

PROJECTIONS, TRANSPOSITIONS, AND RELATIVITY

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1 Arriving

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

\[(1^*) \text{ Jayib ora l-a-yul} \]

how-many hour CP.2A-arrive

'What time did you arrive?'

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

\[(2^*) \text{ t\text{a} al \text{k\text{u}k\text{a}l} \text{ } 'At noon.'} \]

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 Pakku' had wanted the answer you gave, she would have used the verb k'ot.

\[(3^*) \text{ Jayib ora l-a-k'ot} \]

'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 are, 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 socio-cultural 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 alternation of the indexical ground of utterance” (1990:197). In direct quotation, for example, not only personal pronouns but all shifters (Jespersen 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] 1965: 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” (Jespersen [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 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 which have often inspired relativistic rhetoric.

Second, what sorts of transpositions occur? I extend the discussion beyond shifts in the referents of indexical elements, to include non-referential aspects of indexical projections, as well as issues of perspective (Talmy 1978) and construal (Langacker 1987, 1990), whether indexically signaled 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 chapter focuses attention on shifts 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, signaling 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.

3 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’o, ‘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’o.

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,k'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 li-yul, (CP-iA-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-O-yul-i-O-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*) Iyul ora li-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 Zinacantec do 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 do when 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 signaled 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 buh (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, puhu yul, ‘come to say’ (line 6) such things once they hear that X has reached the village.

(8) akuyal (88.08B. 21 June 1988, Portland)
1 C: ak’o ak’u timi o much’u sjak’ e
‘Suppose someone should ask’
2 Jweno: mi, kavi iyul xa li Xune
‘Well, now that Xune has arrived here’
3 k'u x'elan ti Chepe k'u x'elan ti kremotik batecne =
   "How is Chepe? How are those boys that have gone there?"
4 = ni;
5 If-
6 X: buyen
   'Okay.'
7 C: mi much'u xi mi oy much'u chial yal un
   'If someone comes here to say that'
8 X: ji
   'Yes.'
9 C: ak'u yalik
   'Then let them say (to such a person)'  
10 buyen este:
   "Well, uh,..."
11 lek la este ch'ab-
   'They are alright [according to what (John) says.] They...'
12 ch'abtejik xi ika i li Xune
   'They are working,' I heard John say."
13 mu-muk' hu- mud 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] 1971) 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 from a contextual element in the former. A canonical deictic is represented in figure 10.1.

Notice what one means here by "indexical projection." When you say liyul 'I arrive (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 10.2. (The letters S, A, and O stand for "Speaker," "Addressee," and "Other" throughout.) An alternative representation is to laminate the arrival scene onto the

Fig. 10.1  Relational structure of deixis as a complex frame

space of the speech situation so that the arrival point referred to coincides with the deictic "here." This alternative, shown in figure 10.3, 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. There is much to recommend the laminating 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(ep) talking to X(un), in Portland, in June 1988. They

Fig. 10.2 Yul, 'arrive here,' as a projected index
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<sup>NS</sup>), 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 *tel/ came,* 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<sup>5</sup> – 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 10.4.

**Fig. 10.4 'Xun has arrived: Chep has gone'**

A similarly multilayered projection is involved in the parents' hypothetical declaration, in line 10, that Chep *le/ k la,* 'is all right (reportedly):' The quotative particle *la* projects a shadowy secondary narrated speech event, shown as a laminated layer with a dotted edge in figure 10.5, in which someone (presumably Xun) tells the parents that Chep is all right.

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] 1965), but also of "metalanguage" and "reported speech" (Voloshinov 1986), "voice" (Bakhtin 1986), "(re)centering" (Bauman 1986, Hanks 1990, and others), "layering" and "demonstration" (Clark & Gerrig 1990), "empathy" (Kano 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 chapter – is the elaborate analytic machinery, already employed above, which Hanks (1990) develops to present Maya deictic usage.

**Fig. 10.5 'Let them say: "Chep is (reportedly) all right"'**

4 Proportion

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 surrouned 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. 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 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 formal sign 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, associated with any collection of signal forms; each occurring 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 may be 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 co-ordinated and interrelated, a process Silverstein calls metapragmatic regimentation. Sometimes this co-ordination may be achieved through lamination, much as one overlays transparents. 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 context-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 presupposable facet of an otherwise available space. 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 interlocutors do together, with and for one another, though perhaps only implicitly. There must be mechanisms to help interlocutors get this co-ordination right (or to fight it off), mechanisms both to regiment the construction and co-ordination of transposed spaces, and to make it plain when things have come out wrong. 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." 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 lamination 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 10.6 (where the notation E' stands for “transposed event”) illustrates Hanks’s analysis.

In situation semantics (Barwise & 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(φ)e “between situations u in which φ is uttered and situations e described by such utterances” (1983: 120). As Barwise & 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, e, s(φ)s(e). There d is a “discourse situation” (with, among other things, a speaker, an addressee, a discourse location, and an expression s); s(φ) is the speaker’s connections, “a partial function from referring words w to their referents e(φ)” (1983: 125) as intended by the speaker; and e 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 timeslice.

We could (very roughly) represent the denotational meaning of a linguistic element like the Tzotzil verb YUL as a relation d, e, YUL, σ, e just in case the following is true:

\( e: \text{at } i; \text{ is located, } u \text{, yes} \)
\( i \text{ is located, } u \text{, no} \)
\( | i \text{ temporally precedes but spatially coincides with } l \)

where \( l \leq l_d \)

That is, for some indeterminate individual (represented as u, 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 if 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 anchored 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 \( l \leq l_d \) 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 (“projecting”) \( l \) onto \( l_d \) or by calibrating d with e with respect to their locations, as follows:

\[ d = \{ \ldots \ldots l_d \ldots \ldots \} \]
\[ e = \{ \ldots l \ldots \ldots \} \]

In Hanks’s 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 other 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 “altered-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’s model \{I,R,X\}) to a relation between entire situations or settings, mediated by a complex expression \(q\), thus \(\{\tau,\phi,\sigma\}\). 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 \(\sigma\) by \(\sigma'\) but operations on \(\sigma\) to produce \(\sigma'\), 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. Constraints on spaces lessen with each transpositional remove.

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 (signaled 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 judge to a conclusion.

5.1 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 (Irving 1987, Levinson 1988, and Hanks 1990). The Tzotzil verbs with which I began illustrate the lexicalization of a standard spatial “deictic origin,” the “here” with respect to which a lexical contrast like \(u\) or \(\bar{u}\) must be understood. The Tzotzil verb pair exploits a familiar deictic distinction roughly present in both Tzotzil \(\bar{t}\) and English come/go in place of \(u\)/\(\bar{u}\); 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 \(i\) 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 (1993).

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. 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
emanicipated 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 Bamb$t’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

138 ngayu nhangu bagay, eh...
   “I poked him (and said), “Hey...”

140 yarra gunggaar nhaawua
   “Look yonder there to the North!”
   Left hand from down beside body left side, flips up pointing North.

141 ngama thadaara
   “What’s that going along?”
   (Several lines omitted...)

The first transposition here is launched by the “quotation” at lines 138–140. Jack acts out – as Clark & Gerrig (1990) would have it, demonstrates, complete with poke – what he said to the other man: “Look yonder 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 10.7, where Jack’s right arm is extended due North as he “points” to the shark.) 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. 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.

3.2 Objects and configurations

Another variable aspect of a projected space is the inventory of entities it can comprise. Jack Bambi's shipwreck story involves 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, b 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 b 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 muletik, 'old people,' with the remote article ti at line 290.

(11) t906sal
289 P: ti xene un te =
    "long ago"
290 = chk'at ixim, te- ti muletik une
    'the old people would take their corn,'
291 te chk'at ixim taj yo' chiwit chhat une
    'take their corn there to the old market'
( ... several lines omitted)
392 P: la: j yeylik t axes
    'They would drink all (the liquor) up coming home.'

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 xysuhik xo li jentejo muletik katce n
    'Damn! Those old bastards already got drunk!'

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

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!"

In the terminology introduced above, the shift of articles involves projection across transposed sets of "speaker's connections"' (the speaker's intended referents) and "setting" σ (the situation built up from 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 across 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 through 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.

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 δ, and the described situation e. It is thus possible to shift subtly between the sets of relations so defined.

Languages like Tzotil are richly endowed with lexical items which are highly schematicizing, 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, 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. Yet 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) Pigl: putting it face down, hauling it by the legs

4 C: La ipatanik all, ipatanik A nth

   Let’s lay it down — let’s lay it down, Anthony."
5 A: *a bwenô*  
'Ah, okay.'

6 C: *nudâo all ja', xi ino Xun*  
'Wait, uh... this way, John.'

1: grabbing one of the legs and pulling it.

7 X: *bwenô*  
'Okay.'

2:----------------

8 C: *ja li' xal yâ'vele*  
'It should come like this, it seems.'

2: continuing to pull the leg towards speaker,  
so that the whole pig rotates face down.

9 X: *eso*  
'Right.'

10 C: *ja' ckk le sâm*  
'Just like that.'

The deictics, supplemented by gestures in lines 6 and 8, give schematic hints about how to arrange the pig in the *pétal* manner that C (who is directing the butchering) has in mind. (Note, also, that X, the ethnographer, has misunderstood; thinking that *pétal* 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 focusing (e.g., on a particular aspect of an object's anatomy and the consequent de-emphasis of other such potential aspects). Schematizing one space can thus prime subsequent spaces, by leaving the focused elements available for future focus, much as a figure/ground selection, once made, 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, invoking processes of inference familiar in other pragmatic realms. Thus, a given descriptive predicate may implicate a prototype, features of which can be canceled by subsequent descriptors. For example, in the following fragment, P is describing a photograph of a wooden figure. He first characterizes its position as *puchâl*,'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 *nufâl*,'face down.'

(13) Wooden man
24 P: *puchâl* {...}
'It's lying down'

25 *pero pero ma'âk lek puchâl*
'But it's not lying down properly.'

26 *pero nufâl yîle*
'It seems to be face-down.'

( several times omitted ...)

32 *pero lôk'eb k'ak'âl hat 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) must make the transposition and orient the laminates accordingly.

These schematic projections involve not only shifters, but grammatical elements like prepositions and full lexical predicates. The objects and actions 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 focus on its sprayed legs only when the positional *pat* instructs me to do so.

5.3 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 orgo 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) specifically 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 Yimithirr to Bob, an obviously much older man.

(14) Wakooka

GR: Sunnji nganithaum yinoyi dagu yi nhaathi buurraay
dudawriga =

"Sunnji! We're here... well, did you see the water running?"

Why does George call Bob "Sunnji"? 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 one's 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") sets of social relations of the modern Hopevale Mission. GR's use of the vocative Sunnji 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 towards another, more traditional context.

(15) Spears

81 JJ: dagu yii nguba =

'Well, this perhaps...'

82 = yigaar-anul yurra (1.0)

'is going to crack, you.'

83 BF: ngaani (5)

'Why?'

84 JJ: yiha (3.8)

'This part.'

85 BF: nhaathi 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 re-establish, 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 yamhul, '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: = mmngalalih Rob gurra

'Rob and I.'

(...several lines later)

25 B: = i... dinggii-thirr bada ngalilih =

'We set out (a long way) in a dinghy.'

26 = nganithaan (.5)

'all of us.'

27 T: Rob? (.5)

28 B: thaday bada =

'We went down.'

29 T: = ngathu warra ngathi (2.3)

'My old grandfather.'

30 R: jaway ngathu

'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.

5.4 Texts and co-texts

Part of the space projected by language is itself linguistic. The context of speech represented by the setting σ in the formulas above, as a rule includes speech. 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. The two speakers were fighting over an incident which took place 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) Pilar
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 Pilar. 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 dodgedly 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) Pilar
107 abrí la puerta y no-
108 ‘I opened the door and he didn’t.’
108 el no dijo buenas noches.
109 ‘He didn’t even say “Good Evening.”’
109 el no-
110 dijo Aqui vive Pilar Gonzalez? ‘he said, “Pilar Gonzalez lives here?”
111 ‘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) Pilar
122 te juro que no dijo buenas noches dijo.
123 ‘I swear to you that he didn’t say “Good Evening,” he said’
123 Aquí vive Pilar Gonzalez? ‘he said’
124 ‘Pilar-Gonzalez-lives-here?’
124 dije.
125 ¿quién la buscan, 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.
Clearly, X projects himself into a transposed space, centered on the streetcorner (i.e., 'there'), with the girl coming towards 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. *Yamadori no kane o kire, Mary wa kanasukatta*  
  'Hearing the bell of the mountain temple, Mary was sad.'  
  nonreportive
- b. *Yamadori no kane o kire, Mary wa kanasigata.*  
  'Hearing the bell of the mountain temple, Mary was sad.'  
  reportive with *go*.

By contrast, the *ga* form of (21b), appropriate to an evidentially less secure report of someone else's state of mind, 'has definite referential force directed toward the "judge"' (Kuroda 1973: 388). That is, the form "points semantically to the existence of a subject of consciousness whose judgement the sentence is intended to represent" (p. 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 1991a). 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 bana nga nyu* nha-gala. gady
‘Then I just came.’

219 bana nga yu nganhi yi ngunguulama
‘Man, that one, he’s looking at me.’

220 yunguul ngaunguulu ngi bagemby phangu
‘So with a stick I was uh - poking him in the eye.’

221 T: (thu ha ha)

222 *daju 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 did not really understand what was going on, so that his peering through the slots of the building where R was imprisoned was wholly innocent.)

5.6. The nature of transposition: types and triggers

What we have seen so far suggests a range of projectable materials. However, we have seen various construals of the described event v, and these construals of the event v. Such different “projectables” in turn suggest a typology of transpositions that range from full shifts from one space to another, to changes in resolution of representation of a “single” space (zoning 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 & Ritchie 1988:205), onto another.

Working outward from the necessary, putatively universal categories of the originating “utterance situation,” we can imagine a series of projectable transposition types, to be encountered in all linguistic traditions. Thus, we may expect (a) transpositions of participant frames, as in standard pronounial shifts; (b) transpositions of relationships, between interlocutors and protagonists, as in social deictic pronounial shifts; (c) transpositions of (oriented) locations/spaces (including temporal frames), as in the GY gesture case cited - a subtype of (a) above with participant-frames extended to spatio-temporal locations; (d) changes in resolution, from wide to zoom, how close? how far? how much detail or schematization?; (e) transpositions of perspective or vantage point, involving not only physical positioning, but also “empathy” and access. Finally, we imagine that speech routinely, perhaps universally, facilitates (f) transpositions of activity type: “what we are doing now.” No utterance is separable from its ill or per-locational character, and shifts between genres and registers pull interlocutors into and out of one activity or another, as examples to come of Zinacantecan prayer will illustrate. 19

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.

5.7 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 to the speaker, but to his parents talking to an imagined neighbor. The second person addressee of the command “Look yonder there 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 occurs, 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 counterfactual, if not scurrilous, gossip, and so on. Clark & 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.\(^{19}\)

C&G argue that “demonstrations usually depict their referents from a vantage point” (p. 767); and that they are “selective in what they depict of their referents” (p. 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 you said, but I do it with my body and my 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 descriptive, perlocutionary, or affective” (p. 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 D: nyundu thabangala
    “You ask him!”
67 guari ngayu yinil
    “No, I’m afraid…”
68 guariga ngayu galmba yinil
    “I’m also afraid…”
69 ha ha ha
70 ngalgal thabangali
    “So I asked for tobacco.”

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

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\(^{20}\)), this seems a promising approach. Still, what does the shift of language 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 may 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.”\(^{21}\) 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.\(^{22}\)

Evidentials can be morphologically implicit transposers. For example, the quotative clitic \textit{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. 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'adal 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.° The resulting transposition formally resembles that signaled by direct quotation, but the more highly grammaticalized signaling device masks the lamination of spaces.

5.8 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) LOLI
   622 L: *pero mu xkuch ku 'un li 'abtele
   'But I couldn’t survive the work.'
   623 J: *iuj ch'aj lilok
   'I turned out very lazy.'
   624 J: *k'u ma ya'un?
   'Why?'
   625 L: *chiti'olaj
   'I would get restless.'
   626 J: *to 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 incomplete verbal aspect with the verb *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 intertransposable spaces, switching rapidly between them. Gesture is particularly potent in this regard. In (26), Petul is describing a rural *canina* where the men used to stop to drink on the way back to Nabajchená 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] is in line 7, and the *ti* 'be, gate,' which he represents with gesture [10] in line 8.

(26) Tzan-tzan

   7 oy tey nakal krincho 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]

Fig. 10.11 ‘A gate by the path’
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].”

5.9 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 spicing of funny accents, marked genres can conjugate 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 centerings 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.

Zinacantecan curing, too, is characterized by specially marked speech, usually structured in parallel couplets (Haviland 1987, 1994). As in the Yukatec case, Zinacantec shamans construct a partially transposed indexical surround for prayer. Their apparent addressees—all referents of 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 prayer25
ch’al nichimal me // nichimal kaxayal
‘the holy florway (= beautiful) mother, florway lady’
smajhun avok // yikal ak’ob
‘the beating of your foot, the wind of your hand (i.e., the disease)’
kumun-ch’al k’open // kumun-ch’al 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 yat sawe // ti yat saxon
‘the inside of his back, the inside of his side (i.e., his body)’
(s)j’at’em // s’awel
‘his hurt, his pain (i.e., his affliction)’
tz’al ti yoke // tz’al ti sk’ob
‘his foot slipped, his hand slipped (i.e., he was injured in an accident)’

(29) References to patient mediated by 2nd-person possession
rananit viniku // rananit viniku
‘your bought man, your paid-for man’
ok’ul // aj’ul
‘your copy, your replacement (i.e., made in your image)’
manik’ab // manik’ab
‘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
ch’iikabekon // ch’iikabekon
‘you will ease for me, you will loosen for me (i.e., the disease)’
kebekon // kebekon
‘watch for me, see for me’
vk’ul-tambekon // su’uk’il-tambekon
‘lift me seated, lift (me for 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 va 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.

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 signaling 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 catalog 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 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 signaling transposition, a topic that cannot be pursued in the present chapter.

5.10 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, metapragmatics) skills expand these origins 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 fragments 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) Boat

156 mathi post-manaathi
rain + ABS past-become-Past
‘The rain had passed over.’

right hand: palm out, pulled towards E then push out W, slight drop.

Fig. 10.14 ‘The rain passed’

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.

157 and yuwalin nguambuarr guhittra nhaathi
beach-LOC shadow + ABS two + ABS see-PAST
guwarra came + RED-PAST-SUB
‘and (he) could see two shadows coming along the beach.’
right-hand: pointing with straight arm W, moving S to rapid drop to lap.

Fig. 10.15 ‘He saw two shadows coming along the beach’

158 nyulu thawuwa Woibongun yorbu nhaathi
3sNOM friend + ABS Woibo-ERG this way see-PAST
'He, (my) friend, Old Woibo saw that,'
1: right hand: up in “baby O,” points W, then N and up.
2: right hand: 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 nyulaugu guray bula nha'yan nguba
3sNOM-EMPH say-PAST 3duNOM that + ABS perhaps
guwa-janji
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
10.16). 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
chapter. 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
Zinacanteco by telephone. In example (33), we see a complex series of
transpositions that illustrate one attested Zinacanteco solution to this
telephone-call problem.

Here there are three conversants: M, a man who has run away from
the village of Nabenchaik with crushing debts; C, a young unmarried man
also from Nabenchaik 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
directional and auxiliaries fixes M’s perspective, in this reported
correspondence, firmly “at home” in Nabenchaik.

(33) Chepa

1 M: ali ik’opon li Chepa une
    ‘Uh, I spoke with Josefa.’
2 J: aa
    ‘Oh.’
3 M: ku xalal xiyut lek ya’el xkat an
    ‘“How are you?” she said to me. “Alright, it seems,”
    I told her.’
4 J: mim
    ‘Mmm, hmm.’
5 M: aa ci
    ‘“Oh,” she said.’

At line [6], M’s daughter asks, centering herself deictically on
Nabenchaik. “When are you coming?” M replies, evidently transposing
his deictic center to their shared socio-centric origo, Nabenchaik. He also
employs the anchored verb tel. ‘set out to here’.

Fig. 10.16 ‘My friend Woibo’
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 the simplest model of transposition a single quotation, as in line 6 of the last example. (33). M utters the words k'us 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 cletic ni, "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 Josefina, M's daughter; the addressee becomes M himself, in the transposed space in which Josefina speaks to him. Finally, "here," in an understandably plaintive socio-centric alignment, becomes the village of Nabicnauk 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 catalog 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 catalogs of encoded distinctions that vary from one language to another. More categorical 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/realty triad, linguistically encoded projectables, and the accompanying details of language form, provide an unavoidable, if not irresistible, 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] 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 real, 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 Yimithirr interaction.

Transposition is like demonstration, however. Clark & Gerrig argue that since "demonstrations can depict anything recognizable - whether linguistic or not - quotations [which, as has been argued, involve canonical transpositions] 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.29 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 cataloged 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 overlook 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, 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.28 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.)

The nature of the limiting mechanisms there may be on the projection and transposition of the indexical spaces we call "context" remain to be explored. Then, such limits may be both substantive and formal.31 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.

Notes

1 The original version of this chapter was prepared for the Wenner-Gren Conference on Rethinking Linguistic Relativity, organized by John Gumperz and Stephen Levinson, 3-11 May 1991. Quoted with permission. I am indebted to the other participants, anonymous comments, and especially written comments by Gumperz and Levinson, that have been shamelessly exploited for this revision.

2 Examples marked with asterisks are invented, others are transcribed from conversational recordings.

3 I write Teotitlán, a Mayan language of Mexico, in a Spanish-based practical orthography in use in Chiapas.
4 In Tsotzil morpheme-by-morpheme glosses the following abbreviations appear:

1A 1st person Absolute affix
2A 2nd person Absolute affix
3A 3rd person Absolute affix
CP complexive aspect
PREP general preposition
QUOT quotative evidential clitic

5 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.

6 During conference discussion, John Lucy criticized the metaphor of "space" as implying 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 space, 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 (1999), Fauconnier (1984).

7 This observation is due to comments by John Lucy.

8 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 elsewhere) is at pains to point out, is collaborative from the start.

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

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

11 I am indebted to Ed Robinson for this observation.

12 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 from and back.

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

14 The design of the experiment is due to Lourdes de León (1998).

15 As Melissa Bowerman remarked in comments, 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 shiftings. 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 etors rely on a transitivity "transposition" that invites construction of a different described scenario, 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 Baskin-Seigal (1985).

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

17 Consider Talmy's (1985) distinction between static and moving frames: do we see the moving train from the outside or, as it were, from the train itself?

18 The catalog of transpositional types could doubtless be extended. For example, various entities suggested by Langacker as aspects of "constructual" – for example, things vs. relations, setting vs. participants, "search domains" – can presumably give rise, by a shift in utterance form, to alternative or transposed construals.

19 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 & Gerrig 1980: 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.


21 Parallel motion marks – major body shifts, changes in gestural tension or "effort," shifts in gaze – also accompany shifts in other sorts of interaction. See Kendon (1972), Goodwin (1981), Haviland (1991b). 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 1974, McNeill 1983, 1992) 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."

22 Evidentials also implicate a complex social system in which authority is circumscribable and personal or voice problematic – an important arena for comparative investigation that I cannot pursue here. See Chafe & Nichols (1986), and especially Lucy (1993).

23 But see Laughlin's description of one storyteller. "Quite deliberately he neglected to add the particle 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).

24 Levinson (1988), in a kind of redactic 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 Tsotzil evidential la. Contrast Irving (1987) and Hanks (1989, chs 3, 4).
25 Double slashes are used to separate matching elements of parallel constructions.

26 In discussion at the conference.

27 The following abbreviations are used in morpheme-by-morpheme glasses of Guugu Yimidhirr:

\[3d_{u} = 3r d \text{ person dual pronoun}\]
\[3s, 3sg = 3r d \text{ person singular pronoun}\]
\[ABS = \text{ absolute case (usually realized as zero)}\]
\[EMPH = \text{ emphatic nominal suffix}\]
\[ERG = \text{ ergative case}\]
\[LOC = \text{ locative case}\]
\[NOM = \text{ nominative pronominal form}\]
\[PAST = \text{ past tense suffix}\]
\[PREP = \text{ preposition}\]
\[RED = \text{ reduplicated verbal form (continuative aspect)}\]
\[SUX = \text{ subordinating verbal suffix}\]

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

29 See Hanks (1990: 516): ’Here-now’ is never a sheer physical reality 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 perspective subspaces, constructed with the corporal fields of human actors, and located within a broader sociocultural frame space.

30 The literature on mutual knowledge (for example Clark & Marshall 1981, Sperber & Wilson 1982) and ‘relevance theory’ (Sperber & Wilson 1986) makes the problem, though hardly the solution, explicit.

31 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; producing a 180° rotation is impossible. What is already known about perhaps 180° rotations are impossible. What is already known about perhaps 180° rotations is impossible.

References


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RETHINKING
LINGUISTIC RELATIVITY

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