north/south/east/west (Haviland this issue), motion verbs like come (Fillmore 1966), and kinship terms (Luong 1986; Wills 1977). Thus, for example, in front in English may mean—in perfectly ordinary conversational contexts—"in front of the speaker," "in front of the addressee," or "in front of some other object." The English sentence "Go show Daddy!" as often uttered in English baby talk register is far more likely to signal the addressee's than the speaker's own father. And English "He'll come as soon as he can" indicates motion toward the addressee as readily as it does motion toward the speaker.

Many of these examples are, in English and other languages, relational terms, which normally depend for exact calculation of their referent upon the identity of the second term of the relation (the syntactic possessor). When the second term of the relation is a personal pronoun (your right, my grandmother, east of you), the terms may indeed derive their reference from the circumstances of the speech situation. Words like grandmother,
north, or left cannot by themselves be said to encode information about the identity of the individuals who occupy the social roles of speech at the moment when they are uttered. That function is carried by the (semantically) obligatory second term of the relation. Properly speaking, then, these are not deictic or shifter terms at all. Let us call these forms, which require for their interpretation the identification of a locus for conventionalized subjectivity, but which do not themselves encode information about speech-role occupancy, the switcher terms of language.

A rather different kind of perspective-taking (which we should now understand as the locating of conventionalized subjectivity in one of the participants of a given interaction) is involved in the use of true shifters and in the use of switcher terms such as right, left, north, south, grandmother, and come. Perspective-taking in the true shifters (for example, the personal pronouns) is actually far simpler than that involved in switcher terms, since in the former it is normally accompanied by the nonlinguistic social fact of a change in the identity of the speaker, or at least by explicit signals indicating that transposition is to be understood. In contrast to such cases, in switcher terms (like left or come) a shift of the locus of subjectivity may be accomplished without lexical or other formal indications, and within the turn of a single speaker. The perspective-taking forms that are cited in the acquisition literature as early acquired (like personal pronouns, or English here and this) are by and large true shifters. Those later acquired (like kinship terms, or English left, north, and come) have more switcher-like properties. Could the fact that switcher terms that allow change in subjective perspective without change in speaker identity play a role in their late acquisition?

In what follows, a detailed examination of the patterns of use by Mopan adults and children of the Mopan switcher verb tal (coming) is undertaken, in order to examine the pattern of acquisition of speech role and of subjectivity in the use of this Mopan verb.

**ACQUISITION OF MOPAN TAL (COMING)**

In order better to understand how this verb is used by adults and children, a contrived situation of elicitation was constructed (see Figure 1). In this contrived elicitation situation, the form tal was paired contrastively with another Mopan verb, b'el (going). Mopan speakers who were asked to reflect on the meaning of this second verb replied that it could indicate motion in any direction except that toward the speaker. For example, as a toy pig traveled across the table from the consultant toward the researcher, the consultant explained, “You'll see the pig coming (tal) like this. You won't say that it's going (b'el) . . . , because it's coming (tal) to be with you. It's coming (tal) straight toward you.”
In the contrived elicitation situation, the consultant sat opposite me at a conventional Western-style table (Figure 1), and was asked to choose a toy cow, pig, or horse as his or her alak’ (domestic animal, pet). The consultant was given a section of toy plastic fence to identify the animal’s home location—the section of tabletop immediately in front of the consultant—and I chose an animal and a piece of fence for myself. The third animal and the third section of fence were assigned to a toy man who was located at a third side of the table. On the fourth side of the table a toy drinking trough was placed.
The animals were made to move in turn, each one to the drinking trough and back, and each one to visit each of the others and home again. I moved the animals myself initially, but encouraged the consultant to move his or her own animal if she was willing. As each animal moved between each location, on outward journeys (and sometimes also on homeward journeys—only the results from outward journey questions are considered here) I asked the informant “Is it coming or is it going?”

Tan-u-b’el waj tan-u-tal-el?
It-is-going or it-is-coming?

The order in which the two lexemes were presented in the question was varied across journeys and across consultants. An order of journeys between the different locations was maintained that allowed participants to begin with motion toward the drinking trough: a goal that (it was assumed) would not be a possible end point of motion describable with tal, since the drinking trough could only with difficulty be imagined to have a point of view. The order of journeys to the other locations was varied, with the proviso that the consultant’s own animal should not be the first to move. Each animal moved once to each location and back. Each person-identified location therefore served twice as the goal of motion in each interview. The drinking trough served as goal of motion three times per interview.

A total of seven Mopan adults (aged 17 to 50) were kind enough to talk through the possibilities of this contrived situation with me. Of the seven adults, two never preferred the tal alternative to b’el in any context. That is, they chose b’el for every direction of motion, including that of motion toward themselves as speakers. This pattern indicates that, adult speakers’ intuitions notwithstanding, Mopan b’el is in usage not a deictic verb, but a general verb of motion (cf. Wilkins and Hill 1995).

Of the five adults who did prefer tal to b’el in some context, three preferred it only when the motion of the toy animal was actually toward themselves. This, the most popular adult pattern, is faithful to the intuitions of speakers as exemplified in elicited examples (where tal is described as referring only to motion toward the speaker). One adult, however, preferred tal to b’el also in the context of motion toward the consultant—his addressee. Another adult preferred tal to b’el for motion toward the toy man as well as for motion toward herself. No Mopan adult ever preferred tal to b’el for motion toward the toy drinking trough.

**Adult Usage: Discussion and Design Modifications**

A critical contrast with respect to transposition that had been expected from the original design was that between the researcher (a real interlocutor) and the toy man (not an interlocutor) as goal of motion. At least one adult’s preferences, however, did not bear out the importance of this
contrast. One Mopan adult of the initial seven interviewed was willing to choose *tal* when the goal of the motion was a toy man. None, however, chose it when humanity was not even representationally present (the toy drinking trough). This meant that usage with respect to the trough became crucial in a way that the original design had not anticipated. A modification of the elicitation situation was made in order to take account of this fact. The toy man was replaced by a toy tree on the third side of the table, and the animals were now made to travel to sleep under the tree, rather than visiting the toy man. Under this second design, the order of journeys to and from the tree was varied just as were the order of journeys to the other goal objects (journeys to the trough always commenced the game). The responses of a single adult consultant to this modified version of the elicitation context were sought. This person made selections like those of the majority of adults confronted with the original design; she chose *tal* only in contexts of motion toward herself.

**Children's Use of Tal**

I will now consider the responses of 12 children aged 4–11 years (mean age 8.6 years) to the game as initially designed, and of 11 children aged 5–11 years (mean age 7.5 years) to the game after the modifications described (see Table 1). The overall mean age was 8.0 years. Boys and girls are distributed across the sample, and no analysis in terms of sex was attempted.

Mopan children's choices in the game of "coming and going" can be described in terms of four age-related strategies, and one that is less clearly age-related. Of the five child strategies, three reproduce possible adult strategies, while two are unique to the children. Table 2 summarizes the results.

**Child Strategy 1: K'oichi (It's Arrived).** The very youngest group of children (three children aged 4–7, mean age 5.3) did not answer the question as it was posed. Instead of answering with either *tal* or *b'el*, these children responded by giving a different verb: *k'o-chi* (arrive elsewhere). Although the question was posed in the imperfective aspect, these children also all responded in the perfective: *k'o-ch-i* (it has arrived over there). This interestingly uniform pattern of pre-*tal* responses recalls comments from acquisition studies in other languages in which it is remarked that children focus first on end states and completed actions (Slobin 1985).

**Child Strategy 2: Tal for Motion toward All Goals.** Another group of children (five children aged 6–10, mean age 8.0) selected *tal* at least once in every context that was offered, including contexts of motion toward inanimate objects such as the trough and the toy tree. Unlike the first group, this group used the verb *tal*, but they used it in a way that adults did not.

**Child Strategy 3: Tal for Motion to any Animate Goal.** The largest group of children in the study (nine children aged 5–11, mean age 8.0)
Table 1
Numbers of Mopan Child Participants.

<table>
<thead>
<tr>
<th>Age</th>
<th>Design 1</th>
<th>Design 2</th>
<th>Total #</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>—</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
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<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>11</td>
<td>23</td>
</tr>
</tbody>
</table>

followed a pattern that was admissible among adults, using *tal* when motion was either toward themselves, toward their interlocutor, or toward a toy man. They did *not* use *tal* when motion was toward an inanimate object. Children using this strategy spanned the range of ages in the sample and constituted the largest group.

Child Strategy 4: *Tal for Motion toward Self Only*. Another group of children (four children aged 7–11; mean age 9.5) practiced the majority adult strategy, and selected *tal* only when motion was toward themselves.

Child Strategy 5: *B’el Only*. Only two of the older children in the sample (two children aged 9 and 11; mean age 10.0) followed the strategy of never selecting *tal* at all, and of confining themselves exclusively to use of

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Table 2
Developmental Trend in *Tal* (Coming).

<table>
<thead>
<tr>
<th>Strategy Number</th>
<th>Number of Children</th>
<th>Age Range</th>
<th>Mean Age</th>
<th>Strategy: Choose <em>tal</em> (coming)</th>
<th>Do Adults Use this Strategy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>4-7</td>
<td>5.3</td>
<td>Never. Always use <em>k’ochi</em> (it arrived)</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>6-10</td>
<td>8.0</td>
<td>For any goal</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>5-11</td>
<td>8.0</td>
<td>For animate/human goals only</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>7-11</td>
<td>9.5</td>
<td>For oneself as goal only</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>9-11</td>
<td>10.0</td>
<td>Never. Always choose <em>b’el</em> (going)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
b’el—now as a nondeictic verb. Recall that this strategy was followed by two of the eight adults consulted.

**Discussion of Results 1: Late Acquisition Replicated**

Taking together the two groups of children who practice a strategy never practiced by adults (replying with k’ochi, or using tal even for inanimate goals), we find that 8 of the 23 children (mean age 7.0) clearly differ from the adults in their choices in this context. By contrast, a total of 15 children of the 23, with mean age 8.6 years, show strategies also used by adults in their selection of tal. This mean age is sufficiently different from the mean age of the nonadultlike group (7.0) to suggest the existence of a developmental trend (older children are more like adults in their choices than are younger ones), and they also replicate findings that English-speaking children do not approximate adult uses of come in contrived situations like this one, until they are 7, 8, even 9 years old.

**Discussion of Results 2: Acquiring Point of View**

Of the five usage patterns adopted by Mopan adults and children in the contrived elicitation situation, only three actually shed light on strategies of use of the verb tal, since two strategies of the five involved substituting
another verb for *tal* in the response (some young children insist on using the verb *k’och-i*, while some adults and older children always select *b’el* from the pair of choices offered). We can examine the three strategies in which the verb *tal* is accepted by Mopan adults and children for information about perspective-taking in acquisition. Figure 2 graphs in order of age the three different acceptance strategies for *tal*.

The strategy (strategy 2 in Table 2) of accepting *tal* for any goal, including an inanimate one, is practiced only by the younger children, and never by the adults. The strategy of accepting *tal* only when the goal of motion is the speaker (strategy 4 in Table 2) is the preferred adult strategy and is practiced only by older children. These two pieces of data indicate that the course of acquisition of "point of view" in Mopan *tal* does not proceed "outward" from an initial focus on the speaker. Rather it appears to proceed by a process of restriction of meaning, by which the goal of motion encoded by this verb becomes specialized to the speaker. *Tal* is understood early as a general verb of motion and only late as a verb in which motion is ideally directed exclusively toward the speaker. These data come as a surprise both to the expectations of Piagetian and of Vygotskian theories: Classic Piagetian egocentrism would expect early uses to be based on the subjectivity exclusively of the child, while Vygotskian theories equally expect early uses to be based rather tightly on the social roles of speech. The process is instead apparently one in which the child first uses the verb as a general one, and only later as one that is linked either to subjectivity or to the social roles of speech.

But what interpretive sense can we make of the fact that the strategy of using *tal* for motion toward any animate goal (strategy 3 in Table 2) is used by adults and by children in all age ranges? Although the numbers are small, it is difficult to conclude that the younger children who use the animate-goal strategy are engaging in transposition, since the "speaker-only" strategy—from which any transposing strategy would logically be supposed to derive—is evidenced in the child data only well after the very early animate-goal strategy is already in place.

From our discussion of switcher terms above, we have seen that the restriction of subjectivity to the speaker in *tal* is different from and less regular than that involved in true shifters such as the first person pronoun. While the animate-goal responses of the younger children are not wrong when compared to those of adults, the similarity in surface behavior between this large number of children and a minority of adults may correspond to something very different in terms of the underlying understanding of the term *tal*. In short, simple imitation of actual adult usage accounts well for the early appearance of the animate-goal strategy. The young Mopan child could well conclude from observing adult usage that this term has nothing to do with speech-role occupancy, although he or she may grasp that it is
used only for motion toward animates (for adults, possible loci of subjectivity). Under this interpretation of the results, the animate-goal strategy of the younger Mopan children does not involve a semantics of transposition. Ultimately, of course, the child learns that the verb is "best" used for motion toward the usual locus of conventional subjectivity—the speaker. The use of the animate-goal strategy by the older Mopan children and certainly the adults presumably reflects this fact, but the difference between the two kinds of animate-goal usage is not observable in these data.

Under this interpretation, adult usage, and especially transposed usage, is likely to be one of the factors contributing to the late acquisition of this verb. The fact that the adult verb refers best to motion toward the speaker is presumably at first occluded for Mopan children by the transposed occurrences of everyday adult usage. And we have seen that such patterns of everyday transposition are characteristic of switcher but not of shifter terms. We would expect, therefore, that the same sort of occlusion could occur in the acquisition of switcher terms across languages. And indeed, across languages and cultures spatial-switcher terms like the deictic verbs (Clark and Garnica 1974; Macrae 1976; Platt 1986; Richards 1976; Tanz 1980), or like those glossed "right/left" or "in front of/behind," are more similar in their rate of acquisition to nonspatial switchers such as kinship terms (Chambers and Tavuchis 1977; E. Danziger in press; K. Danziger 1957; Deutsch 1979; Elkind 1962; Greenfield and Childs 1977; Haviland and Clark 1974; LeVine and Price-Williams 1974; Luong 1986; Piaget 1928) than they are to true shifters such as demonstratives or personal pronouns.¹¹

To the extent that we can allow ourselves to generalize beyond the small numbers involved in the present study, and to speculate beyond the acquisition of this single Mopan verb, we may ask whether it is possible that children initially learn to use the true shifters as linguistic forms that primarily encode the identities of speech-role participants (Lyons 1990), but that—following adult usage and not adult intuitions—children learn certain of the switchers (like Mopan tal or English come) as forms that primarily encode a semantics of subjectivity. That is, early correct use of true shifters need not be relevant to issues of perspective-taking at all. Where switcher terms are concerned, the universal conventional alignment of linguistic subjectivity with the role of speaker might come only later in language acquisition, at some point in middle childhood. The moment of achievement of such alignment would not necessarily be visible in the everyday use of switchers. But this moment in middle childhood would nevertheless constitute a critical point in socialization, since it would be only then—once subjectivity had become restricted to one party in the linguistic interaction—that children could begin to see themselves “through the eyes of the Other.”
CONCLUSION

Although not always present in precisely equivalent forms, the phenomenon of subjectivity in language is a universal one. So also is the phenomenon of transposition—the lending of subjectivity in speech to a legitimate other. The fact that certain linguistic forms thus encode "point of view" has far-reaching consequences for different theories of child development. From a Piagetian perspective, the ceding of subjectivity which is involved in accepting address as "you," for example, should be impossible for egocentric children. For theorists in the social interactionist tradition, on the other hand, it is precisely this linguistically labelled shift in perspective that facilitates the construction of the objective view of the self, by offering a view that "takes the attitude of the other" (Mead 1974:194).

Linguistic analysis applied to the notion of point of view yields a new distinction between linguistic forms: those that encode point of view (or subjectivity) in such a way that it does not change until there is a change in the identities of the speech-role occupants (the true shifters like I and here), and those (like left, right, and come) that encode or presuppose "point of view" in such a way that it is more independent of the identities of the speech-role occupants. An explanation in terms of this difference between shifter and switcher terms in language could account for children's documented difficulty across languages and cultures with the interlocutor's right-left and with other linguistic "perspective-taking" problems involving switcher terms.

Close inspection of the acquisition of one switcher term yielded data relevant to the social interactionists' proposal that the development of the self concept depends upon perspective-taking in language. An analysis of Mopan children's and adult's acceptance of the verb tal, when contrasted with b'el, replicated English-based data showing that come is a late-acquired term. It gave evidence that acquisition of Mopan tal proceeds by a process of refinement toward speech-situation semantics, rather than by a process of extension outward from exclusive use with reference to the speaker. The study also showed how the switcherlike properties of this Mopan term might be part and parcel of its late acquisition. It documented the fact that the strategy of accepting tal when the goal is an animate being—including but not limited to the current speaker—is a very early strategy indeed. This strategy appears alongside the very childlike strategy of accepting tal for any goal of motion, and before the preferred adult strategy of accepting tal only when the goal of motion is the speaker him- or herself. These Mopan data are compatible with the suggestion that the fact that tal encodes subjectivity is relatively easily learned by children, who rely initially upon adult usage and not on adult intuitions in constructing meanings from
input. The conventionalization of linguistic subjectivity as a unique property of the speaker is on the other hand apparently relatively difficult to learn. But it is only in accepting the convention that linguistic subjectivity is limited to the speaker that any of us open the door to the creation of a social self essentially mediated by social and linguistic convention.

To the extent that any linguistic form encodes subjectivity, the Vygotskyan formula restricts that subjectivity to the speaker. There is linguistic support for this restriction in theories of linguistic subjectivity, notably those of Benveniste. In the Mopan data presented here, therefore, do we see children struggling, well into middle childhood, to align this linguistic fact with apparently anomalous adult usage in the case of switchers? More intriguing still, is the linguistic fact itself (that is, the adult intuition that even switcher forms best encode the subjectivity of the speaker) an artifact of the social-psychological necessity for such restriction, imposed by each speaker only after the Vygotskyan self-concept that requires it is in place? In either case, the moment of acquisition of this intuition (in the Mopan data apparently around 8 years of age) presumably occurs either shortly before or shortly after the consolidation of the social self-concept—the view of oneself through the eyes of the Other. If so, these data may point the way toward marking the moment of that consolidation.

To return then, in closing, to the problem of the interlocutor's right and left hands with which we began, this is to say that as the child in imagination takes the position of the facing interlocutor, it is not just the spatial but also the social world which s/he now confronts from a maximally different angle. S/he now gazes straight into the startled eyes of . . . herself.

NOTES

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1. In a battery of tests designed to "establish the presence or absence of one or more factors connected with the right-left concept" (1974:111), Lacoursière-Païgé has shown that in English-speaking children the ability to identify one's own right and left interacts significantly with age. Age is not correlated, however, with the ability to identify another's right and left hands.

2. In a groundbreaking psychological study, the cognitive psychologists Metzler and Shepard (1974) discovered that American adults were measurably slower in making same/different judgments between true copies and mirror-images, when the figure to be judged was rotated rather than presented in the same orientation as the original. Subjects were slowest when the copy was rotated 180 degrees from the original. This finding has since been replicated many times and in many different ways (see Shepard and Cooper 1986).
3. In a classic study, Clark and Garnica (1974) showed that English-speaking children did not achieve scores of 80 percent correct usage of come even by nine years old. Tanz (1980) also documented the comparatively late acquisition of English come: The oldest children in her sample (five years) had very little mastery of this verb. Some of the lateness that these authors observed is surely the result of putting children in difficult experimental task circumstances. Richards (1976) has shown that more adultlike child use can be achieved even in an experimental situation, if the child is not required to imagine what a third party might say or have said, but is instead involved him or herself as a play participant and speaker (see also Macrae 1976). But even under these more fortuitous circumstances, Richards finds that in one of her two contrived play situations, adultlike use of English come does not emerge until about seven years of age.

4. General ethnographic accounts of various aspects of Mopan life can be found in E. Danziger in press, Gregory 1984, and Osborn 1982. The Mopan language is in everyday use and is acquired as a first language by several hundred children every year. Mopan orthography conforms here to that recommended by the Academia de las Lenguas Mayas de Guatemala (England and Elliot 1990:viii). Mopan words and expressions are presented in italics in their first usage or in cases of metalinguistic mention. Free translations are presented in parentheses. Where a full Mopan sentence is cited, a paraphrase or a free translation in brackets appears in the prose of the preceding paragraph. The Mopan text then appears as the first line of a dedicated glossing paragraph, in some grammatical detail. Mopan words are separated by spaces, and affixes are separated from roots within each word by hyphens. On the line below, and within the same paragraph, literal English glosses for each Mopan root and affix appear, also separated by hyphens. Where a single Mopan root requires more than one English word to render an adequate gloss, the two English words are joined with an underscore. Each Mopan word is aligned typographically with the English glossing unit (gloss for root plus glosses for any affixes) to which it corresponds on the line below. In preparing the glosses, I have preferred appropriate English translations to more general grammatical characterizations where possible. For example, in Mopan, the same prefix is used to indicate third person actors, whether they be male, female, or neuter. I use a gender-appropriate English translation (choosing it when an animal is referred to, for example) rather than providing the more general grammatical characterization "third person pronoun" in the glossing line. Many of the grammatical subtleties of Mopan are lost in this process, but these are not central to the present argument. For more linguistic detail, the reader is referred to Ulrich et al. 1986 and to E. Danziger 1996a.

5. If several objects are arrayed on a table between two interlocutors who face one another, the listener will experience the same sort of difficulty in identifying the object "in front" as he or she will in identifying the object "on the right." Both terms can be understood from either speaker's or hearer's perspective. In this respect, we expect English north, south, east, and west to function sometimes but not always like right and left. If a relationship between two nonspeech-participant objects is specified with cardinal direction terms (e.g., the pencil is north of the cup), then no "point of view" implications follow (cf. Levinson this issue). But if the relationship is encoded with respect to a speech participant (e.g., the pencil is north of you), then we can expect point of view phenomena to occur under certain conditions (cf. Haviland this issue). For example, if two interlocutors sit facing each other, one north of the other, and the pencil lies between them, what is "to the north" for one participant may well be "to the south" for the other. Cardinal direction terms are apparently indeed acquired late by children, even in cultural situations where they are in everyday use (de León 1994; Piaget 1928).

6. This sort of conventional or linguistic subjectivity must be distinguished from phenomenological subjectivity, which the addressee (as well as the bystander) of course continue to experience, despite their acceptance of the linguistic conventions.
7. Elaborate examples of transposition in English are also to be found in cases of “free indirect style” in modern literature (Banfield 1993).

8. If we sit opposite one another, each with a cat in our lap, there can be no possible ambiguity if I ask you to point to the cat “that’s over here.” I cannot have transposed such as to mean in some sense “here for you,” or “what you would mean if you said here.”

9. Langacker (1985:118–120) fleetingly recognizes terms of this sort in order to exclude them from his discussion of subjectivity in the true shifters. In particular (p. 119), he notes that the true shifters will not allow explicit expansion (this-for-me town), whereas other perspective-taking terms will do so.

10. An additional innovation in the second design increased the number of journeys made by the toy animals in the direction of the consultant, to a total of six journeys toward the self. This modification has only minimal consequences for the analysis that follows, since strategies in consultants’ selection of tal are characterized qualitatively—by the fact of at least one occurrence in the context of various goals (toward self, toward addressee, etc.), but not quantitatively (i.e., selecting tal in all cases of motion toward self, for example, is not counted differently from selecting it once in this context). Qualitative effects of this design modification are minimal, since all children who chose tal chose it at least in the context where they themselves were the goal.

Two types of data skewing are, however, possible as a result of this design modification. In the first place, children in design 2 might more often appear to be “self as goal” strategists (strategy 4 in Table 2) than those in design 1—simply because design 2 offered more “self as goal” choice contexts. This is simply empirically not the case. All of the children who chose tal for self goal only were from design 1, which happened to include more older children. These children had no more chance to pick tal for self goal than for any other goal. Those (by and large younger) in design 2 who did have such a chance did not do so. They chose tal for many goals, including themselves.

A second strategy that is vulnerable to the differences between the two designs is that of choosing b’el only (strategy 5 in Table 2). Children in design 1, which offered fewer “self as goal” choice contexts, might more likely appear as b’el-only strategists than children in design 2. And in fact, the two children who used the b’el-only strategy are both from design 1. These two children indeed might perhaps have chosen tal once or twice, had they been offered more chances to do so. But the extra contexts offered in design 2 were all “self as goal” contexts. If the two children in question were comparatively “deprived” of extra opportunities to choose tal, they were deprived with respect to children in design 2 only in this context. Had they chosen tal in this context, their choice strategy would have been characterized as number four (tal for self as goal only) rather than as number five (b’el only). Strategies four and five are both “adult-like strategies” and are both preferred by older children. The analysis in this article opposes strategies four and five on the one hand to strategies one and two on the other, in order to interpret strategy three. To switch individual children from strategy five to strategy four therefore has minimal consequences for the analysis.

11. Luong (1986) comments on the decalage between the early acquisition of personal pronouns by Vietnamese children, and their late mastery of kinship vocabulary. Luong’s hypothesis was that cultural elaboration of transposed usage as it exists in Vietnamese might actually help children acquire kinship terms. This hypothesis was not borne out by his data. Vietnamese children are, like children all over the world, relatively late in articulating the meanings of kinship terms when these are seen “from another perspective” than their own.

12. Evidence from the acquisition of personal pronouns in English indicates that young children indeed have less trouble with the speech-role encoding than with the subjectivity-encoding aspects of these forms (Budwig 1985; Charney 1979; Oshima-Takane 1992; see esp. Chiat 1982:377, 1988:354–355). But the data that indicates general support for the speech-role semantics view of the acquisition of shifters also indicates that there is a very early
component of what could be characterized as “egocentricity” even in this acquisition. Children indeed learn the pronouns first as representing speech roles, but they do so initially in the case where they themselves occupy the speech role in question (Charney 1980:510). Reflect, however, on the ways that this phenomenon also depends upon the social embedding of language. Children get differential opportunities to occupy certain speech roles according to their social, cultural, and historical circumstances (cf. Deutsch et al. in press; Ochs and Schieffelin 1986).

13. Piagetian-inclined language-acquisition researchers initially predicted that young egocentric children would use and understand all shifter terms as if they (the children) constantly occupied the speaker’s role. If the word I encodes subjectivity, then it can only refer to the egocentric child him or herself. If the word you does not encode subjectivity then it can never refer to the egocentric child. But because the words I and you also encode speech-role occupancy, then the egocentric self must also always be the speaker. See Tanz 1980:12-14 for a blistering critique of this assumption. More recent research (Charney 1980; Tfouni and Klatzky 1983; Webb and Abrahamson 1976) emphasizes that a coherent model of “egocentricity” must take account of the fact that children actually frequently occupy the roles of addressee and linguistic bystander.

REFERENCES CITED

Banfield, Ann

Barrera Vasquez, Alfredo

Bavin, Edith

Benveniste, Emile

Budwig, Nancy

Bühler, Karl

Chambers, James C., and Nicholas Tavuchis

Charney, Rosalind

Chiat, Shulamith

Clark, Eve, and Olga K. Garnica

Clark, Eve, and C. J. Sengul

Clark, Herbert

Cox, Maureen V., and Sarah Isard

Danziger, Eve


1996b Parts and their Counter-Parts: Social and Spatial Relationships in Mopan Maya. The Journal of the Royal Anthropological Institute (N.S., incorporating MAN) 1:1–16


Danziger, Kurt

de León, Lourdes

Deutsch, Werner

Deutsch, Werner, Angela Wagner, Renate Burchardt, Nina Schulz, and Jörg Nakath

de Villiers, Peter A., and Jill G. de Villiers

Elkind, David

England, Nora C., and Stephen R. Elliott
1990 Lecturas sobre la lingüística Maya. Guatemala: Centro de Investigaciones Regionales de Mesoamérica.

Fillmore, Charles

Greenfield, Patricia, and Carla Childs
Gregory, James R.

Hanks, William F.

Harris, Lauren J.

Ilaviland, Susan E., and Eve V. Clark

Ilavienlocher, Janellen, and Clark C. Presson

Jakobson, Roman

Johnston, Judith R., and Dan Slobin
1979 The Development of Locative Expressions in English, Italian, Serbo-Croatian and Turkish. Journal of Child Language 6:529-545.

LaCoursière-Paige, Françoise

Langacker, Ronald W.

Laurendeau, Monique, and Adrien Pinard

Lee, Benjamin

LeVelt, Willem

Levine, Robert A., and Douglass R. Price-Williams

Levinson, Stephen C.

Loveland, Katherine A.

Luong, Ily Van
Lyons, John  

Macrae, Alison J.  

Mead, George Herbert  

Metzler, Jacqueline, and Roger N. Shepard  

Miller, George A., and Philip N. Johnson-Laird  

Ochs, Elinor, and Bambi B. Schieffelin  

Osborn, Ann  

Oshima-Takane, Yuriko  

Piaget, Jean  

Piaget, Jean, and Bärbel Inhelder  

Platt, Martha  

Presson, Clark C.  

Price-Williams, Douglass, Ormond W. Hammond, Ceel Edgerton, and Michael Walker  

Richards, Meredith M.  

Shepard, Roger N., and Lynn A. Cooper  

Silverstein, Michael  

Slobin, Dan  
Tanz, Christine

Tfouni, Leda V., and Roberta L. Klatzky

Thompson, J. E. S.

Ulrich, Mathew, and Rosemary Ulrich

Ulrich, Matthew, Rosemary Ulrich, and Charles Peck

Vygotsky, Lev Semyonovich

Webb, Pamela A., and Adele A. Abrahamson

Wilkins, David P., and Deborah Hill

Wills, Dorothy D.