Rethinking linguistic relativity

Edited by

John J. Gumperz

and

Stephen C. Levinson

CONTENTS

v

CONTRIBUTORS

Melissa Bowerman
Max Planck Institute for Psycholinguistics, Nijmegen

Pascal Boyer
Dynamique du langage, M.R.A.S.H., Lyon

Herbert H. Clark
Department of Psychology, Stanford University

Elsa Gomez-Imbert
Centre National de la Recherche Scientifique, Paris

John J. Gumperz
Professor Emeritus, University of California at Berkeley

William F. Hanks
Department of Anthropology, University of Chicago

John B. Haviland
Dept. of Linguistics and Anthropology, Reed College, Portland, Oregon

Paul Kay
Department of Linguistics, University of California at Berkeley

Charles M. Keller
Department of Anthropology, University of Illinois at Urbana-Champaign

Janet Dixon Keller
Department of Anthropology, University of Illinois at Urbana-Champaign

Stephen C. Levinson
Director, Max Planck Institute for Psycholinguistics and Cognitive Anthropology Research Group, Nijmegen

John A. Lucy
Department of Anthropology, University of Pennsylvania

Elinor Ochs
Department of TESL/Applied Linguistics, University of California at Los Angeles

Dan I. Slobin
Department of Psychology, University of California at Berkeley

PROJECTIONS, TRANSPOSITIONS, AND RELATIVITY[1]

JOHN B. HAVILAND

1 Arriving

There is a Tzotzil verb, *yul*, which means 'arrive.' Suppose that you tell your friend Paxku` about your trip to San Cristóbal from the village of Nabenchauk, where you are now having the conversation. She asks you:

(1*)[2] *Jayib   ora   l-a-yul?*[3]
    how-many hour CP-2A-arrive[4]
    'What time did you arrive?'

and, remembering that you got to San Cristóbal about noon, you reply:

(2*)   *ta ol k'ak'al*
    'At noon.'

You will be misunderstood (or, rather, you *have* misunderstood), for the question asks not when you arrived there (in San Cristóbal), but rather when you returned home, i.e., arrived *here*, where you and your friend are now speaking. If Paxku` had wanted the answer you gave, she would have used the verb *k'ot*.

(3*)   *Jayib ora l-a-k'ot*
    'What time did you arrive?'

Here the language records, in verbs of arriving, the same deictic contrast built into, say, Spanish *ir* and *venir*: the choice of verb depends on direction seen from the perspective of where the speaker (and usually also her face-to-face interlocutor) are. Thus *yul* means 'arrive here' and *k'ot* 'arrive somewhere else.' Moreover, this perspective can be shifted or *transposed*.

2 Transpositions

Conversational exchanges, and indeed virtually all uses of languages, are characterized by transpositions between, among other things, perspectives, deictic origos, participation frameworks, and activity types. In practice, such transpositions – as, for example, prosaic discursive shifts between pronouns, tenses or demonstratives, or between different spatial-deictic

271

Arriving

There is a Tzotzil verb, *yul*, which means 'arrive.' Suppose that you tell your friend Paxku` about your trip to San Cristóbal from the village of Nabenchauk, where you are now having the conversation. She asks you

```
(1*)ii     Jayib    ora  l-a-yul?iii
         how-many hour CP-2A-arriveiv
```
What time did you arrive?

and, remembering that you got to San Cristóbal about noon, you reply

```
(2*)      ta   ol   k'ak'al
```
At noon.

You will be misunderstood (or, rather, you *have* misunderstood), for the question asks not when you arrived there (in San Cristóbal), but rather when you returned home, i.e., arrived *here*, where you and your friend are now speaking. If Paxku` had wanted the answer you gave, she would have used the verb *k'ot*.

```
(3*)      Jayib    ora  l-a-k'ot
```
What time did you arrive?

Here the language records, in verbs of arriving, the same deictic contrast built into, say, Spanish *ir* and *venir*: the choice of verb depends on direction seen from the perspective of where the speaker (and usually also her face-to-face interlocutor) are. Thus *yul* means 'arrive here' and *k'ot* 'arrive somewhere else.' Moreover,this perspective can be shifted or *transposed*.

Transpositions

Conversational exchanges, and indeed virtually all uses of language, are characterized by transpositions between, among other things, perspectives, deictic origos, participation frameworks, and activity types. In practice, such transpositions--as, for example, prosaic discursive shifts between pronouns, tenses or demonstratives, or between different spatial-deictic centers in narrative--are rapid, transitory, and evanescent. They are managed by linguistic and gestural devices both grammaticalized and roundabout, both conventional and *ad hoc*. They rely heavily on participants' knowledge--not only schematic sociocultural knowledge, but also contingent facts of biography. Being sparsely coded, and rhetorically potent, they are the natural province of inference. For the same reasons, they are fraught with possibilities for misunderstanding.

A privileged status is usually accorded to a given "here and now" as the context of utterance against which the denotata of indexical elements within utterances are understood. Hanks (1990) develops the referential foundations of such a context--what he calls "the actual corporeal field" (1990:217)--and its central "participant frames." He then brings together what have often been treated as disparate phenomena under the single rubric of "decentered participant frames," phenomena that "rest on displacement or alteration of the indexical ground of utterance" (1990:197). In direct quotation, for example, not only personal pronouns but all shifters (Jesperson as cited in Jakobson [1957] 1971), including indices of place and time, must be understood not in relation to the "here and now" of the quoting utterance, but to the "then and there" of the quoted utterance, real or imaginary. Direct quotation thus requires "recentering." Hanks assimilates into the same model various types of what Bühler ([1934] 1967): 210ff) originally called transposition: devices, often conceived of as

stylistic, which involve no _explicit_ decentering but in which an utterance is cast _as though_ indexically grounded in a context different from the immediate one. A canonical example is the use of the "dramatic present tense" (Jesperson [1924] 1965:290), in which a narrator recounts past events with "present tense" forms, thus "recentering" current speech by projecting himself back to the narrated moment. Hanks extends his model to "complex frames" in several Yucatec Maya interactive routines, showing that a simple model of demonstrative reference, juxtaposed against a more or less complex layering[v] of participant structures, can resolve pronominal reference in such activities as divination and prayer.

　　As Hanks notes, a mechanism like "recentering" is required to resolve the reference of all deictics, not just pronouns (1990:252). I have widened Bühler's term _transposition_ precisely to extend the range and scope of the phenomena in question, and to highlight features of transposition relevant to the present discussion of "linguistic relativity."

　　First, I concentrate on the nature of _projection_, from utterances to contexts, a relationship which complicates considerably the "givenness" of an unmarked physical "here and now." Hanks concludes his presentation of decentered frames recognizing that "[t]he current 'here-now' of any utterance is itself a space of possibilities, not a concrete object immediately given to observation" (1990:254). What is the nature of a projectable and, hence, transposable "space of possibilities"? The importance of projection to the discussion of relativity in the present volume is that a projected contextual space is precisely the arena of substantive differences between communicative traditions that have often inspired relativistic rhetoric.

Second, what sorts of transpositions occur? I extend the discussion beyond shifts in the <u>referents</u> of indexical elements, to include non-referential aspects of indexical projections, as well as issues of <u>perspective</u> (Talmy 1978), and <u>construal</u> (Langacker 1987, 1990) whether indexically signalled or not. Exactly the same logical mechanism is required to "calculate" the meanings of linguistic elements that project, for example, social relations between interlocutors, or points of view on a scene, as of those whose job is (at least in part) to pick out referents. Transposition can in general force recalculation of all projectable elements.

Further, the emphasis on transposition in the present essay focuses attention on <u>shifts</u> in projected grounds. I am therefore especially concerned with "triggers"--formal elements that signal a shift in projected context. What mechanisms signal transpositions, and allow interlocutors to recover them? Direct quotation, as in Hanks's analysis, will be a prototypical transpositional trigger, signalling that recalculation of indexical projections is in order. Similarly, we must consider the problem of recoverability: techniques by which interlocutors keep transpositions straight, and interpret them, if not "correctly," at least coherently.

Deictic transpositions

The unmarked sort of deictic origo is presumed to derive from a canonical speech situation in which (eliminating many details elaborated by Hanks) interlocutors (canonically a single speaker and addressee) are face to face and more or less in the same "here and now." This "here and now" anchors among other things the directionality encoded in the Tzotzil "setting out" or inceptive roots *bat* 'go' and *tal* 'come' and the "arriving" or achievement roots *yul* 'arrive

here' and *k'ot* 'arrive there.' Motion towards the place where interlocutors are conversing is encoded with *tal* or *yul* whereas motion towards any other place is encoded with *bat* or *k'ot*.

In conversational practice, however, things are rarely so neat, and the anchoring point may be transposed in a variety of schematic ways. It may move from the speaker's perspective to that of her addressee (now seen as distinct); or, through quoted or reported speech, it may move to the perspective of a quoted or reported speaker, or again to *her* addressee. Such transpositions are familiar and widely discussed in linguistic literature (e.g., Fillmore 1975).

Manvel is recounting your first conversation with Paxku` to Antun, another Zinacantec, as they work in their cornfield in the lowlands.  They are far from both San Cristóbal and Nabenchauk.  Manvel tells what Paxku` asked you, and he decides to report your answer.

```
(4*)      Chal ti Xune [ti iyul/ik'ot ta ol k'ak'al]
          John says [that he arrived at noon].
```

Which does he choose--*yul* or *k'ot*? Or does it make any difference?

Of course, he might be more likely to use "direct quotation" in the first place, a favored Zinacantec narrative device.

```
(5*)      [Liyul ta ol k'ak'al] xi.
          ["I arrived at noon,"] he said.
```

Here, in the pronominal markers, we have a classic case of transposition through quotation. Manvel's 'I' is embedded in the pronominal prefix of the quoted verb *l-i-yul* <CP-1A-arrive> 'I arrived.' It refers, of course, not to Manvel but to the quoted speaker, Xun. The ground with respect to which the referents of pronouns are calculated has shifted from the current speech situation, with

Manvel speaking to Antun, to a reported speech situation in which Xun speaks to Paxku`. However, not only the pronouns have to be recalculated under transposition: the "here" lexicalized in the verb is also transposed, moving, as it were, from Hot Country where Manvel is speaking back up the mountains to Nabenchauk, where Xun was speaking.

Or perhaps Manvel will report Xun's speech with an evidential embellishment, making the appropriate conversion of person. He inserts the particle *la* which signals that he, Manvel, is reporting hearsay--that is, that he knows only by report that Xun arrived at noon. But what does he say? Will he use *yul* or *k'ot*?

```
(6*)      I-0-yul/i-0-k'ot      la   ta   ol   k'ak'al
          CP-3A-arrive/arrive   QUOT PREP half day
          He arrived, it is said (he says), at noon.
```

Worse, when interlocutors communicate from widely separated locations, neither the speaker's nor the hearer's "here and now" can be jointly taken for granted. How is the "here" indexed by *yul* to be construed? When people talk on the telephone, for example, they must decide whether to share a deictic origo (defined on a variety of possible scales), or whether each is to maintain her own. Lacking conventional solutions to the problem, certain negotiations may be necessary for communication to proceed.

You are now talking to Paxku` by telephone. She is in San Cristóbal, and you are in Nabenchauk. Again, the subject is your trip to town, and she again asks

```
(7*)      Jayib     ora  l-a-yul?
          What time did you arrive?
```

Now you face a new interpretive problem. You know her verb means 'arrive-here'--but whose "here"? Distinctions between verbs like *come* and *go* are slippery in such circumstances (Fillmore 1982). What does **Paxku`** mean? When the origo has suddenly slipped away from a point shared by you and your interlocutor, it needs to be fixed. How do Zinacantecs establish the relevant "here"? Let me leave the reader in the dark about this for the moment (since the answer is not necessarily obvious). Instead I will provide a non-invented conversational example of multiple transposition, involving, among other things, these same Tzotzil verbs of motion.

In fragment (8), C is a Zinacantec who has gone illegally to work in the United States. He is instructing X, the ethnographer who is about to visit his village, what to have his parents back home say, should anyone ask about his whereabouts. There are various spaces available in which to anchor the "here and now" that the deictic motion verbs project. First, there is the shared perspective of C and X as they speak (in Oregon, in June 1988). Second, there is the "then and there" of C's parents in Nabenchauk, engaged in a hypothetical future conversation with inquisitive neighbors. There is also the perspective of the parents reporting their supposed conversation with X, the ethnographer who will have taken news of C back to the village. (Hidden in the background is another space and time: the moment, presupposed in the last two mentioned spaces, when X arrives in Nabenchauk and tells the parents about C and his instructions to them.)

Now consider the transpositions between these spaces, primarily as signalled by the deictically anchored verbs in the passage itself (which are underlined). Line [1] conjures a supposed future "here and now" when prying neighbors interrogate C's parents about C's whereabouts. At this future time, X

will have 'arrived here' (the verb is *yul*, at line [2]) in Nabenchauk, armed with news of C in faraway Oregon. This *yul*, referring to X's arrival "here" in Nabenchauk, and the verb *bat* (line [3]), referring to the 'departure from here' of C and his companions, are buried inside a piece of imagined discourse, in the mouths of the nosy neighbors who have, from the perspective of C's parents, *chtal yal* 'come to say' (line [6]) such things once they hear that X has reached the village.

(8) akuyal (88.08B, June 21, 1988, Portland)

```
 1  C;   ak'o ak'o timi o much'u sjak'e
         Suppose someone should ask
 2       bweno . mi: lavi iyul xa li Xune
         "Well, since John has now arrived here,"
 3       k'u x`elan ti Chepe k'u x`elan ti kremotik bateme =
         "How is José?  How are those boys that have gone there?"
 4       =mi:
          If-
 5  X;   bweno
         Okay.
 6  C;   mi much'u xi mi oy much'u chtal yal un
         If someone comes here to say that
 7  X;   ji
         Yes.
 8  C;   ak'u yalik
         Then let them say (to such a person)
 9       bweno este:
         "Well, uh,"
10       lek la este ch`ab-
         "They are alright [according to what (John) says.] They-"
11       ch`abtejik xi ika`i li Xune
         "'They are working,' I heard John say."
12       mu- muk' bu- mu to bu ijak'bekotik lek
         "But we haven't asked him properly yet."
```

There is a further layer of speech, which involves no motion roots, in lines [10-11], where the parents hypothetically report hypothetical speech by X, who is portrayed as saying that C and his companions in Oregon 'are working' (i.e., have found jobs).

Here, the perspectives adopted are clearly different from the immediate surround of X and C as they speak in Oregon: they are *transposed* perspectives, centered on the village. This transposition is necessarily reflected in the choice of directional verbs, whose very use always indexes some deictic origo.

A few diagrams may make the example clearer. Hanks (1990) adapts notational conventions of Jakobson (1957) to represent indexical projections and their transpositions in decentered frames.   Jakobson distinguishes between a speech event (E^S) and a narrated event (E^N). Many referential indexes in speech involve calculating a referent in the latter from a contextual element in the former. A canonical deictic is represented in Figure (1).

Figure 1: "Relational structure of deixis as a complex frame" (from Hanks 1990:204)

Notice what one means here by "indexical projection." When you say *liyul* 'I arrived (here)' we could represent the relational structure as a projection from the locus of the speech event to the target locus (the place of arrival) in the narrated event, as in Figure 2. (The letters S,A, and O stand for 'speaker," "addressee," and "other.") An alternative representation is to laminate the arrival scene onto the space of the speech situation so that the arrival point referred to coincides with the deictic "here." This alternative, shown in Figure 3, suggests that the context of the speech event and the circumstances being narrated are being brought together, or calibrated (Silverstein 1992) by the verb *yul* around the anchor of a shared locus. In principle, **both** spaces may be adjusted (their presuppositions shifted, or their structures internally rearranged) so as to bring about this calibration.
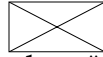
Figure 2: *YUL* "arrive here" as a projected index.

Figure 3: *YUL* "arrive here" as lamination.

There is much to recommend the lamination view, notably the fact that a good deal of what is represented about a narrated event is literally played out on the scene of the narrating (speech) event.

Consider what I have called distinct perspectives in (8) represented as transposed (or perhaps superimposed) "spaces." The original speech event (E^S) has C(hep) talking to X(un), in Portland, in June 1988. They imagine a visitor talking to C's parents in the village. Thus the narrated event is, in turn, a speech event--in fact, two such narrated speech events (E^{NS}), since the hypothetical visitors say two things: (1) "now that Xun has arrived here" (line 2); and (2) "how is Chep who has gone?" (line 3). Since the verbs in these narrated speech events have a deictic component, both involve a projection from the event of the launching speech event. In line 6, both of these narrated speech events are in turn characterized as something that 'someone *comes* to say,' framing them again with an indexical motion verb. Whereas the earlier verbs involve an indexical projection, the verb *tal* "come" in Line 6 involves a transposition, since it talks about the stranger's coming to talk to C's parents *as if* they were coming to "here," to the locus of the outermost speech event E^S--that is, Portland. The current interaction has thus been transposed to the village of Nabenchauk. The projections (shown with a solid arrow) and transposition (shown with a dotted arrow) are diagrammed in Figure 4.

Figure 4: "Xun has arrived; Chep has gone."

A similarly multilayered projection is involved in the parents' hypothetical declaration, in line 10, that Chep *lek la* 'is alright (reportedly).' The quotative particle *la* projects a shadowy secondary narrated speech event, shown as a laminated layer with a dotted edge in Figure 5, in which someone (presumably Xun) tells the parents that Chep is alright.

Figure 5: Let them say: "Chep is (reportedly) alright."

Conversational transpositions are not limited to shifts of spatio-temporal location and speech participants. I have in mind a much wider family of phenomena studied under the rubrics not only of "transposition" (Bühler 1934), but also of "metalanguage" and "reported speech" (Voloshinov 1986), "voice" (Bakhtin 1986), "(re/de)centering" (Bauman 1986, Hanks 1990, and others), "layering" and "demonstration" (Herb Clark, Clark and Gerrig 1990), "empathy" (Kuno 1987), "contextualization" (Gumperz 1982), "calibration" (Silverstein 1992), "participation roles" (Levinson 1988), and even "alternative schematizations" (Talmy 1985). Perhaps the most thorough treatment--and certainly a leading inspiration for the present essay--is the elaborate analytic machinery, already employed above, which Hanks (1990) develops to present Maya deictic usage.

Projection

Familiar deictic transpositions depend on a deictic "origo," minimally a set of coordinates including speech participants, more globally a centered and detailed "point of view." In fact there is already an equivocation here between an origo located, as it were, in the "real" world, and an origo understood as a constructed schematic (necessarily partial) *representation* of the world.

Interlocutors speak and gesticulate in a physical environment, but their signs refer in a universe populated by conceptual entities.

Radiating from a deictic origo is a structured "space" within whose surround deictics "point." In the locational case, this radiating space is literally three-dimensional space, or a schematic view of it. In the general case, however, what I call "space" is merely a mathematical space of relations which extends from a single elemental point to other elements and the relations between them.[vi] Thus, the first element of potential variation and difference (between situations, languages, cultures, or what-have-you) exposed by transposition is the very nature of a structured space. Around what is it centered (what is its "origo")? How much (how wide an area? what "objects"? how structured a perspective?) does it encompass?

On standard formulations, the deictic origo is typically the "here and now" that includes "the spatiotemporal context created and sustained by the act of utterance and the participation in it, typically, of a single speaker and at least one addressee" (Lyons 1977:637). The "here and now" can be more fully fleshed out, to include "the appearance, bearing and attitude of the various participants in the language-event. . . ; preceding, concomitant and subsequent activity; other events taking place in the vicinity; and so on" (Lyons 1977:571).

However, an indexical origo is by itself exceedingly austere, amounting to nothing more than what is "projected" by a single indexical sign.

Any indexical sign form, in occurring . . . hovers between two contractible relationships to its "contextual" surround: the signal form as occurring either PRESUPPOSES (hence, indexes) something about its context-of-occurrence, or ENTAILS ["CREATES"] (and hence indexes) something about

its context-of-occurrence, these *co-present* dimensions of indexicality being sometimes seen as essential properties of the signs themselves, "appropriateness-to-context-of-occurrence" and "effectiveness-in-context-of-occurrence."

Seen this way, every indexical sign, or, to be more precise, every sign insofar as it signals indexically (whatever other semiotic modalities it may be involved in) serves as the point-from-which, or semiotic origin of, a presuppositional/entailing projection of whatever is to be understood as context. There is no necessary connection between, nor even necessary coherence of, the various indexical projections-of-context logically implied by the semiotic fact of indexicality associable with any collection of signal forms: each occurrent signal form indexes its own context-of-occurrence, and that is all that we know by purely indexical (pragmatic) semiosis (Silverstein 1992:36).

Each indexical sign projects a corresponding element of context, an elemental "origo" from which--by a further projection --an entire space maybe seen to radiate. The additional task of interpreting a collection of indexical signs as a *coherent sequence* (of meanings, actions, events, or interactional moves--for Silverstein, "interactional text") requires that these discrete projectable spaces be coordinated and interrelated, a process Silverstein calls *metapragmatic regimentation*. Sometimes this coordination may be achieved through lamination, much as one overlays transparencies. Extending the notion of minimal projected context to composite, more fully fleshed out, laminations of such partial contexts inspires my metaphor of "space." The laminations may not be complete, of course, as indexical signs in natural language schematically project (parts of) rather different sorts of contexts-of-occurrence. Nonetheless, to laminate at all

projected spaces must **fit:** they must be commensurable with respect to certain properties, such as orientation and what I call below grain or resolution. Moreover, the current (though moving) "here and now" is never very far away: any proposed laminate will be partially played out on the stage given by the context of utterance.

Silverstein's formulation (see also Silverstein 1976) suggests how to understand the relation of "projection" which, in my loose usage, obtains between a sign and a contextual space. It will be a relation somewhere along Silverstein's continuum from presupposing to creative (entailing) indexicality: from being appropriate to only a certain sort of context (thus projecting a space of the appropriate sort), to creating a certain sort of context (thus projecting such an altered space). The fact that individual projected origos **radiate** wider spaces complicates the continuum. There may be truly creative indexical signs, which bring something totally new to a projected context; there may also be creative indexes which merely make explicit some implicit but presuppos**able** facet of an otherwise available space.[vii] Moreover, default assumptions about what all spaces contain will structure all projected contexts and will only be suspended when explicitly questioned.

Of course, since signs take their life from interactive use, the business of constructing coherence across projected indexical surrounds is typically a multi-party affair. It is something that interactants do together, with and for one another, though perhaps only implicitly. There must then be mechanisms to help interlocutors get this coordination right (or to fight it off), mechanisms both to regiment the construction and coordination of transposed spaces, and to make it plain when things have come out wrong.[viii] Hanks (1990) emphasizes that a socio-cultural structure of possibilities constrains projections before they ever

happen. Culturally codified participant-frames instantiate parts of a space of possibilities; thus, for example, Maya discourse genres are preestablished, culturally routinized, "frame spaces."[ix] Clearly, only bodies of knowledge and tradition (cultural and otherwise) allow projection from given signs to specific "values" or entities. It is the link between utterance form, situated activity, and local knowledge, that puts linguistic pragmatics at the heart of ethnography (and vice versa).

A formalization

To schematize the notion of transposition, we must represent spaces of relations, and laminations of them. As we have seen, diagrams of the sort employed by Hanks represent an indexical projection as a relation $\{i,R,X\}$ between an indexical ground i (in the speech event), a relational feature R of the deictic element (in the expression uttered), and a referent X (in the denotational space of the narrated event). A transposition, on this account, involves first transposing from an element of the primary indexical ground i in the actual speech context, to an element i^* in some other indexical ground, for example, a narrated speech event, or a distant scene. Figure 6 (where the notation E^T stands for "transposed event") illustrates Hanks's analysis.
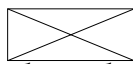
Figure 6: "Transposition of the indexical ground." (From Hanks(1990:208).

In situation semantics (Barwise and Perry 1983)--which provides a formalism for picking apart separable referential strands in interpreting utterances--the "meaning" of a sentence φ is taken to be a relation $u[\varphi]e$ "between situations u in which φ is uttered and situations e described by such utterances" (B&P:120). As Barwise and Perry remark, the utterance φ constrains both the u

and the *e* situations. The meaning relation can be dissected, in part, by describing a relation $d,c[\varphi]\sigma,e$. Here *d* is a "discourse situation" (with, among other things, a speaker, an addressee, a discourse location,[x] and an expression α); *c* is the *speaker's connections*, "a partial function from referring words α to their referents $c(\alpha)$" (B&P:125) as intended by the speaker; and σ is a *setting*, a collection of situational elements, other than the discursive ones, provided by the utterance situation--typically, elements derived from other expressions contiguous to φ in a wider time slice.

We could (very roughly) represent the denotational meaning of a linguistic element like the Tzotzil verb *YUL* as a relation $d,c[YUL]\sigma,e$ just in case the following is true:

(9)
in *e* : at *l:* is_located, **a**; yes

       at *l'*: is_located, **a**; no

       (*l'* temporally precedes but spatially coincides with *l*)

where $l \subseteq l_d$

That is, for some indeterminate individual (represented as **a**, a variable which ranges over possible logical subjects of *yul*), the situation *e* includes a location *l* and a temporally prior but spatially identical location *l'* such that **a** is located at *l* but not at *l'* (i.e., has 'arrived at' *l*); and, crucially, that *l* coincides (spatially) with the *discourse-location*, l_d. In this representation, the final clause shows how the described situation *e* is <u>anchored</u> in *d* the discourse situation (part of the overall utterance situation *u*). The projection involved in the use of a word like *yul* is captured in the equation $l \subseteq l_d$ which bridges two distinct situations, *d* and *e*.

On this account, we could posit a function, invoked by the verb *yul*, that aligns a discourse situation *d* (in which *yul* is uttered) with an "arrival situation" *e* (described by that utterance) by mapping ("projectng") *l* onto l_d, or by calibrating *d* with *e* with respect to their locations, as follows:

```
d = {  ........  l d........}
                  |
e =        {.....l ..............}
```

In Hanks' terminology, such a projection is "centered" because it connects a narrated event with a privileged *center*, the here and now or "actual corporeal field" of the speech event *d* (and more generally *u*, the whole situation of utterance).

Decentered frames, including Bühler's transpositions, involve replacement, in such formulas, of elements of *u* with elements of some <u>other</u> situation *u'*. Situation *u'* will be at least partly of the same type as *u* (it may include a discourse situation, for example), but it will not be the actual situation of the utterance in question. In quotation, for example, the whole of the anchoring situation in a formula like (9) must be transposed away from the actual uttering situation to the described or presupposed utterance of the quoted speech. In other cases, only subparts of *u* may require transposition, typically only the elements of *d*, the schematic discourse situation that includes speech-act participants, their location, and an expression. When the salesman at the door-- in what has been called "altero-centric address"--asks the child "Is Mommy here?" he has transposed Speaker and Addressee roles, without necessarily shifting other parts of the situation of utterance. Transpositions involving speaker's connections *c* and a setting σ are also possible, as we shall see in what follows.

Using this notation, "projection" can be generalized from a relation between an element of context, a deictic sign, and a referent (as in Hanks' model $\{i,R,X\}$) to a relation between entire situations or settings, mediated by a complex expression φ, thus $\{\sigma,\varphi,\sigma'\}$. Non indexical signs can, on this view, also "project" and thus give rise to transpositions.

Indeed, the interesting transpositions will not be wholesale replacements of σ by σ', but <u>operations</u> on σ to produce σ', by means of additions, deletions, collapsings, perspective shifts, zooming, and the like. Moreover, even if it has been transposed away from, the privileged original u, corresponding to the actual here and now of the speech situation, will presumably remain as a potential background or default laminate for all transposed spaces--even as it is revised and updated over the course of an interaction. Indeed, a kind of "bleaching" seems to apply to deeper and deeper layers of transposed "spaces": the farther they get from the fully-fleshed "here and now" the more schematic they become. Contraints on spaces lessen with each transpositional remove.[xi]

The projection involved in normally centered discourse may often be hard to perceive. Indeed, the embedding of speech in an unmarked here and now is often nearly invisible, cued largely implicitly, without formal, segmentable marking in the utterances involved (Silverstein 1981, Gumperz 1982). Insofar as the perspectives, reference points, or partial situations which figure in projective relations are differently structured--from one speaker, language, or communicative tradition to the next--these differences of structure are suddenly brought into analytical focus in the context of transpositions. The possibility of a shift highlights the existence of something that *can be shifted*. Thus, if the mechanism of transposition (signalled by varied formal means) is a linguistic universal, transposition provides a universal window on substantive (linguistic,

cultural, or situational) differences in *what there is to transpose*, that is, in what aspects of situations are projected by utterances. This, indeed, will be my slender contribution to the present discussion of linguistic relativity: first, that the phenomenon of transposition is non-trivially ubiquitous in human interaction (and hence in the linguistic practices that centrally comprise interaction); and second, that transposition exposes to view substantive differences between human groups in the raw material of interaction: what can and must be transposed. This one example may help show a level of analysis appropriate to discussions of what is shared and what is not in human language and social life.

My discussion will proceed through various apparent differences in the nature of linguistically projectable partial situations, exposed to view by transposition, to some devices which "trigger" transpositions in the first place. I will return to the bearing of the discussion on the relativity issue when I finally trudge to a conclusion.

the structure of physical space

Considerable classic work analyzes the nature of the deictic field, and recent detailed attention has been paid to demonstratives (Hanks 1990) and personal pronouns (Irvine 1987, Levinson 1988, and Hanks 1990). The Tzotzil verbs with which I began illustrate the lexicalization of a standard spatial "deictic origo," the "here" with respect to which a lexical contrast like *yul/k'ot* must be understood. The Tzotzil verb pair exploits a familiar deictic distinction roughly present in both Tzotzil *tal/bat* and English *come/go*; in place of *yul/k'ot*, however, English has just a single verb *arrive* that neutralizes the distinction.

The "location" in three-dimensions of a point in projected space is of course only one example of what can be projected. The "here and now" is both socially and spatially constituted in rather complex ways, even if we limit attention to indexical projections explicitly coded in language. Let me assemble a rather patchy inventory of elements in such projections.

First, what is the nature of "here"? Physical space itself may have a complexity not always obvious. One likely locus of cultural variation is precisely what a projected physical space can or must contain. The idealized location *l* of situation semantic notation is highly schematic, and different languages may insist on different degrees of detail.

A striking example is the "absolute" orientation of locations and vectors of motion as represented in the speech of many native Australians. Speakers of Guugu Yimidhirr (GY), from the area around Cooktown in northeast Queensland, use a conceptual and linguistic system of orientation based on cardinal points--or more accurately, cardinal edges--of roughly the North/South/East/West variety. These directions provide an orientational anchor to all spaces which can be described, and with relation to which, for example, gestures may be performed--see Haviland (1986), also Evans (forthcoming).

In GY speech, rarely a sentence will pass without some morphologically specific form of a cardinal direction root, and virtually **all** location is described in such terms.[xii] Moreover, using GY gesture one can distinguish, at varying levels of spatial resolution (from fish-eye to zoom, so to speak) those spaces that are necessarily oriented, with respect to the system of cardinal edges, from those spaces that are at least partly *emancipated* from this system. These latter "free"

spaces are primarily constrained by the immediate interactive configuration--the speaker and his or her interlocutors, as they share a space to speak in--rather than, as it were, by the earth itself (Haviland 1989, 1992). However, talk and gestures relating to landmarks, for example, must always be "correctly" oriented by the compass, although sometimes in complicated ways.

If for GY speakers any space is potentially oriented with respect to the system of cardinal edges, for most English speakers spaces are **not inherently** so oriented. They can be turned any old way--a fact that GY speakers have long ago discovered in conversation with non-Aboriginal interlocutors.

The oriented nature of physical space in GY has a singular consequence for an indexical (or indeed any) sign which, in GY discourse, projects a locational space, referentially or otherwise. This space will, by default, have to be anchored with respect to the cardinal edges: it will have a North/South/East/West, and not just incidentally, but **exploitably**. Thus, the fact that orientation is attached to projected locations may both require explicit calculation, in transposition, and also be relied upon to energize inferential processes.

Consider the transpositions in the following (slightly simplified) passage from one of the late Jack Bambi's marvellous stories. While sitting at the Hopevale Aboriginal community, he is recounting how he and a companion had to swim three and a half miles through stormy seas to shore after a shipwreck. The events themselves took place some thirty years before and some thirty kilometers away, to the northeast. The transcript at (10) includes both Jack's words and also the rough extent of his gestures, which turn out to be important inferential triggers. At this point in the narrative, Jack's companion, exhausted and terrified after the long swim, has knelt on the beach to pray. Jack,

unconcerned, stands beside him to survey the horizon, and he leans down to summon the older man's attention.

(10) Boat: 1st level transposition[xiii]

```
138      ngayu nhangu bagay, eh . . .
         I poked him (and said), "Hey..."

         .................!.....
140      yarra gunggaarr nhaawaa
         "Look yonder to the north!"
```

Left hand from down beside body left side, flips up pointing North.

```
141      ngaana   dhadaara
         "What's that going along?"
```

(Several lines deleted . . .)

```
         ......!...............................
150      you could see that gulnguy  just horizonbi =
         You could just see that boat on the horizon.
```

Right hand tracing horizontal back and forth motion, "horizon?";

performed in front of face (=West).

```
151      =gunggaalu black spot
           Like a black spot to the north.
```

The first transposition here is launched by the "quotation" at lines 138-140. Jack acts out--as Clark and Gerrig (1990) would have it, *demonstrates*, complete with poke--what he said to the other man: "Look there to the North" (where Jack had spied a shark swimming). Thus, Jack invites his interlocutors to imagine themselves with him on the beach; once so transported (transposed) he can point north (and say a word for 'north'), meaning "north *from there.*" (See Figure 7, where Jack's right arm is extended due North as he "points" to the shark.)

Figure 7: "Look north"

The projected space within which Jack points is itself oriented. The anchor is the orientation of the "here and now," upon which the transposed space--including the gesture--can be understood to be laminated.

By contrast, Jack's second gesture at lines 150-151 is more abstract. His words describe looking north to see the wrecked boat on the horizon. As before, he thus verbally invites a transposition: the boat could be spied on the horizon "north" from the narrated site, and not from the spot where Jack is now telling the story. However, Jack's gestural demonstration (sighting along the horizon) seems to pick out only the boat's bobbing motion, and *not* its direction, since the gesture is performed in front of where he sits, to the *west*.

Figure 8: The boat on the horizon.

His gesture is here emancipated from orientational anchors and seems, instead, to be constrained by the immediate interactive surround of Jack and his interlocutors. It was close attention to the different character of the spaces projected by gesture that first alerted me to the seeming consistent difference between GY speakers' spaces and my own.

There are doubtless further variable properties of physical space and location that figure in transposition: the nature of places and their associations (e.g., with people, social groups, history); conventionalized knowledge about regions and directions (for example, that in a certain direction lies Hot Country, or the place where one works or performs other marked sorts of activity, or an area considered dangerous, and so forth). I merely note without further elaboration such potentially projectable features of space.

objects and configurations

Another variable aspect of a projected space is the inventory of entities it can comprise. Jack Bambi's shipwreck story invokes some local conceptual representation of a well-known stretch of territory with several discrete components: named places, a coral reef, particular sand dunes, and later specific trees and the houses of important protagonists in the story. How much of the potential population of a space is invoked in a given projection can vary. Moreover, subtle transpositions can involve shifting the *resolution* or *grain* of a projected space: zooming, as it were, from the beach as an undifferentiated whole, to the contours of its surface, or to its local details. An indexical sign can project a space in rough outline, or in great detail; and a transposition can move from one resolution to the other.

Tzotzil, for example, provides a contrast between two definite articles, *li* and *ti*. *Ti* is the relatively more marked of the two, indicating not only definiteness but also remoteness in time or space. That is, using *ti* as opposed to *li* projects the referent of the noun phrase as relatively distant from the here and now. It thus invites the construction of a remote space--a "then-and-there"-- which the referent inhabits. A discursive stretch, however, can transpose that referent space, bringing it closer or pushing it away. In (11) P is telling how the muleteers whom he used to accompany as a boy would go to sell corn. This was long ago, and he first presents the *moletik* 'old people' with the remote article *ti* at line 290.

(11) t9006a1
```
289     p;       ti vo`ne une te =
                   long ago
290              =chk'ot ixim . te- ti moletik une
                   the old people would take their corn,
291              te chk'ot ixim taj yo` ch'ivit chkal une
```

<p style="text-align:center">take their corn there to the old market</p>

```
... {several lines omitted}
392    p;      la:j yuch'ik talel
```
<p style="margin-left: 2em">They would drink all (the liquor) up coming home.</p>

He continues to use the remote article in reference to the old people until line 393. He now describes how the men, after selling their corn, would stop off to buy cane liquor on their way home, getting progressively drunker and drunker. He switches suddenly to the proximate article *li*, bringing the space of his protagonists into closer (perhaps affective) proximity to the moment of telling.

```
393            puta xyakubik xa li pentejo moletik kavro:n
```
<p style="margin-left: 2em">Damn! Those old bastards already got drunk!</p>

P may be projecting himself **back** to his youth--Bühler's "Muhammed goes to the mountain" type of transposition (see Hanks 1990:217).

Figure 9: P transposes himself to his youth.

He may, alternatively, be bringing the old men metaphorically close, shifting himself back to his youthful consciousness--"The mountain comes to Muhammed." He performs (quotes) his own inner thoughts of the time: "Damn, those old bastards are already (= *now*) getting drunk!"
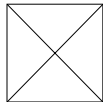
Figure 10: P brings his youthful thoughts closer.

In the terminology introduced above, the shift of articles involves projection across transposed sets of "speaker's connections" c (the speaker's intended referents) and "setting" σ (the situation built up from surrounding utterance context, which has previously placed these referents in a remote space).

Furthermore, even with a fixed inventory of contents, and a constant level of detail, a space can be projected with what Talmy (1983) calls "alternative

schematizations." First, objects can participate simultaneously in different spatial configurations. Second, a single spatial configuration may be presented with attention to different features. Here is one of Talmy's examples:

> If we say that the man went <u>across</u> the wheatfield, then we are abstracting forth one aspect of the wheatfield complex, the fact that it has a horizontal bounded land parcel, and are disregarding the fact that there is wheat growing atop this land. If . . . we say that the man went <u>through</u> the wheatfield, then the wheatstalks, conceived together as constituting a medium are abstracted forth from the whole physical complex, and now the presence of a land surface underneath, horizontal and bounded, is irrelevant. (1983:265)

Talmy offers further examples of alternative schematization invoked by count vs. mass nouns ("the cabbage in the bin" vs. "the cabbages in the bin") and the deictic contrast between *this* and *that* ("Get this [vs. that] bicycle out of the driveway"-- both versions being possible without changing the relative *spatial positions* of speaker, bicycle, and addressee). Here, different descriptions of "objectively" identical situations involve choices between different projected relationships between entities, both within the described situation e and in the relationship between setting σ or discourse situation d, and the described situation e. The sets of relations so defined can thus be subtly shifted between.

Languages like Tzotzil are richly endowed with lexical items which are highly schematizing, in Talmy's sense. Positional roots predicated of objects regiment their referents in detail. They not only describe position, shape, arrangement, etc., but they also project wider schematizations: the configuration of the referent with respect to other objects, the geometry or anatomy of the

referent, and so on. The choice of a particular root to describe an object requires a particular "take" on the configuration of that object in space.

Consider the root *pat*, which Laughlin (1975) glosses in its stative adjective form as follows:

patal= sitting bowed over, lying face down, setting (hen), standing (lizard, turtle, rabbit, frog, mouse), lying down (dog, tiger)

Here is an odd sort of a word, it would seem, which can mean sitting, standing, or lying down. In fact, the word's meaning combines position (belly down, flat to the ground) with virtual anatomy (limbs somehow outstretched, and supporting the body in close proximity to the surface below). Predicating the root of an object, then, invokes varying configurations of figure and ground depending on the nature of the object. To *patan* (place in a *patal* position) a hen would be to set it down in the fluffed out way that hens favor when setting. To *patan* a child would be to lay it belly down, but, for example, leaning forward on its elbows. But to *patan* a trussed pig, as in the following short fragment from a pig-butchering session, involves a schematization in which the pig is arranged belly down, but with its limbs outstretched fore and aft.

(12) Pig1: putting it face down, hauling it by the legs
```
 4  c;      la jpatantik ali . jpatantik Antun
            Let's lay it down--let's lay it down, Anthony.
                                            [
 5  a;                                      a bweno
                                            Ah, okay.
                          1............
 6  c;      malao ali ja` . xi toe Xun
            Wait, uh... this way, John.
                                        [
 7  x;                                  bweno
                                        Okay.

                       1: Grabbing one of the legs and pulling it.
                2............
```

```
 8  c;      ja` li` xtal ya`ele
            It should come like this, it seems.

                              2: continuing to pull the leg toward speaker, so that the whole pig rotates

                      face down.
 9  x;      eso
            Right.
10  c;      ja` chk le` une
            Just like that.
```

The deictics, supplemented by gestures in lines 6 and 8, give schematic hints about how to arrange the pig in the *patal* manner that C (who is directing the butchering) has in mind. (Note, also, that X, the ethnographer, has misunderstood; thinking that *patal* means simply lying face down, he has missed the schematic element that involves the pig's legs.) The schematization imposed on a space, through the application of a positional predicate, thus involves focussing (e.g., on a particular aspect of an object's anatomy and the consequent deemphasis of other such potential aspects). Schematizing one space can thus prime subsequent spaces, by leaving the focussed elements available for future focus, much as a figure/ground selection once selected tends to persist as the scene develops, as one space is laminated onto another, or as a single space is gradually assembled from a sequence of projecting signs.

The schematization imposed by positional descriptions can also involve relationships of markedness and differential specificity, involving processes of inference familiar in other pragmatic realms. Thus, a given descriptive predicate may implicate a prototype, features of which can be cancelled by subsequent descriptors. For example, in the following fragment, P is describing a photograph of a wooden figurine. He first characterizes its position as *puch'ul* 'prone.' Zinacantecs, however, normally lie down on their backs or sides. This figure's position, therefore, appears to call for a revised schema: he is not lying down "properly" but *nujul* 'face down.'

(13) Wooden man

```
 24  p;   puch'ul {...}
          It's lying down
 25       pero . pero ma`uk lek puch'ul
          But it's not lying down properly.
 26       pero nujul yilel
          It seems to be face-down.
{several lines omitted...}
 32       pero lok'eb k'ak'al bat sjol
          It's head is going towards where the sun rises.
```

P also laminates the space of the photograph onto the immediate physical here and now, as is shown by his appeal to absolute orientation in line 32. It is only because he has so oriented it that the figure in the photo is heading East, and his interlocutor (who is trying to pick the matching photograph out of a larger group[xiv]) must make the transposition and orient the laminates accordingly.

These schematic projections involve not only sihfters, but grammatical elements like prepositions and full lexical predicates. The objects and actions[xv] of a situation are not unproblematically given. They, too, are selectively invoked by the component signs of the utterance. I may be holding the dead pig, but I only focus on its splayed legs when the positional *pat* instructs me to do so.

participation frames

A parallel aspect of the immediate physical "here and now"--that it, too, must be projected and assembled to be available to speech--has been long recognized in connection with participation frames. The deictic origo is ordinarily understood to center on the participants in the speech event, taken as typically copresent, individual, embodied carriers of biography. Hanks devotes considerable attention to the nature of participation frames around which indexical spaces are organized, to the social constitution of the participant "space," and to the crucial features of symmetry and asymmetry within it. The

participant spaces projected by different constellations of linguistic signs can also differ to the extent that the social constitution of identity differs between different traditions. Once again, transpositions may be expected to make plain what elements are available for shifting.

In Australia, where language is an especially delicate instrument for managing social relationships, identity and kinship are a constant background to speech. The so-called "Mother-in-law" or "Brother-in-law" vocabularies (Dixon 1971, Haviland 1979)--special lexically marked registers that must be used in the presence of certain affines--are a well-known symptom of the phenomenon.

There are less dramatic instances. On a trip to the bush north of Hopevale, George, a man of about fifty, calls out in Guugu Yimidhirr to Bob, an obviously much older man.

(14) Wakooka
```
gr; Sonny! nganhdhaan yiway dagu yii nhaadhi buurraay dudaariga=
    Sonny! We're here... well, did you see the water running?
```

Why does George call Bob "Sonny"? Several generations of complex social history and biography are built into--evoked, indexed, and projected by--this single vocative. The short answer is that George is Bob's classificatory *biiba* 'father' and hence can consider the older man to be "like a son." That he uses an English diminutive form, and that he chooses to index this particular kin relationship at all under the circumstances (they are visiting a piece of country to which Bob can lay a legitimate claim of ownership--see Haviland 1982) speak to details of the men's relationship and of recent political history in their community too complex to relate here. Note, though, that these details are present in the social space projected implicitly by the talk.

As is to be expected, in a society with such a salient kinship system, even now that the former custom of using special "brother-in-law" words with ones affines has faded, there are verbal ways of projecting a more highly regimented social space on top of the normal, everyday (and, to many older GY speakers, "crooked") set of social relations of the modern Hopevale Mission. G's use of the vocative *Sonny* is one. In the following passage, BF and JJ are repairing spears-- an activity already associated, in an era of Landcruisers and nylon fishing nets, with the past. In place of their normal usage, they adopt mutual terms of address (shown in boldface) which suddenly shift their relationship toward another, more traditional context.

(15) Spears

```
81      jj;     dagu yii nguba =
                Well, this perhaps...
82              =yigaar-amal yurra   (1.0)
                is going to crack, you.
83      bf;     ngaanii (.5)
                Why?
84      jj;     yii ba (3.8)
                This part.
85      bf;     nhaadhi yambala   (.8)
                Do you see, yambala?
```

JJ and BF stand in what would traditionally have been an avoidance relationship, since BF married a woman who would have been JJ's classificatory daughter. The two men have grown up under a Mission regimen that nonetheless made them close friends and frequent associates. JJ's use of *yurra*--in ordinary GY, a 3rd person **plural** pronoun--in line 82 invites BF to reestablish, as it were, the formal, respectful nature of their traditional relationship. This proposal BF clearly accepts, responding in line 85 with a vocative form derived from the now all-but-forgotten word *yambaal* 'man' from the "Brother-in-law" respect vocabulary.

Note further that sometimes, in GY conversation, people explicitly insert kinship relations into talk. Upon mention of a protagonist, participants will often add a comment linking themselves to that protagonist with the appropriate kin term. In (16), B recounts a trip he took, years before, with a man known as Rob. His two interlocutors, in turn, evidently as part of working out who this Rob was, insert their relationship to him into the discourse, at lines 29 and 30. Several social spaces are thereby projected and mutually adjusted: the inhabitants of the current participation frame align themselves to the protagonists of the narrated participant frame, consequently also realigning themselves--or reinforcing their current alignment--with respect to each other.

(16) Cape Melville

```
 10  b;    =mm . ngaliinh Rob gurra
              Rob and I
(...several lines later)
 25  b;        i: ... dinggii-dhirr bada ngaliinh- =
              We set out (a long way) in a dinghy.
 26        =nganhdhaan (.5)
            all of us
 27  t;    Rob? (.5)
 28  b;    dhaday bada=
           We went down.
 29  t;              =ngadhu warra ngadhi (2.3)
                     My old grandfather.
 30  r;    dyuway ngadhu
           my nephew.
```

If we try to formalize these transpositions, deficiencies in the notation adapted from situation semantics become painfully apparent. For here the spaces of relations involved cannot be captured by, for example, shifts in "speaker's connections"--functions from referring expressions to speakers' intended referents. Instead the transpositions involve, roughly, kinship alignments, presupposed in the context, between the three interlocutors--something not projectable onto the plane of reference at all. Each interlocutor, in turn, triangulates his preferred kinship relationship with the third person referent,

Rob, thereby forcing readjustments in the kinship network that links them all together.

texts and co-texts

Part of the space projected by language is itself linguistic. The context of speech as a rule includes speech, represented by the setting σ in the formulas above. Perhaps the clearest example of how speech itself forms part of a projected space is the intratextuality of conversation: my words now recall (presuppose, or creatively cast in a new light) words just uttered. Indeed, the whole point of some talk is to get straight other episodes of talk. To do so may require that interlocutors rehearse a textual stretch several times, each time adding a new layer of indexicality.

Consider the following fragments from a Mexico City argument.[xvi] The two speakers were fighting over an incident when P's new boyfriend had come to call for the first time at the apartment L and P shared. L received him with some suspicion, and the resulting repercussions are now being hammered out between the two roommates. In the course of the increasingly vituperative discussion, the scene at the door of the apartment is repeatedly replayed. Here is the first version:

(17) PilarI
```
187  l;   te juro .
          I swear to you
188       que llegó y me dijo aquí vive Pilar Gonzalez .
          that he arrived and he said "Pilar Gonzalez lives here?"
189  p;   pues sí
          why of course
190  l;   aquí vive Pilar Gonzalez? .
          "Pilar Gonzalez lives here?"
          [         ]
191  p;   es obvio
          it's obvious
192  l;   así me lo preguntó
```

```
          that's how he asked me
193  p;   a pues sí
          ah, of course
```

The issue here is whether L was justified in what she claims was her suspicion that the man at the door was not a boyfriend but an undercover policeman. Everything rests on how the man greeted her, and how he asked for P(ilar). By performing his question, with no courteous preamble, and in police-like tones, at line 190, L projects herself back to the relevant moment, and builds into it the character she seeks to depict in the interaction.

Notice that P doggedly refuses to "hear" more than the literal words the visitor uttered. He was asking for her, "obviously." She ignores the depicted tone, and with it the full transposed scene that L is offering. Here is a case where the interactive uptake of transposition is subject to negotiation. Since the two interactants are fighting, they do not actively collaborate.

On the second replay, after many harsh words have been exchanged, L tries again to project the original event. Here she even "quotes" what the boyfriend **didn't** say, projecting a kind of negative space from which certain events are missing.

(18) Pilar2
```
107       abrí la puerta y no-
          I opened the door and he didn't-
108       él no dijo buenas no:ches
          He didn't even say good evening.
109       el no-
          He didn't
110       dijo . Aquí vive Pilar Gonzalez?
          he said, "Pilar Gonzalez lives here?"
111       eso fue lo que dijo
          That is what he said
```

Again the issue is what the text was in the then-and-there.

Finally, L tries one last time, making the visitor's abrupt tone even more explicit.

(19) Pilar3

```
122     te juro que no dijo buenas noches dijo
        I swear to you that he didn't say Good Evening, he said
123     Aquí . vive . Pilar . Gonzalez? . .
        "Pilar - Gonzales - lives - here?"
124     dije . .
        I said
125     quién la busca ¿no? .
        "Who's looking for her?" No?
```

In line 125 L demonstrates her protective, defensive "Who wants to know?" in response to the boyfriend/policeman's query. She tries explicitly to solicit responsive agreement from P (with the tag *¿no?*), as if to say, "Wouldn't you have reacted the same way?" Thus even affective tone can project onto the space which signs presuppose and create; and the result is interactively negotiable.

perspective, the point of view "centered" on an origo

Let me retrace my steps so far. I began with a set of familiar circumstances in which interpreting speech requires that one adjust or recalculate the values of certain indexical signs, which are ordinarily calculated in relation to the "here and now" of the speech situation. In such cases the "here and now" is apparently *transposed* to some other reconstructible then-and-there. Taking such transpositions as evidence for the nature of a "here and now"--a space projected from the signs themselves--I have sketched an inventory of a few elements that seem to be transposable: spatial, schematic, and social. But a transposable space is not only populated; it is structured. In particular it has an origo, a center, a vantage point from which it is presented. Transpositions can involve movement not from one space (situation) to another, but between points

within the "same" space. Where and how utterances (and utterers) are *positioned* relates to standard discussions of "point of view" or "empathy" (e.g., Kuno 1987).

The issue is again easy to grasp in connection with spatial deixis. Recall that the Tzotzil verb *tal* means 'come'; it describes a vector towards the "here," typically, of the current speaker. In a transposed space, for example in narrative, the point towards which the motion denoted by *tal* is directed can thus be construed as a transposed origo, the vantage point from which a protagonist surveys the scene. This allows what would be, in non-transposed space, a Tzotzil oxymoron: the combination of *tal* 'set out to here' with the general, but highly presupposing spatio-temporal locative *te* 'there [and then] (i.e., some explicit location *other than* here [and now]).' In the following conversation, a Zinacanteco X is describing what happened to him in a distant city, as he and a companion stood on a streetcorner.

(20) Z8808B26

```
363              te jtzob jbatikotike
                 We had met each other there.
                    [
364     j;        aa
                 Oh.
365              bweno
                 Okay.
366     x;       te tal jun . tzeb
                 A girl came there.
367     j;       bweno
                 Okay.
                    [
368     x;        este lisk'opon vo`one
                 Uh, she spoke to me.
```

Clearly, X projects himself into a transposed space, centered on the streetcorner (*te* 'there'), with the girl **coming** toward him. The projection is not total, however, as the use of the locative *te* shows that X still has one foot, as it were, in

his current speech situation: the two spaces coexist, pinned together around X's own position in both.

Projected vantage point, however, can also be social, psychological, and even epistemological. Consider verbal mood in Japanese. Kuroda (1973) was among the first to point out that grammar can accord special treatment to those events or states, many of them psychological, which at least in Japanese one can only reliably predicate of oneself--'being sad,' for example. Grammatically, only the experiencer (or an imagined omniscient narrator) is entitled to use what Kuroda calls a nonreportive description of such states and events, as in ((21a).

```
(21) (Kuroda 1973)
a.    Yamadera no kane o kiite, Mary wa kanasikatta
```
Hearing the bell of the mountain temple, Mary was sad.
```
      /nonreportive/
b.    Yamadera no kane o kiite, Mary wa kanasigatta.
```
Hearing the bell of the mountain temple, Mary was sad.
```
      /reportive with gat/
```

By contrast, the *gat* form of (21b), appropriate to an evidentially less secure report of someone *else's* state of mind, "has definite referential force directed toward the 'judger'"(p. 388). That is, the form "points semantically to the existence of a subject of consciousness whose judgment the sentence is understood to represent"(388), and who must be distinguished from the experiencer of the state described. The outsider's lack of *access* to someone else's inner facts is here morphologically encoded, and so, thereby, is his existence as a separate participant (with a separate viewpoint) projected by the grammar. Moving between such morphological forms thus allows speakers to index a

transposition of vantage points: inside and outside someone's head, as we might put it.

The vantage point of different protagonists in narrative can be interactively positioned, as well. In (22), R is recalling his arrival at Cape Bedford Mission when he was locked in a building (see Haviland 1991). T, his interlocutor, lived at the Mission at the time and tried to peek at the new arrival through the slats of the wall. R then tried to poke T in the eye with a stick. His presentation of his thoughts at the time in "quotation" (at line 219) establishes a transposed space in which both T and R, participants in the current speech event, are also present in their childhood incarnations.

```
(22) Roger
218  r:   nha-gala bama ngayu nha-gala . gaday
          Then I just came.
219       bama nyulu nganhi yii nhaamaalma
          "Man, that one, he's looking at me."
220       yuguunh ngaanaarru . miil bagaalgay nhangu
          So with a stick I was--uh--poking him in the eye.
                        [
221  t:             ((ha ha ha))
222       dagu I wasn't a schoolboy I was just a little boy
          Well, I wasn't a schoolboy, I was just a little boy.
```

T explicitly touches up the psycho-social details of R's transposed space, by inserting a comment at line 222: he, T, was only a tiny child at the time in question. (He implies that he didn't really understand what was going on, so that his peering through the slats of the building where R was imprisoned was wholly innocent.)

the nature of transposition: types and triggers

What we have seen so far suggests a range of projectable material, different relations between the spaces created by the discourse event *d*, and

various construals of the described event *e*. Such different "projectables" in turn suggest a typology of transpositions that range from full shifts from one space to another, to changes in resolution or representation of a "single" space (zooming in and out, clipping, reorienting), to altered perspective (metaphorical movement) within a space. Clearly considerable delicacy is possible when, for one reason or another, one indexical projection is "cast," as one says in C (Kernighan and Ritchie 1988:205), onto another.

Working outward from the necessary, putatively universal, categories of the originating "utterance sitation" we can imagine a series of expectable transposition types, to be encountered in all linguistic traditions. Thus, we may expect (1) transpositions of participant frames, as in standard pronominal shifts; (2) transpositions of relationships, between interlocutors and protagonists, as in social deictic pronominal shifts; (3) transpositions of (oriented) locations/spaces (including temporal frames), as in the GY gesture case cited--a subtype of (1) above with participant-frames extended to spatio-temporal locations; (4) changes in resolution, from wide to zoom: how close? how far? how much detail or schematization?; (5) transpositions of perspective or vantage point, involving not only physical positioning,[xvii] but also "empathy" and access. Finally, we imagine that speech routinely, perhaps universally, facilitates (6) transpositions of activity type: "what we are doing now." No utterance is separable from its (il- or per-)locutionary character, and shifts between genres and registers pull interlocutors into and out of one activity or another, as examples to come of Zinacantec prayer will illustrate.[xviii]

Let me now turn to some of the mechanisms that trigger (or perhaps depend upon) different sorts of transpositions, gradually working my way back to the deictically anchored Tzotzil motion verbs with which I began.

quotation

Almost the paradigm case of a transpositional trigger, as many authors have observed, is "quotation." Hanks (1990:206), for example, treats direct quotation as "decentered, meaning that the indexical ground is displaced from the current corporeal frame of the Spkr making the quote." Once again, the classic observation relates to pronominal and deictic shifts. The first person pronouns in the quoted speech of (8) refer not the speaker, but to his parents talking to an imagined neighbor. The second person addressee of the command "Look yonder to the North" at line 140 of (10) is not Jack Bambi's addressee of the narrating moment, but his addressee of the narrated moment when he stood on the beach. (In both cases, a certain lamination ocurs, to the extent that the co-present addressee must be tempted, and is in effect interactively invited, to project him or herself onto the narrated context.)

"Quotation" is, of course, something of a misnomer. since nothing need literally be quoted. Thus "quotation" occurs in hypothetical, invented and fantasized frames, in deliberately contrafactual, if not scurrilous, gossip, and so on. Clark and Gerrig (1990) (hereafter C&G) propose a useful theory in which quotation, unlike canonical description, which operates with reference and predication, involves a distinct semiotic modality they call demonstration, which in turn involves depicting rather than describing what it "refers" to. Thus Jack Bambi, in "quoting himself" in (10) is demonstrating (aspects of) what he did (and, indeed, how he felt) that day on the beach: his words, his bodily attitudes, his gestures, all can contribute to the demonstration. C&G also distinguish a third modality they call "indicating" which involves pointing directly to an intended referent. Whether or not the three modalities can be rendered autonomous (since depictions can clearly depend upon descriptions and

indications, and vice versa), seeing quotation as demonstration makes plain the indexical shift that triggers a transposition. When a speaker "quotes" she does not simply speak but invites her interlocutor to inspect her speech as performance: and the performance carries its own space--the space created by the performance--onto which the words and the illocutionary effects of the quotation must be transposed.[xix]

C&G argue that "[d]emonstrations usually depict their referents from a vantage point" (767); and that they are "selective in what they depict of their referents" (768). Correspondingly, I have claimed that indexically projected transposed spaces are centered or oriented around a certain perspective, variously established; and that they are schematic, only partially populated.

C&G also espouse a "principle of markedness" which I think can help with the problem of recoverability in transposition. Jack Bambi, sitting at Hopevale, has established a transposed space (the beach near the shipwreck one stormy afternoon in the past). When he points, or uses a pronoun, how do we know whether he is pointing or referring in the "here and now" or the then-and-there? The problem for quotation is similar: I may quote what <u>you</u> said, but I do it with <u>my</u> body and <u>my</u> voice (even if I try to imitate yours). If I have a cough or a gringo accent when I quote you, is that part of what I am trying to depict? Clearly, it depends; and how will my interlocutors know? C&G's principle of markedness states:

> Whenever speakers mark an aspect of a quotation, they intend their addressees to identify that aspect as nonincidental--that is, as depictive, supportive, or annotative (1990:774).

Consider the transposition involved in the quoted parts of the following account, by a GY speaker, of how a famous fight between some Aboriginal stockmen and their white employers began. Several men had run out of tobacco, and the narrator and his friend wanted to ask the boss if they could have their tobacco ration a day early. Their quoted dialogue at lines 66-68, as well as the commentary at line 70, is in GY.

(23) Dougie
```
66              nyundu dhaabangala
                "You ask him!"
67              gaari ngayu yinil
                "No, I'm afraid."
68              gaariga ngayu galmba yinil
                "I'm also afraid."
69              ha ha ha
70              ngalgal dhaabangadhi
                So I asked for tobacco.
```

But when the narrator performs the request to the white stockman, he switches to English.

```
71              "heey, Roy
72              "these fellows run out of smokes."
73      j;      aa
74      d;      "any chance--"
75              ration day tomorrow, see
```

Following the markedness principle, the shift to a **marked** language variety at line 71 must be non-incidental to the depiction. If we can operationalize the notion of markedness (and to do so will clearly require a rather powerful inferential engine[xx]), this seems a promising approach. Still, what does the shift of languages mean, after all? It clearly does not necessarily mean that the narrator and his friend *actually* spoke to each other in GY and that D then used English with the boss, Roy (who was, in fact, a part Aboriginal GY speaker himself). This <u>**may**</u> have been what happened. However, the marked switch of varieties clearly fosters a further subtle transposition in the projected

context of utterance. D has already moved from the discursive moment, sitting under a Hopevale mango tree telling the story to a group of friends, to the narrated moment: the stockmen in their bush camp. (The time is also transposed: observe that "ration day" was "tomorrow" [line 75].) The register shift at line 71 amounts to a further change of footing: a "cast" in which the focus in transposed space moves from the Aboriginal friends talking *sotto voce* with each other to the more public confrontation between workers and bosses.

C&G's markedness principle can help us to see how interlocutors know what to transpose and what to calculate from the vantage point of the unmarked "here and now."[xxi] However, the subtleties of transposed spaces show that "demonstrations" are themselves complex semiotic processes which can exhibit all the familiar indexical properties.

Evidential devices may be more frequent in discourse than direct quotation, and their greater degree of grammaticalization may render them somewhat less available to "metapragmatic awareness" (Silverstein 1981) than explicit quotation, where the implied transposition is especially plain. On a localist view, evidential embellishment to speech can be seen as a kind of metaphorical movement. One distances oneself from an utterance by suggesting that it comes from another's mouth; or one embraces the vantage point of another, taking it as one's own.[xxii]

Evidentials can be morphologically implicit transposers. For example, the quotative clitic *la*, which we met in example (8), accompanies declarative sentences in Tzotzil to mark them as not directly attested by the speaker. The clitic is, for example, particularly appropriate to myths.[xxiii] The indexicality of

such a word is particularly obvious when it appears in an interrogative sentence, as in the following question about a volcanic eruption:

(24) Chichonal

```
a;   Mi li`oxuk `ox la k'alal iyal tane,
     Were you here when the ashes fell  la?
```

The quotative effect here must be understood to fall on the illocutionary force of the utterance, rather than on its propositional content. The quotative clitic must be understood, that is, to point implicitly to a questioner other than the speaker himself. "Were you here when the ashes fell? (X [that is, someone else] wants to know; or X asked me to ask you.)" The use of such evidential devices invites the interlocutor to construct a space onto which the question (and its original author) can be transposed.[xxiv] The resulting transposition formally resembles that signalled by direct quotation, but the more highly grammaticalized signalling device masks the lamination of spaces.

narration

Narrative in general canonically triggers transpositions. As a narrator sketches the actions of his protagonists, the ground upon which they act is a necessary backdrop to the narration. As in all transposition, however, there remains a tension between the narrated space and the narrating space: between the spot where a protagonist **was** and the spot where the narrator **is**. This is especially true when narrator and protagonist are one (or at least different phases of the same "self"), as in the following passage when L is telling J about his former life working on road gangs.

(25) LOL1

```
622    l;      pero mu xkuch ku`un li `abtele
               But I couldn't survive the work.
623            toj ch'aj lilok'
```

```
                 I turned out very lazy.
624     j;       k'u ma yu`un?
                 Why?
625     l;       chiti`olaj
                 I would get restless.
626              ta jna' tal li jnae
                 I would miss my home.
```

The tension between "here" and "there" in this passage is apparent in the deictically anchored directional *tal* in line 626. L has described the arduous work building roads and bridges in the Chiapas lowlands. He tells the story sitting in his highland home. At line 626 he presents the perspective of his former self suffering in the lowland heat. He uses an incompletive verbal aspect with the verb *ta jna`* 'I miss/would miss [my home],' suggesting that his perspective is transposed to that place and time. Simultaneously, he exhibits the currently embodied "here and now" with the directional *tal* 'towards here' suggesting that the home he missed is the home where he actually **is** at the moment of speaking.

Skilled narrators can also exploit the availability of different inter-transposable spaces, switching rapidly between them. Gesture is particularly potent in this regard. In (26), Petul is describing a rural *cantina* where the men used to stop to drink on the way back to Nabenchauk from San Cristóbal. He has set up a transposed space in which his gestures point at an imaginary fence and gate: the *tey* 'there' to which he points with the gesture shown as [8] in line 7, and the *ti`be* 'gate' which he represents with gesture [10] in line 8.

(26) Tzan-tzan
```
          ........8.............9...
   7      oy tey nakal krixchano un
          There were indeed people living there.
```

        8: Cupped hand palm down, arm still extended, taps once up and down

        out [N]. *{living there}*

9: Right hand points down quickly, then curls back in ->SW to position

in front of face *{people}*

```
        .......10
 8      ta ti` be
        beside the path.
```

10: Hand flat, vertical down and up motion

(gaze to hand). *{gate}*

Figure 11: "A gate by the path"

```
        11a           11b
 9      .   yech smuk'ul chk i na chk li`e
            (It) was the same size as this house here.
```

11a: Right hand crosses to SW, and gaze also,

11b: and points to kitchen house, before returning to rest. *{size}*

Swiftly, however, he brings his gesture back to the current "here and now," in order to point, at [11], line 9, directly at the kitchen house where he and his interlocutor are seated. "*That* house [whose gate I can point to in transposed narrative space] was the same size as *this house* [which I can point to here]."

Figure 12: "Same size as this house"

generic brackets

Some speakers utilize paralinguistic "quotation marks" (not unlike "writing" them in the air beside one's head while speaking) to mark a stretch of talk as what C&G call "non-serious." Such bracketing devices can be gestural, as when a skilled narrator like Jack Bambi shifts posture and gaze to act out the different roles in a performed/narrated conversation. The brackets in turn signal a transposition.

A much studied bracketing device is the shift between registers or entire speech genres. Not unlike the GY man's switch to English in (23) above, or the aping of funny accents, marked genres can conjure indexical spaces rather different from the ordinary "here and now." Hanks (1990:236ff) illustrates two varieties of Maya shamanic performance which "systematically produce complex frames in which transpositions and decenterings play a basic role." These transpositions are "governed by relatively specific conventions" and are "highly constrained." Indeed, Hanks's example suggests that the structure of transpositions can itself be a conventionalized cultural product.

Zinacantec curing, too, is characterized by specially marked speech, usually structured in parallel couplets (Haviland 1987a,1987b). As in the Yucatec case, Zinacantec shamans construct a partially transposed indexical surround for prayer. Their apparent addressees--referents of all second person forms--are saints and ancestral deities whose good auspices are sought for their healing virtues. The agents of verbs of curing and efficacy, in such prayers, are also invariably in the second person. Here are some isolated illustrative lines from a bonesetting prayer.

(27) 2nd person and vocative forms in curing prayer[xxv]
```
ch'ul nichimal me` // nichimal kaxayil
```
   holy flowery (=beautiful) mother, flowery lady
```
smajbenal avok //yikal ak'ob
```
   the beating of your foot, the wind of your hand (i.e., the disease)
```
komun-ch'ul k'opan // komun-ch'ul ti`an
```
   speak in common, talk in common (i.e., intercede)

The patient, face-to-face with the shaman, appears in prayer only as a shadowy third person, frequently encoded as the *possession* of a second-person deity, or with the remote definite article *ti*.

(28) 3rd person references to the patient

```
ti yut spate // ti yut xokone
```
the inside of his back, the inside of his side (i.e., his body)
```
(s)k'uxel // yavanel
```
his hurt, his pain (i.e., his affliction)
```
tz'ul ti yoke // tz'ul ti sk'obe
```
his foot slipped, his hand slipped (i.e., he was injured in an accident)

(29) References to patient mediated by 2nd person possession
```
tamanbil vinike // tatojbil vinike
```
your bought man, your paid-for man
```
alok'ol // ajelol
```
your copy, your replacement (i.e., made in your image)
```
tavalab // lanich'nab
```
your child, your offspring

The shaman herself appears as first person, but normally in non-active roles (as beneficiary or recipient).

(30) 1st person references to shaman
```
chayambekon // chayochbekon
```
you will ease for me, you will loosen for me (i.e., the disease)
```
k'elbekon // ilbekon
```
watch for me, see for me
```
xach'ul-tambekon // (xa)lekil-tambekon
```
lift for me sacredly, lift for me well

The arrangement in which a passive 1st person shaman asks for the intercession of powerful 2nd person deities, for the benefit of a backgrounded 3rd-person patient, is thus a standard, culturally pre-fabricated indexical space, for Hanks a "p-frame." Such a space is invoked, automatically as it were, by the opening lines of a curing prayer, uttered in the appropriate voice, and structured in the rhythmic parallel constructions of ritual Tzotzil. Similarly, as in the following extract from the same bonesetter's prayer, the reverse transposition can be instantly effected when the curer switches out of parallel speech. Ordinary pronominal values are, temporarily, restored by the frame-break.

(31) bonesetting prayer
```
385 tach'ul pom xa tal // tach'ul ch'ail xa tal kajval
```
may your holy incense come, may your holy smoke come, my Lord ("you"=ancestors)
```
    ((blows  incense))
```

```
     ((switches from prayer voice to normal speech))
388 nupo ta ak'ob
     Put your hands together  ("you"=patient)
     ((pours liquor into patient's hands))
389 ak'o me ta ajole
     Put it on your head.
     ((Then returns to prayer))
```

Here a generic bracketing forces a switch between transposed spaces. The curer returns briefly to the ordinary "here and now" to give direct instructions to the patient.
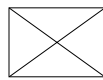

Figure 13: Tranposition from prayer

The discursive progress of an interaction creates its own kind of activity space: What is this event all about? What are we doing ("here and now")? What **is** there to do? Generic features of a register can project a range of such activity spaces. Thus, in Tzotzil, one can move from prayer to instruction, or from formal denunciation to mere complaint, simply by switching from parallel constructions to ordinary, non-parallel speech. Note that such shifts can transpose space, time, personae, and activity, perhaps all at once.

The signalling devices that function as what I have called transpositional triggers may frequently have the implicit, unmarked character of what Gumperz (1982) has called "contextualization cues." Even to begin to calculate referents for the plainest of deictics, interlocutors must participate in immanent wholesale patterns of local knowledge about how reference is to be achieved. The catalogue I have offered lists as triggers only the most codified, formally marked sorts of transposition, making the process seem more mechanical than it doubtless is.

Transitions from one space to another may proceed in tiny steps. Similarly, the "here and now" does not stand still, so that as a sequence of utterances (or even a single utterance) unfolds, the contextual facts may change. Len Talmy has remarked[xxvi] that "spaces" can be in motion. "Real" motion presents the canonical case: a train is "whizzing past." In such circumstances, a transposition might simply **freeze** the frame, to portray motion as stasis. Indeed, linguistic coding itself produces certain "moving" effects by casting non-linear spaces onto the linear stream of speech. Gesture and other communicative modalities thus present especially notable alternative possibilities for signalling transposition, a topic that cannot be pursued in the present essay.

calibrating and centering transposed spaces

As Silverstein's formulation, quoted earlier, points out, a single indexical sign projects only an atomic, schematic context; only interlocutors' interpretive (in Silverstein's terms, *metapragmatic*) skills expand these origos to full spaces, or coordinate/laminate spaces projected by a collection of distinct signs, creating coherent sequences. Yet, if speakers routinely project and transpose the indexical grounds upon which their talk stands, there must be means by which interlocutors flesh out spaces, find coherence between them, and locate indexical centers within them. My two final examples illustrate the problem and indicate where further attention is required.

First, let me return to the GY orientation system. I have claimed that physical spaces as projected in GY are typically absolutely oriented, anchored by the compass points. The default assumption is that North is always North, and that what can vary is where one is centered. We saw above in (10) that a GY narrator could transpose between the narrating space and the narrated space,

keeping his directions straight all the while. In the following fragment from later in the same narrative, Jack establishes a transposed space, centered on another man who watched the two men who had swum to shore as they walked south along the beach. First, at line 156, he shows with his gesture that the storm clouds moved off to the West, an orientation that is potentially equivocal as to its center. (That is, the storm presumably blew westwards both from the points of view of the beach, and of the mission where Jack is now telling the story.)

(32) Boat2[xxvii]

```
            ..........!........
156         madhi    past-manaadhi
            rain+ABS past-become-PAST
            The rain had passed over.
```

R: palm out, pulled towards E then pushed out W, slight drop.

Figure 14: "The rain passed"

```
            ...!...............................
157         and yuwalin    nguumbaarr gudhiirra nhaadhi   gadaariga
                beach-LOC shadow+ABS two+ABS    see-PAST come+RED-PAST-SUB
            and (he) could see two shadows coming along the beach.
```

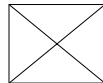R: pointing with straight arm W, moving S to rapid drop to lap.

Figure 15: "He saw two shadows coming along the beach."

In line 157, he describes the shadows of the two men seen from afar as they walked along the beach. The vector of their motion is again shown by gesture: they walked North to South. The gesture would be appropriate precisely to the new protagonist, Woibo, watching them progress down the beach *from where he stood at the time*. That is, combining the gestures with what they know of the (past) geography of the area, Jack's audience can fix the act of seeing squarely on Woibo, who goes on in "quoted" thoughts at line 160, to speculate on what had happened.

```
             1:.......  2:.............!.............
158     nyulu dhawuunh  Woibongun  yarrba   nhaadhi
        3sNOM friend+ABS Woibo-ERG  this way  see-PAST
```
He, (my) friend, Old Woibo saw that.

                     1: R: up in "baby O," points W, then N and up.

                     2: R: curls back to SE point, with gaze and head nod, ends in E over L

                     shoulder, 2nd nod as hand retracts to lap.

```
159     nyulu-
        3sNOM
```
he-

```
160     nyuluugu    gurray   bula    nhayun    nguba   guwa-dyandyi
        3sgNOM-EMPH say-PAST 3duNOM  that+ABS  perhaps sink+PAST
```
He thought to himself, "perhaps those two sank the boat."

There remains a puzzle, namely Jack's pointing gesture over his left shoulder to the southeast as he mentions Woibo in line 158 (see Figure 16).

Figure 16: "My friend Woibo"

If my interpretation of this gesture is right, it exemplifies both the potential rapidity of transpositions, and the difficulty posed by their recoverability: the fact that interlocutors can keep them straight. For here, apparently, Jack is pointing over his shoulder to a place (the Hopevale store) where the protagonist's eldest son (also called Woibo) works and is normally to be seen. That is, with his gestures, this narrator has leapt from a secondary transposed narrated space back to the immediate "here and now" (although schematized: it is not certain that the son is *actually* visible at this moment). His pointing indexes both spaces in quick succession. How to calibrate different projected spaces, how interlocutors can decide when to expand, laminate, or simply switch between transposed "spaces", are questions for further investigation.

Now let me return to the riddle which I posed at the beginning of this essay. Sometimes interlocutors find themselves interacting in abnormal conditions; for example, they may not be face-to-face, or they may have to interact at great distance, back-to-back (de León 1990), or in a variety of other circumstances that Hanks characterizes as asymmetric. Managing transpositions under such circumstances involves crucial indexical dilemmas that admit of both conventional and *ad hoc* solutions. In example (7) I invented a scenario in which you talk to a Zinacantec by telephone. In example (33), we see a complex series of transpositions that illustrate one attested Zinacantec solution to this telephone-call problem.

Here there are three conversants: M, a man who has run away from the village of Nabenchauk with crushing debts; C, a young unmarried man also from Nabenchauk who accompanied M for the adventure of it; and J, M's compadre. The conversation takes place in Mexico City, and M is recounting a telephone conversation with his daughter Josefa. He spoke to her from Mexico City, although she was in the village. The dance of directionals and auxiliaries fixes M's perspective, in this reported conversation, firmly "at home" in Nabenchauk.

(33) Chepa
```
 1  m;   ali ijk'opon li Chepa une
         Uh, I spoke with Josefa.
 2  j;   aa
         Oh.
          [
 3  m;    k`u xa`elan xiyut lek ya`el xkut un
          "How are you?" she said to me. "Alright, it seems," I told her.
 4  j;   mjm
         Mmm hmm.
          [
 5  m;    aa xi
          "Oh," she said.
```

At line [6], M's daughter asks, centering herself deictically on Nabenchauk,

"When are you **coming**?" M replies, evidently transposing his deictic center to

their shared *socio-centric* origo, Nabenchauk. He also employs the anchored verb

tal 'set out to *here*.'

```
  6       k'u to ora chatal xi ch'abal to bu chital xkut=
          "When will you be coming?" she said.  "I'm not coming yet," I told her.
  7  j;   =ch'abal to
           Not yet-
  8  c;   mu xital
          "I'm not coming."
                [
  9  m;      k'usi tal jpas ch'abal xkut
             "What will I come to do?  Nothing," I said.
```

At line [8] notice that C, M's companion, echoes these reported words. C's *mu*

xital 'I am not coming' represents (at least) a double transposition, since C first

must transpose himself into M's shoes, as it were, and thereafter into the

transposed perspective of the village (to which M can 'come').[xxviii] M ends his

conversation with the rhetorical question of a man in exile, wishing he were

home (and indexically transposing himself there): "What will I come [home to

Nabenchauk] to do?" And, remembering his debts, he provides his own forlorn

answer: "[I have] nothing [to come home to]."
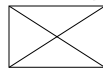
Figure 17: "What will I come to do?"

transpositions and relativity

Mexico city apartment dwellers, Zinacantec cornfarmers, and Guugu

Yimidhirr speaking storytellers are not like Wittgenstein's lion. They **can** speak,

and we **can** (more or less) understand them. I suggest that the phenomenon of

transposition can direct us to the proper level of analysis to locate discussions of

linguistic relativity and universality.

Suppose that we take as simplest model of transposition a single quotation, as in line [6] of the last example, (33). M utters the words *k'u to ora chatal xi?* '"When will you be coming?" she said.' There are several familiar deictic elements in the morphology here. Ignoring tense/aspect and a certain perspective issue built into the clitic *to* 'still,' there are at least the 2nd person pronominal subject of the verb *ch-a-tal*, and the deictically anchored directionality of the verb stem itself. Both of these deictics project a skeletal context. The 2nd person prefix wants an "addressee" as referent; the verb wants a "here" as a goal. There is also the 3rd person subject of the verb *xi* '[he/she/they] said,' which requires a non-speaker non-addressee as referent. But as M utters the words, his addressees are C and J, and his "here" is Mexico City. The values of the deictics must, therefore, be recomputed on the basis of an indexical surround different from that of the immediate "here and now." The "she" becomes Josefa, M's daughter; the addressee becomes M himself, in the transposed space in which Josefa speaks to him. Finally, "here," in an understandably plaintive socio-centric alignment, becomes the village of Nabenchauk from which M has fled with no prospects of returning. The formal fact of deictic projection, a commonplace of every human language, is here given a local, Zinacantec substance. The interpretive problems posed by the universal formal dilemma of projection under transposition are solved in a local, perhaps extemporaneous, maximally situated manner.

Many deictic elements in language require referents, whose values must be computed in (projected onto) a transposed space. Other, non-referential indexes may require or impose upon their projected spaces different sorts of configurations and elements, some of which may likewise require projection onto

a transposed space. Further non-indexical signs may denote, more or less explicitly, parallel configurations which must also be projected across spaces of relations. My examples have first been intended to illustrate the range of projectable (and in principle transposable) elements.

It would be comforting to suppose that, to test linguistic relativity, we need only catalogue those transposable elements explicitly coded in linguistic form. Clearly these are not only the most tractable objects of study but also the most likely vehicles for allegedly habitual or conventionalized patterns of communicative action. Discussions of linguistic relativity often start (and, too often, also end) with catalogues of encoded distinctions that vary from one language to another. Mere categorial variation, at the level of projectables, is probably neither significant (for human cognition) nor interesting (for social or linguistic theory). However, insofar as they demarcate the boundaries of the first term in the traditional language/thought/reality triad, linguistically encoded projectables, and the accompanying details of language form, provide an unavoidable, if not irresistable, starting point.

Indexicals in language are central to understanding the triad as well. In conference discussion, Stephen Levinson coined the slogan: "indexicality is the chink [in the armor of referential language, presumably--JBH] through which context flows into meaning." One could also reverse the priority, finding in the linguistically facilitated abstraction of reference and predication the characteristic leakage (or seepage) out of otherwise insistently situated communicative action. In either case, "context" is reality, and "meaning" is, minimally, the denotative substance regimented by linguistic form, for purposes of the triad.

Insofar as transpositional cues (or "triggers") are built into language itself, the linguistic code partly predetermines the available transposable spaces. The availability of respectful "Brother-in-law" words, for example, pulls the realm of social relations it indexes into a position ever hovering in the background of Guugu Yimidhirr interaction. Transposition is like demonstration, however. Clark and Gerrig argue that since "demonstrations can depict anything recognizable--whether linguistic or not--quotations [which, as has been argued, involve canonical transpositions--JBH] should be able to too" (1990:781). Thus, one assumes that transposed spaces can contain anything ordinary (i.e., immediate, untransposed) spaces can. Moreover, even these "immediate" or untransposed spaces are themselves never "given" but always projected.[xxix] One good

reason for detailed scrutiny of situated examples is to find evidence for the transpositions implied in talk, and to try to discover those elements--"whether linguistic or not"--which signal them.

Once we have catalogued the potentially exotic inventory of projectable relations, transposition gives us a special purchase on specific, perhaps highly local and variable, linguistic practices. For it is precisely when indexical signs project a space that differs from the immediate, unmarked, and taken-for-granted contextual surround--when they require transposition--that the transposed features spring to attention. A static scene may seem easier to perceive than a moving picture. Nonetheless, it is a commonplace of nature that something still is easier to <u>overlook</u> than something in motion. So it is with the entities projected by linguistic forms. They may remain invisible because they are routinely presupposed precisely until, through transposition, they must be re-projected, adjusted, or calculated anew. Transposition thus illustrates a characteristic tension between what might be called the necessary and the variable. The universal fact of transposition, a logical consequence of the universal employment in human language of certain semiotic modalities, itself provides a particularly acute lens with which to focus on substantive differences, between communicative traditions, in the universe of projectable entities and the relations between them: differences in "the world" as it can be talked about.

The presumed cognitive operations involved in transposition, in turn, bring us unavoidably to the missing term of the triad: thought. Keeping track of storytellers' referents and pointing fingers alike presumably requires certain mental gymnastics. Indeed, the dizzying complexities of the conversational examples cited point directly to the need for a theory of conversational reasoning, with an inferential engine powerful enough to show how transpositions are, at least sometimes, successfully brought off between interlocutors.[xxx] Projected "spaces" are a necessary mediating link between static and processual modes of thought, since one cannot get from utterance to interpretation except via such schematic representations; the universal process of transposition brings a complicating dynamic into the process. Being located in interaction, transpositions are also prime exemplars of a further Levinson slogan: that interaction is, "in effect, displayed cognition." (Indeed, the gestures of a gifted storyteller like Jack Bambi literally display his presumed cognitive representations on interactively defined physical space.)

It remains to be explore, then, what limiting mechanisms there may be on the projection and transposition of the indexical spaces we call "context." Such limits may be both substantive and formal.[xxxi] The default orientational anchoring of **any** projected space in GY talk is a possible example of the former. The requirement that transpositions must be interactively recoverable--by means that still remain largely a mystery to me--is an example of the latter.
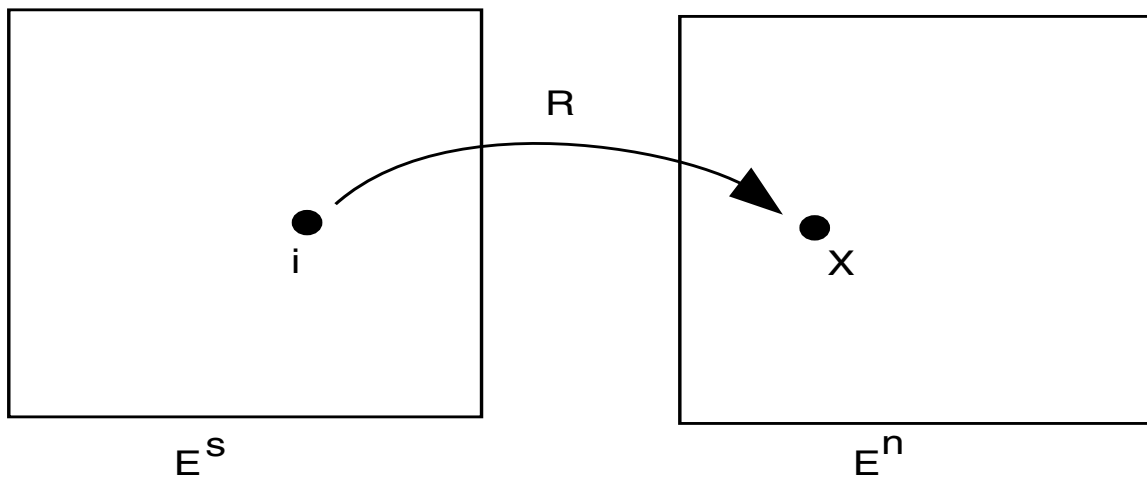
R is the relational feature of the shifter.
i is the indexical ground (in the current
        speech event).
X is the referential object (in the narrated
        event frame).
(After Hanks 1990:204.)

Figure 18: "Relational structure of deixis as a complex frame" (from Hanks 1990:204)
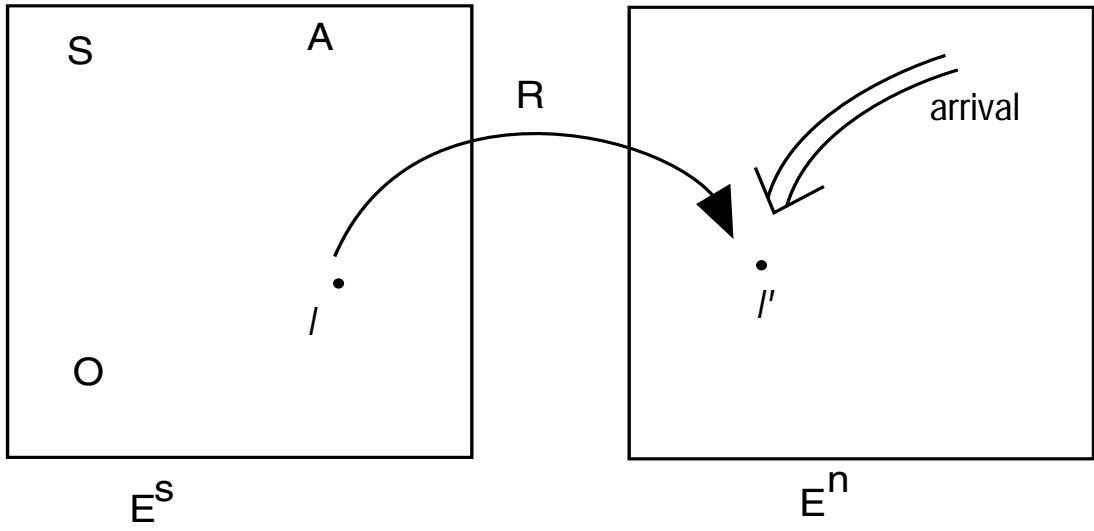
Figure 19: *YUL* "arrive here" as a projected index.
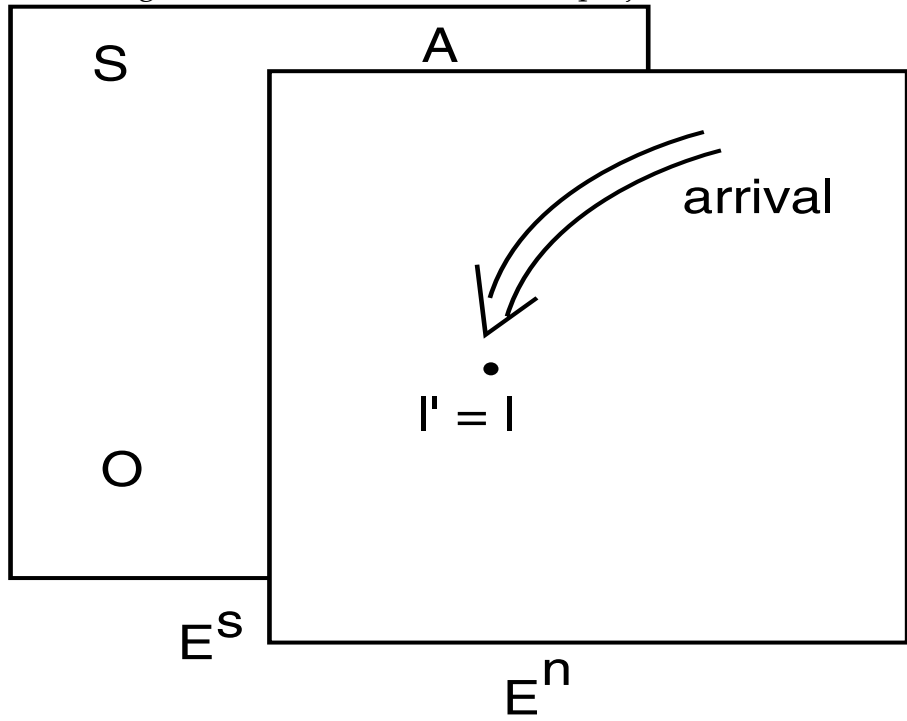
Figure 20: *YUL* "arrive here" as lamination.
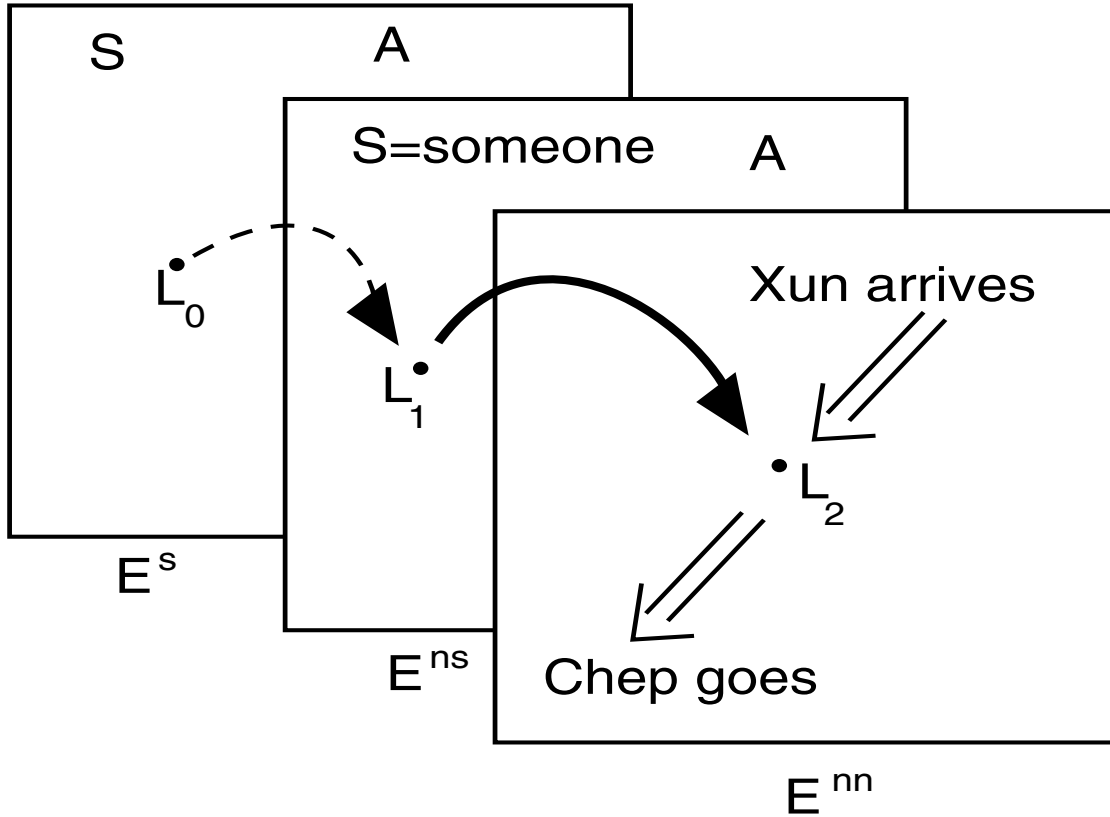
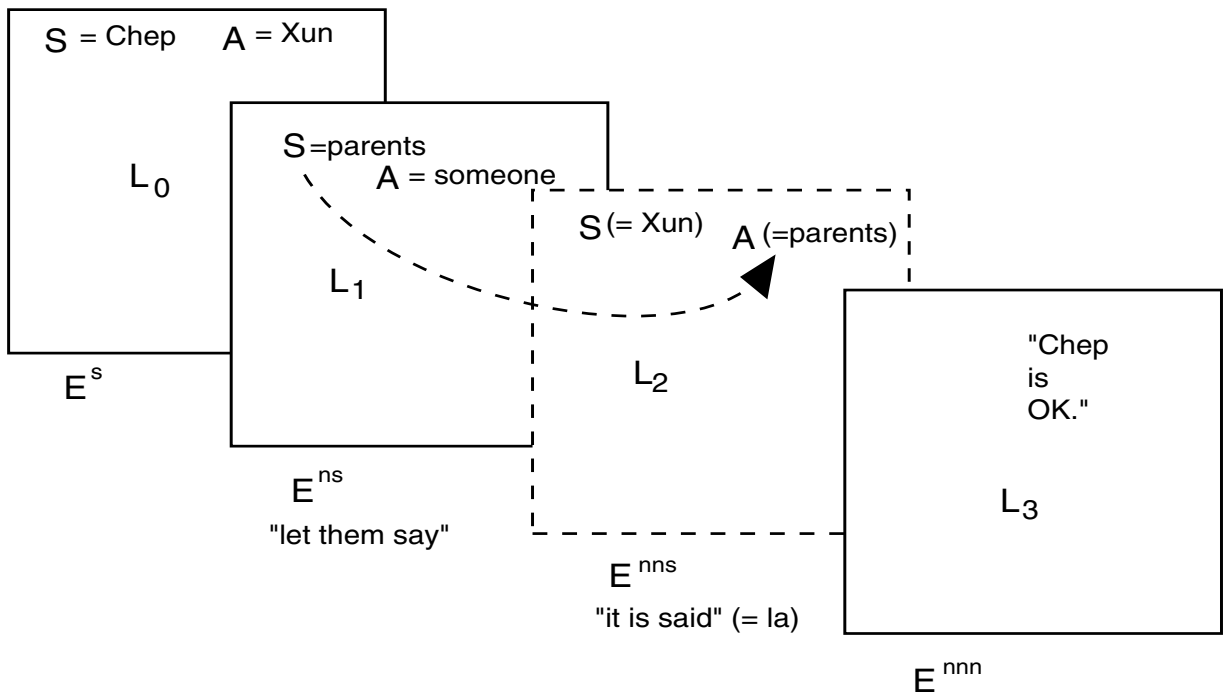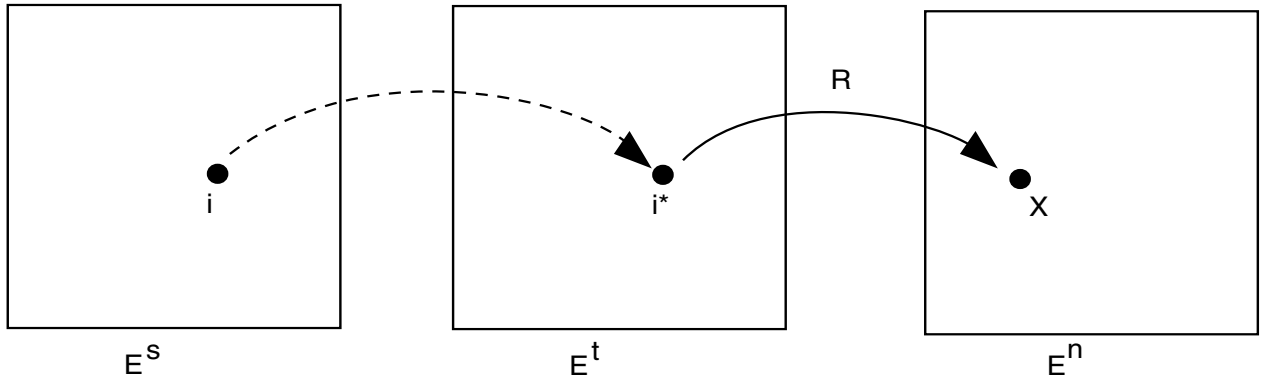Figure 21: "Xun has arrived; Chep has gone."

Figure 22: Let them say: "Chep is (reportedly) alright."

Transposition of the indexical ground. The referent
(X) is identified relative to a new indexical ground (i*).
(After Hanks 1990:208.)

Figure 23: "Transposition of the indexical ground." (From Hanks(1990:208).

N

Figure 24: "Look north"
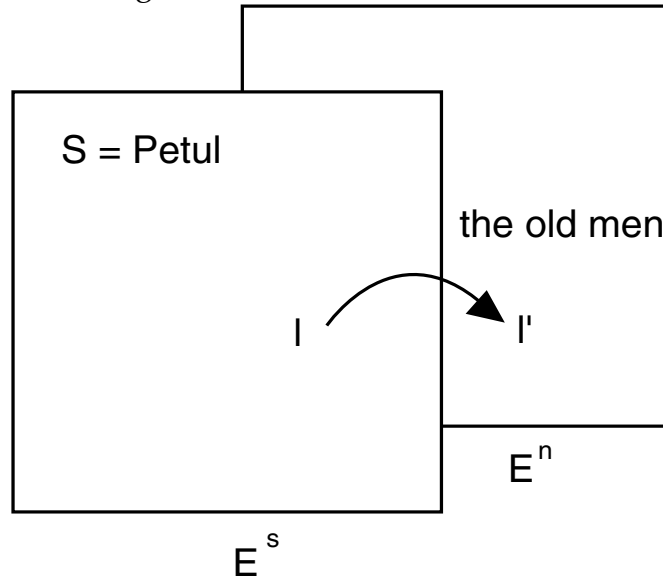
Figure 25: The boat on the horizon.

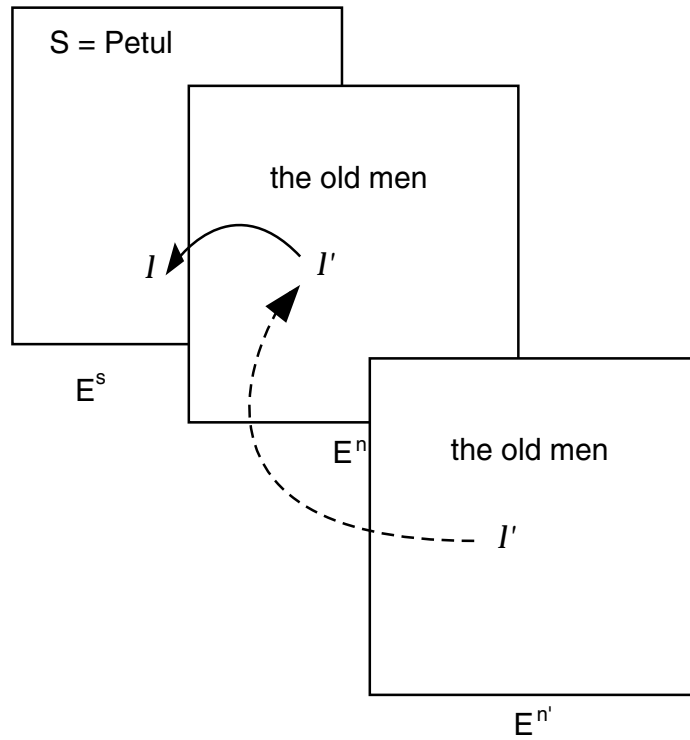Figure 26: P transposes himself to his youth.
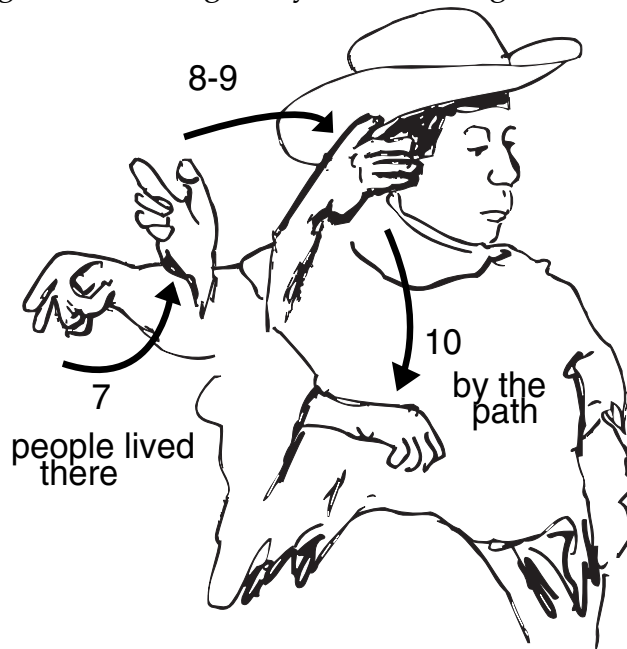
Figure 27: P brings his youthful thoughts closer.

Figure 28: "A gate by the path"

This house
right here.

Figure 29: "Same size as this house"

"everyday" speech

S

A

patient

shaman

O

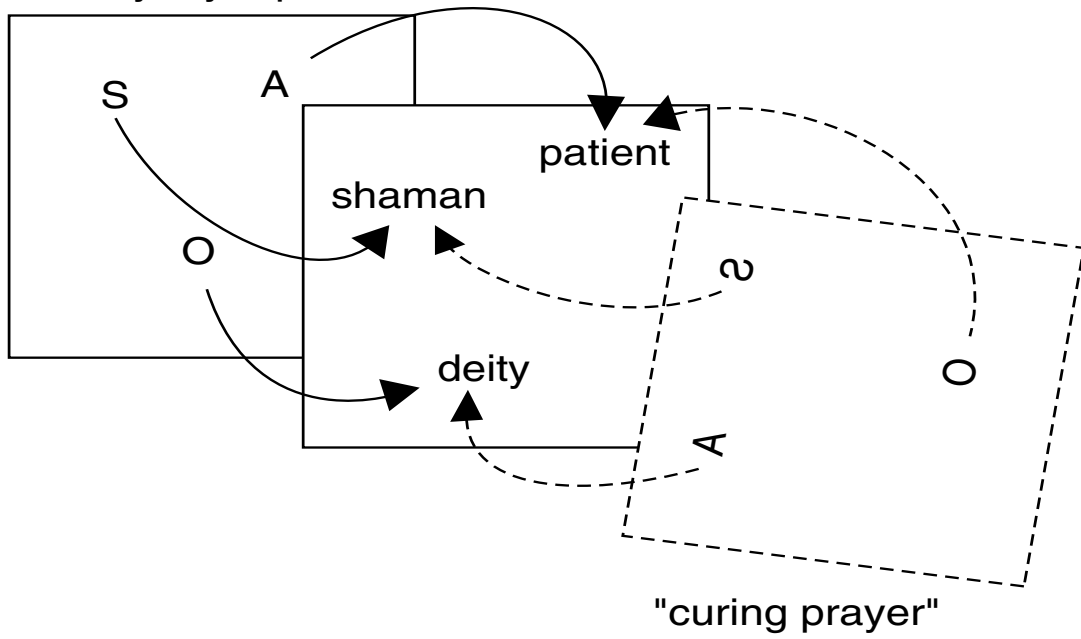deity

S

O

A

"curing prayer"

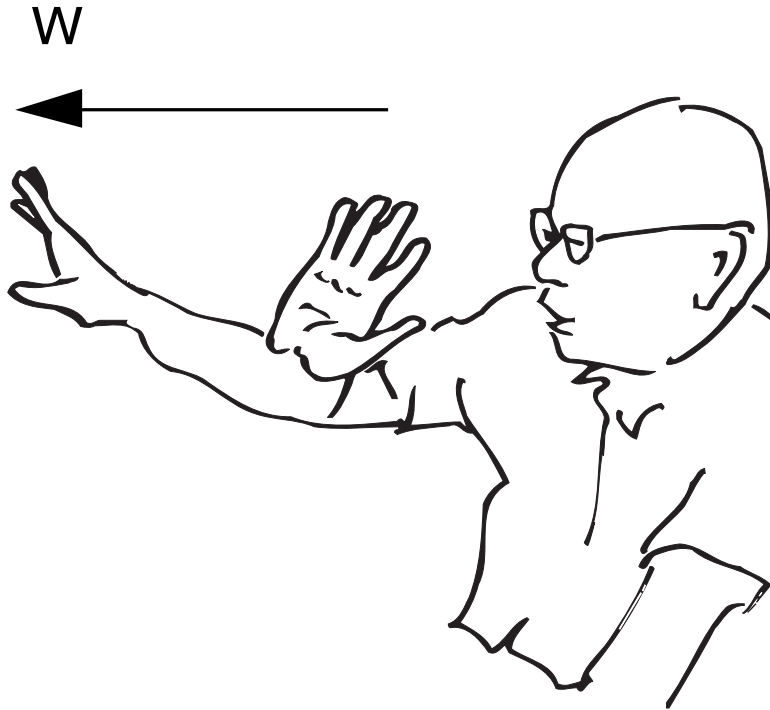Figure 30: Tranposition from prayer

W

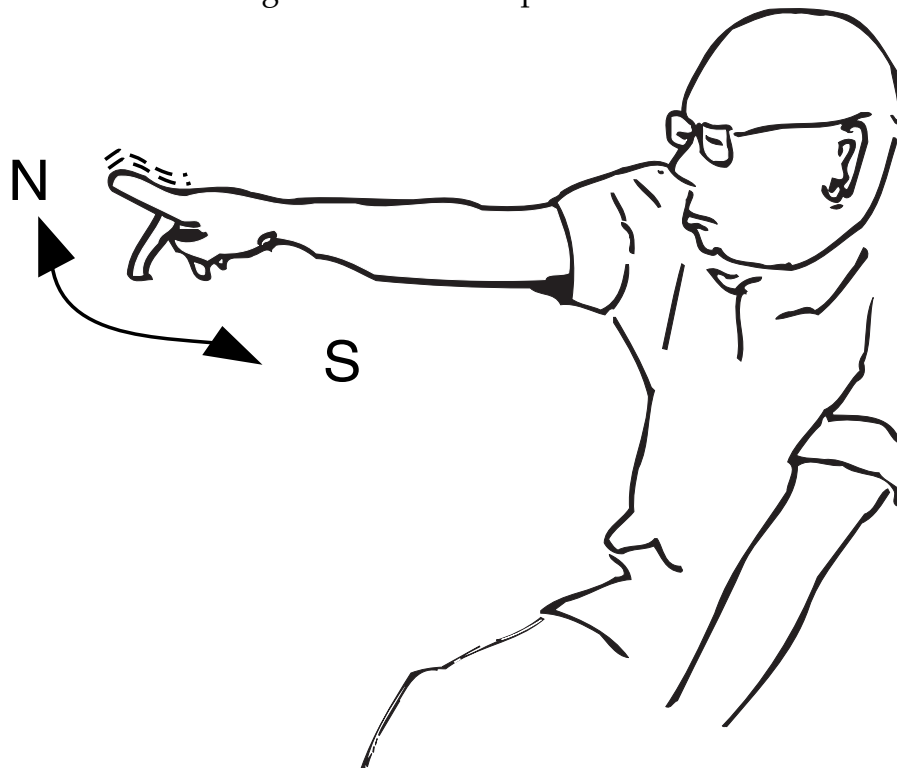Figure 31: "The rain passed"

N

S

Figure 32: "He saw two shadows coming along the beach."

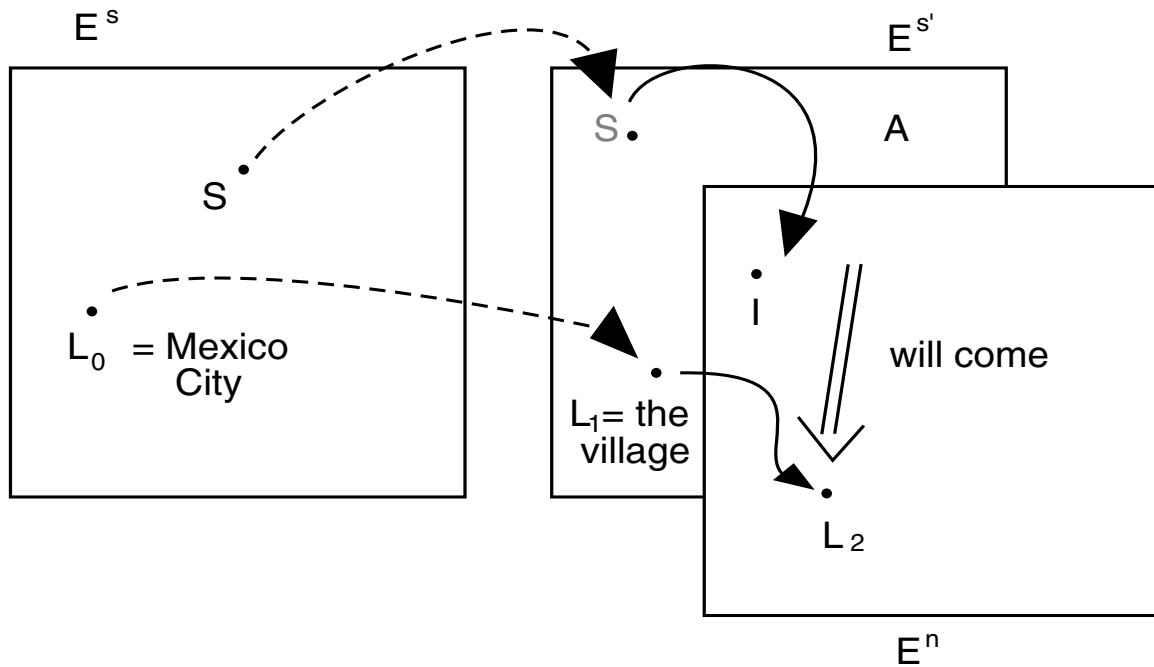Figure 33: "My friend Woibo"

Figure 34: "What will I come to do?"

Bakhtin, M.M., 1986.

    Speech genres and other late essays. Austin: Univ. of Texas Press.

Barwise, Jon and John Perry, 1983.

    Situations and Attitudes. Cambridge, Mass.: MIT Press.

Bauman, R., 1986.

    Story, performance and event: Contextual studies of oral narrative. Cambridge: Cambridge Univ. Press.

Berk-Seligson, S. , 1983.

    "Sources of variation in Spanish verb construction usage: the active, the dative, and the reflexive passive. ." *J. of Pragmatics*, 7(2) :145-168.

Bühler, Karl, [1934] 1982.

    Sprachtheorie: Die Darstellungsfunktion der Sprache. Jena: Fischer. Reprinted 1982, Stuttgart: Gustav Fischer Verlag.

Goodwin, Charles, 1981.

    Conversational Organization: Interaction Between Speakers and Hearers. New York: Academic Press.

Chafe, Wallace and Johanna Nichols (eds.), 1986.

    Evidentiality: the linguistic coding of epistemology . Norwood, NJ: Ablex .

Clark, Herbert H. and Richard J. Gerrig, 1990.

    "Quotations as demonstrations." *Language*, 66(4):764-805.

Clark, H.H. and C.R. Marshall, 1981.

    "Definite reference and mutual knowledge." In A.K. Joshi, B. Webber, and I. A. Sag (eds.), *Elements of discourse understanding*. Cambridge Univ. Press.

de León, Lourdes, 1990.

    "Space games in Tzotzil." Ms., Max-Planck-Gesellschaft Projektgruppe for Kognitive Anthropologie.

Dixon, R.M.W., 1971.

    "A method of semantic description." In Danny D. Steinberg and Leon A. Jakobovits (eds.), *Semantics*. 436-471. Cambridge: Cambridge University Press.

Evans, Nick, forthcoming.

    Kayardild grammar. Ms.

Fauconnier, G. , 1984.

    Espaces menteaux: aspects de la construction du sens dans les langues naturelles. Paris: Les Editions de Minuit.

Fillmore, C., 1975.

    Santa Cruz Lectures on Deixis . " ." Bloomington: Indiana Univ. Linguistics Club.

Fillmore, C., 1982.

    "Towards a descriptive framework for spatial deixis." In R. Jarvella and W. Klein (eds.), *Speech, Place, and Action: Studies in Deixis and Related Topics*. 31-59. New York: John Wiley and Sons.

Goffman, Erving, 1979.

   "Footing." *Semiotica*, 25(1/2):1-29.

Gumperz, John J., 1982.

   Discourse Strategies. Cambridge: Cabridge Univ. Press.

Hanks, William F., 1990.

   Referential Practice. Chicago: University of Chicago Press.

Haviland, John B., 1982.

   "Kin and country at Wakooka outstation: an exercise in rich
   interpretation." *International Journal of the Sociology of Language*, 36:53-70.

Haviland, John B., 1986.

   "Complex referential gestures." Ms. Center for Advanced Study in the
   Behavioral Sciences, Palo Alto, Ca.

Haviland, John B., 1987c.

   "Lenguaje ritual sin ritual." Paper presented to I Coloquio Swadesh, IIA-
   UNAM, Mexico City, Oct. 1987.

Haviland, John B., 1987.

   "Tzotzil ritual language without ritual." Austin Discourse Conference, Ms.

Haviland, John B., 1989.

    "Complex referential gestures revisited: the 'iconicity' of pointing in Guugu Yimidhirr." Paper and videotape presented at the University of Chicago, Oct. 1989, and at the invited session, "The interactive organization of talk: analyses of video tape from five cultures," organized by Charles Goodwin and Adam Kendon, annual meetings of the American Anthropological Association, Washington D.C., Nov. 1989. .

Haviland, John B., 1991c.

    "Xi chbat ta lok'eb k'ak'al "It goes towards the sunrise": Sculpting Space with the Body." Ms. Cognitive Anthropology Research Group, MPI for Psycholinguistics, Nijmegen, October, 1991.

Haviland, John B., 1991.

    ""That was the last time I seen them, and no more": voices through time in Australian Aboriginal autobiography." *American Ethnologist*, 18(2):331-361.

Haviland, John B., 1992.

    "Anchoring, iconicity, and orientation in Guugu Yimidhirr pointing gestures." Working paper No. 8, Cognitive Anthropology Research Group, Max-Planck Institute for Psycholinguistics. Nijmegen, The Netherlands.

Haviland, J. B., and Lourdes de Leon, 1988.

""Me tengo que tragar mis broncas (I have to swallow my problems)." ." Paper presented to the invited session "Restructuring interactive narrative: tellings and retellings in a cross-cultural perspective," organized by Alessandro Duranti and Charles Goodwin, Annual Meetings of the Am. Anth. Association, Phoenix, November 19, 1988. .

Irvine, Judith, 1987.

"The implicated dialog: structures of participation in discourse." Paper presented to the meetings of the Amer. Anth. Assoc. Chicago, Nov. 1987.

Jakobson, Roman, 1957.

"Shifters, verbal categories, and the Russian verb." Mimeo. Russian Language Project, Dept. of Slavic Languages and Literatures, Harvard University.

Jakobson, R., 1971 [1957].

"Shifters, verbal categories, and the Russian verb." In *Selected writings of Roman Jakobson*. Vol. 2:130-147. The Hague: Mouton.

Jesperson, O., [1924] 1965.

The philosophy of grammar. New York: W.W. Norton.

Kendon, Adam, 1972.

"Some relationships between body motion and speech." In Seigman, A.W. and Pope, B. (eds.), *Studies in Dyadic Communication*. Elmsford, NY: Pergamon Press.

Kendon, Adam, 1980a.

     "Gesticulation and speech: two aspects of the process of utterance." In Mary Ritchie Key (ed.), *Relationship between verbal and nonverbal communication*. 207-227. The Hague: Mouton.

Kendon, Adam, 1981.

     "Geography of gesture." *Semiotica*, 37:129-163.

Kernighan, Brian W. and Dennis M. Ritchie, 1988.

     The C Programming Language, Second Edition. Englewood Cliffs, NJ: Prentice Hall.

Kuno, Susumo, 1987.

     Functional syntax: anaphora, discourse and empathy. Chicago: University of Chicago Press.

Kuroda, S-Y., 1973.

     "Where epistemology, style, and grammar meet: a case study from Japanese." In S. Anderson and Paul Kiparsky (eds.), *A Festschrift for Morris Halle*. 377-391. New York: Holt, Rinehart and Winston.

Langacker, R., 1987.

Langacker, R., 1990.

     Foundations of cognitive grammar, Vol. 1.

Laughlin, Robert M., 1975.

     The Great Tzotzil Dictionary of San Lorenzo Zinacantan. Washington, D.C.: Smithsonian Institution.

Laughlin, Robert M., 1977.

    Of Cabbages and Kings: Tales from Zinacantan. Washington, D.C.: Smithsonian Institution.

Levinson, Stephen, 1988.

    "Putting linguistics on a proper footing: explorations in Goffman's concepts of participation." In Paul Drew and Anthrony Wootton (eds.), *Erving Goffman: Exploring the Interaction Order*. Cambridge University Press.

Lucy, J. (ed.), 1992.

    Reflexive Language: reported Speech and Metapragmatics. Cambridge: Cambridge Univ. Press .

Lyons, John, 1977.

    Semantics. London: Cambridge University Press.

McNeill, David, 1985.

    "So you think gestures are nonverbal?" *Psychology Review*, 92(3):350-371.

McNeill, David, forthcoming.

    Hand and Mind: What gestures reveal about thought. University of Chicago Press.

Schegloff, Emmanuel, 1984.

    "On some gestures' relation to talk." In J.M. Atkinson and J. Heritage (eds.), *Structures of Social Action: Studies in Conversation Analysis*. 266-296. Cambridge: Cambridge University Press.

Silverstein, Michael, 1976.

>   "Shifters, linguistic categories, and cultural description." In Basso, K. and Selby, H. (eds.), *Meaning in Anthropology*. Albuquerque: Univ. of New Mexico Press.

Silverstein, Michael, 1981.

>   "The limits of awareness." *Working Papers in Linguistics*, No. 84:Austin: Southwestern Educational Laboratory.

Silverstein, Michael, 1992.

>   "Metapragmatic discourse and metapragmatic function." In John A. Lucy (ed.), *Reflexive Language*. 33-58. Cambridge University Press.

Sperber, Dan, and Dierdre Wilson, 1982.

>   "Mutual knowledge and relevance in theories of comprehension." In Smith, N. (ed.), *Mutual knowledge*. 61-131. London: Academic Press.

Sperber, Dan and Dierdre Wilson, 1986.

>   *Relevance*. Cambridge, Mass.: Harvard Univ. Press.

Talmy, L., 1978.

>   "Figure and ground in complex sentences." In J. Greenberg, et al., eds., *Universals of Human Language*. 4:625-54. Stanford: Stanford University Press.

Talmy, Leonard, 1983.

>   "How language structures space." In H. Pick, L. Acredolo (eds.), *Spatial orientation: theory, research, and application*. New York: Plenum Press.

Talmy, Leonard, 1985.

> "Lexicalization patterns: semantic structure in lexical forms." In Timothy Shopen, *Language typology and syntactic description*. 3:London: Cambridge University Press.

Voloshinov, V.N., 1986.

> *Marxism and the philosophy of language*. In Transl. L Matejka, I.R. Titinuk, . Cambridge, Mass.: Harvard Univ. Press.

---

[i] The original version of this paper was prepared for the Wenner-Gren conference "Rethinking Linguistic Relativity," organized by John Gumperz and Stephen Levinson, May 3-11, 1991, Ocho Rios, Jamaica. I am indebted to Lourdes de León for her patient comments on the first draft, and to discussion by other participants, anonymous comments, and especially written comments by Gumperz and Levinson, that have been shamelessly exploited for this revision.

[ii] Examples marked with asterisks are invented; others are transcribed from conversational recordings.

[iii] I write Tzotzil, a Mayan language of Mexico, in a Spanish-based practical orthography in use in Chiapas. The following abbreviations occur in the morpheme-by-morpheme glosses of Tzotzil examples:

1A=first person absolutive affix

2A=second person absoultiuve affix

3A=third person absolutive affix (realized as zero).

CP=completive aspect

QUOT=quotative evidential clitic.

[iv] In Tzotzil morpheme-by-morpheme glosses the following abbreviations appear:

1A   1st person Absolutive affix

2A   2nd person Absolutive affix

3A   3rd person Absolutive affix

CP   completive aspect

PREP   general preposition

QUOT   quotative evidential clitic

[v] Herb Clark, in recent work on quotation, has used the term "layering"--which I borrow here--to describe something comparable to Hanks's complex frames.

[vi] During conference discussion, John Lucy criticized the metaphor of "space" as inviting confusion and suggesting equivocation. Does the metaphor suggest that any "space" has a full set of coordinates, or a continuous extent? "Real" physical space is, of course, a leading example of what can be projected and then transposed; the deictic origo, as normally (minimally) populated, is only a special case of such projection. Physical space is often, then, taken as a prototype for many, if not all, linguistically coded relations. See Lyons (1977), Langacker (1990), Fauconnier (1984).

[vii] This observation is due to comments by John Lucy.

viii People can interpret wrongly, be thought to have transposed when they haven't meant to, and so forth. All of this, as Herb Clark (this volume and elesewhere) is at pains to point out, is collaborative from the start.

ix Ochs (this volume) suggests that phenomena like those I treat as transpositions are examples of constitutive activities, which necessarily display issues of membership: who's who to whom within a communicative tradition.

x "Location" is understood as some spatio-temporal extent.

xi I am indebted to Ed Robinson for this observation.

xii In fact, there are nearly no other devices available for specifying location or direction: none of the familiar sorts of ego- or object-relative locatives like *left* and *right* or even *front* and *back*.

xiii The timing of gestures, including stroke phases (shown as !) and their full extent (shown with ...), is represented above each verbal transcript line. Written descriptions that follow such lines, sometimes keyed to numbered points on the gesture line itself.

Many gestures are characterized by a putative English gloss (shown in italics enclosed within curly brackets following a verbal description of the gestural form). The compass directions associated with the gestures are sometimes also shown. The following abbreviations occur in gestural descriptions.

"baby O"=a hand shape resembling the ASL finger-spelling shape of the same name, composed of a "ring" made by thumb and index finger, with the remaining fingers folded into the poalm of the hand.

E= east

L= left hand

N= north

R= right hand

S= south

SW= southwest

W= west

xiv The design of the experiment is due to Lourdes de León. See de León 1990.

xv As Melissa Bowerman remarked in comments at the conference, the familiar competitive recasting of events by interlocutors, often for quite strategic ends, has the formal character of transposition even if it involves no explicit shifters. Thus, in Melissa's example, a child defends herself against another's accusation: "You broke it." "No, I just pushed it and it broke." Here the retort relies on a transitivity "transposition" that invites construction of a different described scenario *e*, in which the thing *breaks* without *somebody's breaking* it. Such transpositions are, as it were, wholly denotational. For treatment of a similar rhetorical use of Spanish reflexive, see Berk-Seligson (1983).

xvi The material presented here derives from a joint study with Lourdes de León. See Haviland and de León (1988).

xvii Consider Talmy's (1986) distinction between static and moving frames: do we see the moving train from the outside or, as it were, from the train itself?

xviii The catalogue of transpositional types could doubtless be extended. For example, various entities suggested by Langacker as aspects of "construal"--for example, things vs. relations, settings vs. participants, "search domains"--can each presumably give rise, by a shift in utterance form, to alternative, or transposed construals.

xix This is, incidentally, part of the difficulty with maintaining that "indications"--in ordinary parlance, indexes--work by inducing interlocutors to perceive their referents "by direct experience" (Clark and Gerrig 1990:765). As should be evident, one can point in a *transposed* space, so that an interlocutor can "perceive" the object of a pointing gesture only by imagining that space.

xx See Sperber and Wilson (1986) for one attempt.

xxi Parallel kinesic marks--major body shifts, changes in gestural tension or "effort," shifts in gaze--also accompany shifts in other sorts of interaction. See Kendon (1972), C. Goodwin (1981), Haviland (1991c). It seems plausible, as suggested by Len Talmy in the conference, that certain sorts of cues may allow interlocutors to distinguish what's in the "here and now" from what must be understood in a transposed space. Features of gestural morphology may have this character. Another possibility might be found in changes in the synchrony between word and gesture. It has been argued (Kendon (1980,1981), Schegloff (1984), McNeill (1985, forthcoming) that gesture routinely coincides with or slightly precedes the verbal material it is meant to illustrate. However, there is some evidence that this strict pattern of synchrony may not obtain in, for example, quoted "demonstrations."

xxii Evidentials also implicate a complex social system in which authority is circumscribable and personhood or voice problematic--an important arena for comparative investigation that I cannot pursue here. See Chafe and Nichols (1986), and especially Lucy (1992).

[xxiii] But see Laughlin's description of one storyteller. "Quite deliberately he neglected to add the particle *la* which indicates that the story was only hearsay, for he wants you to know that he was there at the time of the creation" (1977:94).

[xxiv] Levinson (1988), in a kind of *reductio* argument based on Goffman (1979), builds an elaborate theory of finely discriminated participant roles to account precisely for the existence of such shadowy participants as are encoded in grammatical devices like the Tzotzil evidential *la*. Contrast, Irvine (1987) and Hanks (1990:Ch.4).

[xxv] Double slashes are used to separate matching elements of parallel constructions.

[xxvi] In discussion at the conference.

[xxvii] The following abbreviations are used in morpheme-by-morpheme glosses of Guugu Yimithirr.

3du=3rd person dual pronoun

3s, 3sg= 3rd person singular pronoun

ABS= absolutive case (usually realized as zero).

EMPH= emphatic nominal suffix

ERG= ergative case

LOC= locative case

NOM= nominative pronominal form

PAST= past tense suffix

PREP= preposition

RED= reduplicated verbal form (continuative aspect)

SUB= subordinating verbal suffix

[xxviii] I am indebted to Bill Hanks for noticing this echoed line on the transcript, and pointing out its transpositional complexity.

[xxix] See Hanks (1990:516): "'Here-now' is never a sheer physical relaity to which we can meaningfully apply objective measures. As the ground and by-product of communicative practices, it is inevitably **lived space** made up of perspectival subspaces, costructured with the corporeal fields of human actors, and located within a broader sociocultural frame space."

[xxx] The literature on mutual knowledge (for example, Clark and Marshall (1981), Sperber and Wilson (1982)) and "relevance theory" (Sperber and Wilson 1986) makes the problem, though hardly the solution, explicit .

[xxxi] Herb Clark, playing a psychologist's role in discussion, pointed out that there may be cognitive limits on what can be required in a transposition. Mentally producing a mirror image, for example, may be hard for human beings; perhaps 180 degree rotations are impossible. What is already known about "thought" may suggest where transpositional devices are likely to succeed, and where they will not venture.