CHAPTER 39

COGNITIVE LINGUISTICS AND ANTHROPOLOGICAL LINGUISTICS

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1. Introduction

Coming from opposite directions on the cognitive-cultural spectrum, linguists are approaching a theory of grammar in which meaning originates not only in biologically driven cognitive processes and embodied categories of physical and social experience, but also in cultural traditions. Each of these sources of meaning provides schemas and more elaborate cognitive models that constitute semantic categories. Culture takes on heightened significance in this equation when we consider that even embodied categories such as that of 'container' may be shaped by living within dwellings of various architectures or by the sight, feel, and characteristic usage of household cups, bowls, saucers, and baskets (Sinha and Jensen de López 2000). This perspective has been called *Cultural Linguistics* (Palmer 1996), but it is entirely consistent with Cognitive Linguistics as defined by Langacker (1999a: 16), who has stated that "language is an essential instrument and component of culture, whose reflection in linguistic structure is pervasive and quite significant." Similarly, Lakoff has argued that metaphorical idioms involve cultural knowledge in the form of conventional images and that links in radial semantic categories are structured by experiential domains, which may be culture-specific

(Lakoff 1987: 95; Lakoff and Johnson 1999: 69).[1] Making the point even more directly, Geeraerts and Grondelaers (1995: 177) claimed, "If cognitive models are cultural models, they are also cultural institutions." Thus, it is clear that Cognitive Linguistics must keep one eye on culture. It is the shift of focus to culture as a source of lexicon, grammar, and metaphor that takes us into the realm of Anthropological Linguistics.

This chapter focuses on the intersection of cultural knowledge with the semantic component of Cognitive Grammar. In the theory of Cognitive Grammar, the semantic component includes Idealized Cognitive Models and maps, domains of experience, image schemas, conceptual metaphors and metonymies, prototypes, complex categories, radial categories, and encyclopedic knowledge (Lakoff and Johnson 1980; Lakoff 1987; Langacker 1987, 1990, 1991, 2000). These elements almost always present important cultural components, in that they take specific forms which speakers learn in the course of socialization and enculturation. Cognitive models that are culturally specific may be termed *cultural models*. Though we may think of cultural models as primarily structuring social interaction and cultural artifacts, they may also provide specific conceptual structure for *cognitive maps* of salient physical domains of nature, such as geography or anatomy (Hallowell 1955; Wallace 1965; Bickel 1997; Basso 1990; Palmer 1998a). Cultural models of social action may be termed *scenarios* (Lakoff 1987; Palmer 1996) or *cultural scripts* (Schank and Abelson 1977; Frake 1981; van Dijk 1987; Wierzbicka 1994a, 1994b), depending on whether one wishes to highlight contingencies and expectations (scenarios) or fixed sequences with slots for paradigmatic alternatives (scripts).[2] Others simply refer to them as *schemas* (Malcolm and Sharifian 2002; Sharifian 2001, 2002) or *scenes* (Grady and Johnson 1997). The conceptual content of scenarios may pertain to any social institutions or domains of discourse, from the mythical and ritual to the economic and domestic. Lakoff (1987) based his famous interpretation of Dyirbal noun classifiers on the domain of myth. In Palmer and Woodman (1999) and Palmer (2006), we centered our analysis of Shona noun classifiers on the domestic activity of pounding grain. Wierzbicka (1994b) presented scripts of discourse on various topics in Japanese and in American Black and White English.

Examples of cultural structuring of scenes with schemas, scenarios, or scripts are myriad; but a few examples will make the point. In English, we commonly conceptualize the future as lying ahead of us on the horizontal plane. When the speaker of Cora, a Uto-Aztecan language of Mexico, talks about the future, we find that time marches uphill, curving around the side of the hill on a path leading to the top (Eugene Casad, p.c.). In southwest Australia, Aboriginal English *half* refers to any degree of partiality (Malcolm and Sharifian 2002; also see Sharifian 2001), which suggests that these speakers apply a different cultural schema than that of non-Aboriginal English *half*. In Zapotec, the schemas that in English must be termed *in* or *under* are both referenced by one term whose prototype meaning is 'stomach' (Sinha and Jensen de López 2000). Examples such as these, revealing conceptualizations that are simultaneously semantic and cultural, could be multiplied into the thousands. Scholars have been aware of cross-linguistic differences

in construal and categorization of common experiences since at least the early nineteenth century (Humboldt [1836] 1972).

If we subscribe to Langacker's (1987: 63) assertion that semantic knowledge is encyclopedic, then semantic schemas may be discovered and recorded by systematic ethnographic research. Linguistics that aspires to explain grammatical structure requires ethnographic methods aimed at discovering and verifying those cultural models, maps, and scenarios that govern and motivate linguistic usages, where *usage* refers not only to grammar, but also to the pragmatic dimension of language—the uses of language to accomplish social goals (Duranti 1997).

This chapter examines research in two broad semantic domains: (i) agency and emotion and (ii) spatial orientation. There is no presumption that these categories have folk or emic status in other languages; their status is merely analytic. In actual case studies, one seeks to discover how speakers themselves delineate their semantic domains. One can think of other semantic domains that linguists and anthropologists have studied—color, kinship, illness, firewood, botany, anatomy, geography, and the earmarkings of reindeer come to mind. The two discussed in this chapter are less well publicized than the research on color terms and kinship, but they are prominent in contemporary research.[3] My purpose is to discuss new approaches and findings in each of the selected domains that offer promise for Anthropological Linguistics. I focus on studies demonstrating strong interdependencies between grammar and culture, but I will show that the findings do not support a strong Whorfian position on the determination of perception by grammar.

2. Agency and Emotion

Emotion language has been the object of intensive study in recent years, both in Cognitive Linguistics and in anthropology (see, e.g., Niemeier and Dirven 1997; Palmer and Occhi 1999; Wierzbicka 1999; Kövecses 2000). Much of this research has focused on the search for universals in emotion language and the debate over whether any universals can be demonstrated (see, e.g., Geeraerts and Grondelaers 1995 vs. Kövecses 1995; Kövecses and Palmer 1999; Kövecses, Palmer, and Dirven 2002). In this section, I will first show that many verbal expressions of emotion are governed by conceptual scenarios in which emotions are evoked and lead to subsequent actions and thoughts (see also Dirven, Wolf, and Polzenhagen, this volume, chapter 46). These scenarios of emotion presume agents and patients who possess various qualities and degrees of agency that are specific to languages and cultures. The topic of agency is one that has received much attention in contemporary anthropology, especially among critical theorists who study social inequalities pertaining to race, ethnicity, gender, or class (Ortner 1996; Ahearn 1999). In linguistics, topics pertinent to agency include voice, ergativity, transitivity, and hierarchies of

animacy or empathy, all of which have received extensive study.[4] Thus, it seems worthwhile to explore connections between the anthropological notion of agency and the grammatical topic of voice. I propose that morphemes of voice predicate and profile highly abstract scenarios of agency. To illustrate, I will describe the usage of grammatical voice in the emotion language of a Tagalog melodrama in which agency is very much at stake. Emotion language is not the only domain exhibiting connections between voice and agency, but emotional scenes often highlight the links.

2.1. Agency and Grammatical Voice

The grammar of voice should be of high interest to linguistic anthropologists as well as to linguists, because it provides vehicles for the communication of agency. Linguistic anthropologists take it as axiomatic that agency is not only expressed by language, but also constructed and maintained by it (Duranti 1997; Ahearn 1999). Agency is the capacity of an intentional being or social group to make choices, to perform actions that have intended consequences, to effect results, or to control situations. It is conferred by political and economic power, which are central to theories of self, gender, race, ethnicity, and class. Grammatical voice refers to how linguistic forms and constructions predicate relationships between nominal participants in a clause, particularly the degree of influence of active Agents on the objects of action or attention. *Voice* covers such phenomena as the English active and passive voice, the "middle" voice of Greek and Interior Salish languages, reflexive verbs, noncontrol verbal affixes (which may be misleadingly called "causatives"), experiential verb forms, "impersonal" constructions, and antipassives (Crystal 1991; Langacker 1991). Ergative markers and active transitive constructions signal relatively high agency in a clausal subject or focal participant. Passive constructions, absolutive markers, and noncontrol or stative verb forms signal relatively low agency in subjects and focal participants. Thus, these voicing constructions are crucial to discourses involving the assertion, denial, and negotiation of agency.

But agency is not one-dimensional. Prototypically, it involves an Agent who applies mechanical force to an object or a Patient, but it could also mean applying social influence or controlling the actions of a secondary active participant. Or it may involve nothing more than active attention and perception as contrasted with experience over which one lacks control. Thus, it would appear that there is no simple semantic model of agency that can be applied cross-linguistically and cross-culturally. Most probably, the grammar of agency is constructed more or less uniquely in each language. Here I propose that grammatical morphemes and constructions of voice predicate highly schematic scenarios that characterize either the influence of agents on other participants, the degree of control over events affecting the agent or patient, or the degree of direct involvement of agents in predicated events or processes. These semantic qualities are independent of, but interact with, related potentials in the verb or verb stem. Some of these possibilities are diagrammed for Tagalog voice constructions in Palmer (2006).

To the extent that expressions signaling voice are based either directly or metaphorically on scenes involving mechanical forces, their semantics may be represented by Talmy's (1988) model of force dynamics (see also De Mulder, this volume, chapter 12). A well-known feature of Navajo verb morphology demonstrates that each culture arrives at its own conventional construals of the force dynamics of events. Navajo can mark a transitive verb construction with one or the other of the prefixes *yi-* or *bi-*. It was formerly thought that the *yi-* marked transitive objects and *bi-* marked passive subjects, but Witherspoon (1977) has shown this to be an oversimplification. The *bi-* is best understood as marking a scenario in which a controlling subject allows him-/her-/itself to be acted upon by a noncontrolling agent. Relative control is defined by a cultural schema that ranks intelligent "talking" beings (mostly people) above less intelligent "calling" beings (mostly animals), large beings above small ones, and animate beings above inanimate objects. Infants are ranked with "calling" beings. Thus, Navajo grammar is not simply marking Agonists and Antagonists as Agents and objects; it is also marking the Navajo construal of the mental efforts that control events (Palmer 1996: 158), a linguistic development whose appearance in some language or other would have been predictable from Talmy's (1988) theory of force dynamics.

In many languages, it is uncommon to explicitly mention agents of transitive constructions, so that sentence subjects are often Experiencers or objects of transitive actions. In some of these languages, such as Samoan, a transitive Agent may require explicit ergative marking, while in others, such as Tagalog, transitive Agents are given no special marking,[5] but absolutives (objects, Patients, and Experiencers) are focused. In a study of village council meetings in Western Samoa, Duranti (1994: 114–43) has shown how the study of grammar in context can reveal established patterns of agency as well as bids and concessions thereof. During the beginnings of meetings, participants use few constructions with ergative Agents, revealing a reluctance to assign agency. As meetings progress, ergative constructions are used only where participants are receiving credit or blame or where the power of actors is acknowledged. This is most evident in talk about actions of the Almighty, which place the Lord in the ergative case (126). Duranti pointed out that speaking with ergative Agents constructs relations of power as much as it reflects them. The powerful may use ergative constructions to frame the situation, but the less powerful use them at their own risk. Section 2.2 will demonstrate how voice morphology expresses qualities of agency in Tagalog by predicating scenarios involving direct and indirect agency and noncontrol.

2.2. Agency and Emotion Language

In linguistics, emotion is often regarded as a kind of basic experience that is expressed or predicated by particular lexemes and constructions, but in linguistic anthropology, emotion language is more likely to be treated as a kind of discourse with pragmatic consequences (Rosaldo 1984; Lutz 1988; Palmer and Brown 1998).

Such discourses are culturally specific, as are the emotionally evocative and reactive scenarios. In fact, in some languages one discusses the evocations and reactions rather than the focal emotional experience (Rosaldo 1984, 1990; Palmer and Brown 1998).

The importance of emotion scenarios is recognized by both linguistic relativists and universalists. For example, Catherine Lutz, a relativist, said in her study of Ifaluk emotion words that "to understand the meaning of an emotion word is to be able to envisage (and perhaps to find oneself able to participate in) a complicated scene with actors, actions, interpersonal relationships in a particular state of repair, moral points of view, facial expressions, personal and social goals, and sequences of events" (1988: 10). Lutz used the terms *scene* and *scenario* interchangeably. Wierzbicka (1994c; 1996: 183; 1999) defines each emotion term by listing a culturally specific set of scripts (see also Harkins and Wierzbicka 2001). Each emotion script is constructed using items from a small set of proposed universal semantic primitives, such as BAD, DO, FEEL, THINK, WANT, and so on.

Kövecses (1988), a universalist, proposed that the English model of TRUE LOVE begins with the ideas 'true love comes along', 'the other attracts me irresistibly', and 'the attraction reaches a limit point on the intensity scale at once'. Using the terms *scene* and *scenario* interchangeably, Kövecses found that emotion metaphors of English are susceptible to analysis in terms of force dynamics. At the heart of the system is a scenario that forms the basis of "the most pervasive folk theory of emotion coded into English" (Kövecses 2000: 85):

> (1) cause of emotion — force tendency of the cause of emotion => (2) self has emotion — force tendency of emotion => (3) self's force tendency ↔ emotion's force tendency => (4) resultant effect.

Thus, we find that several prominent researchers with diverse perspectives on emotion language have found useful the notions of scenario and script. Such scenarios may involve the self or groups undergoing experiences over which they lack control, being impelled to action, or undertaking volitional actions. In the remainder of this section, it will be shown that grammatical voice provides vehicles for the expression of force dynamics in scenarios of emotion, and thereby provides linguistic anthropologists with an entry to the topic of agency.

Using the approach outlined above, I studied a Tagalog video melodrama, *Sana'y Maulit Muli* 'I Hope It Will Be Repeated Again', which depicts two young Filipino middle-class lovers, Agnes and Jerry (Palmer 1998b). Agnes's mother, who lives in San Francisco, urges her to come to the United States. She complies, and Jerry arrives later. In the course of the film, the couple experiences the anguish of separation from family and one another, onerous social demands imposed by the market economy, and victimization by callous employers and immigration officials. Their emotional conversations appear to be largely about the loss and recapture of personal agency. Alice and Jerry are not from the world's downtrodden classes, but they belong to an age group and social class for whom agency is problematic; and therefore, their use of grammatical voice is of interest.

In Tagalog, several voice affixes predicate the agency or nonagency of the focal participant in a clause. In their conversations, Agnes and Jerry most often present themselves as grammatical Experiencers or Patients. In those instances when they represent themselves as actors, they are seldom placed in grammatical focus, so their agency is de-emphasized. Focus is marked by the referential preposition *ang* (e.g., *ang babae* 'the woman'), by the use of a referential pronoun (e.g., *ako* 'I'), or by the use of a referential personal name marker (e.g., *si Adelfa*). The focus construction in Tagalog is here interpreted as a marker of salience, a means of *profiling* participants and processes (Langacker 1999a: 27). Grammatical focus on an actor marks the actor's agency as salient. If an experiencer in a noncontrol construction or undergoer in a transitive construction has grammatical focus, it indicates lack of agency on the part of that participant. The examples which follow will illustrate use of focus in emotional expressions. Very typical of the emotional language in this melodrama is a construction with a noncontrol affix (*ma-* ~ *na-* ~ *pa-*) and focus on the patient or experiencer, as in Agnes's complaint of boredom in (1). Focus is indicated by the referential first-person pronoun *ako*, which contrasts with genitive *ko* and directional *akin*.

(1) **na**-ba-bato **ako**
NC.RLS-R-stone 1SG.SPC
'I am stoned [turned to stone].'

At the climax of the story, Jerry appears to examine his own motivations and uses more active language. His one clearly agentive utterance is that in (2), in which his use of the active prefix *nag-*, although it is not a highly transitive prefix, placed him in focus as the actor, as shown by the referential prefix *ako*.

(2) *dahil* ***nag-****ba-baka-sakali* ***ako****-ng* *ma-ulit* yun-ng dati
because RLS.AF-R-perhaps-COND 1SG.SPC-LG NC.IRR-repeat REM.SPC-LG former
'because I am hoping the past will be repeated'

Sentence (3), from a pop song not in the film, shows that emotional language can be strongly agentive, in the sense of invoking mental effort and choice, even where transitivity is weak. Once again, the active verbal prefix *nag-* occurs in a construction with the referential first-person pronoun *ako*, which here appears twice, once in the inverse position before the verbs. The English expression "I love you" is used as a verb stem.

(3) *Ngayon* ***ako-ay*** ***nag****-si-sisi* *kung* *bakit* ***ako*** ***nag****-"I love you"!!!*[6]
now 1SG.SPC-PM AF.RLS-R-regret COND why 1SG.SPC AF.RLS-"I love you'
'Now I am regretting ever saying "I love you"!!!'

How do these expressions relate to scenarios of emotion, such as the English scenario outlined by Kövecses (2000)? Many of the emotional expressions in the film are like (1), expressions of emotion with noncontrol morphology. These are

clear examples of Kövecses's step 2, *self has emotion—force tendency of emotion*, but the causes (step 1) may only be recoverable from an understanding of the preceding events. Sentence (3), with active voice, corresponds to Kövecses's step 3, the struggle between self and emotion: *self's force tendency ↔ emotion's force tendency*. Thus, the voice morphology of Tagalog does not in itself predicate all the force dynamics of emotion scenarios, but it supplies elements of force-dynamic constructions.

Close analyses of ergativity and voice, such as those of Witherspoon (1977), Duranti (1994), Palmer (1998b, 2006), and Siiroinen (2003), can reveal much about the construal of discourse situations by the participants, especially the construal of scenarios involving force dynamics. It is thus an indispensable tool in Anthropological Linguistics, where human agency is a central interest. Conversely, constructions involving ergativity and voice can best be studied by examining their uses in discourses where agency is at issue. Such discourses are always defined and structured by culture. The same issues that structure research on emotion language—universals, voice, agency, scenarios, and metaphor/metonymy—also surface in the domain of thinking (D'Andrade 1995; Fortescue 2001; Palmer, Goddard, and Lee 2003).

3. Spatiocultural Orientation

Spatial orientation has commonly been investigated as a semantic domain with absolute or intrinsic frames of reference. My purpose in this section is to relativize this domain and unify the theory of spatial domains with that of other semantic domains. Unification is possible if spatial maps are treated as subtypes of cultural models and if it is acknowledged that in all cultures some spatial maps are tightly integrated with other kinds of cultural maps and models, such as those of gender, ethnicity, ethics, and cosmology. This perspective, developed within a general framework of cognitive processes, should find many sites of application in Anthropological Linguistics.

3.1. Spatial Orientation

Spatial language holds great fascination for both cognitive and anthropological linguists, perhaps because spatial contexts can be more readily controlled and described than is possible for domains such as emotion. Perhaps we all feel that we understand our three-dimensional environment intuitively and that cross-linguistic studies will readily sort out languages into a few logical types in their partitioning

of space. If that is the case, it is not evident in recent research results, which favor a relativistic view of spatial language. If the topic of how people talk about space, spatial relations, and orientations in space appears at first to be straightforward, it soon leads on into unexpected complexities. Subtopics include image schemas and their transformations (Brugman 1981; Talmy 1983; Lakoff 1987; Zlatev, this volume, chapter 13), deixis and orientation (Casad and Langacker 1985; Casad 1988, 2001; Brown 1991; Levinson 1992, 1996; Haviland 1993, 1996; Bickel 1997; Heine 1997; Senft 1997a, 1997b; Zlatev, this volume, chapter 13), folk topographical and navigational models (Hutchins 1995; Hill 1997; Wassmann 1997), metonymy and compositionality of spatial terms (Langacker 1999b), and spatial metaphors (Casad 2003).

In this study, I will concentrate on studies of particular interest to linguistic anthropology; but in order to treat them systematically, it is first necessary to present a more relativistic theoretical framework for the discussion of spatial orientation than Levinson's (1996) popular framework, which begins with classical mathematical coordinate systems. The framework developed here differs in focusing on the culturally defined cognitive maps of speakers and listeners. It builds on the approach to spatial language developed in Casad and Langacker (1985), Casad (1988, 1993), and Langacker (1999b). The approach enables the analysis of deictic orientations that are discounted in Levinson's framework, and it more easily achieves a fine-grained analysis of complex spatial predications. Furthermore, since cognitive maps of spatial relations are cultural models in this approach, it is readily apparent how spatial maps can be semantically integrated with other kinds of cultural models, such as those of gender, history, and supernatural belief systems.

Levinson (1996) distinguished "frames of reference" on three dimensions: (i) whether their coordinates are intrinsic or relative, (ii) whether the origin of their coordinates is speaker, addressee, third person, or object, and (iii) whether their "relatum" (Ground in a Figure/Ground relation) is the same as or different from the origin. But since we are dealing with cognitive maps of spatial relations, an intrinsic coordinate need only be intrinsic to a cognitive model, not to an object in the world. Since we are concerned with orientation and topography, I will use the term *map* for cognitive models that include orientational frames (Bickel 1997). Therefore, in place of *intrinsic*, I suggest the alternative term *object map* to evoke a topographical cognitive model of an object, an environment, or some other entity. Levinson arrived at three linguistic frames of reference: *intrinsic*, *relative*, and *absolute*. My framework will include only two—*object maps* and *view maps*—with deictic orientation being a property of some view maps. In place of Levinson's absolute frame, I propose the term *macro-map*, which I take to be a subtype of object map.

Levinson discounted deictic orientations because the usual classification (deictic-intrinsic-extrinsic) does not adequately account for expressions such as *For John, the ball is in front of the tree*, which uses a relative frame that is not grounded in the discourse situation. His framework describes this example easily as having relative coordinates with third-person origin (John) and an object relatum (tree).

Yet the grounding situation is clearly salient in many, if not all, languages, as evidenced, for example, by first- and second-person pronouns and in demonstratives by distinctions of proximal (by speaker or interlocutors) and medial (by addressee) locations. Therefore, it seems reasonable to retain the term *deictic* as one that cross-cuts Levinson's framework (cf. Zlatev, this volume, chapter 13). "Deictic" here refers to orientations that are based on cognitive maps of the ground or on view maps deployed by persons in the ground. The *ground* is defined by Langacker (1987: 489) as "the speech event, its participants, and its setting. (Distinct from the sense of ground that contrasts with figure.)." Even Levinson (1996: 142) conceded that "there can be little doubt that the deictic uses of this system [of frames of reference] are basic (prototypical), conceptually prior, and so on."

My proposal departs from Levinson's in another way. Like Zlatev (this volume, chapter 13), I begin with Langacker's (1987) relational structure of *trajector* and *landmark*. These terms stand for Figure and Ground at the level of the clause. The task of orientational expressions is to locate a trajector with respect to a landmark. Thus, trajector, relation, and landmark are always found in the base of an orientational predication.[7] A predication may profile any of these in any combination, but often it is only the relation and the entity representing new information that is specified, as the other entity is understood, having been mentioned in the preceding discourse or assumed by convention. This means that every orientational predication specifies a relation, so it is misleading to distinguish, as Levinson does, between "relational frameworks" and other types (typically "intrinsic" and "absolute"). All orientations are relative to one or more landmarks.

There are two fundamental kinds of maps that serve as the conceptual base for relations and landmarks, and therefore provide orientational frameworks. These are *object maps* and *view maps* (i.e., speaker or hearer's map of a viewer's field of view). View maps are like object maps—in that persons and other sorts of observers are also objects—except that they include a field of view as part of their conceptualization. Thus, if we use Levinson's (1996: 137) example, *The ball is to the right of the lamp, from your point of view*, we have in mind an image of a second-person viewer and field of view (see figure 39.1).

Levinson would refer to the observer as the "origin" of the line-of-sight coordinate and treat the orientation as "ternary" (Figure, Ground, and origin). But the expression is actually too complex to characterize as "ternary." The phrase *to the right* contains a relation *to* that profiles directing of attention to a subregion (*the right*) of the field of view (figure 39.1).[8] The subregion constitutes the primary landmark—the one most directly linked to the trajector. An abstract trajector, here instantiated by the phrase *the ball,* is located within this subregion. The full scope of predication of the complex relation *to the right* includes the abstract trajector, the map of the viewer and field of view with its right and left subregions on either side of a line of sight, and an abstract secondary landmark located on the line of sight. The secondary landmark is instantiated by *the lamp*. The preposition *of* predicates a relation between the primary and secondary landmarks.[9] In this

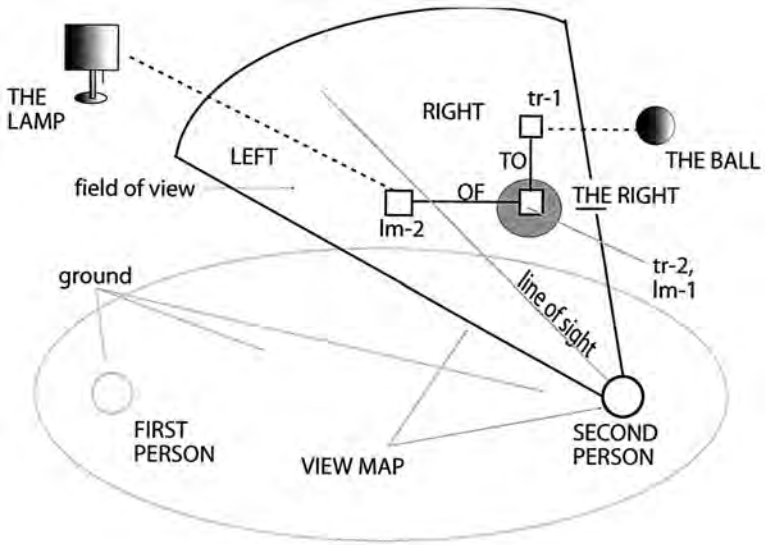

Figure 39.1. The ball is to the right of the lamp from your point of view

second relation, the primary landmark functions as a trajector. Thus, the expression describes a *focus chain* with five elements, not three (Langacker 2000). The five elements are shown in the left column of the table.

concept	**instantiation**	**symbol**
tr-1	SPECIFIC BALL	*the ball*
rel-1	TO	*to*
lm-1=tr-2	SPECIFIC RIGHT	the right
rel-2	OF	*of*
lm-2	SPECIFIC TREE	*the tree*

Three of the elements—SPECIFIC RIGHT, OF, and the secondary landmark 1m-2—belong to the view map. The remaining elements appear to be more independent of the view map. One might regard *to the right of* as a complex relation in the view map and see the whole structure as ternary, but contrasting phrases such as *from the right* or *on the right* argue for a more complex analysis. All the elements within the bold lines constitute the view map, which in this instance is instantiated by second person. The relation *to* is given only an abstract representation rather than an iconic one. Since orienting expressions can be compounded recursively, it does not seem

useful to characterize them as profiling merely ternary relations. The classification that I propose distinguishes orienting expressions by the type of map in the conceptual base (scope of predication) of the relation or the landmark. The main distinction is between *view maps* and *object maps* (including the subtype *macro-maps*).

View Maps

In this type, a Figure or trajector is located relative to a conceptual landmark located within or attached to a view map. The view map may be instantiated by speaker, addressee, third person, or some other entity construed to be animate and possessing a field of view. The field of view is the crucial component of the map, but knowledge of the orientation of the observer may also be necessary to an interpretation. A profiled relation, such as *right* or *away*, is a component of the view map. If the view map is instantiated by first or second person, the expression is deictic. Orientations based on observer models in (4) and (5) are deictic, at least on a default reading, but (6) is not. The examples are from Levinson (1996: 137).

(4) The ball is in front of the tree.
(5) The ball is to the right of the lamp, from your point of view.
(6) John noticed the ball to the right of the lamp.

An expression such as *the car moved away* presupposes a view map, but its landmark and the instantiation of observer as first person or other must be disambiguated from context, with different consequences for the construal of relations in the map. The landmark may be construed as the observer himself or herself or as an entity lying on the line of sight. A similar problem is posed by demonstratives, such as the medial demonstratives in Tagalog *iyán* or Coeur d'Alene *ɬuʔ* both meaning 'that one, by addressee'.[10] These deictics do not always presuppose an observer's field of view, per se, but they do presuppose a model of the discourse ground. One can verify that field of view is not at issue by mentally rotating first person in any direction. The meaning does not change. Yet it seems likely that the prototype or default construal is one in which interlocutors face one another, so that second person lies within first person's field of view.

Object Maps

In this type, a Figure or trajector is located relative to a conceptual entity that has orientational values by virtue of its shape or other qualities. An observer's field of view need not be invoked for an interpretation. Object maps are the more-or-less stable orientations in the cultural models imposed upon viewable objects such as the human body, animal bodies, plants, cars, houses, and culturally significant landforms. The front of a car or a house does not ordinarily change with the speaker's vantage point, though people may disagree over what they construe to be the front or back of a truck bed or a building. Orientation frames based on object maps are frequently termed *intrinsic* (Levinson 1996; Bickel 1997; Zlatev, this

volume, chapter 13). They are often based on maps of human or animal bodies (MacLaury 1989). For example, as with many other languages, in Tagalog, the top part or front of anything may be referred to as the 'head' (*ulo*).

Macro-Maps

Macro-maps constitute a subtype of object maps lying toward the high end on a gradient of geological or cosmological scale, permanence, and fixed location. This refers to the large-scale and permanent orientations inherent in cultural models of the environment and cosmos, involving movements of the sun, the direction of prevailing winds, the tracks of stars and planets, and the orientations of large-scale landmarks or landforms such as major rivers and mountain ranges, regardless of a viewer's vantage point. Macro-map orientation is often termed *absolute* or *cardinal* orientation (Levinson 1996; Bickel 1997; Heine 1997). Terms such as *up* and *down*, *east* and *west*, *upriver* and *downriver* are based on macroschemas. In Tagalog, for example, *Silangan* is the direction of the sun's rising, *Kanluran*, the direction of the sun's drowning in the sea. When we say that something lies to the/our north, the figure is located relative to a known landmark (location of first or second person in the default construal) on the macromodel of cardinal directions as defined in Western cultures.[11] An expression such as *the arctic is in the north* requires that the arctic region be conceptualized relative to a subregion of the macromodel of the earth and its cardinal directions.

Thus, macro-orientation is very much like basic object map orientation in that both locate a figure relative to cognitive maps having subregions. They differ only in the scale and mobility of the map referents. The orientation of the macro-map is fixed, but that of a smaller object may change. For example, I might say that a deer is downslope from a particular mountain peak, which would be structurally analogous to saying that the deer is in front of a car. The only real difference in the mental calculations is that the macro-map of geological slope has a fixed orientation, but the orientation of the car must be determined in order that the subregion of the object map predicated by the phrase *front* can be calculated. But, under certain disorienting conditions, it might be necessary for a speaker to make a similar redetermination of the lay of the land in the macro-map, especially where slope is not locally obvious, but must, by convention, be specified.

It may be more surprising that there is little difference between the use of object maps versus view maps instantiated by third persons. After all, persons are objects and their cultural modeling involves dimensions like front-back, left-right, and top-bottom. Charles Fillmore (1982: 39) observed the similarity, saying, "In the uses I refer to as 'deictic by default' [e.g., *They're up front.*] the reference object is the speaker's body." He also asserted that such categories as up-down, front-back, and left-right are basically nondeictic. Field of view is not a part of an object map, but the location and orientation of an object may still have to be considered much as one would have to determine the location and orientation of an observer.

For example, to say that a deer is in front of a car requires a mental calculation analogous to that posed by saying that the deer is in front of a third person.[12] Thus, all three ideal types of orientation, whether based on view maps, object maps, or macro-maps, involve the same basic mental calculations. A trajector is located in relation to a landmark which is either a part of a topographical map or coincident with the map. Relations may also be features of the map. The orientation of the map itself is known, either through long experience and cultural tradition in the case of macro-maps or, most often, through online calculations and context-based conventions in the case of observer and object maps.

Levinson (1996: 134) reviewed a number of experiments that demonstrate that many languages use "an 'absolute' [i.e., macro-map] frame of reference . . . where European languages would use a 'relative' or viewpoint-centered one."[13] Many languages fail to provide an observer-based frame of description (1996: 144, 156). For example, in Tzeltal Mayan, in any scale, one speaks not in terms of 'left', 'right', 'front', or 'back', but in terms of 'downhill', 'uphill', and 'across'. Orientations are clearly cultural choices, as Levinson (1996: 145) implied:

> No simple ecological determinism will explain the occurrence of such systems, which can be found alternating with, for example, relative [view map] systems, across neighboring ethnic groups in similar environments, and which occur in environments of contrastive kinds (e.g., wide open deserts and closed jungle terrain). [brackets added]

Vertical orientation appears to conflate or alternate between two conceptual bases. To the extent that the category is emergent from the bodily experience of gravity, it belongs to the view map, which is anchored to the person. But to the extent that it is located in the primal scene (Alverson 1991) of earth, horizon, and sky, it is also a macromodel. I will assume as a working hypothesis that all cultures allow for the conceptualization of verticality using both maps, either separately or combined.

Typically, orienting expressions are constructions which combine or superimpose multiple maps. The sentence *Las Vegas is west of here* combines the macro-map of cardinal directions (*west*) with a deictic view map (*of here*). If I describe myself as *looking up* at a building, the expression combines viewer based *looking* with the macro-map-based subregion *up*. Fillmore's famous expression, something like *Get back down from out of up in that tree*, makes use of the object map of the container (*out of . . . in*), the macro-map of verticality (*down . . . up*), and a view map (*back . . . from*). In Cora, the combining of spatial frames in a series of prefixes is a typical form of construction, as in the initial word of (7) from Casad (1988: 365). The morphemes that predicate shape and path schemas function as constructors in building complex path maps.

(7)	***a-hu-ku-rá'a****-raa*	*áh-ka'i*	*irí*	*hece*
	outside-slope-around-corner-go	slope-overhill	hill	at
	OBSVR-OBJ-PATH-OBJ-GO			
	'He went off over the edge of the hill.'			

3.2. Cultural Models of Space and Orientation Theory

All orientations are relative to cultural models of spatial structure. Often, languages provide grammatical instantiations of salient spatial schemas. For example, compact objects, long thin objects, flat objects, containers, and fluid substances (including sand, etc.) are marked in both Bantu and Apache noun classifier systems (Palmer 1996). Models of human and animal bodies vary widely and terms for body parts such as *face*, *belly*, *back*, *head*, and *buttocks* are often metonymically extended to terms for orientations, as in the terms *facing* and *back of* (Friedrich 1979; Brugman 1983; Heine 1997; Zlatev, this volume, chapter 13). Spaces have structure, too. They may, for example, be straight or curved, wide or narrow, small or voluminous, open, enclosed, empty, partly full, full, or interrupted. Processes also have spatial orientation and structure: there is orientation in 'coming' and 'going'; there is both structure and orientation in 'crossing', 'climbing' and 'falling', 'entering' and 'leaving', and in 'sifting' and 'sowing' (see Bybee 1985: 14). Orientations and spatial structures may be predicated by all sorts of linguistic devices: prepositions; affixes; reduplications; nominal, stative, and verbal roots; and constructed lexemes, phrases, and sentences (Senft 1997a; Zlatev, this volume, chapter 13).

Recent studies demonstrate the importance of culture in structuring space and spatial orientations. The dependence of Tzeltal orientational language on a macro-map of slope plus the view map implied by *across* was mentioned above. It can be shown that the same map governs nonlinguistic spatial orientation. When Tzeltal subjects are shown an arrangement of items and are then rotated 180 degrees and asked to reproduce the arrangement, they preserve the fixed, macro-map bearings, placing items to the east if they were originally on the east. By contrast, Dutch speakers preserve observer-based left or right orientation (Levinson 1996). Levinson (1997: 37) argued that it is the linguistic system which forces speakers to compute absolute or relative locations, because the coordinate systems "could only be shared throughout a community through the agency of a shared public language." This is probably largely correct, especially if we include gestural systems within the category of linguistic system, but perhaps we should not forget that other symbolic representations, such as diagrams and dwellings, also inscribe and communicate orientational structure. For example, the opening of the Pawnee earth lodge faced east to admit the morning rays of the sun and the altar to the Evening Star goddess was in the west sector of the lodge (Weltfish 1965).

There is abundant evidence that culture plays a large role in orientation. Bickel (1997) presented a detailed ethnography of spatial orientation in Belhare, a language spoken by a subgroup of about 2,000 of the Kiranti of Eastern Nepal. He defined four different "mapping operations" in Belhare orientations, three of which are object maps and one of which is observer based:

a. *ecomorphic* (including above, below, and horizontal)
b. *geomorphic* (in large scale based on the orientation of the Himalayas)

c. *person-morphic* (including further from, nearer to, and lateral to a person)
d. *physiomorphic* (as in upper teeth, lower teeth, and across teeth, i.e., molars)

Bickel's ecomorphic, geomorphic, and physiomorphic mappings are object maps. Furthermore, the ecomorphic and geomorphic mappings are macro-maps. Physiomorphic orientation may be regarded as based on a micro-model. Only his person-morphic category is a view map.

Symbolic spatial arrangements in Belhare psychology and religion are positioned on the ecomorphic schema. Belhare have a "ubiquitous fear of stumbling and falling." If one dies as a result of falling, "the corpse is turned face down . . . and the soul is believed to enter a dark world of small humanoids below the surface of the earth" (Bickel 1997: 76). He concluded that spatial schemas are fundamental to the culture. By the same token, we can say that the culture, developed within the potentials and constraints of its geomorphic environment, heightens the salience of selected spatial schemas. Comparable reviews of orientation terms in the Mayan languages Tzeltal and Tzoltzil and the Austronesian languages Tolei and Giman appear in Senft (1997a).

Cross-cultural differences in the conceptualization of spatial tasks can be truly astounding, even between two languages in the Indo-European family. Carroll (1997) compared the structuring of space in English and German "when describing entities such as the layout of a town or village or when giving instructions on how to assemble the parts of an object" (137). She showed that in such tasks, speakers of English orient with object maps while speakers of German use deictic models. Speakers of English were "object-centered" on both tasks, dividing rooms into sections and delimiting a toy truck by the shape of its parts. By contrast, speakers of German bind spatial structures to persons and associated "deictic viewpoints" that are encoded in the forms *hin* 'thither' and *r-* 'hither'. In other words, one might also say that the German speakers were placing the real objects within their view maps of the scene. Where the speaker of English might say *Slide it so the button type of object on the bottom slides into the track on the grey piece*, the German would say something like *Okay, from in front to the black (piece) thither is it to be hither-in pushed* (Carroll 1997: 150).

The role of culture is revealed most clearly in the experiments of Sinha and Jensen de López (2000), who studied the acquisition of spatial linguistic categories in Zapotec (an Otomanguean body part locative language) and Danish (Indo-European). They found no evidence that early usage was governed by categories based on a child's experience of his or her own body as a prototype: "Utterances in which the speaker's body, or part of it, is either landmark or trajector do not seem to systematically precede utterances in which both landmark and trajector are other objects" (22). Furthermore, "Spatial schemas implicate 'non-self' objects and events at least as much as they implicate the developing child's own body." If this is the case, then the development of spatial categories must be largely cultural, since most of the objects that would serve as trajectors and landmarks are cultural creations that are encountered and presented in orientations and perspec-

tives that are culturally (and linguistically) structured. Based on experiments too detailed to discuss here, Sinha and Jensen de López concluded that at least some semantic categories are acquired by reinforcing prelinguistic or allo-linguistic cultural categories. Their results argue against the strong Whorfian position of Lucy (1992) that it is grammatical categories that cause speakers to habitually attend to certain qualities of objects in their environment (see also Palmer 1996: 16–18, 159–63). They also argue against the notion of Johnson (1987) that spatial categories such as CONTAINER are exclusively emergent from basic bodily experiences.

3.3. Fictive Spaces, Transpositions of Ground, and Post-Whorfian Relativity

Perhaps the most amazing human cognitive ability is that of shifting a conceptualized discourse ground or landmark, or as Bühler ([1934] 1982: 22) put it, "deixis at the phantasma." Because of this ability, speakers can alternately take the positions of other speakers in a discourse and say what they said or might say and be understood by addressees as representing the fictive speaker. If the topic of discussion is spatial orientation, speakers can describe situations with a fictive field of view far removed from the actual discourse ground.[14] Such descriptions are normally accomplished with a combination of orientational language and gestures.

Haviland (1993) described just such a narrative in which a speaker of Guugu Yimithirr, a language of Queensland, Australia, described the direction taken by swimmers after a boat capsized. Facing west, the narrator gestured to the southwest, as though the place where he was sitting was actually located some (unspecified) distance to the northeast where the event took place. On another occasion, he retold the story while facing north, so his gestures pointed "behind him, over his shoulder" (1993: 13), simultaneously maintaining the translocated landmark (i.e., origin) and the relative movement away from speaker within the framework of the macro-map. Haviland concluded that the *interactional space* (i.e., the deictic ground *à la* Langacker 1987: 489) "comes equipped with cardinal directions conceptually attached" (1993: 26). *Narrative spaces* are "laminated over the immediate interactional space" (26).

Narrators construct other sorts of transposed fictive spaces. The same narrator described the fin of a shark that surfaced during the capsize event as though it were located directly in front of him (in the ground) and oriented independently from the macro-map. Narrators also construct *narrative interactional spaces* in which remembered or fictive narrators are removed in time and place from the actual ground. Narrative interactional spaces may or may not be anchored to a known location. Haviland (1993: 37) concluded that "it is this multiplicity of 'gesture spaces' . . . and the evanescent shifting between them, that belies the alleged simplicity of pointing gestures as primitive referential devices." In Haviland (1996), the approach is generalized to transpositions other than spatial ones, including those involved in indexical projections, perspective, and construals of resolution or level

of schematization. He also discussed types of transposition "triggers," including quotation, narration, and various "generic brackets," such as paralinguistic quotation marks or shifts in register or genre, as with the use of ritual speech.

The production and comprehension of orientational language and gestures depends not only on the ability of narrators and audiences to follow the shifting grounds and narrative spaces, but also on their historical and cultural knowledge, such as their knowledge of locations, actors, and events. It depends additionally on knowledge of gesture etiquette in various social contexts. As an example, McKenzie (1997) reported that local speakers of Aralle-Tabulahan, an Austronesian language of Sulawesi, use a directional referring to upstream when heading from Tabulahan near the west coast to Polopo, which lies directly east on the other side of an impassible highland jungle. Since Polopo lies on the coast of the Bay of Bone, it cannot be regarded as upstream in any direct sense. The usage may derive from a former time when it was still possible to travel east through the jungle. Similarly, Haugen (1969: 334), trying to understand contradictory usages of cardinal terms in Iceland, distinguished between *proximate orientation*, based on celestial observations, and *ultimate orientation*, "based on social practices developed in land travel in Iceland."

3.4. Cultural-Spatial Models

Important as it is, orientation theory covers only part of the terrain of spatial language. There remain many questions of how shapes and the shape of movements through space are conceptualized cross-linguistically. One path on this quest could lead us back to classifiers, which may predicate shapes and textures that are characteristic of culturally salient domestic or ritual activities, as mentioned above. Another could lead to languages whose verbal predicates include specifications of shapes (Whorf 1956: 169; Talmy 1985), including those of sign languages (Emmorey 1996). There is also the large realm of spatial metaphors (see Grady, this volume, chapter 8) and their uses in emotional expression and social orientation (Lakoff and Johnson 1980). When several salient cultural linguistic domains are linked with space in pervasive symbolic complexes, almost any orientational expression takes on metaphorical or metonymic values. For example, consider the following passage from Keesing (1997: 134):

> Vertical axes are extensively developed in Kwaio ritual and mythology, in relation to gender polarity and to purity and pollution, sacralization, and desacralization. . . . A Kwaio settlement expresses a cosmological design where men's sacred area is up, women's polluted area is down, and the zone of the mundane is in the middle. The men's house in the upper part of the clearing and the shrine above are symbolic mirror images of the menstrual hut in the lower part of the clearing, and the childbirth hut in the forest below. *To **fane** 'ascend' is, for men, to pass from the mundane to the sanctified, and for women, to pass from the polluted to the mundane.* [emphasis added]

Similarly, Shore (1996: 269) reported a fundamental distinction in the Samaon village of Matavai, Safune, between *tai* 'seaward' and *uta* 'inland'. *Tai* is the realm of women, light, clean, and formal, where there is civil life, social control, and good speaking. *Uta* is the realm of men, dark and dirty, but intimate, where it is uncivilized, village laws are inoperative, and there is bad speaking. Clearly, one would need to understand these associations in order to make proper use of Samoan orientational language in Matavai.

The topic of orientation merges almost imperceptibly with that of ethnogeography. Among the Kaluli of Papua New Guinea, every waterway is named, and places in the forest are named after local streams. Schieffelin (1976: 30) reported that "the name of a locality carries, in effect, its own geographical coordinates, which place it in determinate relation to the brooks and streams that flow through the forest." Long narrative songs navigate localities, so that each mentioned place evokes fond memories of shared experiences with deceased relatives. In the 1970s, the Kaluli identified with their home territories to the extent that they yelled place-names as war cries.

Ethnogeography is a source of metonymies. Basso (1990: 109) characterized Apache place-names as "thoroughly descriptive," "pointedly specific in the physical details they pick out." Part of this detail consists of orientational predicates, as example (8) illustrates. In Palmer (1996: 261–62), I used a cognitive linguistic approach to compare the structure of Apache place-names to those of the Salishan language Coeur d'Alene.

(8) *tse* *biká'* *tú* *ya-* *-hi-* *-líí*
rock on.top.of.it water downward REP it.flows
'Water flows down on top of a regular succession of white rocks.'

But our concern here is with the moral schemas that attach to places. In Apache, the mere mention of a place-name known as the location of an event having moral significance can "shoot" a victim, identifying him or her as having committed a certain type of transgression. Basso (1984, 1990) referred to this practice as "stalking with stories." The process by which a name comes to stand for a moral transgression is both metonymic and metaphorical: PLACE FOR MORAL STORY; TARGET PARTICIPANT IS STORY CHARACTER.

In Coeur d'Alene, there is a correspondence between the topological naming of the body and the naming of landforms and bodies of water (Palmer and Nicodemus 1985, 1998a). Surface features on the body are named with complex terms that contain orientational morphology, as in (9), which contains two relational predicates: the spatial orientational prefix *hn̓* 'in' and the relational body part suffix *ič'n̓* 'back ~ back of' (see also Casad 1988). The orientational prefixes, such as *hn̓* in (9), are highly polysemous, a topic that has been explored in Occhi, Palmer, and Ogawa (1993), Palmer (1996, 1998a), and Ogawa and Palmer (1999).

(9) *s-* *hn̓* *č'em* *-ič'n̓* *-''čt*
NOM in surface back hand
'surface in the back of the hand' (palm)

(10) *hn̩ č'em -qiλn -k^{w}i?*
in surface head water
'Surface at the Head (of the Water)'

Understanding this polysemy is necessary to comprehending fine discriminations in the nomenclatural semantics of Coeur d'Alene. But again, it is not the orientational structure of the terms that primarily concerns us here; it is the comparison of such terms to place-names. Of the 135 known place-names in Coeur d'Alene, nearly half have the relational structure rel–tr–lm with body-part suffixes that restrict the landmark as in (9). Item (10), which has parallel structure to (9), is the name of a traditional village on Lake Coeur d'Alene at the outlet of the Spokane River at the metaphorical top of the lake, which also has a named bottom.

If we now compare the grammatical structure of Coeur d'Alene place-names to those of Apache, we find that by contrast, the structure of the Apache term in (8) is rel–tr–lm. The postposition *biká'* 'on top of it' serves as a landmark restrictor much like the Coeur d'Alene anatomic suffix. The approach of Cognitive Grammar very clearly reveals parallels and contrasts in the semantic structure of the complex terms for places and body parts precisely because it provides a conceptual structure for relational predications.

3.5. General Orientation Semantics

Given that we now possess a useful body of observations and theoretical perspectives on spatial orientation, it appears that a general theory of orientation language must conform to the following propositions:

a. Orientational maps are highly schematic, language-specific, topographical maps of shapes, directions, and affordances (e.g., consider *into, around, cross, climb*).
b. Orientational maps may be based on an observer or an object. Deictic orientation, based on a conceptualization of the discourse ground, seems to presuppose a view map (of the speaker) as part of its base of predication, at least in prototypical usages. Macro-maps are a subtype of object maps having fixed orientations and geological or cosmological scales. Macro-orientation is relative rather than absolute.
c. Every orientational expression necessarily contains in its base of predication a trajector, a relation, and a landmark. An orienting expression may profile any one or a combination of these. In view maps, the relation of trajector to landmark is situated within the construed field of view.
d. Orientational maps are often combined in the predications of constructions or conflated in the predications of single terms.
e. Interlocutors reconstrue perspectives and fictive orientations by translocating or rotating maps, by zooming in and out, and perhaps even by

shrinking or expanding maps. Alternative construals provide a basis for orientational polysemy.

f. Spatial maps conflate with image schemas of movement (e.g., consider *towards*, *away from*, *cross*, *climb*).

g. Spatial maps are often, if not always, superimposed or "laminated" onto social, cultural, and historical schemas, which provide or enrich conceptual landmarks. The matrix of imbricated spatial maps, movement schemas, and sociocultural and historical models presents a rich semantic field requiring ethnographic as well as linguistic methods for an adequate grammatical description of orientation language. It follows that orientation terms will normally be polysemous across these types of models.

The studies reviewed in this chapter reveal a shift away from the strong Whorfian notion of language as the determiner of spatial perception to the notion of language as a set of cognitive abilities and acquired verbal and gestural skills operating on cultural-experiential models within social and historical contexts. As Senft (1997a: 22) put it, "The analysis of space concepts and spatial reference in various cultures and languages must consider not only the linguistic context of an utterance but also the paramount cultural context in which such an utterance is produced and adequately understood." Similarly, Foley (1997: 229) asserted that spatial language is at least partly a product of "our history of engaging with our spatial environment and sedimented in our linguistic practices." But Foley (1997: 215–29) reached this relativist position from within the relative-absolute spatial framework that is critiqued here.

4. Summary, Conclusions, and Suggestions for Further Research

Cognitive and anthropological linguists are struggling to parse out the influences of heredity, basic experience, and culture on semantics. Some basic experiences are universal because they are motivated by biological and environmental universals, but others are constrained by architecture, material culture, and socially constructed patterns of discourse. Grammar emerges as a community of speakers negotiates conventional construals of verbal and signed forms and constructions within the constraints set by innate cognitive processes.

These considerations establish that grammar is pervasively, though not entirely, a cultural phenomenon. As such, it should be studied in culturally defined contexts, such as the Tagalog melodrama examined in this paper. The emotion of melodrama is communicated by means of constructions in which grammatical

voice is profiled, because agency is often at stake. The grammar of voice is a grammar of agency because it predicates abstract scenarios of transitive action and degrees of actor control and involvement. In this melodrama, the Tagalog morphology of voice evokes a force-dynamic model of emotions that partially constitutes a model of agency.

In the realm of spatial language, I propose that all orientational predications presuppose spatial maps in their conceptual bases. A general and relativistic theory of orientation leads us into connections with sacred language and other cultural frames, such as ethnoanatomy, ethnogeography, gender, and ethics. Culturally motivated semantic distinctions are fine-grained, influenced by the conventional and prelinguistic uses of containers, the arrangement of objects, and the repertoire of orientational schemas and maps. These and other findings weaken the case for the strong Whorfian hypothesis but lead to a better understanding of linguistic relativity.

Cognitive Linguistics has provided new conceptual tools for the study of cultural-semantic domains. These new tools, which transcend the ethnoscience of the 1960s and 1970s, could be viewed as the elaboration of the paradigm of linguistic relativity developed over a century and a half by scholars such as Wilhelm von Humboldt, Wilhelm Wundt, Franz Boas, Edward Sapir, and Benjamin Whorf and then largely neglected for thirty years after 1950 (Lee 1996; Palmer 1996; Sinha, this volume, chapter 49). Other antecedents are the prestructuralists who worked in the tradition of diachronic semantics (Geeraerts 1988; Nerlich and Clarke, this volume, chapter 22). In my experience, the concepts of Cognitive Linguistics have yielded new insights in every conceptual domain to which they have been applied. These encouraging results argue for an enthusiastic cross-linguistic research program, which should include ethnography that is focused on semantic categories, including the semantics of signing and of the temporal coupling of gestures with speech (McNeil 1992, 1997; Stokoe 2001). The goal is a discipline of Anthropological Linguistics that is well grounded in cognitive theory and equally well suited to the study of discourse as it is to the study of semantic domains.

NOTES

I wish to thank my research assistant Jennifer Hansen for meticulous and insightful copy editing. Any remaining mistakes are my own.

1. Lakoff actually used the phrase "characterized by," rather than "structured by."

2. Lakoff (1987) treated a scenario as a kind of Idealized Cognitive Model (see 1987: 78) and equivalent to a script (284). He regarded it as metaphorically structured by a SOURCE-PATH-GOAL schema in the time domain (285) and having a "purpose structure, which specifies the purposes of people in the scenario" (286). My usage is more general.

3. For a review of the work on kinship and color terms, see Foley (1997). The research on color terms is also discussed in Palmer (1996), where I reached similar conclusions regarding the need to consider both universalist and relativist positions.

4. See Dixon (1979) on ergativity, Comrie (1981) and Croft (1990) on animacy, Langacker (1990, 1991, 2000) and Croft (1990) on voice, and Hopper and Thompson (1982) on transitivity.

5. In Tagalog, transitive agents are typically preceded by a genitive marker or realized as a genitive pronoun. In some constructions, transitive objects are in genitive case, so the genitive itself is not a transitive or ergative marker, though it is commonly regarded as such.

6. *Maniwala Ka Sana* 'Your Belief Is Hope' by Parokya Ni Edgar, *KHANGKHUN GKHERRNITZ THE ALBUM*, Parokya Ni Edgar: Backbeat. Pasig, Metro Manila (audiotape).

7. But see Zlatev (this volume, chapter 13) for an alternative view.

8. On regions, see also, Zlatev (this volume, chapter 13).

9. Langacker (2000) theorized that *of* predicates an intrinsic relationship between two entities. This can only be true if the two entities are the subregion *the right* and the abstract landmark of the view map, not the instantiated landmark *the lamp*, which normally would have no intrinsic 'right' side. One could say that the abstract landmark's instantiation inherits the intrinsic relation of the view map.

10. Coeur d'Alene is known more properly, but less widely, as *Snchítsu'umshtsn*.

11. But compare Zlatev (this volume, chapter 13) for an alternative view.

12. Let us leave aside the question of whether the object model of the car derives content from that of an animate observer, whether by metaphor or metonymy.

13. Levinson (1996: 149) showed that absolute frames of reference differ from intrinsic ones in that rotating an array consisting of a Figure and Ground requires a new description in the absolute frame, but not in the intrinsic. However, it is possible to conceptually rotate an array consisting of Figure, Ground, and the macromodel itself, in which case the original description is still valid. For example, if we conceptually rotate north to south, an object described as 'north' of a landmark is still north. The fact that this is not normally done is a practical matter rather than a cognitive constraint. In fact, Levinson observes that "in certain respects, absolute and intrinsic viewpoints are fundamentally similar—they are binary relations that are viewpoint independent" (1996: 151).

14. See Talmy (1996) on general fictivity.

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