

Schema and Superposition in Spatial Deixis

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Abstract. The paper argues that the use and interpretation of spatial deictics involves two rather distinct components: the inherent or "schematic" effects of deictic categories, and the "superposed" effects of accompanying signs. The discussion is organized around detailed analyses of the structure and use of spatial deictics in a single language, Lhasa Tibetan. The paper shows that, although deictic forms conventionally schematize spatial effects to a high degree, deictic spatialization is not a coding relationship between linguistic forms and preexisting spatial realities. Rather, spatial deictics impose a further interpretive structure on the spatial (and other) effects of co-occurring signs, including linguistic and gestural devices. The total "spatial" effect of any deictic utterance depends, in this sense, on the interplay between deictically schematized and contextually superposed effects in use.

1. Introduction. In thinking about concrete uses of spatial deictics, language users feel intuitively that deictic words "encode" spatial phenomena. "Here is the deictic word" the intuition tells us; "there is the spatial entity (thing, region, path, etc.) that it represents." Any analysis of deictic usage shows, however, that such intuitions are ex post facto rationalizations about the spatial effects of deictic usage; they do not correctly describe how such effects are achieved. Yet a correct analysis should explain why the intuition appears plausible at all. The intuitive appeal of words like "encode" and "represent" lies in the suggestion that deictic words themselves possess conventional properties, necessary for schematizing aspects of space; what the intuition misses entirely is that such conventional properties are never sufficient for achieving concrete spatialization effects.

The basic argument of this paper is that the felt concreteness of deictic spatialization effects involves two kinds of principles or components. The first component is a spatial schema projected by the deictic form itself. The second component is the "filling in" of this schema by devices that co-occur with the deictic form in use. I illustrate this argument by means of detailed data from a single language, Lhasa Tibetan. Throughout, however, I attempt to make the criteria on claims sufficiently explicit that analogous claims may be formulated, and tested, on data from any other language as well. The first half of this paper (section 2) describes the schematic properties of Lhasa Tibetan deictics; the second half (section 3) explores a range of superposed effects observed in their usage.

I use the term *spatial schema* to refer to the conventional or categorial effects of deictic forms in use. Such effects involve **both** semantic and pragmatic typifications. Spatial deictics are denotational-indexicals in the following sense: the deictic form schematizes a semantic denotatum (e.g., a 'thing', 'region', 'path', etc.) **while** schematizing its relation to interactional variables (e.g., 'proximal-to-speaker', 'distal-to-speaker-and-addressee' etc.). I refer to these two typifications as the "denotational" and the "interactional" schemas of deixis.

When deictic forms are used in utterances, however, such schematic effects are inevitably contextualized by spatial effects otherwise achieved. For example, people who utter or interpret deictic forms have visual access to physically contiguous regions of space; they often move through them while speaking; they point to aspects of their surroundings; they describe and redescribe their surroundings by means of linguistic devices other than deictics, such as place names, definite descriptions, and so on. A deictic utterance indexically presupposes independently achieved spatial effects insofar as it is consistent with them, or depends upon them; it indexically entails or creates spatial effects insofar as it gives some structure to spatial representations already in play, reshaping them in some distinctive way (Silverstein 1976, 1993).

In cases of presupposition, aspects of context routinely superimpose spatial construals on deictic usage. We can speak of schematic categories in deixis only insofar as the deictic form is itself capable of creating or entailing contextually **distinctive** spatial effects when used. This raises the question of the types of schematic properties a deictic form may be said to have.

2. The schematic components of deixis. The most detailed and thorough account of linguistic deixis currently available is the theory proposed by William Hanks (especially, 1990, 1992, 1993). Two aspects of Hanks's works are particularly central to any understanding of deixis as a semiotic phenomenon, and especially to the account that I offer here.

First, Hanks has shown that the regularities of linguistic deixis cannot be described without appealing to the nonlinguistic manifold—such as physical orientation, gesture, and other types of bodily kinesis—with which language use co-occurs. Secondly, Hanks demonstrates that within this larger context of multimodal activity, the effects of **linguistic** deixis involves three distinct functional dimensions. These may be summarized as follows:

- *characterizing properties* ('thing', 'region', 'path', 'time', etc.);
- *relational properties* ('proximal to', 'distal to', etc.); and
- *origo of deixis* ('speaker-of', 'addressee-of', 'event-of' utterance, etc.).

The *characterizing properties* of the deictic expression implicitly typify the deictic denotatum in semantic terms, specifying it **as an entity of some type**. For example, the English demonstratives *this/that* specify their denotatum as some type of 'thing'; the spatial adverbs *here/there* specify a 'region'; the temporal adverbs *now/then* specify a moment or interval in 'time'. In making such

metalinguistic statements about each pair of English deictics, I have used a common noun to gloss each deictic pair (e.g., *here/there* 'region'). Each metalinguistic gloss (viz., 'thing', 'region', 'time') makes semantically explicit a property that is only implicit in the deictic, and shared by each deictic pair. But where does the implicit semantic property of the deictic itself come from? I discuss this question in some detail in the light of Lhasa Tibetan data below.

The *relational properties* of the deictic expression specify the relationship between the denotatum and some zero point of reckoning: the first member of each of the above pairs—i.e., *this*, *here*, and *now*—specifies its denotatum as 'proximal to' the zero point of deictic reckoning, while the second member—i.e., *that*, *there*, and *then*—specifies the relation 'distal to' such zero point. Indexical relations such as 'proximal' and 'distal' are not inherently tied to the semantics of physical location, as can be seen from the fact that they differentiate denotata that are implicitly characterized as moments or intervals of 'time' (viz., *now/then*, *hereafter/thereafter*) in addition to denotata implicitly characterized as spatial 'regions' (viz., *here/there*). Nor do relations such as "proximal" and "distal" have fixed scalar interpretations: if the uttered token *here* is accompanied by a downward pointing finger, the 'proximal region' implicitly specified by such usage may be glossed explicitly, even glossed correctly in this instance, by the definite description "the swatch of ground directly below the pointing finger." However, other uttered tokens of *here* may permit any among the following definite descriptions as their correct gloss: "the grass/the land/the city/the country/etc./below the pointing finger." Deictic spatialization effects inherently have a radial indeterminacy of (absolute) scale, particularly when compared to the spatialization effects of definite descriptions used contextually to gloss them.

Deictic space is delimited, instead, in relation to an interactional zero point of reckoning, the *origo of deixis*, noted above. The *origo of deixis* provides a "relational centering" of the deictic field (Hanks 1990). In relation to a given *origo*, any denotatum picked out by a term in the first series—i.e., *this*, *here*, and *now*—can be located as 'proximal' in comparison to a denotatum of the corresponding term in the second series—i.e., *that*, *there*, and *then*; the latter denotatum is, conversely, more 'distal' in comparison to the first denotatum, when the two are related to the *origo* given.

The way in which the *origo* is "given," however, is not fixed once and for all. Particular deictic expressions typify the *origo* in terms of **variable** dimensions of discursive interaction, e.g., 'speaker-of', 'addressee-of' or 'moment-of' utterance. The value of such variables is "filled in" during usage: for example, the corporeal person who fills the role 'speaker-of utterance' varies across phases of discursive interaction in distinct speaking turns. Moreover, the "filling" of such variable roles frequently depends upon the nonlinguistic accompaniments of speech, e.g., the person who is recruited to the role 'addressee-of utterance' may be selected from a number of co-present others by the eye-gaze and bodily com-

portment of the corporeal speaker as he or she formulates the utterance. Thus, although deictic expressions schematize the origo in terms of *interactional variables*—such as ‘speaker-of’ or ‘addressee-of’ utterance—the specific values of such variables differ across phases of discursive interaction, frequently depending upon the functionally superimposed effects of accompanying nonlinguistic acts, whether prior or concurrent to the utterance act itself.

The arrow of linguistic deixis is best seen, therefore, as a relational arrow. It is an arrow whose target is a typified denotatum, and whose trajectory is centered in relation to an origo of interaction. I refer to these two components as the “denotational schema” and the “interactional schema” of deixis. The *denotational schema* of deixis corresponds to the “characterizing properties” of deixis in Hanks’s formulation. The *interactional schema* of deixis—defined by grouping together Hanks’s “relational properties” and “origo of deixis”—typifies the relationship to origo of such denotatum. This bipartite grouping is based on (and, thus, does not replace) Hanks’s tripartite distinction. It labels the semantic and pragmatic categories that the deictic form implements in usage: the “denotational schema” is a name for the semantic category, the “interactional schema” for the pragmatic category. I turn now to a discussion of how these categorial components may be isolated within deictic words.

2.1. Form and function in Lhasa Tibetan deictic words. Although deictic expressions in Lhasa Tibetan are words of the language, we cannot clarify their functional properties by focusing on their character as words, e.g., by assigning unitary lexical meanings to them. Part of the reason is that these words are not lexical primes. They have an internal morphosyntactic organization defined by the concatenation of simpler elements—generally, a stem and up to two classes of suffixes. Thus, a functional analysis of the deictic word cannot proceed independently of a word-internal grammatical analysis. But a second, equally compelling, reason is that deictic usage indexically situates spatial representations in relation to contextual variables whose **values** are only specified during the course of discursive interaction. The apparently simple repertoire of deictic words therefore constitutes a **functionally interlocking** paradigm of semantic and pragmatic properties whose clarification requires both grammatical and discourse-based analyses of deictic words.

In the case of Lhasa Tibetan, the two schematic components of deixis are segmentally distinct to a high degree within the structure of the word. The interactional schema of deixis—which relates a denotatum to an interactional origo—is specified by the stem of the deictic expression. The denotational schema—which typifies the denotatum itself—is specified by the lexico-grammatical properties of the word as a whole, and especially the system of suffixes.

2.1.1. Interactional schemas. Let us consider the stems first. The paradigm of Lhasa Tibetan deictic expressions is built from five stems, or base forms, to

which a number of other morphemes can be suffixed. Each of the base forms distinguishes a particular type of interactional schema, described in table 1.

Stems *tī-* and *thē-* in table 1 project the same pragmatic relation—that the denotatum is ‘proximal’ to its origo—but differ in the typification of origo itself: for *tī-*, the zero point is the speaker of the utterance; for *thē-*, it is the addressee.

The next three bases, *phā-*, *yā-*, and *mā-*, project slightly different contextual relations, but share a common origo: the origo is the location shared inclusively by speaker and addressee.

Table 1. Deictic Stems and Interactional Schemas

STEM FORM	INTERACTIONAL SCHEMA	
	<i>Relation to</i>	<i>origo</i>
<i>tī-</i>	‘proximal to	speaker’
<i>thē-</i>	‘proximal to	addressee’
<i>phā-</i>	‘distal from	both speaker and addressee’
<i>yā-</i>	‘distal and above (e.g., above eye level of)	both speaker and addressee’
<i>mā-</i>	‘distal and below (e.g., below the feet of)	both speaker and addressee’

All three bases are alike in picking out denotata that are ‘distal’ from this common origo. However, *yā-*, and *mā-*, but not *phā-*, unite ‘distal’ values with relations of verticality: the base *yā-* individuates a ‘distal’ denotatum as lying above some ordinally defined axis, such as the line of sight; and *mā-* individuates a ‘distal’ denotatum as lying below some ordinal axis, such as the level of the feet. How such ordinal axes are interpreted in corporeal terms (e.g., at the level of eyes, or feet, etc.) depends upon facts of contextual superposition, a point to which I return in section 3.4.3.

2.1.1.1. Interactionally absorptive forms. Although each of the five stems listed in table 1 projects a distinct interactional schema, the five schemas are not unrelated to each other. Some components (e.g., ‘distal’, ‘speaker’, etc.) recur across several schemas. This implies that the five stems have functionally overlapping usages. These overlaps are shown in figures 1a and 1b.

The ‘distal’ forms (*yā-*, *mā-*, *phā-*) are in figure 1a. All three stems specify the relation ‘distal-to-speaker and addressee’. However, the stems *yā-* and *mā-* specify relations of verticality as well, which the stem *phā-* does not. This means that any interactional centering correctly implemented by the use of *yā* or *mā* can also be implemented correctly by *phā-*, though in a less specific way. For this reason, *phā-* is the “absorptive” member (Silverstein 1988) of this three term series.

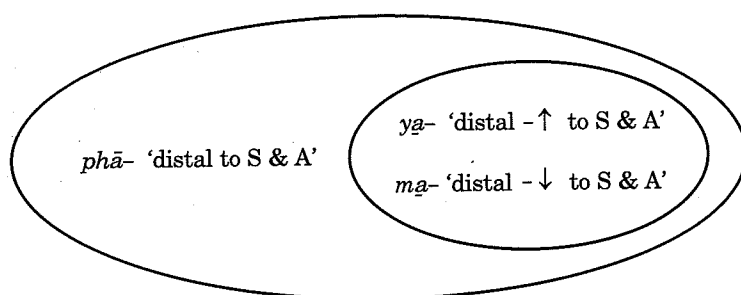


Figure 1a. Ranking of interactional schemas: distal series.

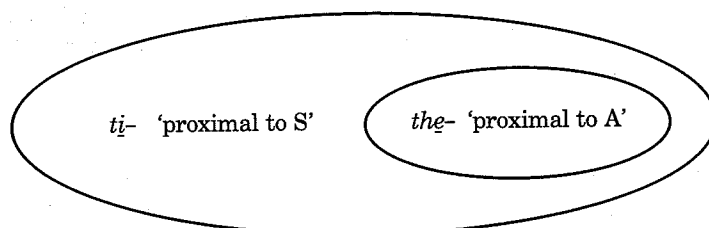


Figure 1b. Ranking of interactional schemas: proximal series.

Figure 1b shows a similar asymmetry for the proximal forms. Note that although the stem *thē-* specifies the relation 'proximal to addressee', the relation is always implemented from the role 'speaker-of utterance'. In using *thē-*, the speaker imposes a partition on interactional space whereby the addressee becomes the zero point of locational reckoning. Since it is the speaker who imposes such partition, the use of *thē-* carries the implicature that the denotatum is closer to the addressee than to the speaker, especially in exophoric usage. The stem *tī-*, however, simply implements the interactional schema 'proximal to speaker', without appealing to—or implying anything further about—any other interactional variable. This is the least specific, and least informative, type of anchoring possible. Thus, in exophoric reference, an object that is close to speaker and addressee, but closer to addressee than to speaker, can felicitously be individuated either by *thē-* (where the **relative** proximity to addressee is an implicature of its addressee-centric schema) or by *tī-* (with **no** implication of any kind regarding addressee). But objects that are closer to speaker than to addressee are felicitously individuated only by *tī-* (since the use of *thē-* carries the opposite implicature). Thus, of the two, *tī-* is the more interactionally absorptive deictic form.

2.1.2. Denotational schemas. Full deictic words are formed from these stems by the addition of certain suffixes. Much of the semantic content that counts as the denotational schema of deixis depends compositionally on the semantics of suffixation. However, some degree of lexicalization prevails here as well.

In order to make the ratio of compositional sense to lexical content clearer, we need to clarify the relationship of each denotational schema to the compositional structure of the word that implements it. Table 2 illustrates six deictic words formed by the attachment of suffixes to the stem *phā-*. (This is the third stem listed in table 1; it specifies the interactional schema 'distal from both speaker and addressee', a specification common to all the words in table 2). The second column lists the denotational schema distinctive to each deictic word. The third column specifies how each deictic word is formed.

Table 2. Denotational Schemas and Word Formation: *phā-* Deictics

DEICTIC WORD AND GLOSS	DENOTATIONAL SCHEMA	WORD FORMATION
A. <i>phāqi</i> 'that (thing)'	enumerable thing(s)	<i>phā</i> + <i>qi</i>
B. <i>phāqēē</i> 'there'	region (specific)	<i>phā</i> + <i>qi</i> + D/L
C. <i>phāpaa</i> 'thereabouts, around there'	region (approximate)	<i>phā</i> + <i>pa</i> + D/L
D. <i>phāā</i> 'that way, in that direction'	path to	<i>phā</i> + D/L
E. <i>phātsa</i> 'a little bit in that direction'	path to (diminutive)	<i>phā</i> + <i>tsa</i>
F. <i>phānēē</i> 'from that direction, from there'	path from	<i>phā</i> + ABL

The denotational schema and the word-internal morphology distinctive to each word may be summarized, briefly, as follows. Form A, *phāqi* 'that (thing)', is a demonstrative, schematizing its denotatum as 'enumerable thing'. It is formed by the suffixation of the nominalizer *-qi* to the stem *phā-* (whose form changes to *phā-* due to vowel harmony).¹ Form B, *phāqēē* 'there', is an adverb, schematizing its denotatum as a spatial 'region'. It is formed by the addition of a dative-locative suffix to the demonstrative in A.² Form C, *phāpaa* 'thereabouts, around there', is a spatial adverb as well, denoting an approximate region, less clearly bounded and delimited than the region specified by *phāqēē*. Like *phāqēē*, the deictic *phāpaa* is formed by the suffixation of a nominalizer to the stem *phā-*, followed by the dative-locative suffix; however, the nominalizer is *-pa*, not *-qi*. Form D, *phāā* 'that way, in that direction', is a directional adverb, specifying 'direction towards' its origo. It is formed by the suffixation of the dative-locative suffix directly to the base. Form E, *phātsa* 'a little bit in that direction', is a directional adverb as well. It differs semantically from the preceding form in that it specifies a smaller increment in the direction of motion; the semantic reflex is due to the diminutive-incremental suffix *-tsa*. Form F, *phānēē* 'from that direction, from there', is derived by suffixation of the ablative case marker, *-nēē*; the semantic reflex 'direction from' is due, once again, to the regular meaning of the suffix.

Each of the denotational schemas distinguished in table 2 typifies the denotatum of the deictic word semantically, as an entity of some characterizable type (i.e., as 'thing', 'region', 'path to', 'path from', etc.). But how are these semantic typifications associated with each deictic word?

Although a certain degree of lexicalization prevails in the specification of some denotational schemas (by comparison, **all** the interactional schemas noted in table 1 depend **entirely** on the lexical meaning of the stem), many semantic properties that schematize denotata are motivated by the "grammatical sense" properties (i.e., the compositional semantics) of each deictic word. I turn now to a discussion of the "lexical" vs. "grammatical" sources of these denotational schemas.

2.1.2.1. The semantic sources of denotational schematization. The grammaticalized sense properties of a word comprise that subset of its semantic properties that is motivated by facts of word-internal or word-external morpho-syntax. Each set of grammatical facts provides a framework for assessing compositional meaning. Given a measure of lexicalization, the denotational schema is not reducible to compositional sense; nonetheless, the morphosyntax of the word motivates its semantic properties in each case.

The semantic properties of Lhasa Tibetan deictics can be grouped at more generic vs. more specific taxonomic levels, thus implying that the overall semantics of the word involve several cross-cutting dimensions of grammaticalized sense content. Five such dimensions of grammatical sense are shown in table 3.

The capacity of form A (demonstrative) to schematize its denotatum as 'thing' is motivated by the distributional fact that form A is the only syntactic noun in the paradigm; its capacity to denote 'enumerable things' is motivated by the fact that it is the only pluralizable form. These two grammatico-semantic properties are noted jointly in column (a) of table 3.

A second respect in which form A differs from all the others is that the 'thing' which it denotes is notionally a *locatum*, i.e., 'a thing-in-a-location'. On the other hand, forms B and C specify 'regions' whereas forms D, E, and F specify 'paths'. Regions and paths are, from a notional point of view, two types of *location*, i.e., 'where things can be found'.

The notional contrast of *locatum* vs. *location* corresponds to several grammatico-semantic differences between form A versus the others. First, all the location-specifying deictics are nonnouns; they all function syntactically as adverbs, as noted in column (c) (form B can occur adnominally as well [cf. column (b)]; but it is the adverbial usage that specifies an undifferentiated 'region'; the adnominal usage specifies a 'locus-relative-to-a-thing', where the 'thing' is independently characterized by the modified noun, e.g., *qhānpa phāqēē* 'at that house'). Secondly, whereas form A has nominative (zero) case, the other deictic forms (excepting E) incorporate an oblique case morpheme, as noted in column (d). In particular, forms B, C, and D are formed from the dative-locative

case, and F from the ablative (as shown in the left column). The dative-locative and the ablative are semantically locational cases; thus, a generically 'locational' meaning is introduced into the deictic word by case-marking itself. Form E is internally suppletive, taking the adverbial suffix *-tsa*, rather than a case marker. Yet its notional meaning of 'location' is nonetheless motivated by a distributional property that form E shares with D and F, as noted in column (e).

Table 3. Denotational Schemas and Grammatical Sense

DENOTATIONAL SCHEMA	GRAMMATICAL SENSE PROPERTIES				
	(a) pluralizable noun	(b) used adnominally	(c) used adverbially	(d) oblique case	(e) selectivity for motion verbs
<i>locatum</i>					
A. 'enumerable things' <i>phāqi</i> (= <i>phā</i> + <i>qi</i>)	+	+	-	-	-
<i>location</i>					
B. 'region (specific)' <i>phāqèè</i> (= <i>phā</i> + <i>qi</i> + D/L)		+	+	+	-
C. 'region (approximate)' <i>phāpaa</i> (= <i>phā</i> + <i>pa</i> + D/L)		?	+	+	-
D. 'path to' <i>phāā</i> (= <i>phā</i> + D/L)			+	+	+
E. 'path to (diminutive)' <i>phātsa</i> (= <i>phā</i> + <i>tsa</i>)			+	-	+
F. 'path from' <i>phānèè</i> (= <i>phā</i> + ABL)			+	+	+

Notes: '+' = 'specific'; '-' = not 'specific'; '?' = 'unclear'.

Column (e) indicates that all three path-specifying locationals (forms D, E, and F) share a property that differentiates them from the region-specifying locationals (B and C): the path-specifying forms occur freely only with active verbs, prototypically motion verbs, whereas the region-specifying forms are nonspecific along this sense dimension (i.e., they occur freely with stative verbs as well). This difference is shown in examples (1a)–(1b) and (2a)–(2b).

The sentences in examples (1a)–(1b) illustrate the distribution of the locational forms, B–F, with stative predicates. The stative verb *tuù* 'be-at, exist' yields acceptable sentences with region-specifying forms, as in example (1a), but not (productively) with the path-specifying forms in (1b).

- (1a) *qhō phāqēē / phāpaa tuù*
 he-NOM there /thereabouts be-at
 'He is over there/thereabouts.'

- (1b) ?? *qhō phāā / phātsa / phānēē tuù*
 he-NOM that-D/L /that-little /that-ABL be-at
 'He is in that direction/a little in that direction/from that direction.'

With motion verbs, on the other hand, the use of **both** region- and path-specifying forms is very common and highly productive, as illustrated in (2a)–(2b).

- (2a) *qhō phāqēē / phāpaa chiū sōŋ*
 he-NOM there /thereabouts went AUX
 'He went over there/thereabouts.'

- (2b) *qhō phāā / phātsa / phānēē chiū sōŋ*
 he-NOM that-D/L / that-little / that-ABL went AUX
 'He went in that direction/a little in that direction/from that direction.'

These examples show that the path-specifying forms (D, E, and F) occur freely only with motion verbs, i.e., verbs that explicitly denote path-motion.³ To this extent, the property common to all three words is motivated by shared facts of syntactic distribution. On the other hand, the specific difference between forms D and F—namely, that D specifies 'path towards' and F specifies 'path from'—is motivated by word-internal differences of dative-locative vs. ablative case marking.

E is a suppletive form by the second criterion (it incorporates no case marker) but not by the first: the fact that it is path-specifying is clearly motivated by its selectivity for motion verbs (cf. examples (2b) versus (1b)). Its specification of a "diminutive" path follows from the word internal sense-contributions of the suffix *-tsa* 'a little bit, approximately'. But the fact that it specifies 'path towards' rather than 'path from' (hence is more like form D than like form F) is a purely lexical property of the form, not motivated by any discernible fact of grammatico-semantic patterning.

In contrast to the path-specifying forms, the region-specifying forms, B and C, are less selective: they exhibit no selectivity for motion verbs (cf. examples (1a) and (2a)). The notional contrast of forms B–C vs. D–F (i.e., 'region' vs. 'path')

thus corresponds to a morphosyntactic difference. However, the notional difference between B and C (viz., 'specific' vs. 'approximate' region) is a purely lexical difference between the two words: although the words contrast morphemically (*-pa* vs. *-qi*), the form contrast does not motivate the notional contrast (nor is it productive across all five stem series; see note 4).

If a schematic property of a form is motivated by grammatical principles, this schematic property inheres not only in that form, but in a paradigm of forms generated by the same principle. For example, I noted earlier that series A forms are productively inflected for grammatical number and, to this extent, are schematized as 'enumerable things'; to this extent, they are just like the denotata of any pluralizable count noun. Recall that each of the five stems noted in table 1 yields series A forms; given a three-way differentiation of number (singular, dual, and plural), fifteen distinct deictics in the language share the denotational schema 'enumerable things'.⁴ "Series A" is simply a name for this denotational class. The fifteen forms belonging to series A are listed in group (1) of table 4. The five stem shapes (and their interactional schemas) are listed at the top of the table; the three rows in group (1)—"SG," "DU," "PL"—reflect distinctions of grammatical number.

Series A demonstratives also occur as adnominal modifiers to nouns. Their use as modifiers is exemplified in group (2) in table 4 for the singular forms (however, dual and plural forms occur in this construction as well). The notional property of the demonstrative—that it specifies a locatum or locatable thing—is only realized in adnominal constructions relative to the superposed semantics of the modified noun. If the noun is semantically concrete—as in [*thəp ti*]_{NP} 'this book'—the locatum-referent can be isolated, at least in principle, in visual and physical terms. However, if the noun is abstract—as in [*sāmlo the*]_{NP} 'that thought'—the locatum-referent has no location in physical space. The adnominal usage therefore implies that deictically denoted 'things' may be 'locatables' in several types of 'space', a point to which I return below.

2.1.2.2. Denotational markedness. In the previous section, I argued that many aspects of the denotational schema of deixis are motivated by the grammatical distributions of deictic words and word-elements. For each of the six word series A through F—each corresponding to a distinct denotational schema—the distributional facts were summarized in table 3, and discussed thereafter. Since several cross-cutting distributional criteria differentiate the sense properties of words in series A through F (cf. columns (a)–(e), table 3), there is no necessity that a word that is more marked relative to one criterion also be more marked relative to a second. Nonetheless, the markedness relations between these forms clearly involve two levels of ranking among three generic groups of deictic words.

Table 4. Series A Demonstrative Forms

		INTERACTIONAL SCHEMA		
INFLECTION IN MORPHOSYNTACTIC PARADIGMS	PROXIMAL (to speaker or addressee)		DISTAL (to both speaker and addressee)	
	<i>t_i</i> - 'proximal to S'	<i>th_e</i> - 'proximal to A'	<i>y_a</i> - 'distal-↑ to S & A'	<i>m_a</i> - 'distal-↓ to S & A' <i>phā</i> - 'distal to S & A'
(1) enumerable nouns				
SG	<i>t_i</i> 'this'	<i>th_e</i> 'that'	<i>y_aqi</i> 'that-↑'	<i>m_aqi</i> 'that-↓' <i>phāqi</i> 'that'
DU	<i>t_iññi</i> 'these two'	<i>th_iññi</i> 'those two'	<i>y_aññi</i> 'those-↑ two'	<i>m_aññi</i> 'those-↓ two' <i>phāññi</i> 'those two'
PL	<i>t_itso</i> 'these'	<i>th_etso</i> 'those'	<i>y_itso</i> 'those-↑'	<i>m_itso</i> 'those-↓' <i>ph_itso</i> 'those'
(2) adnominal noun modifiers	<i>[th_ep t_i]_{NP}</i> 'this book'	<i>[th_ep t_i]_{NP}</i> 'that book'	<i>[th_ep y_aqi]_{NP}</i> 'that book up there'	<i>[th_ep m_aqi]_{NP}</i> 'that book down there' <i>[th_ep phāqi]_{NP}</i> 'that book over there'

Notes: ↑ = 'above'; ↓ = 'below'; square brackets and subscripts show syntactic constituency.

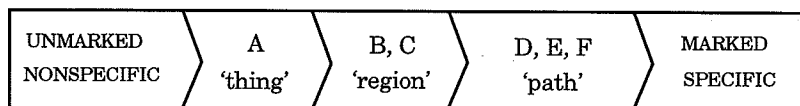


Figure 2. Ranking of denotational schemas: distributional markedness and denotational specificity

The path-specifying forms (D, E, and F) on the right hand side of figure 2 are distributionally the most marked, given their exclusively adverbial syntax and their selectivity for motion verbs. They correspondingly have the most specific denotation: their prototypical referents are 'path' trajectories (up to and including a 'path' terminus). The region-specifying forms (B and C) are distributionally less marked: they are not selective for motion verbs, nor restricted to adverbial syntax. Their denotational effect is, correspondingly, less specific: a greater variety of loci can be individuated as 'regions'. For example, any 'path' individuated by forms D through F can be referred to anaphorically as a 'region' in resumptive reference. Series A deictics are the most distributionally unmarked forms. These forms have the widest, least specific denotational range: anything at all can be reindividuated as 'thing', however it may have been typified in an earlier phase of discourse.

2.2. Summary of deictic schemas. I have been arguing that deictic words constitute a functionally interlocking paradigm of forms: each deictic word **jointly** schematizes denotational and interactional variables in usage. In Lhasa Tibetan, the interactional schemas inhere lexically in deictic stems; the denotational schemas are motivated largely by the morphosyntactic sense properties of deictic words (i.e., by morphemic composition **and** syntactic distribution), though some degree of lexicalization prevails here as well.⁵

These facts are summarized in table 5. At the top of the columns numbered I–V, I list the five deictic stems noted in table 1, along with the interactional schemas lexicalized in each. I use the letters A through H to distinguish the denotational schemas implemented by deictic words (including the schemas A through F noted in table 3). Cases where the same word implements more than one denotational schema are differentiated by subscripts. For example, the "nominal" and "adnominal" functions of series A forms (distinguished above in table 4) are differentiated in table 5 as subseries A₁ and A₂, respectively. The forms in each row differ in their interactional schemas (shown at the top of each column), but share the same denotational schemas (shown in the leftmost column).

Table 5. Schematic Properties of Lhasa Tibetan Deictics

DENOTATIONAL SCHEMA	INTERACTIONAL SCHEMA				
	I. <i>tj</i> - 'proximal to S' [<i>tj</i>] _{NP} 'this' [NOUN] _{NP} <i>tj</i> 'this NOUN'	II. <i>thē</i> - 'proximal to A' <i>thē</i> 'that' NOUN <i>thē</i> 'that NOUN'	III. <i>yē</i> - 'distal-↑ to-S & A' <i>yē</i> 'that-↑' NOUN <i>yē</i> 'that-↑ NOUN'	IV. <i>mē</i> - 'distal-↓ to-S & A' <i>mē</i> 'that-↓' NOUN <i>mē</i> 'that-↓ NOUN'	V. <i>phā</i> - 'distal-to-S & A' <i>phā</i> 'that' NOUN <i>phā</i> 'that NOUN'
A ₁ . 'enumerable thing(s)'					
A ₂ . 'adnominal'					
B ₁ . 'region (specific)'					
B ₂ . 'adnominal locus'					
C. 'region (approximate)'					
D. 'path towards'					
E. 'path towards (diminutive)'					

Table 5. Schematic Properties of Lhasa Tibetan Deictics (continued)

DENOTATIONAL SCHEMA	INTERACTIONAL SCHEMA			
F ₁ 'path from'	<i>tinèè</i> 'from here'	<i>thənèè</i> 'from there'	<i>yanèè</i> 'from above, downwards'	<i>mānèè</i> 'from below, upwards'
F ₂ 'time from'	<i>tinèè</i> 'hence, hereafter'	<i>thənèè</i> 'thence, thereafter'		
G. 'time'	<i>tijjüü</i> 'at this time, then'	<i>thijjüü</i> 'at that time'		
	<i>tijirij la</i> 'in this time, during'	<i>thijirij la</i> 'in that time, during'		
H. 'manner'	<i>tin₁ɲʃsü</i> 'like this'	<i>thən₁ɲʃsü</i> 'like that'		

Notes: S = 'speaker'; A = 'addressee'; ↑ = 'above'; ↓ = 'below'. Syntactic constituency partly determines denotational schemas and is shown by brackets and subscripts in column I, rows A₁, A₂, B₁, and B₂; all other deictics in these four rows share the same constituency; all deictics in rows C-H are syntactically adverbs.

Since I have already discussed the schematic properties of series A forms in some detail, I begin here with a discussion of series B forms. Series B deictics are formed by the addition of the dative-locative suffix to the series A form, yielding words like *tɛɛ* 'here', *thɛɛ* 'there', *yɛqɛɛ* 'there-↑', etc. Series B deictics implement two rather distinct denotational schemas. As adverbs, they denote a 'region (specific)'; this form-function category is shown in row B₁ in table 5. As nominal postpositions, they represent an 'adnominal locus' (or 'locus-relative-to-a-thing', where the 'thing' is denoted by the modified noun or nominal); this category is shown in row B₂.

The 'region (specific)' function involves a relatively independent schematization of location since the deictic that implements it occurs as a simple adverb. This is shown in example (3a). When the deictic occurs as an adnominal postposition, however, the denotational schema of 'adnominal locus' is filled in by the superposed semantics of noun type and of verbal case-assignment, as illustrated in examples (3b)–(3d).

- (3a) *qhō* [*yɛqɛɛ*] *chɪ̃* *sōŋ*
 he-NOM there-↑ went AUX
 'He went up there.'

- (3b) *qhō* [*saqhãã* *phɛqɛɛ*] *chɪ̃* *sōŋ*
 he-NOM restaurant that-D/L went AUX
 'He went to that restaurant.'

- (3c) [*pūqu*] *tɛɛ* } *qãŋɿrii* *tɪ̀*
 boy this-D/L bicycle exist
 'This boy has a bicycle.'

- (3d) [*pūqu* *phɛqɛɛ*] *nãã* *rɔnãã*
 boy that-D/L give(H) please
 'Please give [it] to that boy.'

In example (3b), the deictic occurs as part of the postpositional phrase *saqhãã phɛqɛɛ* 'to that restaurant'. Since the verb *chɪ̃* 'went' assigns a 'locative' semantic role to this argument, and since *saqhãã* 'restaurant' is a place noun, the overall spatial effect of the sentence is still transparently one of 'locational' reckoning. In example (3c), however, the deictic modifies *pūqu* 'boy', an animate noun; the verb *tɪ̀* assigns dative case to this argument (semantically, "dative of interest"); the animate-dative configuration specifies a "possessor" construction in this language. The semantics of 'possession' are thus superimposed upon the deictic locus, here understood as the 'person owning the bicycle'. In example (3d), the oblique argument *pūqu phɛqɛɛ* 'to that boy' is assigned the semantic role 'receiver' by the verb *nãã* 'give (H)'; the deictic locus is understood as the recipient of an act of giving. In contrast to the B₂ category in examples (3b)–(3d),

the B₁ category—exemplified in (3a)—does not permit this degree of grammatical differentiation of sense: whatever it denotes is typifiable as 'region'.

All the remaining series of deictics, listed in rows C through H in Table 5, have a purely adverbial syntax, lacking any adnominal properties. Whatever spatialization effects they enable, these effects are projected adverbially, in relatively independent schematizations of location.

Series C deictics are formed directly from the stem by suffixation of the nominalizer *-pa*, followed by the dative-locative suffix (see note 2). Series C deictics adverbially denote approximate regions of space, with boundaries less clearly defined than for B₁ forms. The utterance in example (4) was recorded when the speaker and I were walking on a mountain path in the Solukhumbu district of Nepal. A number of farm dwellings were in view below us as we headed up the mountain towards another settlement.

- (4) *yapaa* *lɔɔ* *mĩ-tuù* «pointing up»
 there(↑)about light neg-AUX
 'There is no electricity up around there,'

yinèè *mapaa* *tuù* «pointing down»
 but there(↓)about AUX
 but there is [some] down around there.'

The speaker was referring to the fact that there was no electricity higher up the mountain, but that the regions below did have electricity. Although both statements were accompanied by pointing gestures in the appropriate directions, the utterance did not convey the precise boundaries of the spread of electrification below, or of its absence above. Our destination higher up the mountain did, in fact, turn out to have electricity, but this fact was not necessarily inconsistent with the approximate schematization of regions in utterance (4).

Series D and E forms represent directions rather than regions. In both series, however, the proximal stems *tĩ-* and *thẽ-* are replaced suppletively by the stem *tshũ-*; thus, neither series differentiates the interactional schema 'proximal to S' from 'proximal to A'. Series D expressions are formed by the addition of the dative-locative suffix directly to the stem. Series E is formed with the suffix *-tsa* 'a little bit, more or less'. A form from each series is exemplified in examples (5a)–(5b).

- (5a) *qhō* *maa* *rĩi-pa* *rẽ*
 he-NOM down-DAT fall-NZR AUX
 'He fell down there.'

 (5b) *qhōō* *qēētsaa* *yā-tsa* *tsaa* *soŋ*
 he-ERG ladder-ABS up-little climb AUX
 'He climbed a little bit up the ladder.'

Series F expressions are formed by the suffixation of the ablative case marker (*nɛ̀* 'from') to the deictic stem. The proximal forms in this series (*tɪnɛ̀*, *thɛnɛ̀*) tend to exhibit some functional leakage between a spatial and a temporal meaning, distinguished as F₁ and F₂ in table 5). However, the distal forms (*yɛnɛ̀*, *mɛnɛ̀*, and *phɛnɛ̀*) only implement the F₁ category. The spatial and temporal meanings of the proximal forms are illustrated in examples (6a) and (6b), respectively, and the purely spatial reflex of the distal form in example (6c).

- (6a) *yɪqi tɪ the-nɛ̀ yon sɔŋ*
 letter this that-ABL came AUX
 'This letter came from there.'

- (6b) *the-nɛ̀ yɪqi ciq yon sɔŋ*
 that-ABL letter one came AUX
 'Then, a letter came.'

- (6c) *ŋaə thep phɛnɛ̀ nɪ̃ cun*
 I-D/L book that-ABL find AUX
 'I found the book (from) there.' (e.g., "I brought it from that place")

The temporal usage, F₂, appears to be motivated partly by analogy with the exclusively temporal series G deictics: both are implemented only from proximal stems. In series G (see example (7)), the distal stems—*yɛ-*, *mɛ-*, and *phɛ-*—yield no deictic forms at all. Similarly, series H deictics, the 'manner' deictics, are also formed only from the proximal stems, *tɪ-* and *thɛ-*, by the suffixation of particles such as *nɛnɛ̀* 'like, similar(ly)', as in example (8).

- (7) *thɪ-tɪ̃ qhɔ̃ nɪ̃ ʃor sɔŋ*
 that-time he sleep fall AUX
 'Then, he fell asleep.'

- (8) *yɛŋkaa tɪ-nɛnɛ̀ ma-lap-a*
 again this-like NEG-speak-IMPV
 'Don't talk like this again.'

Overall, the distal stems (*yɛ-*, *mɛ-*, and *phɛ-*) are more narrowly 'spatial' in their uses than the proximal stems (*tɪ-* and *thɛ-*): the distal stems yield no temporal meanings in series F; they yield no deictics at all in the two nonspatial series (i.e., G 'temporal', H 'manner'). The latter two series contain other forms as well, not listed in the table. These forms incorporate further morpholexical material, merging ultimately with adverbial phrases.⁶

3. Contextual superposition. Thus far, I have confined my attention to the schematic properties of deictic words, illustrating deictic usage only in rather

minimal contexts. I have been arguing that the schematic properties of deictic words involve two rather distinct components, a denotational schema and an interactional schema, united together as the meaning of the word.⁷ These considerations suggest that the **utterance** of a deictic word always enacts a schematically hybrid effect: it specifies entities in the universe of denotation while locating them relative to variables of interaction.

Yet, as I noted in the introduction, the "spatial" effects of deictic usage are inevitably contextualized by the effects of other semiotic devices within discursive interaction. These devices include tokens of other, co-occurring linguistic categories, as well as elements of nonlinguistic signal. For example, spatial locations may be specified by kinesic-visual means independently of the utterance of the deictic word; or, they may be represented linguistically but non-deictically (e.g., by means of place names, descriptions, etc.). Since deictic words themselves occur as part of a linguistic "co-text" as well as a nonlinguistic "context"—in what is better termed a "co(n)text" of occurrence—the schematic effects of deixis impose a structure on any spatial representations (or "models" of space) independently constructible in the co(n)text of deictic use. Conversely, the effects of such co(n)textual spatial models are **superposed** during usage upon the schematic effects of the deictic word. We need to get clearer, therefore, about the types of spatial models that can co(n)textualize the spatial effects of deictic usage.

John Haviland has distinguished four such models of space constructible by concurrent semiotic activity during the time course of discursive interaction. Haviland argues that the "lamination" of these more elementary spaces yields more complex representations of space as a cumulative result (1993:196). Haviland's basic distinctions may be summarized as follows:

- *local space*: a framework for locating observable features of the environment;
- *narrated space*: the spatial framework in which narration situates referents;
- *interactional space*: the spatial framework projected by the orientation of the interactants' bodies; and
- *narrated interactional space*: the interactional space in which narrated events are situated.

The first such model, *local space*, is most closely connected to the semiotics of vision, though it incorporates other principles as well, which Haviland discusses in some detail. For the present, it will suffice to say that objects that are not perceivable in the physical environs have no position in 'local' space, and that visual perception is the central channel for reckoning such positions.

The use of a language is necessary for locating entities in *narrated space*, since language is necessary (though not generally sufficient) for specifying "referents" (as opposed to perceivable "objects"). A narrated space is frequently projected relative to an *interactional space*, since the referents of a linguistic

narration may be locatable in relation to the corporeal interactants' bodies. Finally, if the use of language specifies narrated speech events, as in the case of reported speech, the referents thus specified may be locatable in relation to a *narrated interactional space*, i.e., the interactional framework of those corporeal beings who are understood as engaging in the narrated speech event.

Haviland's account of these distinct models of space is extremely useful for isolating the co(n)textually superposed effects of deictic usage. Insofar as people who use deictics can see referents, see each other, employ narrative frames, etc., several different types of higher-order spatial models are constructible around facts of deictic usage. I begin with a discussion of one such higher-order construct, what is sometimes called "physical space."

3.1. Exophoric reference to 'physical' objects in local space. Perhaps the most concrete spatial effect of deictic usage involves the locatability of physical objects. This most concrete of usages, sometimes called "exophoric deixis," is often regarded as the paradigm case of deictic usage. In the examples below, I illustrate the way in which a number of semiotic variables, additional to the deictic form itself, must be pressed concurrently into service to achieve such reckoning. The most concrete case turns out to be a very special case, involving a dense superposition of several different spatialization effects. This suggests that the most concrete case is by no means the paradigm case of deictic usage in general.

The lamination of spaces—or the superposition of spatial effects—is evident if we attend to the verbal and gestural accompaniments as well as to the physical context of deictic usage. In Thepo's question in example (9), the deictic *the* 'that' schematizes its denotatum as 'thing'; the noun that it modifies, *thep* 'book', explicitly characterizes the thing in question; the utterance is accompanied by a pointing finger; the utterance and pointing gesture occur in a setting in which a prototypical referent of *thep* 'book' is co-present in local space.

- (9) Thepo: *thep the sũũ rɛ̀* «pointing with finger»
 book that whose AUX.INT
 'Whose is that book?'

- Chimi: *tĩ ɲɛɛ rɛ̀* «gaze turning towards book»
 this mine AUX.ASR
 'This (one) is mine'

The pattern of gestural accompaniment imposes an interactionally defined structure on this local space: Thepo's pointing finger radially projects a line; Chimi's gaze turns so that its final direction projects a line of sight intersecting the line projected by Thepo's finger. The pattern of deictic usage imposes a further interactional space upon this local space, as evident from the switching

of deictic forms between question and answer. In responding to Thepo's question—which contains the addressee-proximal deictic *the* 'that'—Chimi switches to the speaker-proximal deictic *ti* 'this', thus indicating that the object at issue (whose characterization as a 'book' is indexically presupposed from the question) is indeed proximal to him. The two deictic forms, *the* and *ti*, asymmetrically partition the interactional space between speaker and addressee. Once this partition is imposed upon local space, the superposition implies that the denotatum in question (characterized independently as a book, and individuated concurrently by gestures) is closer to Chimi than to Thepo. In interactionally asymmetric usage, referring to the 'same' object in local space typically requires the switching of deictic forms—or recalibration of positions in interactional space—across distinct speaking turns.

On the other hand, the deictic form used in example (10), *m_Aqi* 'that down below', is interactionally symmetrical in an important sense: it indexes a referent that is equivalently distal, or nonproximal, from both speaker and addressee (whatever its actual scalar distance from either may be). In such cases, the response to the question typically requires no switching of deictic forms, as example (10) shows.

- (10) A: *m̩aqi qhare rɛ̀*
that-↓ what AUX.INT
'What is that (down there)?'

B: *m̩aqi cɔlaa rɛ̀*
that-↓ bag AUX.ASR
'That (down there) is a bag.'

Although example (10) differs from example (9) in that deictic forms are not switched, the kinesic signs accompanying the deictics exhibit a comparable "switching." In example (9), Thepo's question was accompanied by a **presentative** gesture, the pointing finger, and Chimi's response by a **confirmatory** turning of eye gaze towards the object. In example (10), speaker A individuates the referent of *m̩aqi* by means of chin movement and eye gaze in a presentative fashion; in responding, B's eye gaze turns towards the referent in a confirmatory gesture.

If we consider cross-modal relationships, we see again that several semiotic effects converge together in example (10) to isolate the 'same' thing. The intersection of eye gaze interactionally defines a position in local space; the deictic *maqi* imposes both interactional and denotational structure on this position (interactionally, 'distal-↓-to-S-and-A'; referentially, a 'thing'), identically in question and response; the 'thing' thus individuated is indexically presupposed in—and elaborated further by—the explicit denotation of the predicate (*colaa reè* 'is a bag').

In both examples (9) and (10), physical ostension is not a "natural" (i.e., semiotically unmediated) phenomenon grounding the linguistic utterances as such. The two modalities of semiosis—gestural and phonatory—reciprocally diagram each other in patterns of usage, serving as indexical icons for each other: insofar as patterns of kinesis and patterns of linguistic deixis co-occur with each other, the effects achieved by either are indexically presupposable by the other; insofar as the effects of deixis and of gesture resemble each other (e.g., they pick out the 'same' object, thus achieving referential effects that are comparable in outline), the two patterns serve as contextual **icons** of each other, motivating each other within the act itself.

The "nonnaturalness" of gestural accompaniment can be seen more clearly in cases such as (11), where the kinesic event that counts as the act of ostension presupposes the effects of utterance to a very high degree.

- (11) *chūūrā tī rūūpa rē* «scraping the cheese with a knife»
 cheese this rotten AUX
 'This cheese is rotten.'

Here, the act of scraping cheese with a knife is co(n)textualized by an utterance containing proximal deictic reference to the cheese. The act of scraping in example (11) is no less an act of ostension than the finger pointing in (9) and chin movement in (10), though **it is only recognizable as such** because it is contextualized by the utterance. Just as the interpretation of deixis often depends upon accompanying kinesis, gestural "events" frequently require framing by utterances in order to be construed as ostensive "acts." Deictic and kinesic signs typically motivate each other in use, though the direction and degree of motivation may vary from case to case.

All three examples, (9), (10), and (11), are cases of exophoric deixis to a concrete, physically bounded object. The construal of these utterance-acts as clear cases of exophoric deixis depends, however, on a superimposed semiotic effect, involving several semiotic variables working together in concert. First, kinesic signal anchors spatial effects in local space. Secondly, such locus receives an interpretation in the interactional space typified by deictic usage (e.g., 'proximal to speaker', etc.). Third, such locus is semantically motivated as the location of 'physical' objects because the nouns accompanying deictic usage are common nouns denoting concrete, physically bounded and visually perceivable objects—viz., *thep* 'book', *cōlaa* 'bag', and *chūūrā* 'cheese'. Fourth, the semantic effect of such nouns has an additional interpretation in local space because—in all three instances, (9), (10), and (11)—a prototypical referent of each common noun is independently visible in the local space in which the utterance-act occurs.

Note that cross-modal relationships also motivate typifications of gestures. For example, the act of scraping cheese in (11) is only interpretable as "osten-

sion" due to the accompanying utterance. On the other hand, the "presentative" gestures in (9) and (10) (pointing with finger, pointing with chin-and-eye), are relatively conventional ways of achieving ostension (the former more so than the latter) in Lhasa Tibetan culture, and in ours. However, these gestures are only typifiable as "presentative" (and the subsequent turning of interlocutor's eye-gaze, as "confirmatory") relative to the utterances that frame them.

Such cross-modal relationships also motivate typifications of deictic usage itself. In example (12), the speaker-proximal deictic *têĕ* is used in a "presentative" fashion.

- (12) Chimi: *ŋawan laà... khērāā qi pāse qhapaa yōō*
 PN HON you GEN passport where AUX
 'Ngawang... where is your passport?'

Ngawang: *laà tēĕ* «handing over passport»
 HON here
 'Here [it is] (polite).'

This deictic usage is typifiable as a "presentative" act (an act of 'presenting an object') only by virtue of a dense superposition of several semiotic variables. First, the noun *pāse* 'passport', which specifies the topic of Chimi's locational query, is semantically a concrete noun denoting a highly bounded, physically locatable object. Secondly, although Ngawang's verbal response (*laà tēĕ*) is highly elliptical by sentence-propositional criteria, the fully contextualized utterance-act, consisting of the utterance *laà tēĕ* and accompanied by the act of physically handing something over, occurs sequentially after Chimi's question, as a **candidate** answer to that question. Third, what makes it a good—indeed exemplary candidate—is that the thing handed over is a physical object that happens to be a prototypical referent of the semantic class designated by *pāse* 'passport'. It is only in the light of these superposed effects that the typification of the act as "presentative" makes any sense. Contextual superposition thus provides **an emergent framework for typifying action**. Different participants (or analysts) may have access to, or may attend to, different layers of superimposed effects in distinct phases of discursive interaction. To this extent, they may have different perspectives on what the action is. But the typification of acts does not proceed without appeal to superimposed effects.

3.2. Reference in nonlocal spaces: endophoric deixis. The preceding discussion suggests that deictic usage may be typified as "exophoric" only when the utterance of the deictic is part of a multimodal semiotic activity that itself individuates physical objects in local space. In the next set of examples, the nouns modified by deictic forms are all semantically concrete; however, no criterial referents are visually perceivable in local space. The usage motivates no exophoric construal. Deictic usage of this type is traditionally called

"endophoric usage"; the nonlocal spatial framework involved is sometimes called "information space." The question remains of how the interactional schemas typified by deictic forms—relations such as 'proximal to origo', etc.—are construed in nonlocal spaces.

In example (13), the speaker-proximal deictic *tī* 'this' occurs in an adnominal construction, *pūqu tī* 'this boy'. The denotational schema projected by the deictic *tī* 'this'—that its referent is a 'thing'—has superimposed upon it the noun-based characterization that the thing in question is a 'boy'. However, the deictic utterance is not co(n)textualized by any acts of ostension, and no criterial referent of *pūqu* 'boy' is visually perceivable in the physical setting of the utterance.

- (13) *qhēēsa lapṭaa pūqu ciq phāma ñlmtōō yon cūŋ*
 yesterday school-D/L boy one parents with come AUX
 'Yesterday a boy came to the school with [his] parents.'

pūqu tī cāŋ toqhapo tūū
 boy this clever seem AUX
 'This boy seemed bright.'

Under such conditions, the exophoric construal of the speaker-proximal deictic *tī* 'this' (e.g., the construal of physical proximity of the corporeal speaker to an object in local space) is unavailable. On the other hand, the utterance of *pūqu tī* 'this boy' is contextualized by the utterance of the lexically cohesive noun phrase, *pūqu ciq* 'a boy' in the immediately preceding sentence-token. Such lexical cohesion (highlighted by emphasis in the English gloss) motivates the construal that the referent of the deictic phrase *pūqu tī* 'this boy' is the same as the referent of the nondeictic phrase *pūqu ciq* 'a boy'. Lexical cohesion thus provides a deixis-independent criterion for locating referents, a criterion that is superimposed in use on the effects of deixis. If the deictic *tī* implicitly typifies its denotatum as 'thing', and the noun *pūqu* explicitly characterizes that thing as 'boy', then lexical cohesion "fills in" the denotational schema of deixis even further: it specifies that the boy who seemed bright is the same as the boy who came to school with his parents. (The inference of "same reference" motivated by this criterion may, of course, prove subsequently to be false; in the instance it proved to be correct, i.e., was ratified by both interactants in subsequent discourse).

But how is the interactional schema 'proximal-to-speaker' understood in such usage? The construal of 'physical closeness in local space' is clearly ruled out in cases like (13) by the absence of exophoric-local anchoring. However, the endophoric anchoring in (13) itself motivates a construal: the anaphoric antecedent (*pūqu ciq* 'a boy') itself counts as "new" information relative to its frame (as the indefinite article indicates). In such a context, the interactional schema 'proximal to speaker' (implemented by *tī* in *pūqu tī* 'this boy') has at least one

clear endophoric interpretation: its referent is 'new information introduced by speaker'.

Example (14) is similar in that no exophoric-local anchoring is available. Like the case in (13), the sentence has a past time modalization (*qhēēsa* 'yesterday'), and the deictic occurs in an adnominal construction, modifying the nominalized sentence *ñee parce ño-qhēē the* 'buyer of my camera'. The deictic itself is the 'addressee-proximal' form *the* 'that'.

- (14) *qhēēsa ñee parce ño-qhēē the ñūū tshanma tēē macun*
 yesterday my camera buy-er that money all give neg.AUX
 'That one [i.e., the person] who bought my camera yesterday didn't give [me] all the money.'

In example (14), the adnominal use of the 'addressee-proximal' form implies that some aspect of the denotation of *qhēēsa ñee parce ño-qhēē the* 'that buyer of my camera yesterday' is **known to current addressee** (e.g., that the current addressee knows that someone has bought, or has attempted to buy, the speaker's camera). Whether or not the addressee actually knows any of this, i.e., whether or not it really is "old information," determines the interactional success of such deictic reference.

These considerations suggest that the construal of the interactional schema of a deictic form may itself be motivated by the interpretation of its denotational schema. For example, the denotational schema common to the two deictics in utterances (13) and (14)—viz., 'thing'—is not interpreted relative to physical objects perceivable in local space. Consequently, the "filling in" of the interactional schemas—viz., 'proximal-to-speaker' and 'proximal-to-addressee' in (13) and (14)—itself carries no implication of "physical proximity" between the origo and the referent, i.e., between the speaker and the boy in (13), or the addressee and the camera buyer in (14).

When the denotational effects of deixis are anchored in narrative space, but have no interpretation in local space, the resulting framework of orientation may usefully be termed "information space" (where the term "information" refers to narrated propositional content). Such characterization helps us to see that the distinction between "new information (introduced by speaker)" vs. "old information (known to addressee)" is formally analogous to the distinction between "physical proximity to speaker" vs. "physical proximity to addressee," since both distinctions may be implemented by the contrast between *tī* and *the*. Although the metaphoric term "information space" helps us to see this analogy between endophoric and exophoric usage, the metaphor is useful only if it is not literalized. It also has severe limitations.

One limitation of the metaphor is that propositional "information" is as critical to exophoric deixis as it is to endophoric deixis. Endophoric deixis is special not because it distinctively involves "information" but because its "infor-

mational" or propositional content has no interpretation in local space. If exophoric deixis involves the superposed coincidence of effects in local, interactional and narrative spaces—as illustrated in the discussion of (9)–(11)—endophoric usage is the case of superposed noncoincidence, as in (13) and (14). However, such noncoincidence is a matter of degree, since it involves several interacting variables. This point is clarified in the next section.

3.3. Reference to nonconcrete, nonlocalizable objects. All of the uses of deictic forms considered so far involve reference to highly concrete, spatio-temporally bounded objects. In the adnominal uses considered so far, the modified nominal expression is semantically [+ concrete]—viz., *thep* 'book', *cɔlaa* 'bag', *chũūrā* 'cheese', *pūqu* 'boy', and *ɲɛɛ parce ño-qhẽẽ* 'buyer of my camera'. The cases I consider below involve [– concrete] nominal expressions.

In example (15), the distal demonstrative *thɛ* 'that' occurs as modifier to a complex N' construction—the nominalized clause [*ɲɛɛ lap-pa*]_{N'} '(what) I said'—whose referent is not a concrete (i.e., spatially bounded, temporally perduring) object. The nominalized clause refers to an utterance, potentially an earlier segment of discourse within the same interaction. Such a referent is an inherently evanescent and fleeting 'thing', not visually perceivable; it is cognitively graspable only in memory, as the speaker enjoins the addressee to do in (15).

- (15) [*ɲɛɛ lap-pa*] *thɛ* | *ma cɛɛ-pa* | *chɛ qɔ* | *rɛɛ*
 I-ERG say-NZR that not forget-NZR do must AUX
 '[You] must not forget what I said.'

In this adnominal usage, the spatial effect of *thɛ* 'that' does not involve physical objects because the modified nominal *ɲɛɛ lap-pa* 'what I said' cannot refer to objects of the 'physical' kind. Consequently, the interactional schema 'proximal to addressee' has no exophoric interpretation of physical closeness to the corporeal addressee. However, even in the absence of exophoric-local anchoring, the addressee-proximal indexicality does have a motivated interpretation in "information" space, just as in example (14): the denotatum ('what I said') is understood as presupposable by the addressee from prior discursive interaction. Once again, such "information" may not, **in fact**, be known to the addressee, a circumstance to which he or she may respond in a range of possible ways (e.g., with open challenges such as "What did you say that is so important?").

Example (16) presents a parallel case, differing, however, in that the demonstrative exemplified is the proximal form, *tɪ* 'this'.

- (16) A: *tɛmpa laa tar khẽrãã chããlee cɪqpa re-pɛɛ*
 PN HON and you(H) work(H) same AUX-INT
 'Is Tempa's and your **work** the same?'

B: *laà mareè... ηεè lεεqa che-yaà tì* «pointing to tools»
 h NEG.AUX I-ERG work do-NZR this

No... this **work** which I do,

qhōō qù sī-qi yɔɔ mareè
 he-ERG know-NZR NEG.AUX
 he doesn't know [it].'

The modified nominal expression—*ηεè lεεqa che-yaà* 'work which I do'—is, once again, semantically [-concrete]. The deictic noun phrase occurs in B's response; it has an endophoric construal motivated by lexical cohesion with A's question (cf. *chaa-lεε* 'work (H)' in the question, and *lεε-qa* 'work (NH)' in the response). Despite such endophoric anchoring of indexicality, the proximal deictic in example (16) introduces new information relative to its own frame: having answered A's yes-no question in the negative, B stipulates that his own work—'this work which I do'—is not only **not** identical to Tempa's work, it is work that Tempa does not even know how to do. To this extent, the referent of the deictic phrase is characterized in a new way, such characterization being "new information" relative to the order of shared knowledge presupposable within the interaction. Once again, the endophoric implementation of the interactional schema 'proximal-to-addressee' correlates with the signaling of relatively "new" information—here, a novel characterization of the "work"—relative to its endophoric frame.

However, B's response in (16) is also accompanied by a pointing gesture. The gesture picks out some tools lying on a table. As a result, the boundary between endophoric and exophoric usage becomes blurred. The spatiotemporally locatable and physically co-present things—the tools—which the gesture ostends in local space are all elements used in the course of the relatively abstract and non-localizable thing—the work—which the deictic phrase characterizes in narrative space. The immediately co-present tools are in a nontrivial relationship to the denotatum of *ηεè lεεqa che-yaà tì* 'this work which I do', hence serving to motivate a quasi-exophoric construal. The construal is only "quasi-exophoric," however, since the tools are not the same as the activity in which they may be used. This example suggests that the relation between entities indexically co-present in local space and those indexically characterized in narrative space can be relatively indirect, thus permitting different degrees of exophoric orientation during the course of endophoric usage.

The problems with our inherited terminology of "exophoric deixis" and "endophoric deixis" may now be described as follows: the terminological contrast does not describe any schematic properties of deictic forms per se; rather, it differentiates the superposed effects of their usage. This binary contrast of terms serves, at its clearest, to distinguish the case of unique denotational anchoring in local space (the paradigm "exophoric" case) from the case of unique denota-

tional anchoring in prior denotational effects (the paradigm "endophoric" case). Example (16) shows that both types of anchoring can simultaneously be achieved to some degree on a single occasion of deictic usage.

In the foregoing examples, I have noted that deictic usage with [-concrete] nouns tends to block the exophoric-physical construal of deixis. The irrealis mood provides another such grammatical variable. In example (17), both variables co-occur in the use of a speaker-proximal deictic form.

- (17) *qhōō qii lēqqa tī chēē ma chēē hāqu-qi mēē*
 he-ERG work this do not do know-NZR NEG.AUX

'[I] don't know whether or not he did this work.'

The referent of *lēqqa tī* 'this work' is abstract in the sense that the noun *lēqqa* 'work' does not denote a concrete, localizable object. Given the absence of gestural anchoring, the phrase has no stipulated interpretation in local space. The irrealis mood further attenuates the 'local space' interpretation of the deictic form by specifying that sentence denotation—which includes deictic denotation—is stipulatively noncoincident with the actual state of affairs. The work in question may never have been done; in this sense, the denotatum may not even "exist." The overall interpretation is doubly remote from anchoring in any type of 'physical' framework of orientation.

3.4. Interdependence of denotational and interactional construal. I have been arguing that "physical space" and "information space" are higher order constructs that serve co(n)textually to interpret the denotational effects of deixis. Such constructs are recognizably implemented in actual usage by semiotic devices other than deictics (e.g., visual signs, kinesics, lexical cohesion, etc.). Such devices define an emergent framework for the interpretation of deictic tokens. Once implemented, however, such frameworks "fill out" the denotational construal of the deictic form in contextually specific ways.

Since the schematic properties of the deictic form itself unites two distinct functional components—a denotational and an interactional schema—we would expect that the co(n)textual construal of either one has implications for the construal of the other. We saw in the above examples that when the denotational schema of deixis has an interpretation in exophoric-local terms, the interactional schema is also construed in such terms. Thus, in the exophoric usages in (9), (10), and (11), the interactional schemas of deixis are construed as involving the physical proximity or distance of denotata since these denotata are independently locatable as physical objects. In (13), (14), and (15), however, such interactional schemas serve to implement distinctions such as "new" versus "old" information relative to the denotational effects of prior discourse. In all of these cases, therefore, the construal of the denotational schema motivates an interpretation of the interactional schema.

I noted earlier that the interactional schema of deixis locates denotata in relation to interactional variables such as 'speaker-of' and 'addressee-of' utterance by treating the latter as origos or zero points of "spatial" reckoning. In all of the preceding examples, these interactional variables have been interpretable as the default cases 'current speaker' and 'current addressee'. I now turn to cases where such default interpretation is clearly unavailable.

3.4.1. Transposition of origo to noncurrent interactional frameworks. The interactional schema of deixis simply locates deictic referents in relation to **some** interactional framework by typifying that framework in a schematic way. The deictic form never specifies **which** interactional framework may be at issue at the level of schematic content. The assumption that the current interaction provides the default value of the interactional schema is itself motivated by a superimposed semiotic effect. The assumption is motivated by the most quotidian of all superpositions: every occurrence of any deictic form—irrespective of how it schematizes its interactional zero point—is pragmatically situated by the occasion of its occurrence. Such an occasion is the "current" interaction. Interactional variables—such as 'speaker-of utterance'—have default interpretations—such as 'current corporeal speaker'—only in this sense.

We saw in table 1 (in section 2.1.1) that different deictic stems typify the occasion of deictic usage by integrating typified origos into different interactional schemas, such as 'proximal to speaker of utterance', 'distal to speaker and addressee of utterance', and so on. Such schemas are implicit metapragmatic typifications: they tell us something very general **about the pragmatics** of any occasion of usage. They tell us that some implicit and generic pragmatic locus—explicitly definable only in variable terms—serves to anchor denotation on any such occasion of utterance. More specific values of the variables defining origo are available by co(n)textual superposition in any actual occasion of usage—though it is by no means necessary that a unique construal be available in every case.

Cases of reported speech are particularly interesting in this regard in that the reported speech construction explicitly specifies that the interactional framework of the **reported** discourse is noncoincident with the interactional framework of the **reporting** discourse. Such constructions transpose the interpretation of the origo away from the default interpretation.

The utterance in (18) was offered to me by a young girl, Pēēma, who was talking about her brother. The quotative frame is specified by the enclitic -s occurring at the end of the reported utterance.

- (18) *qhōō tī tēē shō -s lap cūŋ*
 he-ERG this here put -QT say AUX
 'He said "Put it here!"'

Although both *tī* 'this' and *tēē* 'here' are forms that specify the interactional schema 'proximal to speaker', the quotative construction explicitly specifies that the 'corporeal speaker' at issue is not Pēēma, the speaker of (18), but her brother, the speaker of the reported utterance. Consequently, although the two deictics in (18) do denote a 'thing' and a 'region', respectively, and although both denotata are interactionally schematized as 'proximal to speaker', the quotative construction makes it clear that ^{such} 'thing' or 'region' are not entities whose location can be reckoned by treating the location of Pēēma as the zero point of reckoning. The origo of deictic spatialization is transposed to the narrated interactional space where Pēēma's brother spoke to her, and is specified—relative to such transposition—as being the locus from which he spoke. Both the denotational and interactional schemas of deixis are implemented in a perfectly regular way. The transposition of origo is the superimposed effect of the reported speech construction.

Reported speech constructions are only the most denotationally explicit devices by which transpositions of origo can be achieved. In example (19), the transposition of origo is achieved by a rather complex configuration of devices, including both a hand gesture and a narrative that frames its kinesic realization. The speaker of example (19) is Pēēma, the same girl who offered the utterance in example (18). In (19), she is describing how a friend of hers found her during a game of hide and seek.

- (19) *qhō* *yanēē* *yōŋ* *cūŋ* «palm rises to crest, then falls»
 he-NOM there-↑-ABL come AUX
 'He came from above.'

The utterance is contextualized by a physical gesture and by an earlier narrative. The earlier narrative described how Pēēma hid behind a wall that separated her from the school compound in which the game was taking place; the playmate who found her "tagged" her by climbing over the wall and creeping up on her from behind, on her side of the wall. The gesture accompanying the utterance is a sinuous, wavelike motion of the palm that diagrams her friend's trajectory in climbing the wall and descending on the other side. The deictic form *yanēē* 'from above' in her utterance projects the denotational schema of a path emanating **from** some locus; it specifies the interactional schema 'distal and above speaker and addressee'. Since Pēēma is speaking to me in offering this utterance, the "default" interpretation of origo would be our current shared location. However, the hand gesture visibly diagrams the narrated event itself, thus serving to shift the origo of reckoning away from the current interaction—where she and I are located—and to transpose it upon the narrated interactional space in which she was found out. The entire performance specifies that the boy's coming 'from above' is centered in relation to the place where she was then hiding, not in relation to the place where she is currently speaking to me.

Whereas the transposition in (18) was marked explicitly by a highly localizable semiotic device (i.e., the reported speech construction), the transposition in (19) is a semiotically complex achievement, highly embedded in the multimodal configuration of which it is a part, and "nondetachable" from it for purposes of construal. Example (20) is similar, though in this case, the highly embedded transposition is achieved without any gestural accompaniment.

Examples (20) and (21) were both uttered by a speaker with whom I was riding on a motorcycle at the time. The speaker, Tsetan, made no pointing gesture in making either statement, needing both his hands to steer. I was sitting behind him as we headed from downtown Kathmandu towards Tribhuvan University, located on the outskirts of the city. We were talking about the events of the previous day, when both Tsetan and I had been at the house of a common friend, Dawa. Tsetan uttered (20) in the course of describing how Dawa had been looking for a book that had eventually turned up in a downstairs room of the house.

- (20) Tsetan: *qhōō thep m̩q̩ēē t̩y̩*
 he-GEN book there-↓ AUX
 '... his book was down there.'

The sentence in example (20) is inherently tenseless and is locally susceptible to both a past and a present interpretation; the past tense construal in this instance is entirely context driven. The deictic *m̩q̩ēē* 'down there' specifies a region that is distal to both speaker and addressee, and below them. Tsetan's usage of the form in this context projects the zero point of reckoning as being the upstairs floor of Dawa's house, a place where both Tsetan and I had been sitting the preceding morning. Although Tsetan and I happen to be current speaker and addressee, respectively, the spatial effect of the utterance is projected relative to the location that we shared earlier in Dawa's house. The place that is individuated as 'down there' by the utterance is located relative to **that** shared location, **not** the location shared by us (en route) at the time of the utterance. The utterance transposes the construal of the interactional schema to a narrated interactional space in which the two individuals who are currently speaker and addressee were corporeally co-present (though not, of course, in the same roles). The link to this narrated interactional space is achieved by dense lexical cohesion and propositional consistency within the frame of the narrative (e.g., the antecedent of the anaphor *qhōō* 'his' is only recoverable relative to the narrative). The transposition is, again, a highly implicit and "nondetachable" effect of contextualized usage, but one in which text cohesion, rather than kinesic gesture, plays the critical role.

The topic of the conversation changed eventually to the purpose of our visit to Tribhuvan University. We were going there to meet a university official, about whom Tsetan then said:

- (21) *qhōō thāta phīqēē tūù*
 he(H)-NOM now there AUX
 'He is there now.'

In this case, the spatial reference of the adverb *phīqēē* 'there' was clearly intended by him (and understood by me) as reference to the university campus, projected relative to the location that we shared en route at the time of utterance. The utterance is endophorically embedded in its narrative frame by the anaphoric reference of *qhōō* 'he (H)'; the pronoun is honorific (compare the nonhonorific form *qhōō* 'his' in example (20)), thus reflecting the social status of the university official whom we were hoping to meet. In addition to the status-sensitive reference of the subject pronoun, the temporal adverb, *thāta* 'now' modalizes the predication—which contains the deictic *phīqēē* 'there' as a constituent—as temporally coincident with the current speech event. In the context created jointly by such subject reference and predicate modalization, the origo of *phīqēē* 'there' has the default interpretation, namely, the **current** shared location of speaker-and-addressee.

3.4.2. Region and path. In the foregoing examples, we have seen a number of cases of co(n)textual phenomena imposing a structure on deictic construal, yielding higher-order spatialization effects. I now consider a couple of cases of contextually superposed effects involving 'region' and 'path' deictics.

Example (22) involves the region-specifying adverb *tēē* 'here' with an active verb in the imperative mood.

- (23) *tī tēē shōō*
 this here put-IMPV
 'Put it here!'

The overall interpretation of the utterance—not of the deictic form alone—projects a higher-order spatialization effect derived jointly from the region-specifying function of the adverb and the movement specified by the imperative verb: the higher order spatial effect describes a directed path towards the region as its endpoint, a path that the addressee must traverse if he or she is to satisfy the contextual conditions indexically entailed by the verb's imperative mood. The specific interpretation of the adverb *tēē* 'here', however, is still that of a 'region'; verb spatialization delimits adverbial spatialization further by superimposing a 'path' construal upon a 'region' construal.

I noted in section 2.1.2.1 that the opposite type of sentence—one containing a 'path'-specifying deictic and a stative verb—is normally judged unacceptable. However, such sentences do occur felicitously in contexts where the present state-location of referents is specified in relation to their prior motion. Example (23) was uttered by a speaker in a context where his young daughter had scat-

tered a number of objects across the room, displacing them from their original locations. Each of the four deictic tokens occurring in this utterance—*tī* 'this', *phāā* 'that way', *tī* 'this', and *maa* 'that-↓-way'—was accompanied by a distinct pointing gesture. The four gestural pulses kinesically individuated four different locations in the room, two locations for each object.

- (23) «pointing 1» «pointing 2» «pointing 3» «pointing 4»
 tī *phāā* *tūi*, *āni* *tī* *maa* *tūi*
 this that.way be-at and this that-↓-way be-at
 'This one was over there, and this one was down there.'

The verb *tūi* 'be-at' is tenseless; its past interpretation is motivated by context. Since the location of **each** denoted object is individuated by two gestural pulses—the first individuating its current location, the second its past location—each object is understood as **having traversed** the path connecting two ostended points. This interpretation of the utterance-act in (23) is motivated jointly by the disarray visually observable in local space, and the gestures accompanying the utterance. The 'path' motion of denotata is thus independently motivated from the local space that contextualizes the construction of narrative space. Detached from such a local space, the sentence is either judged unacceptable by native speakers, or it is felt to imply some prior path motion (even though the sentence contains no past adverbs, or past tense, or motion verbs).

3.4.3. Up and down. I noted in section 2.1.1.1 that the deictic stems *ya-* and *ma-* distinguish relations of verticality. Thus far, I have glossed these as '↑' (or 'above') and '↓' (or 'below'), respectively. My initial hypothesis about these forms was that the former can be glossed generically as 'above line of sight', and the latter as 'below level of feet'. In effect, I had assumed that the schematic properties of these forms always specify the corporeal framework of the interactants' bodies. But when I presented this hypothesis to native Lhasa speakers, I was offered several counterexamples that suggest that the corporeal framework of orientation is at best a default interpretation.

Example (24) was suggested by a Tibetan monk, DW, who offered it as belonging to an imaginary context where the speaker is a teacher summing up a lesson on the history of the Dalai Lamas. After talking about each of the first nine Dalai Lamas, the teacher summarizes the lesson by uttering (24).

- (24) *yaqi* *kūthēē* *thaŋpo* *ŋē*, *maqi* *kūthēē* *qupa* *phār* *qi* *Gyawla*
 that-↑ line(H) first from that-↓ line(H) ninth to GEN Dalai Lama
 rimchōō *nam* *lō* *kə* *taŋ* *ŋāpcu* *naŋ* *la* *cūŋ-pa* *rē*
 consecutive (H) PL year 100 and 50 inside occur-NZR AUX
 'From that first one to that ninth one, the succession Dalai Lamas occurred in a
 hundred and fifty years.'

In (24), the deictics *yāqi* 'that-↑' and *māqi* 'that-↓' have no interpretation in local space; their referents (the first and ninth Dalai Lamas) are deceased. Instead, the two deictics individuate the beginning and end of a list as its 'top' and 'bottom'. Consequently, the schematic components '↑' ('up') and '↓' ('down') can only be interpreted relative to an order of enumeration, defining its 'top' and 'bottom'.

Even when the usage is firmly anchored to local space, the difference between *yā-* and *mā-* does not necessarily depend on any axis defined in terms of "natural" properties of the human body, such as eyes or feet. In order to clarify this point, DW asked me to consider a second imaginary context, one in which he and I are sitting towards one end of a bench, with him at the extreme edge. In such a context, DW can ask me to move towards the middle of the bench by uttering any of the commands given in (25a)–(25c), though with different contextual effects in each case.

(25a) *yātsa* *shīl* *taa*
 that-↑-little move IMPV
 'Move up a little.'

(25b) *mātsa* *shīl* *taa*
 that-↓-little move IMPV
 'Move down a little.'

(25c) *phātsa* *shīl* *taa*
 that-way-little move IMPV
 'Move that way a little.'

In the case where (25a) is uttered, a horizontal movement (in a direction away from the current shared location of speaker and addressee) is spatialized as 'up' the bench. DW agreed that in this context the same movement can also be represented as 'down' the bench, by means of (25b), or by a verticality-neutral "absorptive" specification, as in (25c). With regard to the question of verticality, however, the fact that both (25a) and (25b) can be used in this context suggests that even horizontal movements can arbitrarily be specified as either 'up' or 'down' without infelicity. Once specified, however, subsequent discussion of the movement must preserve the initial 'up' or 'down' in order to remain felicitous. Arbitrary choices thus appear highly nonarbitrary in resumptive reference.

DW added that in cases of horizontal movement towards a sacred or revered object, such as an altar, (25a) would be considered respectful, and (25b) disrespectful. We might say that in such cases the schematic difference between '↑' and '↓' serves as a metaphor for 'respect' and 'disrespect'. Note, however, that the metaphor works only by contextual superposition: if the local space in which the movement occurs is independently known to be a sacred space, the use of *yā-* and *mā-* has an interpretation relative to its sacred characteristics. No such

interpretation obtains, for example, in the scenario involving the bench discussed above.

3.4.4. Deixis and participant role perspective. The final set of examples that I want to consider illustrate the ways in which deictic spatialization effects are informed by the superposed effects of yet another type of indexical category. The indexical category in question is one that I have elsewhere termed "participant role perspective" (Agha 1993: chap. 4).

Participant role perspective is an indexical category of the auxiliary verb in Lhasa Tibetan. Sentences in the indicative and interrogative moods are formed using one of six auxiliary verbs. These are illustrated in table 6. Note that each verb belongs to one of three series of forms, each defined by joint lexicalization of aktionsart and epistemic mode. In each series, two distinct forms of the verb occur, differentiating two types of participant role perspective, represented by the symbols 'P' and ~'P'.

Table 6. The Basic Auxiliary Verbs in Lhasa Tibetan

ASPECT/EPISTEMIC MODE	PARTICIPANT ROLE PERSPECTIVE	GLOSS
	'P' / ~'P'	
imperfective factive	<i>yīl̃</i> / <i>rɛ̀</i>	'be'
imperfective evidential	<i>yṑ</i> / <i>tɹ̀</i>	'be-at'
perfective evidential	<i>cɹ̃</i> / <i>sō̃</i>	'occur'

The 'P'-forms index a criterial speech act participant in every instance of predication: in questions, the criterial participant is the 'addressee-of' the utterance; in statements it is the 'speaker-of' the utterance. The ~'P' forms simply fail to index any speech-act participant.

This is illustrated for the first auxiliary verb listed in table 6, *yīl* / *reè* 'be', in examples (26a)–(26d). Although no pronouns, or any other nominal argument, occurs in these utterances, the speech act participants involved are recoverable in very specific ways for the 'P'-specifying utterances, (26a) and (26b), but not for (26c) and (26d), which contain the ~'P'-form of the verb. Since (26a) is an assertion, the 'P' verb indexes 'speaker of the utterance', glossed as '[I]'. Since (26b) is a question, the 'P' verb indexes 'addressee-of utterance', glossed as '[you]'. Examples (26c) and (26d) employ ~'P' forms, not specifically indexing any speech participants; their interpretation is correspondingly ambiguous or vague in decontextualized construal.

- (26a) *laà yīl*
 HON P.AUX.ASR
 '[I] am.'

- (26b) *q̣usuq ṭɛɛpo ɣ̃ḷ-p̣ēē*
 body-H well P.AUX-INT
 'Are [you] well?'

- (26c) *lãa ṛɛ̃*
 HON ~P.AUX.ASR
 '[It, he/you] is/are.'

- (26d) *q̣usuq ṭɛɛpo ṛɛ̃-p̣ēē*
 body-H well ~P.AUX-INT
 'Is/are [he, she/you] well?'

With explicit arguments, the copula normally has a nominative-nominative syntax, as illustrated in (27a). When a dative argument occurs, it is construed benefactively, as in (27b).

- (27a) *ṭi c̣ɔ̣qtse ṛɛ̃*
 this-NOM table-NOM ~P.AUX.ASR
 'This is a table.'

- (27b) *ṭi p̣ēēma ḷa ṛɛ̃*
 this-NOM PN D/L ~P.AUX.ASR
 'This is for Pēēma.'

When deictics marked for the dative case occur as oblique arguments of the copula, the construction describes not the actual location of an object, but its proper or appropriate location. Thus, in example (28a), the utterance does not assert that the table is **in** the locus specified by 'there', but rather that it **belongs** there. The sentence may be true even if the table has never occupied that locus.

- (28a) *c̣ɔ̣qtse ṭi pḥḷq̣ēē ṛɛ̃*
 table this that.DAT ~P.AUX.ASR
 'This table is for over there' (i.e., "It belongs there," "It goes over there," etc.)

- (28b) *ṭi ṭēē ṛɛ̃-p̣ēē*
 this this.DAT ~P.AUX-INT
 'Is this for here?' (i.e., "Does this one belong here?", etc.)

Example (28a) is typically understood as a directive to put the table in the locus specified by *pḥḷq̣ēē* 'there'. Similarly, example (28b) does not ask if the table is located in the place indexically denoted by *ṭēē* 'here'; it asks whether the item whose location is being reckoned **belongs** in the deictically denoted place. In a context where a family is moving into a new house, (28b) would be the normal way in which the furniture movers might ask for the desired location of an item

of furniture, and (28a) would be the normal way in which the householders might offer instructions to the movers.

Notice that the verb forms used in examples (28a)–(28b) are the ~‘P’-forms of the verb. In the assertion in example (29), the ‘P’-form is used, specifying the speaker’s perspective on locational reckoning. The speaker of example (29) had just returned home with some freshly purchased flowers. She uttered example (29) in the course of instructing her daughter as to their arrangement.

- (29) *mətɔ̀ tētso tē tē yīl̃ thətso phl̃qē tē yīl̃*
 flowers these here P.AUX.ASR those there P.AUX.ASR

‘These flowers go here, those ones over there (speaker’s perspective).’

Relative to deictically reckoned location, the speaker-indexing verb, *yīl̃*, projects a location desired specifically by the speaker. The flowers “belong” in the specified location only in the sense that the speaker, who has purchased the flowers, **intends** them to go there. Notice that the entire locational utterance specifies a projected future location relative to the viewpoint and intentions of the speaker.

Consider now examples (30a) and (30b), which illustrate this contrast in interrogative constructions. Either may be asked in the following imaginary context: a guest who has arrived at a party asks the host where he or she should sit. In such a context, both questions are straightforward and appropriate, but the participant role indexicality of the verb (~‘P’ vs. ‘P’) differentiates two different kinds of “proper” places for the guest to be seated.

- (30a) *na qhapaa rē? na tē rēpē, th̃̃qa rē?*
 I where ~P I here ~P upstairs ~P

‘Where am I for? Am I for here, or for upstairs?’ (e.g., “Where should I sit? Is there more room here or upstairs?”)

- (30b) *na tē yīpē phl̃qē yīl̃?*
 I here P there P

‘Am I for here, or there?’ (i.e., “Where did you plan to have me sit?”)

The questions in example (30a), formed from the ~‘P’ verbs, inquire after the appropriate place in impersonal terms. The speaker may be asking, for example, as to where there is more room, thus stipulating the “proper” place in relatively objective terms. The questions in example (30b), however, are formed from ‘P’-specifying verbs, indexing ‘addressee-of utterance’. If the guest speaks to the host in this way, such inquiry indexes that the relevant sense of “proper” place involves the seating arrangements planned by the host.

4. Conclusion. The foregoing considerations show that deictic spatialization effects are not the outcome of “coding” relationships between deictic categories

and preexisting spatial realities. A deictic utterance imposes a **further structure** on other representations (including spatial representations otherwise achieved) during discursive interaction: it typifies denotata while locating them in relation to variables of interaction.

Such schematic typifications inevitably appear rather abstract when compared to the effects achieved on particular occasions of usage. The feeling of "concreteness" is an effect that emerges only in contextualized use. The concrete construal of the denotational and interactional schemas of deixis depends upon the "filling in" of these schemas by concurrent semiotic activity, generally multimodal in character. A number of more specialized spatial effects can be achieved in this way. In the foregoing discussion, I have talked about the reckoning of "physical" objects in local space (sometimes called "physical space"), of objects indexically presupposable from narrated space (sometimes called "information space"), and of transpositions of origo to narrated interactional spaces. Other constructs discussed include the "spatialization" of enumerated lists, and the "spatialization of respect" in referring to sacred or honorable objects. In section 3.4.4, I discussed the effects of verb indexicality on deictic construal. Such effects result in higher order constructs such as "the proper place of the object," and even "the place intended by the speaker/addressee."

All such contextualized effects of deictic usage are higher-order, or "superposed," effects in the sense that they are not reducible to the schematic properties of the deictic word. Contextual superposition does, however, **delimit** the schematic effect of the deictic form in further detail, e.g., by specifying that the deictic denotatum is a physically co-present object, or recoverable from an anaphoric antecedent; or that the value of origo is 'current corporeal speaker', or 'speaker of reported utterance', and so on. Cases of "metaphoric" denotation are cases where contextually superposed effects **extend** the total effect beyond any effects implemented by the denotational schema of the deictic form; the total metaphoric effect frequently has interactional consequences as well (as in the case of deictic reference to sacred objects noted in section 3.4.3). Cases of "transposition of origo" are cases where the most routine kinds of contextual superpositions (e.g., those based on visual access to corporeal participants, etc.) are no longer criterial for delimiting the current value of deictic origo; successful transpositions provide criteria for locating referents as well (e.g., as entities having a position in a narrated interactional space).

Since all higher-order effects are constructed by contextualization (generally, across several modalities), there is no upper bound on their number and type. The examples that I have discussed above suggest, however, that across all the types of contextually motivated variability observed, the schematic properties of deictic forms impose a structure on all higher-order effects, even though the total effect depends, additionally, on facts of contextual superposition.

Notes

Abbreviations. The following symbols are used in the interlinear glosses: NOM = nominative; ABL = ablative; ASR = assertoric; AUX = auxiliary verb; D/L = dative-locative; ERG = ergative; GEN = genitive; H = honorific word; HON = honorific particle; IMPV = imperative; INT = interrogative; NEG = negative; NH = nonhonorific word; NZR = nominalizer; PL = plural; PN = proper noun; QT = quotative; ↑ = 'above'; and ↓ = 'below'; double angular brackets (« ») are used to represent gestural accompaniment.

1. Low vowels are raised to high vowels by a regular process of vowel harmony conditioned by high vowels in adjoining syllables. A second alternation widespread in the data involves simplification of tone distinctions in positions of secondary stress, e.g., in suffixes. The change in shape of the ablative postposition *-nɛ̃* to *-nē̃* in *tī-nē̃* reflects the operation of both phonological rules. Further details of transcription and phonology may be found in Chang and Shefts (1964).

2. The dative-locative case is marked either by a postposition or by a suffix in Lhasa Tibetan. After words ending in long vowels or a closed syllable, only the postposition *la* is used. In open syllables with short vowels, the suffixed case form is also possible. The suffix is realized either as lengthening (plus lowering and centralization, where possible) of the final vowel, or as the segmental suffix *-r*. For example, the series C deictic, *phāpaa* 'thereabouts, around there' is sometimes pronounced *phāpar*.

3. But see example (23) where a meaning implying motion is available from the context, even in the presence of a stative predicate.

4. As table 4 shows, the singular forms of these demonstratives have a slightly different formation in the proximal and the distal categories. The singular distal demonstratives are formed by the suffixation of the nominalizer *-qi* to the base, viz., *yaqi* 'that-↑', *maqi* 'that-↓', and *phāqi* 'that'. The singular proximal demonstratives consist simply of the base, without any suffix, viz., *tī* 'this' and *the* 'that'. The dual and plural, on the other hand, are regular for all stems: the dual is built by suffixation of the numeral *nūi* 'two' to the stem; the plural by means of the regular plural suffix *-tsho* (where the affricate *tsh* appears intervocalically as *ts*).

5. Deictic systems differ typologically in the extent to which their schematic content is lexicalized in deictic words, or recoverable from morphosyntactic properties. In English, for example, interactional schematization is a wholly lexical affair; denotational schemas are not segmentable in word-internal morphology, but are nonetheless motivated by syntactic distribution (e.g., *this/that* denote 'thing' and have a nominal syntax; *here/there* denote 'region' and are adverbials of place; *now/then* denote 'time' and belong to the syntactico-semantic class of temporal adverbs). Urdu-Hindi and Japanese express these distinctions in a way similar to Lhasa Tibetan: interactional schemas are lexicalized in deictic stems; denotational schemas are motivated partly by suffixes, and partly by facts of word distribution.

6. For series H, additional forms include *tūtẽs* 'similarly', *tūtẽnɛ̃ŋsū* 'in this manner', *thaqanɛ̃sū* 'like that', etc. The adverb *thirɛ̃* 'today' (as opposed to *thiirɛ̃ la* 'during that time') is a very common additional form from series G. Additional forms, with increasing degrees of lexicalization, may be cited as well.

7. Since the deictic word unites two schematic, we could say that these two schematic components are "categorically superimposed" in usage. However, I prefer the term "plurifunctional category" for such cases (i.e., cases where **every token** of the word unites two or more functions). Such inherent plurifunctionality differs fundamentally from cases of "contextually superposed" effects. The latter are cases where some contingent feature of current context permits a specialized interpretation not characteristic of the category as such. I use the term "superposed" (alternately, "superimposed") only to describe the latter, radically context-dependent cases (i.e., cases where **some token** of

the category exhibits a contextually motivated functional effect). The terminological distinction is intended to capture the following fact central to deixis in all languages: although deictic forms are inherently "plurifunctional categories," each functional dimension is susceptible of further specification by facts of "contextual superposition."

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