

CASE AND GRAMMATICAL RELATIONS IN COGNITIVE GRAMMAR  
(WITH SPECIAL REFERENCE TO NEWARI)

Ronald W. Langacker

This paper presents an initial account of certain basic grammatical phenomena from the standpoint of cognitive grammar. Its main concern is case semantics, particularly the connection between case and grammatical relations. Much of the exemplification is drawn from Newari, a language that is especially revelatory in this regard. I will not attempt a systematic description of the Newari case system; for that, see the papers in this volume by Ken Cook, Tony Hung, and Steve Poteet, who have provided all my information concerning the language. Our discussions of Newari have helped to shape the ideas presented here, which offer in return a natural and straightforward way of approaching the data.

Grammatical Relations

By way of orientation, a few words are necessary concerning the general character of cognitive grammar.<sup>1</sup> We will then consider its treatment of grammatical relations.

The Framework

A central claim of cognitive grammar is that only symbolic units, each having both semantic and phonological import, are required for the description of grammatical structure. Semantic structure is identified with conceptualization rather than truth conditions, and is held to embody conventional imagery, i.e. it reflects the ability of speakers to shape and construe a conceived situation in alternate ways. Grammar therefore provides for the structuring and symbolization of conceptual content; different constructions represent different ways of construing and portraying a situation for expressive purposes.

The meaning of any expression (even a single morpheme) is called a predication. Predications are characterized relative to cognitive domains (also referred to as frames or cognitive models--cf. Fillmore 1982, Lakoff in press). Any sort of conception or knowledge system is capable of serving as the domain for a predication; for example, the conception of a wheel provides the cognitive domain for the characterization of hub, while the domain for onside kick is knowledge concerning the rules, objectives, and procedures of football. The scope of a predication consists of those portions of relevant domains that it specifically invokes and relies on for its characterization (e.g. only certain facets of one's knowledge of football are directly relevant to the description of onside kick).

The conceptual "content" of a predication, as given by its scope, is only one aspect of its semantic value. Equally significant is imagery, i.e. how the predication construes and portrays its content. Numerous parameters of imagic variation can be noted: the level of specificity at which a predication characterizes a scene; construal relative to different assumptions and expectations; matters of perspective (vantage point, orientation, directionality); and the relative prominence of substructures. The type of prominence that concerns us most is profiling. Every predication singles out some substructure for maximal



salience. Intuitively, this substructure--the profile--defines the focus of attention within the predication's scope; it might also be described as that substructure which the expression designates. The term hypotenuse, for instance, evokes for its domain and scope of predication the conception of a right triangle, and within this domain it profiles (designates) the line segment lying opposite the right angle. Often two expressions presuppose the same cognitive domain, yet contrast semantically by virtue of imposing alternate profiles on it. For example, hub and spoke profile different substructures with respect to the conception of a wheel.

I also speak of profiling in the case of relational predications, which correspond to such classes as adjectives, prepositions, and verbs. What a relational predication profiles is the interconnections among various facets of a conceived situation (interconnections can be thought of as cognitive operations assessing the relative magnitude and position of entities within a domain). A relational predication invariably picks out one entity involved in the profiled relationship and endows it with special prominence of another sort. I refer to this salient entity as the trajector,<sup>2</sup> and speculate that the trajector is properly characterized as the figure within the relational profile. The choice of trajector is flexible, and is not strictly predictable from the predication's conceptual content (hence the choice is once again a matter of conventional imagery); even a predication that designates a relationship symmetrical from the standpoint of its content manifests this type of asymmetry in how it portrays its participants. For example, X resembles Y is not semantically identical to Y resembles X despite their logical equivalence: the former is concerned with assessing X (its trajector) and takes Y as a reference point for this purpose; the latter reverses these roles. Similarly, above and below invoke the same conceptual content, and profile the same interconnections, but X above Y takes Y as a landmark for situating the trajector X, while Y below X takes X as a landmark for situating Y. Regardless of whether the trajector is validly characterized as relational figure, semantic contrasts such as above vs. below demonstrate that, in addition to content and profiling, some type of participant salience is important to the meaning of a relational predication.

### Cognitive Models

A central claim of the framework is the symbolic nature--and hence the meaningfulness--of grammatical units. Like other symbolic elements, the grammatical notions that concern us are characterized with reference to cognitive domains. Among these domains are certain abstract but nonetheless powerful folk models pertaining to the make-up of our world, the transmission of energy and its role in driving events (Talmy 1985), and the nature of canonical actions. These models are part of our general conceptual apparatus; they are not solely (or even primarily) linguistic.

First, we tend to conceive of our world as being populated by discrete objects, each of which (at a given moment) occupies a distinct location. Some of these objects are capable of moving about and interacting with others, particularly through direct physical contact. Motion is driven by energy, which some objects are capable of supplying internally and others must receive from outside sources. When physical contact is initiated with any degree of force, energy is transmitted from



the mover to the impacted object; this may cause the latter to move also, and possibly to interact with additional objects. Let us call this archetypal conception the billiard-ball model.

Our ability to interact perceptually with other entities gives rise to a second archetypal conception, which might be termed the stage model, since in many respects our role as observer is analogous to that of somebody watching a play. At any one time the observer is capable of attending only to a limited portion of the world around him, and generally his gaze is directed outward. The canonical viewing arrangement thus finds the observer focusing his attention on some external region, where actions unfold as upon a stage. Moreover, just as actors move about the stage and handle various props, we tend to organize the scenes we observe in terms of distinct participants who interact within an inclusive and reasonably stable setting. We further impose structure along the temporal axis, by chunking clusters of temporally contiguous interactions (especially those involving common participants) into discrete events. The stage model thus idealizes an essential aspect of our ongoing experience: the observation of sequences of external events, each involving the interactions of participants within a setting.

Additional cognitive models pertain to our experience as sentient creatures and as manipulators of physical objects. From countless instances of such experience, we develop a conception of certain typical roles that participants play in events. Descriptions of these role archetypes read very much like Fillmore's classic definitions of semantic "cases" (1968), though we are not yet talking about specifically linguistic constructs; such archetypes presumably organize our conception of events in much the same way that cardinal vowels serve as reference points in vowel space. The archetypal agent role is that of a person who volitionally carries out physical activity resulting in contact with some external object and the transmission of energy to that object. The polar opposite of an agent is an inanimate patient, which absorbs the energy transmitted by externally-initiated physical contact and thereby undergoes some change of state. The instrument role is that of an inanimate object manipulated by an agent to affect a patient; it is through the instrument that energy is transmitted from the agent to the patient. A person engaged in mental activity instantiates the experiencer role, while a mover changes position with respect to its surroundings. Other archetypes can be recognized, and finer distinctions can of course be made. For instance, we can recognize different types of experiencer, based on the kind of mental experience involved (intellectual, perceptual, emotive). We are also familiar with common deviations from these archetypes (such as non-human animate agents) and with certain hybrid roles (e.g. an animate experiencer-patient).

By combining certain of these models, we obtain the complex conception sketched in Fig. 1, which represents the normal observation of a prototypical action. The stage model contributes the notion of a viewer (V) observing an event from a vantage point external to its setting. In accordance with the billiard-ball model, this event consists of discrete objects--shown as circles--moving about and interacting energetically through physical contact. These interactions constitute an action chain to the extent that they result in energy being successively transmitted from one participant to another. Fig. 1 depicts a three-participant action chain; the double arrows indicate the transmission of energy, and the squiggly arrow stands for an internal change of state.



We can further take the leftmost participant (the ultimate energy source) and the rightmost participant (the energy sink) as instantiating the agent and patient role archetypes, respectively. The presence of an instrument mediating the transfer of energy from agent to patient is an optional feature of prototypical actions.

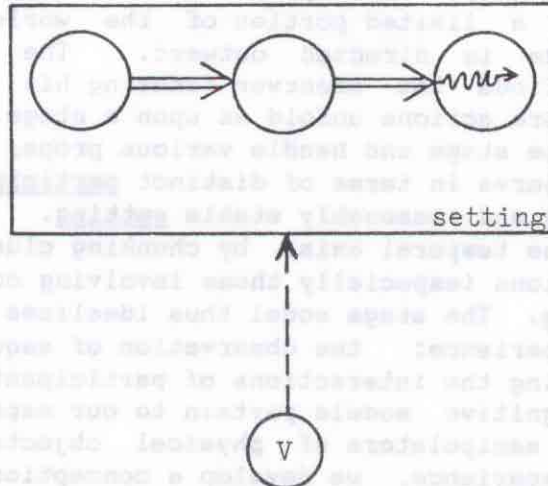


Figure 1

Various facets of the complex model in Fig. 1 are reflected in the typical structure of a full, finite clause. First, I analyze such a clause as profiling a process that is construed as constituting a single event.<sup>3</sup> The participant/setting organization imposed by the model corresponds to the traditional distinction between actants and circonstants (Tesnière 1959), or to the difference between the nominal arguments of a verb and certain clause-level adverbial modifiers (particularly adverbs of time and place). Furthermore, the profiled process is prototypically an action chain connecting an agent and a patient, with the former being selected as the clausal subject, and the latter as the direct object. Finally, the unmarked status of third-person participants reflects the external vantage point of the "viewer" (i.e. the speaker, and secondarily the addressee).

### Subject and Object

Cognitive grammar maintains that grammar and lexicon form a continuum of symbolic structures. In the case of lexicon, an expression is typically polysemous: it has not just one meaning, but rather a constellation of alternate senses that constitute a network (cf. Brugman 1981; Lakoff *in press*; Hawkins 1984; Lindner 1982; Langacker *in press a*, ch. 10). Some of these senses represent extensions from other, more prototypical values; some are schematic, and express the commonality observable across an array of more specific senses. The network model is also held to be appropriate for the meanings of grammatical elements, including such notions as subject, direct object, and transitivity. It has come to be widely accepted that these constructs have semantic values that can be regarded as prototypical (cf. Hopper and Thompson 1980; Givón 1979, 1984). However, I take the further, more controversial position that they have schematic characterizations as well, i.e. highly abstract descriptions applicable to their full range of instantiations.

The prototypical values of these constructs can be characterized with respect to the cognitive model sketched in Fig. 1. Prototypically, subjects and objects conform respectively to the agent and patient role archetypes. In a prototypical transitive clause, moreover, they are connected by an action chain that involves the transmission of physical energy from the AG to the PAT, resulting in the latter's change of state. Hence the sentences in (1) are canonical transitives:

- (1)(a) Seymour sliced the salami with a knife.
- (b) Floyd broke the glass.

Of course, not every transitive clause is prototypical, nor is every subject and object. As we extend the analysis to encompass successively wider ranges of data, schematic characterizations capable of accommodating all instances of these constructs will have to be made progressively more abstract.

As a first step in this direction, consider alternative ways of describing an event in which Floyd swings a hammer and thereby shatters a glass. Besides (1)(b), the following are all possible:

- (2)(a) Floyd hit/broke the glass with the hammer.
- (b) The hammer hit/broke the glass.
- (c) The glass (easily) broke.
- (d) Floyd hit the hammer against the glass.

We may assume that all of them invoke for their scope of predication a canonical action chain in which Floyd, the hammer, and the glass function respectively as agent, instrument, and patient. It is clear from such examples that neither the subject nor the object relation is invariably associated with any single role archetype: AG, INSTR, and PAT are all possible values for the subject, while either PAT or INSTR is permitted as an object.<sup>4</sup> The various options are diagrammed in Fig. 2.

The heavy lines indicate profiling. Hence the sentences in (2) (also their finite verbs) profile different portions of the overall action chain constituting the scope of predication: (2)(a) profiles the action chain in its entirety; (2)(b) designates only the interaction between the instrument and the patient; just the patient's change of state is profiled in (2)(c); and (2)(d) focuses on the agent's manipulation of the instrument. It is apparent that the choice of subject and object is anything but random: once the profile is known, the assignment of participants to these grammatical relations can be predicted (or conversely). The subject is consistently the head of the profiled portion of the action chain, i.e. the participant that is farthest upstream with respect to the energy flow. By contrast, the object is the tail of the profiled portion of the action chain: the participant distinct from the subject that lies the farthest downstream in the flow of energy. Though more abstract than "agent" and "patient", these characterizations are still semantic in nature. They invoke nothing more than the conception of an action chain (a schematic cognitive domain) and the notion of profiling, a facet of conventional imagery that is fundamental to semantic structure.



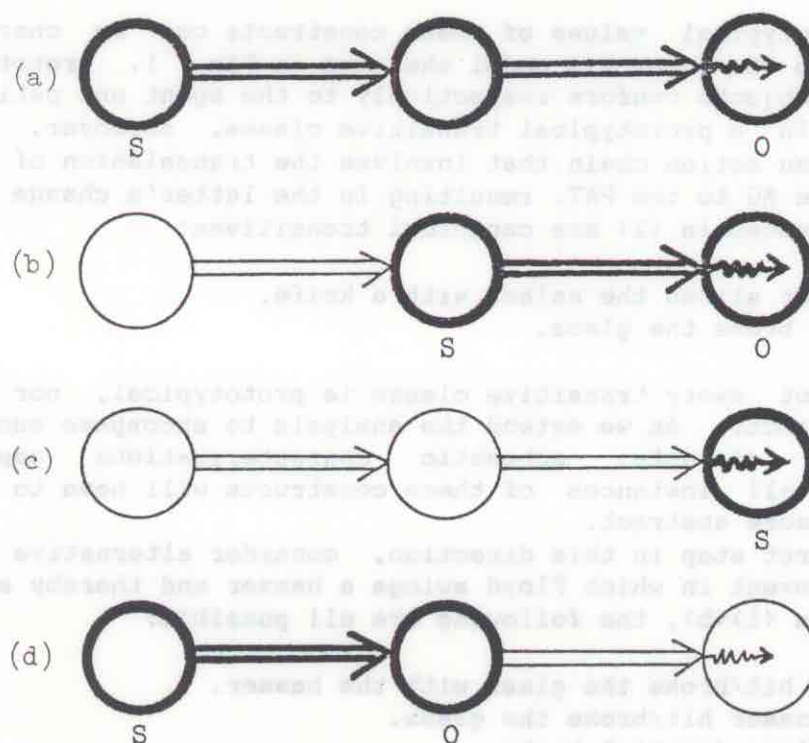


Figure 2

Recall that Fillmore (1968, p.33), to accommodate sentences like (2) in case grammar, posited a hierarchy for the unmarked choice of subject: if an agent is present, it becomes the subject; otherwise, if there is an instrument, it becomes the subject; otherwise, the subject is the "objective" (= patient, for the present data). While Fillmore simply stipulated this hierarchy, it follows as a consequence of the constructs and definitions I have proposed. The sequence AG > INSTR > PAT reflects the flow of energy in an action chain. Profiling allows different portions of a chain to be brought into prominence as the designated process, and if the subject is characterized as the head of the profiled portion, its choice will naturally conform to Fillmore's hierarchy. The precedence relations therefore derive from the inherent conceptual content of the role archetypes and their respective places in canonical instrumental actions.

Though more schematic (and hence more inclusive) than AG and PAT, the notions we have arrived at (head vs. tail with respect to the profiled portion of an action chain) are not yet sufficiently abstract to accommodate all subjects and direct objects. For one thing, not every process profiled by a transitive clause unfolds in physical space or involves the transmission of energy. In some instances, it is plausible to argue that the canonical conception of an action chain is extended metaphorically to non-physical domains. Thus Talmy (1985) extends his notion of force dynamics to certain social interactions:

- (3)(a) They forced him to resign.
- (b) Irving persuaded me to clean the garage.
- (c) I urge you to give up that crazy idea.

Overlapping with this class are verbs of transfer and communication, where the subject conveys some type of mover to a recipient:

- (4)(a) Judith sent a package to her niece.
- (b) I gave that information to all the neighbors.
- (c) The bank transferred the deed to the new owners.
- (d) He told those lies to anybody who would listen.

Though physical energy need not be involved, the subject in each case instigates the movement of the object, and can thus be construed as an abstract energy source.

However, there are many transitive clauses that do not appear to involve the transfer of energy from subject to object, even in an abstract or metaphorical sense. Prominent examples include clauses describing perception and ideation:

- (5)(a) Several witnesses saw the accident.
- (b) I noticed a rip in the fabric.
- (c) She remembered her childhood.
- (d) I have carefully considered your offer.

The subjects in these sentences are experiencers (i.e. they engage in some type of mental activity), and the object is totally unaffected by the designated process. But although the notion of an action chain is inappropriate for such examples, one can still discern an abstract similarity between the roles of the experiencer subject and of an agent in prototypical actions. In both instances, we can speak of an asymmetrical interaction that is in some sense initiated by the agent or experiencer.

In a prototypical action, the agent interacts with the patient through physical contact and the transmission of energy; this interaction is asymmetrical because the agent induces the contact and functions as the energy source: AG ----> PAT. The interactions in (5) occur in the mental rather than the physical realm. As a sentient creature, the experiencer is capable of generating internal representations of real or imagined entities, and in so doing, he makes mental "contact" with the entities represented. The experiencer clearly initiates this abstract interaction, in the sense of carrying out the requisite mental activity. Moreover, the roles are asymmetrical in regard to energy: the experiencer is energetic to whatever extent we conceive of energy as being required for mental activity, whereas the other participant is neither an energy source nor an energy sink. I will use the term absolute for such a participant. The interactions in (5) can therefore be represented as follows, where the broken arrow indicates the mental contact that the experiencer establishes with the object of perception or conception: EXPER ----> ABS.

Additional data forces the adoption of still more abstract characterizations. If every transitive clause is said to profile an asymmetrical interaction, sentences like those in (6) require that the notion of an interaction be defined abstractly enough to accommodate static situations:

- (6)(a) Line A intersects line B. (b) Marsha resembles Hilda.
- (a') Line B intersects line A. (b') Hilda resembles Marsha.



More seriously, the content of these sentences affords no apparent basis for the subject/object distinction. The profiled relationships of intersection and resemblance are not only symmetrical, but also connect two non-energetic participants: ABS <----> ABS.

Nevertheless, it is intuitively evident that the members of each sentence pair are semantically non-equivalent, and that some type of asymmetry in the portrayal of participants is responsible for the contrast. In (6)(b), for example, Hilda serves as a standard of comparison with respect to which Marsha is evaluated, while in (6)(b') these roles are reversed. It is a claim of cognitive grammar, as previously noted, that relational predications consistently single out some participant for special prominence; specifically, it is suggested that this element (the trajector) can be characterized as the figure within the relational profile. Since a finite clause is one type of relational predication, we expect as a special case that some participant will always be selected as figure/trajector at the clause level. I attribute this status to the clausal subject, and thereby explicate the perceived asymmetry in sentences like (6) in terms of figure/ground organization.

Under this analysis, such sentences are seen as limiting cases with respect to subject asymmetry. A finite clause always profiles a process (i.e. a relationship viewed as extending or evolving through time) and its subject is in all cases analyzed as the processual figure. However, expressions form a gradation as to how strongly the choice of subject/trajector is suggested by their conceptual content. It is cognitively quite natural for the most energetic participant to stand out as a focus of attention, so in canonical AG ==> PAT sentences the agent is the obvious candidate for selection as relational figure. In clauses like (5), of the form EXPER ----> ABS, the asymmetry is perhaps less obvious because the profiled interactions occur in the mental realm; still, the experiencer is the only energetic participant and is thus the expected trajector. Sentences like (6) can be viewed as occupying the endpoint along this scale: the speaker imposes a choice of trajector that is essentially arbitrary from the standpoint of conceptual content. The selection of a relational figure can be motivated by content to a greater or lesser degree; zero motivation represents the limiting case.

In seeking a universally applicable definition of the notion subject, we have formulated successively more schematic (and hence more general) characterizations: agent; head of an action chain; energetic participant; and finally, figure within the profiled relationship. Although this last formulation is controversial, it should at least be apparent that any notional definition valid for all subjects will have to be comparably abstract. The standard view that subjects are prototypically agents is both accepted and accommodated in the network model; the two characterizations pertain to different levels of description, both of which are claimed to be necessary in a full account. What about the prevalent idea that subjects are topics? A discourse-based notion of topic (i.e. one referring to thematic continuity, topicality, etc.--cf. Givón 1983) is probably valid for prototypical clausal subjects, but it is doubtful that any such description holds for all subjects without exception. On the other hand, if a topic is simply defined as "what the sentence is about" (a standard description despite its vagueness--see van Oosten 1986 for a survey), one can argue for its universal validity. But then, I would propose that this "aboutness" relationship is most plausibly explicated by analyzing the subject as



figure within the profiled process.

The prototypical value for direct objects is that of a patient. More generally, a direct object can be characterized as the tail of an action chain, whether this be a patient, mover, experiencer, or some combination of these. A schematic characterization compatible with the full range of instances must be considerably more abstract, however, for it must further accommodate the unaffected, absolute object in sentences of the form EXPER ----> ABS, and also the non-subject nominal in sentences describing static situations. Thus a universally valid definition based on role archetypes or conceptual content alone is not feasible; the critical factor is how such content is construed. Because a subject, as figure within the profiled relationship, is the most prominent clausal participant, it is natural to suggest that a direct object is the second most prominent participant, i.e. the most prominent participant within the ground.<sup>5</sup> More precisely, I propose that a direct object be characterized schematically as a prominent participant lying downstream from a participant subject, either in the flow of energy or in some abstract analog thereof. In extreme cases where conceptual content provides no inherent directionality, this abstract flow may be entirely subjective: it reduces to the hierarchy of prominence the speaker imposes on the participants (and thus the order in which they tend to be accessed).

A consequence of these definitions is that a clause may have a subject without having an object, but not conversely.<sup>6</sup> While every clause is presumed to select some entity as relational figure (hence as subject), an object occurs only if this entity is a participant and the profiled relationship happens to involve some additional, downstream participant. Intransitive clauses are thus accommodated: rather than associating two distinct nominal participants (as per the billiard-ball model), the profiled process holds between subparts of the subject, or between the subject and another type of entity (e.g. some facet of the setting or the domain). As for transitivity, the most schematic characterization refers only to the existence of participants meeting the specifications for subject and direct object. More specific characterizations refer to particular kinds of asymmetric interactions, prototypically the flow of energy from subject to object along an action chain.

### Marked Coding

We have so far concentrated on examples where the prominence accorded participants via the choice of subject and object conforms to the most natural construal of an event on the basis of its conceptual content. However, to accommodate various communicative objectives, languages also permit certain departures from this unmarked coding of events. Some of these involve different profiling options; others pertain to voice.

Consider give vs. receive. Both invoke the conception of an agent who induces the transfer of some entity from his own sphere of control to that of some other individual, whose role is that of an experiencer and resultant possessor. I analyze give as profiling this entire complex occurrence, whereas receive designates only the latter portions of it, i.e. the agent's initiation of the transfer is left unprofiled. Now it is generally agreed that give represents the unmarked coding of such an event, since the agent is chosen as subject; the coding effected by



receive is marked because the experiencer-possessor is not the natural choice for subject when the occurrence is taken as a whole. Recall, however, that the subject relation is characterized with reference to the profiled portion of a process (cf. Fig. 2), which in the case of receive is confined to the interaction between the experiencer-possessor and the mover. Granted this marked profiling option, the choice of subject and object reflects their natural alignment: the subject is energetic relative to the object in the sense of establishing perceptual contact, being the locus of emotive experience, and exercising possessive control.

The marked coding in sentences like the following is also attributed to profiling:

(7)(a) The door opened only with great difficulty.

(b) A good tent puts up in about two minutes.

(c) This ice cream scoops out very easily.

This construction has been analyzed in considerable detail by van Oosten (1977, 1986), who concludes that it portrays the subject as being in some way responsible for the profiled activity, and is used when the role of any true agent is considered irrelevant. Though I agree with her analysis in essence, it seems apparent that sentences like these often do imply an agent--I do not, for example, imagine the ice cream in (7)(c) as wielding a scoop and lifting itself out of the container. The agent is however relatively non-salient and is left unspecified.

I assume once more that the agent's role in the process is included in the scope of predication but left unprofiled. Consider Fig. 3, which depicts three alternate senses of the verb open. Fig. 3(a) represents its normal transitive value, as in Andrea opened the door: the agentive subject transmits energy to the object and thereby induces its motion. Depicted in 3(b) is the intransitive open of sentences like The door opened. On the relevant interpretation, neither an agent nor the transmission of energy is directly invoked, i.e. the motion is portrayed as absolute; being the only participant, the mover is coded as subject. Fig. 3(c) corresponds to sentence (7)(a), in which the efforts of an agent are invoked but remain unprofiled. The mover is once more selected as subject, there being no other participant in the profiled portion of the action chain. With the mover as relational figure, the interactions it participates in--especially those it initiates--receive augmented salience. In particular, the resistance it offers to the agent's exertions (or in other examples, its facilitation of those efforts) comes to the fore in this construction, as indicated in 3(c) by the double arrow internal to S. Though volition is not involved, this resistance (or facilitation) makes the mover agent-like to some degree.

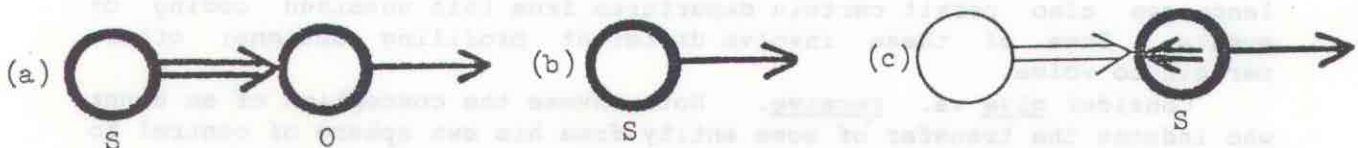


Figure 3

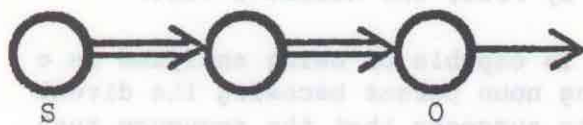
The sentences in (7) resemble passives, in that the head of an action chain remains unspecified, with a downstream participant assuming the role of subject/trajector. The subject is nevertheless chosen in



conformity with our previous generalization, as it heads the profiled portion of the action chain (cf. Fig. 2). I therefore consider such sentences to represent an active-voice construction.

In a passive sentence, e.g. The door was finally opened, the choice of subject runs directly counter to the pattern observed so far--it is not the head of a profiled action chain that is elevated to the status of trajector, but rather the tail, as shown in Fig. 4. The two voices thus represent alternative philosophies with respect to the linguistic coding of events. By equating the relational figure with the most energetic participant, an active clause achieves the co-alignment of two asymmetries, each of which presumably reflects the order in which conceived entities tend to be accessed at some level of cognitive processing: the ranking of participants in terms of their subjective prominence, and directionality in the objectively construed flow of energy. In a passive, by contrast, the most salient participant lies downstream in the energy flow. The resulting conflict in alignment is what makes the passive a marked construction; the profiled process receives an unnatural construal, being accessed through a focused participant representing the terminus (rather than the origin) relative to its inherent directionality. The communicative utility of this skewing is the raison d'être for the passive construction.<sup>7</sup>

(a) ACTIVE



(b) PASSIVE

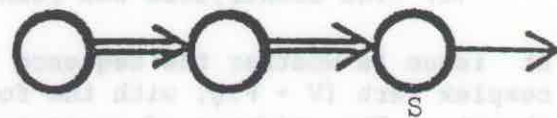


Figure 4

Another facet of this skewing merits comment. The participant selected as direct object in an active clause is chosen instead as subject in the corresponding passive, but the converse is not true--the active subject is not expressed as the passive direct object. This follows directly from the previous characterization of a direct object as a prominent participant lying downstream from a participant subject. Consider this definition in relation to Fig. 4(b). A passive is recognized as such by its effect on a non-passive verb stem, which establishes the directionality of the profiled process, and thus determines the unmarked choice of subject. The effect of the passive is to impose a marked subject choice on the process so construed, equating the trajector with the terminus (rather than the origin) of the directed path linking the salient participants. The subject selection determines whether any other participant qualifies as direct object, which is not the case in 4(b): even if the head of the action chain has considerable prominence, it lies upstream from the subject rather than downstream. A passive is therefore intransitive, and the action-chain head is either left implicit or identified periphrastically (as an oblique).

#### Setting vs. Participants

Recall that the stage model makes a fundamental distinction between setting and participants. In the unmarked situation, entities construed as participants function as the clausal subject and object, while the



setting is expressed by an adverbial modifier. Departures from this canon can nevertheless be observed, and have interesting grammatical consequences.

The grammatical significance of the setting/participant distinction becomes apparent when we review the definitions offered earlier for subject and direct object. At the most schematic level, a subject (clausal trajector) was defined as the figure within the profiled relationship. Importantly, this definition does not require that a subject be a participant; I will suggest, in fact, that trajector status is sometimes conferred on some facet of the setting. A participant generally is selected as subject, however, and as figure in the profiled relationship, it is then the most prominent participant in the scene. A direct object was characterized as the second most prominent participant, and one that lies downstream from a participant subject. An object is therefore possible only in clauses that also have a subject. Moreover, an object must be construed as a participant, and occurs only in clauses where the subject is also a participant.

Consider this characterization in relation to sentences like the following (due to Sally Rice):

- (8)(a) Fred, who needed advice, rushed to Marsha.
- (b) Marsha was rushed to by Fred, who needed advice.
- (c) Fred, who needed a rest, rushed to the countryside.
- (d) \*The countryside was rushed to by Fred, who needed a rest.

At issue is whether the sequence V + P is capable of being analyzed as a complex verb [V + Plv, with the following noun phrase becoming its direct object. The evidence of passivizability suggests that the sequence rush to permits this analysis, as seen in (8)(a)-(b). Note, however, that passivization and (presumably) the complex verb analysis are precluded in (c)-(d). This contrast can only be attributed to the character of the prepositional objects, Marsha vs. the countryside: people are prototypical participants, while the countryside--a canonical setting in all respects--is very difficult to construe in this fashion. Since participant status is part of the definition for direct objects, the behavior of rush to as a complex verb with Marsha, but not with the countryside, is predicted.<sup>8</sup>

Imposing figure/ground organization on a scene is something at which people manifest considerable flexibility. Thus, if a subject is correctly characterized as relational figure, it is hardly surprising that diverse elements can assume this function, including facets of the setting. In this regard, consider the contrast in (9):

- (9)(a) Fleas are crawling all over my cat.
- (b) My cat is crawling with fleas.

Naturally, (9)(b) does not attribute any motion to the cat; instead, crawl takes on the extended value 'be the setting for crawling activity'. The semantic distinction between the two sentences is diagrammed in Fig. 5. There is no substantial difference in conceptual content--in both (a) and (b), the insects move about (as indicated by the arrow) within a limited setting (the cat). The contrast resides primarily in the choice of subject, which is equated with the mover in (a), but with the setting in (b). It is thus a matter of conventional imagery.



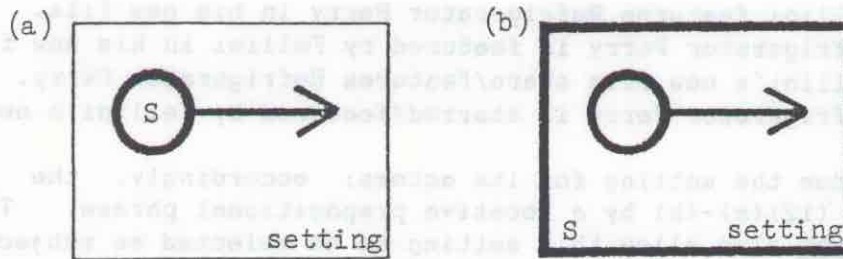


Figure 5

Note that the contrast between 'crawl' and 'be the setting for crawling activity' follows automatically from the choice of subject. A relational predication profiles interconnections among conceived entities, and the salience accorded a given entity largely determines that of the interconnections involving it. Thus the figure/subject and the second most prominent entity define a "window of prominence" that serves as the focal point within the relational profile. When the setting is chosen as figure, as in Fig. 5(b), the most prominent interconnections are consequently those between the setting and the mover. The center of prominence is no longer the crawling per se, but rather the relation borne by the setting to the actors and activity it contains.

In neither (9)(a) nor (9)(b) can the V + P sequence be analyzed as a complex verb permitting passivization:

- (10)(a) \*My cat is being crawled all over by fleas.  
(b) \*Fleas are being crawled with by my cat.

Since my cat is the setting rather than a participant in (9)(a), it resists being analyzed as a direct object, so (10)(a) is ill-formed. The deviance of (10)(b) cannot be explained in quite the same way, since fleas is definitely a participant in (9)(b), and hence the potential object of a complex verb. However, an object must not only be a participant itself, but must also lie downstream from a subject with participant status. Because the subject my cat lacks this status in (9)(b), fleas is not analyzable as a direct object. A passive based on this sentence is thereby precluded.

More strikingly, even a noun phrase that immediately follows a simple verb fails to be treated as a direct object (at least with respect to the passive construction) when the subject's role is exclusively that of a setting. For instance, the subject in (11)(a) is clearly a setting, with see assuming the approximate meaning 'be the setting for seeing'; hence the corresponding passive, (11)(b), is deviant.

- (11)(a) Tuesday saw yet another startling development.  
(b) \*Yet another startling development was seen by Tuesday.

The analysis also explains such data as the following:



- (12)(a) Fellini features Refrigerator Perry in his new film.  
 (b) Refrigerator Perry is featured by Fellini in his new film.  
 (c) Fellini's new film stars/features Refrigerator Perry.  
 (d) \*Refrigerator Perry is starred/featured by Fellini's new film.

A film provides the setting for its actors; accordingly, the film is introduced in (12)(a)-(b) by a locative prepositional phrase. The verbs star and feature also allow this setting to be selected as subject, as we observe in (12)(c), but the post-verbal noun phrase does not then constitute a passivizable direct object--note the deviance of (12)(d). By contrast, the participant status of the subject in (12)(a) makes the post-verbal noun phrase a direct object, with the consequence that (12)(b) is well-formed.

The non-object character of a post-verbal nominal is even more apparent in sentences like the following:

- (13)(a) There is a salesman at the door.  
 (b) There are wasps in the attic.

Bolinger (1977, ch. 5) has argued that the "existential" there refers to an abstract location, which may be equated with the "awareness" of the speaker or addressee. In similar fashion, Lakoff (in press) claims that there introduces a "mental space" (in the sense of Fauconnier 1985). I feel that something along these lines is undoubtedly correct, whatever the specific details. It is sufficient for present purposes to maintain that the there in (13) designates some type of abstract setting for the relationship specified by the post-verbal elements. From such an analysis, it follows directly that the noun phrase after the verb is not a direct object.

A similar analysis may be proposed for German sentences like (14)(b), which matches the conceptual content of (14)(a), but differs in conventional imagery:

- (14)(a) Eine Vase steht auf dem Tisch.  
 'A vase stands on the table.'  
 (b) Es steht eine Vase auf dem Tisch.  
 'There stands a vase on the table.'

It is demonstrable that the post-verbal nominal in (14)(b) is not a direct object--an automatic result if the subject es is considered an abstract setting roughly comparable to English there. If it is not a direct object, what is it? Relational grammar treats it as a subject chômeur created by the insertion of a semantically empty "dummy". In the present analysis, it is simply a prominent participant that qualifies as neither subject nor object, while es and there are regarded as non-participant subjects with actual (albeit rarified) semantic content.<sup>9</sup>

I conclude this section by noting that these concepts provide a straightforward account of some interesting sentence types of Newari. Consider first a contrast noted by Hale and Manandhar (1980):

- |                           |                            |
|---------------------------|----------------------------|
| (15)(a) wa-n laasaa daala | (b) wa-n laasaa-e daala    |
| he-ERG mattress beat      | he-ERG mattress-LOC beat   |
| 'He beat the mattress.'   | 'He beat on the mattress.' |

A large, inanimate object like a mattress is precisely the sort of entity



whose status as a participant or a setting is subject to variable construal--it is too large to be readily manipulated or obviously affected by a blow in the fashion of a hammer or a glass, but at the same time it is clearly discrete and smaller than a prototypical setting like a room or a geographical region. Hence the distinction in (15) is plausibly attributed to whether the mattress is construed primarily as a participant with respect to the beating (making it the direct object), or whether greater emphasis is placed on its role as a kind of setting for this activity (as indicated by locative case).

Initially more puzzling are sentences like those in (16), where what is normally a one-place predicate occurs with two nominals:

- |         |                            |     |                           |
|---------|----------------------------|-----|---------------------------|
| (16)(a) | gi-ta wa baanlaa           | (b) | wa khicaa-yaake bhugin du |
|         | I-DAT she beautiful        |     | the dog-COM fly exist     |
|         | 'I think she's beautiful.' |     | 'The dog has flies.'      |

Moreover, though word-order considerations suggest that the first nominal is in each instance the subject, it is the second nominal that one would expect to be the subject of 'beautiful' or 'exist', neither of which seems a likely candidate to take a direct object. Now it is possible that these sentences are actually intransitive, and that the preposed nominals are oblique--I must leave this question for those with greater knowledge of the language. I will however observe that notions already introduced permit an analysis in which everything falls neatly into place, including word order.

We need only assume that (16) represents a special construction parallel to those previously considered for other languages. The pivotal feature of this construction is that the status of clausal subject, which is normally given to the single participant of 'beautiful' or 'exist', is conferred instead on the setting in which this process unfolds, precisely as shown in Fig. 5. For (16)(a), this implies that a person (the speaker in this instance) is construable as the setting for someone else's beauty. Though seemingly problematic, this construal is in fact perfectly natural: what better way of describing an opinion, which necessarily involves an internal representation of the situation in question? (Does beauty not lie in the eye of the beholder?) For (16)(b), of course, there is nothing at all problematic about claiming that the dog is construed as a setting for the existence of flies (cf. (9)).

Choosing the setting as subject (relational figure) has the automatic consequence that maximal prominence falls on those interconnections which associate the setting with other prominent entities. In (16)(a), these interconnections relate a conceptualizer to an object of conception, so a sentence employing 'think' as the main verb is an appropriate translation. 'Have' is similarly appropriate for the relation between a dog and (the existence of) its attendant flies in (16)(b). A further consequence of the analysis is that 'she' and 'flies' qualify as neither subjects nor direct objects--they are simply prominent participants (call them *chômeurs* if you like). Finally, the case marking that appears on the subject is treated as a separate predication, and in each instance its value is both compatible with the meaning of the sentence and attested in other uses. I will argue in what follows that dative case has the experiencer archetype for its prototypical value, both in Newari and cross-linguistically. The import of the comitative case in (16)(b) is also fully consonant with its regular value in Newari, namely "animate source/possessor".



### Case

All languages require such constructs as subject and object for their proper description, and universally-valid schematic characterizations are reasonably sought. By contrast, case markings display substantial cross-linguistic variation: some languages dispense with them altogether, and case-marking systems are anything but uniform. Thus no specific inventory of cases can be posited as an absolute universal instantiated in all languages. Moreover, the search for all-encompassing schematic characterizations would not appear promising; case semantics is better approached in terms of language-specific families of senses organized around prototypical values.

### General Comments

Case markings are traditionally regarded as purely "grammatical" elements devoid of semantic content. There are several apparent reasons for this view: the role of case in signalling syntactic relations (notably subject and object) that are themselves denied semantic import; the fact that cases are often governed by verbs, prepositions, or constructions, leaving no option in their selection; the use of case for purposes of agreement, where by definition it is incapable of providing any "independent" semantic content; and the inability to isolate any single meaning appropriate for a particular case in all its occurrences.

From the perspective of cognitive grammar, these reasons are simply invalid. Markers identifying subjects and objects as such can be regarded as meaningful if these grammatical relations are themselves notionally grounded. The assumption that a governed morpheme is ipso facto semantically empty is erroneous: being obligatory is not the same as being meaningless, and the conventions of a language often specify the co-occurrence of particular meaningful elements. Likewise, the failure of a morpheme to contribute independent semantic content does not imply that it is semantically empty, but only that its contribution is redundant; semantic overlap is present to some degree in all composite expressions, and full overlap is an expected limiting case. Finally, polysemy is the normal situation for both lexical and grammatical morphemes; in neither instance does the absence of a single semantic value accounting directly for all of a morpheme's uses entail that it has no meaning at all.

Case markings thus conform to the fundamental generalization of cognitive grammar, namely that only symbolic units are required for the description of grammatical structure. They are not seen as mechanically-induced, semantically empty grammatical markers, but rather as separate predications, whose value can either dovetail with that supplied by other elements or else provide supplementary semantic specifications. The meaning of a case marker reflects its function, which is to specify the type of role that a nominal entity plays with respect to some relation. Hence the cognitive domain supporting its semantic characterization is the schematic conception of an appropriate relation--let us call this the base relation. The nominal entity whose role within the base relation is being specified may be called the focused participant. In grammatical composition, the focused participant is equated with the profile of the nominal that the case marking attaches to; the schematically-conceived base relation is generally identified with the process profiled by the clause in which the case-marked nominal appears (or with the relation



profiled by the element that governs the case).

What does a case marker profile? There are two options. First, it may profile the focused participant (making it similar internally to a nominalizer like -er or -ee). Its effect on a noun phrase is then to derive a more elaborate nominal expression capable of serving as a subject or object. Alternatively, the case predication may be relational in character, profiling the interconnections between the focused participant and the base relation overall. In this event the case marker is very similar semantically to a preposition; accordingly, it converts a noun phrase into a relational expression of the sort that functions as an "oblique" complement. Note that both variants are possible for the same case, even in a single language. In Polish, for instance, some nominals marked instrumental are direct objects, while others are oblique.<sup>10</sup>

### Role Archetypes

We will consider only those categories that primarily involve the role of participants in the process profiled by a clause. Thereby excluded are such cases as the genitive, whose basic function is NP-internal rather than clausal; the vocative, which concerns an extra-clausal relationship between the speaker and addressee; and locative cases, which generally pertain to the setting in which the profiled process unfolds. These distinctions are not always sharp, and the limitation is solely a matter of practicality.

As noted earlier, we conceive of processual participants with reference to an array of role archetypes. These archetypal notions derive from recurrent aspects of our everyday experience, and represent deeply-ingrained categories organizing our conception of participant interactions. Thus role archetypes are not viewed as being solely or specifically linguistic in nature (despite their semantic and grammatical significance), but as part of our general conceptual apparatus. They differ in this respect from the constructs variously called "deep cases", "thematic relations", or "theta roles", as these are normally interpreted. The term role archetype is intended to underscore this difference in status.

The different status encourages alternate theoretical expectations. One is not led to anticipate (as with "deep cases", etc.) that linguistic theory should be capable of enumerating a small, fixed set of uniquely-valued roles adequate for describing the nominal participants in any natural-language sentence. For one thing, our richly varied experience supports the extraction of numerous and multifarious schemas pertaining to types of participants and the nature of their involvement in a process. Those schematic conceptions that we single out for discussion as role archetypes may distinguish themselves by their degree of cognitive salience and utility, but they are nonetheless representatives of a far broader, even open-ended population. Moreover, I limit the descriptive function of role archetypes to providing the prototypical values of cases and other constructs (e.g. subject and object). A full description of such a construct requires a multiplicity of values related to the prototype by paths of semantic extension (cf. Lakoff in press; Langacker in press a, ch. 10). The prototype itself may well be instantiated directly in only a minority of the sentences employing the construct.

As judged by their systematic cross-linguistic significance, only a handful of roles are sufficiently fundamental and cognitively salient to be considered archetypal: agent, instrument, experiencer, patient,



mover, and absolute. The first two are manifested in the conception of a human actor volitionally wielding an object to physically affect some other entity (e.g. Seymour sliced the salami with a knife). I define an experiencer as an individual engaged in some type of mental process, be it intellectual, perceptual, or emotive; the subjects of think, see, and fear are examples. I will construe the term patient quite narrowly, to indicate an entity that undergoes an internal change of state, whereas a mover is an entity that changes position with respect to its surroundings; these are illustrated by the objects in (17)(a) and (17)(b), respectively:

- (17)(a) Stanley melted the ice with a blowtorch.
- (b) Abernathy hurled the discus nearly 70 meters.

An absolute participant is one whose role in a process is viewed in isolation from the flow of energy and causal interactions. Both participants are absolute in a sentence like (18)(a), which portrays a static situation in purely configurational, non-energetic terms.

- (18)(a) A chain-link fence encloses his property.
- (b) The weary ranger watched another lovely sunset.
- (c) The ice slowly melted.
- (d) The discus sailed nearly 70 meters.

Sentences like (18)(b) are more dynamic, in that the subject is the locus of mental activity, but the object--unaffected by the process and insulated from the energy that drives it--is absolute. The subjects in (18)(c)-(d) are also absolute, though not because their participation is intrinsically non-energetic; in contrast to (17), these sentences simply abstract away from the triggering forces and focus on the change of state or position per se. Hence the subjects in (c) and (d) can be regarded as an absolute patient and an absolute mover, respectively.<sup>11</sup>

It bears repeating that there is no unique or exclusive set of role conceptions. Those cited as archetypal are analogous to the highest peaks in a mountain range: they coexist with others that may be significant despite their lesser salience. A familiar example is the conception of inanimate, essentially autonomous forces capable of driving events:

- (19)(a) The wind blew the door shut again.
- (b) A flood wiped out the poverty-stricken village.
- (c) An earthquake woke us up.

Though such forces are neither agents nor instruments in any strict sense, a schematic conception of them is presumably invoked by speakers of English to represent the generalization that sentences like (19) are conventionally-sanctioned. Also, many verbs imply hybrid roles that combine essential features of two or more archetypes, as illustrated by the subject of jump (AG-MVR) and the object of injure (EXPER-PAT). Note further that processual participants need not conform precisely to an archetype or any other standard role conception. Pushing matters to the extreme, there is a sense in which every process defines a set of roles which reflect the specific details of that particular process and are consequently sui generis. That is in no way problematic in the present framework, and does not preclude either schematization or categorization.



Clearly, role archetypes amount to more than a structureless inventory of unrelated conceptions. By virtue of their intrinsic character, they participate in systemic relationships reminiscent of those observable among the phonemes of a language. One analogy is with the cardinal vowels, which are maximally differentiated with respect to the primary vocalic parameters, and thus make optimal use of the available phonological space. The agent and patient archetypes stand similarly opposed in regard to all their essential features: an agent is human, exercises volitional control, is an energy source, directs action outward, and remains basically unaffected by it; on the other hand, the archetypal patient is inanimate, consequently has no volition, serves as an energy sink, is the target for externally-initiated activity, and undergoes an internal change of state. Their polar opposition in this region of conceptual space lends a special salience to the agent and patient roles. The fact that AG and PAT represent the prototypical values for subjects and objects is one manifestation of their privileged status.

Role archetypes can also be arranged in hierarchies with respect to certain cognitively salient parameters. Each hierarchy constitutes a natural sequence for accessing the archetypes it comprises, and the ordering it imposes is exploited for linguistic purposes. We have already considered the hierarchy defined by the flow of energy along an action chain, namely AG > INSTR > PAT/MVR/EXPER, and noted its relevance to the unmarked choice of subject and object in English. Let us call this the energy flow hierarchy. Also significant is the initiative hierarchy, whose basic form is AG > EXPER > OTHER. This second hierarchy reflects the capacity of a participant to function as an original source of energy and thereby initiate contact with other entities. The archetypal agent ranks highest, since it is necessarily a source of energy in the physical domain. By contrast, an experiencer is not invariably construed as an energy source (some mental activity being externally induced), and qua experiencer initiates only abstract interactions with other entities (e.g. by imagining them or establishing perceptual contact). One manifestation of the initiative hierarchy is the basic word order SUBJECT > INDIRECT OBJECT > DIRECT OBJECT found in many languages (e.g. Turkish, Japanese, Newari).

Additional systemic relationships are represented in Fig. 6, which sorts role archetypes according to two binary oppositions. The distinction between source domain and recipient domain is based on energy transmission: by their very nature, agents and instruments pass energy

	SOURCE DOMAIN	RECIPIENT DOMAIN
ACTIVE PARTICIPANT	AG	EXPER
PASSIVE PARTICIPANT	INSTR	PAT MVR ABS

Figure 6



along to participants downstream, whereas the other roles figure in the transfer of energy only as recipients, if at all (though an entity is often a patient, mover, or experiencer by virtue of energy absorption, these can also be construed as absolute--i.e. independently of energy flow). Within each domain, a further distinction is made between active and passive participants. The active participant is in each case the one that ranks highest on the initiative hierarchy.

The groupings suggested by this chart are natural in other ways as well. As for the source domain, an instrument is naturally regarded as an extension of the agent: it implies an agent, who generally manipulates it directly. The grouping of AG and EXPER as active participants is motivated not only by their common initiative capacity, but also by their necessary sentience (required for either willful control or mental experience). Note further that an agent's experience of his action typically goes beyond volition (he may imagine it beforehand, perceive it, and recall it afterwards), and that purely mental activity is often subject to volitional control. Finally, the recipient domain appears to have a certain coherence. In sharp contrast to AG and INSTR, the roles in this domain--EXPER, PAT, MVR, and ABS--are all very commonly associated with direct objects. Moreover, they frequently coalesce to form hybrid roles, any combination being possible.

#### Correlation with Grammatical Relations

Givón has rightly observed (1984, p.136) that the diversity of case-marking systems derives from interplay in the coding of two kinds of information: what role archetype a nominal participant instantiates, and its grammatical relation in a clause (subject, object, or oblique).<sup>12</sup> There is of course a connection between the two, since archetypes figure in the description of grammatical relations (notably with respect to their prototypes). But there is also substantial divergence, as neither subjects nor objects invariably instantiate any particular archetype; their schematic characterization refers instead to figure/ground organization and degrees of prominence.

We can therefore envisage a spectrum of possibilities in regard to case systems. At one extreme, a system is fully correlated with grammatical relations, in that one case is devoted exclusively to marking subjects, and another to marking direct objects (with subjects and objects always being marked in this fashion). It is evident that a strict and wholly consistent nominative/accusative system has this character. The meanings of the nominative and accusative cases are then "subject" and "direct object" respectively, where these in turn are resolvable into the networks that define these relations semantically.<sup>13</sup> At the other extreme lies a fully uncorrelated system, i.e. one in which case categories have no direct connection whatever with the basic grammatical relations. Instead, each category is associated with a particular role archetype, which provides its prototypical value and anchors a network of conventionally-established senses. Hence the only correlation between subjects and objects on the one hand, and cases on the other, resides in the fact that both are characterized (though independently) with reference to archetypal roles.

What distinguishes a correlated system is the dedication of cases to marking notions that are primarily prominence-based rather than role-based. Though the subject and object categories take AG and PAT as their prototypes, this association is secondary and contingent (it stems from



the inherent salience of these polar opposites, hence the naturalness of selecting them as the first- and second-most prominent participants). As a consequence, the networks representing conventionally-established values of the subject and object categories extend beyond AG and PAT to subsume a variety of other archetypes. By contrast, since a role-based case is tied directly and specifically to an archetype, its values tend to cluster more tightly around it. This is, however, a matter of degree, so correlated and uncorrelated systems should not be seen as radically divergent types.

There are other factors that lead to the same conclusion. For instance, even in strict NOM/ACC languages it is common for these cases to mark elements other than subjects and objects (e.g. certain adverbs might take ACC). Additionally, if a correlated system has more than two or three cases, some of them are sure to be characterized in terms of role archetypes; thus NOM/ACC systems often incorporate a dative case with EXPER as its prototype, an instrumental case centered on INSTR, and so forth. The reason for this role-oriented aspect of correlated systems is that there are more linguistically significant roles than there are grammatical relations distinguishable solely on the basis of prominence. Degrees of prominence alone could hardly be expected to support more than a three-member hierarchy: SUBJECT (relational figure) > OBJECT (the most salient participant other than the figure) > OBLIQUE (all remaining participants).<sup>14</sup> Hence just two cases (or three at most) are sufficient to accommodate prominence-based relationships, and in a larger system the remaining cases are dedicated to the coding of role archetypes.

A final consideration is the existence of systems that are typologically mixed. There is no reason, of course, to believe that a mixed system is inherently unstable, or that it is necessarily "caught in transition" between two pure (and thus ostensibly stable) types. On the contrary, all indications point to some kind of split or mixture being canonical, if not universal. The prevalence of languages split between nominative/accusative and ergative/absolutive organization is of course well known. Agent/patient languages also split in various ways (see Dahlstrom 1983).

Fully correlated and uncorrelated systems should probably be regarded as idealizations--it is doubtful that pure examples are found in nature. But focusing for the moment on the (possibly non-existent) ideal of unmixed languages, it is evident that nominative/accusative and agent/patient systems lie at opposite extremes of the spectrum. A strict and consistent NOM/ACC system is by definition fully correlated: these cases mark subjects and objects no matter what roles they instantiate. On the other hand, an ideal AG/PAT language is fully uncorrelated: one case consistently flags agentive participants, while a second marks patients (and maybe other roles in the recipient domain), irrespective of their status as subjects or objects. Where in this scheme do we fit an ergative/absolutive language? It would seem to fall near the correlated end of the spectrum. An ERG/ABS system cannot satisfy the definition of full correlation, since it violates the requirement that all subjects be marked by the same case. Nevertheless, to the extent that the ERG/ABS marking is predictable from the number of central participants (i.e. whether a clause has both a subject and an object, or just a subject), it is clearly sensitive to grammatical relations, and not to role archetypes per se.



### Ergative/Absolutive Systems

Despite the foregoing remarks, we have not yet captured the spirit of an ERG/ABS system. If nothing were involved other than the identification of subjects and objects, it is hard to fathom why a language would ever depart from the NOM/ACC arrangement, which codes these relations directly and straightforwardly. If the subject and object relations are pivotal, why should a language mark them so inconsistently, with one case (ERG) used for certain subjects only, and the other (ABS) for both subjects and objects? We can pose the same problem by considering how the cases might be characterized semantically. The schematic value "transitive subject" accommodates ERG--and in the present framework, this does constitute a meaning (albeit abstract). But what about ABS? What do the notions "transitive object" and "intransitive subject" have in common? Since ERG/ABS organization is anything but rare, there must be something conceptually natural about the grouping.

An initial clue is afforded by cross-linguistic tendencies in how the relevant cases are signalled phonologically. The predominant pattern in NOM/ACC languages is for NOM to be coded by zero, and ACC by overt phonological material; the Hopi sentences in (20) are typical:

- |         |                     |        |     |                        |          |      |
|---------|---------------------|--------|-----|------------------------|----------|------|
| (20)(a) | maana               | piti   | (b) | maana                  | ciro-t   | tiwa |
|         | girl(NOM)           | arrive |     | girl(NOM)              | bird-ACC | see  |
|         | 'The girl arrived.' |        |     | 'The girl saw a bird.' |          |      |

In ERG/ABS languages, ABS is generally the zero form, with ERG being marked overtly, as seen in Newari:

- |         |              |      |     |                      |           |      |
|---------|--------------|------|-----|----------------------|-----------|------|
| (21)(a) | raam         | sita | (b) | raam-an              | jaa       | nala |
|         | Raam(ABS)    | die  |     | Raam-ERG             | rice(ABS) | eat  |
|         | 'Raam died.' |      |     | 'Raam ate the rice.' |           |      |

While there are of course exceptions, the pattern is quite robust and thus indicative of deeper factors--perhaps NOM and ABS are the unmarked members of their respective case systems not just phonologically, but also in some structural or semantic sense. My specific proposal is that NOM and ABS are characterized "autonomously", whereas ACC and ERG are characterized with reference to NOM and ABS. This has the distributional consequence that, while some nominal is marked NOM or ABS in every clause (provided that the central participants are overtly manifested), ACC and ERG occur only if there is some additional nominal meeting the appropriate conditions.

How this works for NOM and ACC is straightforward in light of previous discussion. NOM means "subject", characterized schematically as clause-level relational figure. The characterization is autonomous (i.e. it makes no reference to other participants), and since figure/ground organization is inherent to relational predications, there is always some entity that qualifies. For ACC, which means "direct object", the situation is very different. Recall that an object is characterized with reference to a subject: it is a prominent participant that lies downstream (typically along an action chain) with respect to a subject that is also a participant. These conditions are not always met, so not every sentence has an object. We can thus describe a subject as the starting point for calculating whether an object is also present. The



calculation proceeds by (i) starting with the subject as point of origin; (ii) from there, tracing downstream along the action chain (or its analog); and (iii) ascertaining whether the profiled segment of this path terminates with a distinct participant having the requisite degree of prominence.

To the extent that NOM and ACC correlate with subject and object, a single calculation applies to both the cases and the grammatical relations. However, the same cannot be true of ERG/ABS languages, whose distinctive property is that the cases cross-cut the grammatical relations.<sup>15</sup> The procedure as stated is presumably valid in such languages for grammatical relations, but some alternative is required for case marking. As it turns out, the two procedures are very similar--one is essentially the inverse of the other. Transitivity and case are each determined by tracing a path along an action chain, but these paths proceed in opposite directions. Though each path is natural in its own way, their lack of co-alignment is perhaps responsible for the minority status of ERG/ABS systems.

The procedure for determining case in an ERG/ABS language is as follows: (i) assign ABS case to the tail of the action chain (or its analog); (ii) from this starting point, trace an upstream path along the chain; and (iii) if a distinct participant is encountered that lies at the endpoint of this path (i.e. if it heads the profiled segment of the action chain), assign it ERG case. Observe that the characterization of ABS is autonomous, for it only invokes step (i), which does not refer to ERG. Moreover, ABS is always assigned, even if there is only a single participant; though degenerate, a one-participant relationship is still construable as an action chain, whose single member is both the head and the tail. On the other hand, ERG is characterized with reference to ABS, and will not occur in single-participant clauses, owing to the requirement that the ERG- and ABS-marked participants be distinct.

A consequence of this analysis is that ERG and ABS are not primarily or specifically markers of grammatical relations. The characterization of ABS, which is clearly pivotal, does not refer directly to subject or object, but rather to a participant's position on an action chain. There is of course an indirect (but nonetheless regular) connection between the cases and the grammatical relations, stemming from the fact that both are defined with reference to action chains or equivalent asymmetries. We can even admit that speakers exploit this connection and use the case markers to identify subjects and objects. The point remains, however, that the role-based value of ERG and ABS is fundamental, and that their relation-marking function represents a secondary overlay.

The inconsistency of the correlation (subjects marked by both ERG and ABS; ABS marking both subjects and objects) is quite understandable from this perspective. Moreover, given that ERG case is sensitive to the structure of conceived events, it is not surprising that its occurrence is sometimes independent of how these events are coded in terms of subjects and objects. In Newari, for example, ERG case appears on the subject of certain verbs that are grammatically intransitive but imply a second participant semantically, as in (22)(a):

(22)(a) raam-an tona  
Raam-ERG smoke  
'Raam smoked.'

(b) gitaa pyaakhan lhula  
Gitaa dance perform  
'Gitaa danced.'

Conversely, as seen in (22)(b), ERG case is omissible from transitive



subjects with certain verbs whose objects are not really distinct from the verbal process itself, and are thus difficult to construe as separate participants. Recall that case markers are treated in cognitive grammar as separate predications, i.e. they have their own semantic value, even when redundant or exploited for grammatical purposes. The semantic independence of role predications is obscured in fully correlated languages, where the meanings of NOM/ACC and subject/object essentially coincide; it is more apparent in an ERG/ABS system--especially in a language like Newari, where semantic factors predominate--and quite obvious in an AG/PAT system.

What, then, are the meanings of ERG and ABS? A first approximation to their meanings is provided by the case-assignment procedure outlined above, which qualifies as a semantic description: it invokes a cognitive domain (the conception of an action chain) and specifies the relative position within it of the focused participants. The characterization can nevertheless be brought into sharper focus; our efforts along these lines will be rewarded by a deeper understanding of ergativity and associated grammatical phenomena. To achieve this, we must examine more closely the structure intrinsic to our conceptualization of canonical events.

### The Structure of Events

A finite clause profiles a unitary process--that is, a process construed as constituting either a single situation or a single event. By definition, the conception of a process involves some entity and the evolution through time of a relationship in which it figures. In the case of situations, this relationship is conceived as a static configuration stable through time; for events, some kind of change is implied. This much conceptual content is the irreducible minimum for a processual predication.

Restricting our attention to this irreducible minimum, we must next consider the role an entity plays in the profiled process. For events, there are three basic possibilities: the entity either moves, has a mental experience, or undergoes an internal change of state (i.e. it is a MVR, EXPER, or PAT). These are diagrammed in Figs. 7(a)-(c), using abbreviatory notations that by now should be familiar. For situations, on the other hand, the entity may simply be viewed in relation to some domain or setting (e.g. Wombats really exist), and if so, its role is essentially vacuous in terms of conceptual content. There are advantages to treating this "empty" role as the degenerate instance with respect to MVR, EXPER, and PAT; in other words, the degree to which it undergoes motion, experience, or change of state represents the limiting or "zero" case. I thus refer to it as the zero role (Fig. 7(d)).

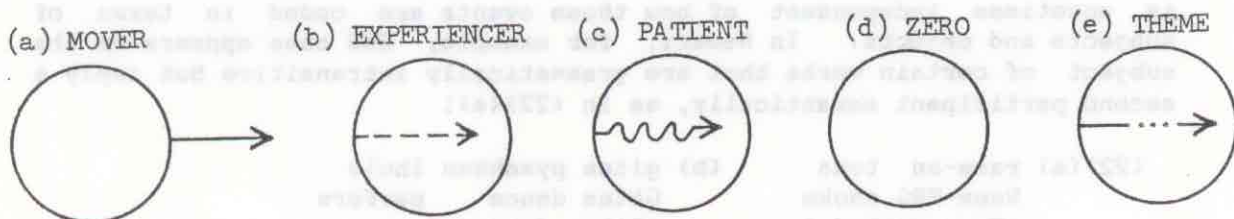


Figure 7



I also posit a more schematic role conception that subsumes MVR, EXPER, PAT, and ZERO as special cases. The term theme is conveniently adopted for this generalized notion, and the notation of Fig. 7(e) for its diagrammatic representation. A thematic participant therefore undergoes some kind of change (possibly zero change, as a limiting case), but the characterization of TH is neutral as to whether the change is internal or external, and whether it occurs in the physical or the mental sphere. Observe that the roles subsumed by TH are essentially those of the recipient domain (Fig. 6)--the only discrepancy is that ZERO replaces ABS. The difference is only apparent, however. The import of ABS is merely that energy is not considered a factor, hence this role is capable of being superimposed on any of the others; the combinations ABS-MVR, ABS-EXPER, and ABS-PAT have already been noted. To reconcile the inventory of thematic roles with those of the recipient domain, we need only recognize that participants previously treated as ABS tout court can in fact be analyzed as ABS-ZERO.

As its minimum conceptual content, therefore, a processual predication invokes a thematic relationship portrayed as either evolving through time (for events) or continuing unchanged (for situations). In the case of events, there are several basic ways of construing this minimal relationship with respect to the input of energy. One possibility is an absolute construal, sketched in Fig. 8(a), which views the event autonomously by abstracting away from whatever energy might be required to drive it. A second option is to conceive the requisite energy as being drawn from the theme's own internal resources, as shown in 8(b). Because the theme and energy source are thus collapsed in a single participant, a process construed in this fashion lends itself to coding by intransitive verbs; examples are crawl (for MVR), concentrate (EXPER), and burst (PAT). A third alternative, given in 8(c), is for the energy to be supplied from some external source. Coding is then most naturally effected by a transitive verb taking the energy source as subject and the theme as object, e.g. throw, tickle, squash.

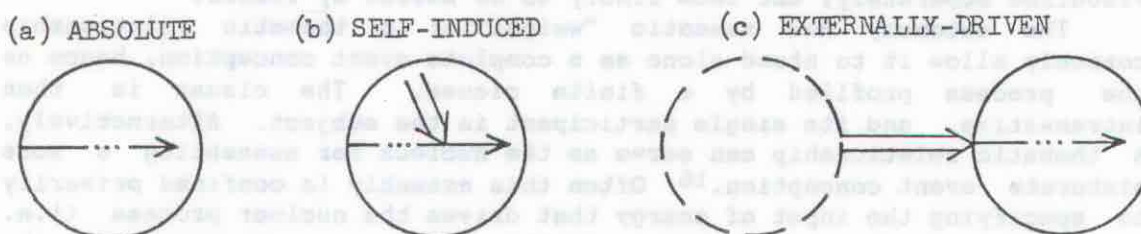


Figure 8

Our capacity for imposing an absolute construal on events, even those that are inherently energetic, has many linguistic manifestations. Consider, for example, the non-reflexive verbs of French that take the auxiliary être 'be' rather than avoir 'have'. Essentially, they are intransitive motion verbs that limit themselves to describing direction of movement in a locative frame of reference: aller 'go', venir 'come', monter 'ascend', descendre 'descend', etc. Because these verbs are silent regarding such matters as rate and means of propulsion (which are closely associated conceptually with energy input), their construal of the profiled process is plausibly analyzed as absolute. Verbs which do specify the rate or manner of locomotion (courir 'run', nager 'swim', voler 'fly', etc.) take avoir instead of être, and so do monter and



descendre when used as transitives or causatives.

More generally, the notions at hand permit a natural account of the verbs called "unaccusative" in relational grammar (Perlmutter 1978). I analyze unaccusatives as single-participant verbs whose construal of the profiled process is absolute, and though we cannot pursue the matter here, I believe this analysis will help account for their distinctive grammatical behavior. The sole participant of an unaccusative is characterizable as an ABS-TH. In other frameworks it is sometimes called an "inner argument", a term that is intuitively quite reasonable. We can now explain--on conceptual grounds--precisely why this description seems appropriate.

The reason is that a theme and the change it undergoes provide the minimum semantic content required for a processual predication, and thus constitute its irreducible conceptual "core". As such, a thematic relationship enjoys a certain autonomy vis-à-vis the agent and the flow of energy, even for inherently energetic processes (e.g. despite our knowledge that force is somehow involved, The door opened focuses exclusively on the mover's spatial trajectory--cf. Fig. 3). The source domain is not similarly autonomous: it is far less natural to conceptualize the agent and energy flow independently of any reference to its downstream consequences (so that the agent, as it were, simply radiates energy "into the void"). This non-autonomy explains the peculiarity of sentences like \*Andrea caused, in which only the source domain is coded. Contributing to this difference in autonomy is a contrast between the source and recipient domains in the nature of their conceptual content, which tends to be richer and more concrete in the latter. Consider Andrea opened the door. Since there are many ways to open a door (in the ordinary way, by leaning on it, through magic or telekinesis, by pushing a button, etc.), all this sentence tells us for sure about the agent is that she somehow supplies the energy to initiate the process. Compared to our conception of the door following its spatial trajectory, this information is more abstract, harder to visualize separately, and less likely to be useful by itself.

The autonomy and semantic "weight" of a thematic relationship commonly allow it to stand alone as a complete event conception, hence as the process profiled by a finite clause. The clause is then intransitive, and its single participant is the subject. Alternatively, a thematic relationship can serve as the nucleus for assembling a more elaborate event conception.<sup>16</sup> Often this assembly is confined primarily to specifying the input of energy that drives the nuclear process (i.e. the source domain is invoked, and the theme--now construed as the recipient of energy input--is no longer absolute). This more elaborate conception is typically coded by a transitive clause, with the theme as object and the energy source as subject. The fact that objects are more "tightly bound" to the verb than transitive subjects (as witnessed cross-linguistically by word-order tendencies, noun incorporation, the prevalence of VO-idioms, etc.) is thus attributable to the conceptual status of objects as inner-layer participants.

As its irreducible conceptual nucleus, a thematic relationship is therefore the starting point for constructing a complex event conception, in the same sense that a root is the starting point for constructing a complex word, and a vowel the nucleus for assembling a syllable. Of course, there are many other ways in which an element is reasonably considered a starting point (cf. MacWhinney 1977): the agent is a starting point in terms of energy flow; as relational figure, the subject



is a starting point with respect to the hierarchy of participant prominence; the first word in a sentence is its starting point along the temporal axis of phonological space; and so on. Each starting point represents the initial step in accessing certain elements of a complex structure in a cognitively natural sequence. These alternate "paths" through a clause can either dovetail or diverge, and their interplay is an essential aspect of grammatical structure.

### Ergativity

We are now able to state more cogently the nature of the contrast between NOM/ACC and ERG/ABS languages. I will assume that grammatical relations are basically similar in all languages, and that our previous characterization is essentially valid: the subject is the most prominent clausal participant (prototypically an agent), while the object--the second most prominent participant--has a thematic role and lies downstream from the subject. In both NOM/ACC and ERG/ABS systems, then, the unmarked coding of a scene entails the coincidence of two kinds of starting points. The first is the starting point for the hierarchy of participant prominence (i.e. the subject). The second is the element suggested as the most natural starting point by the clause's conceptual content (e.g. an agent, action chain head, or perceptual experiencer).

Against this common backdrop, NOM/ACC and ERG/ABS systems differ with respect to a third starting point, namely the one they adopt for the computation of case marking. Fully correlated with grammatical relations, a NOM/ACC system simply makes this third starting point coincide with the other two. The starting point for determining case is thus the subject, which is marked by NOM, and ACC-marking is invoked only if one encounters a second, distinct participant by following along the relevant paths (i.e. the prominence hierarchy, and the action chain or its analog). By contrast, the distinctive property of an ERG/ABS system is that the starting point it adopts for computing case diverges from the other two. Specifically, its starting point for case computation is the thematic relationship that constitutes the essential nucleus for the conception of a complex event or situation. This starting point is marked by ABS, and ERG is invoked only for a second, distinct participant encountered by continuing outward from the nucleus (hence upstream along the action chain or its analog).<sup>17</sup>

Thus, while they differ as to what counts as "initial" for purposes of case assignment, each system is natural in its own way. The choice of starting point is motivated in a NOM/ACC system by considerations of participant prominence and direction of energy flow; in an ERG/ABS system, it is motivated by conceptual autonomy and the inherently layered organization of a complex event conception. But in either type of system, the starting point is typically the zero form, with overt marking reserved for the possible occurrence of a secondary element. Moreover, both types of system can be correlated with grammatical relations, so that only subjects and direct objects are accessed in the calculation.

What if there is only a single participant? Consider in particular a sentence like She jumped or He concentrated, in which the subject has both agentive and thematic properties. For purposes of case assignment, this participant qualifies as a starting point in either a NOM/ACC or an ERG/ABS language, but for different reasons: in the former, by virtue of being the subject and agent; in the latter, by virtue of being a theme. But in either sort of language, the lone participant typically remains



unmarked, and for the same reason: the starting-point case (NOM or ABS) is generally zero.

A starting point is simply the initial element encountered when a complex structure is accessed via some cognitively natural ordering. As such, it is maximally accessible with respect to the parameter in question. If the starting points invoked for case do in fact initiate cognitively natural paths, we should expect this to be reflected in other sorts of grammatical behavior. That this is so for subjects, the starting point of the participant prominence hierarchy, is well known (cf. Keenan and Comrie 1977). The matter is not quite so obvious in regard to thematic relationships, the starting point in terms of conceptual autonomy, probably because the path involved is more abstract and of lesser cognitive salience. Nonetheless, ergativity outside the realm of case is quite common, even in languages with NOM/ACC systems.<sup>18</sup> It is likely that some phenomenon treating intransitive subjects and transitive objects alike (to the exclusion of transitive subjects) can be found in virtually every language.

The notion of starting points also helps to make sense of various types of split ergativity in the domain of case (cf. DeLancey 1981; Givón 1984, ch. 5). A frequent kind of split involves the "empathy" or "animacy hierarchy", where speaker and hearer outrank third-person participants, humans outrank non-humans, animates outrank inanimates, and so on. Somewhere along this hierarchy there is a cut-off line, such that only those transitive subjects falling below the line take ergative case; the split most commonly divides the speech-act participants from the remainder, so that first- and second-person pronouns are the only transitive subjects to occur without ergative marking. One interpretation is that higher-ranking elements are inherently agentive, and that only for elements farther down on the hierarchy is agentivity sufficiently "newsworthy" to be marked overtly by ergative case. While this may well have some validity, it probably does not tell the whole story. Why, for instance, should third-person humans differ from the speech-act participants in regard to inherent agentivity?

Let me suggest an alternative (or complementary) account. The empathy hierarchy reflects a person's assessment of his relation to other sorts of entities. He perceives them as lying at different "distances" from himself in regard to such matters as likeness and common interests. The speaker is the ultimate starting point for computing these distances, but in the context of a speech event, the speaker and addressee (as co-participants) are further construable as a joint, higher-order starting point established by the immediacy and inherent solidarity of the communicative act (the "us" vs. "them" syndrome). Ergative systems manifesting a split with respect to the empathy hierarchy receive a very natural description from this perspective: for a nominal to be marked with ergative case, it must lie beyond the starting point not only along the hierarchy of conceptual autonomy (which is characteristic of ergative case in general), but along the empathy hierarchy in addition. That is, an ERG-marked nominal must be non-initial on both parameters.

A second type of split is attested in Newari. One of the factors determining whether a transitive subject takes ERG case is its degree of focus. Thus (23)(a), with the subject marked ERG, is appropriate in response to the question 'Who's cooking the rice?', while (23)(b) answers the question 'What's the man doing?'.



(23)(a) wa manu-nan jaa thuyaa cona  
the man-ERG rice cooking be  
'The man is cooking the rice.'

(b) wa manu jaa thuyaa cona  
the man rice cooking be  
'The man is cooking the rice.'

This makes perfect sense in terms of our overall analysis, since the focused constituent represents the novel or informative part of the utterance, i.e. that portion of its semantic content which goes beyond what has previously been established in the discourse. At any given moment, the content already established serves as a baseline for evaluating that which is provided by the following utterance, whose focus consists of whatever information extends beyond this starting point. We can therefore analyze the ERG case marking in (23)(a) as indicating that the subject is non-initial (lies beyond the starting point) with respect to both the hierarchy of conceptual autonomy and the introduction of content in the flow of discourse.

The analysis is also consistent with the standard account of other types of split, e.g. the common phenomenon of ERG/ABS morphology occurring only in perfective clauses.<sup>19</sup> The usual explanation is that imperfectivity lessens the extent to which the object is affected by the action of the verb, and thus diminishes a clause's transitivity. Recall, in this regard, that ERG is characterized with reference to ABS--taking a thematic participant as starting point, ERG case is employed only for a second, distinct participant encountered farther along on the hierarchy of conceptual autonomy. Consequently, any factor that detracts from the salience of the object or its role in a clear-cut thematic relationship reduces its likelihood of being invoked as starting point for computing the applicability of ERG case marking (cf. (22)(b)).

### Other Case Phenomena

The foregoing remarks provide at best a limited introduction to the rich domain of case semantics. For a glimpse of what remains, let us briefly consider some additional case phenomena. The discussion focuses on two broad issues: the systemic aspects of a case inventory, and the significance of regarding case markers as separate predications.

A case category is generally complex, comprising a network of alternate senses connected by relationships of schematicity and semantic extension. The specific array of senses associated with a particular case is a matter of linguistic convention and reflects the interaction of numerous factors. For one thing, the senses of a case tend to cluster around a particular role archetype, which provides its prototypical value and "center of gravity"; dative case, for instance, is normally centered on the experiencer role. A second factor is the number of cases in the system, and their competition for the privilege of coding the many possible role conceptions; clearly, in a small system each case will tend to subsume a broad range of values, possibly including more than one archetype. Finally, the relative naturalness of different schemes for apportioning the array of role conceptions to the various cases is determined by systemic relationships among the archetypes themselves.

Consider the systemic relationships represented in Fig. 6, particularly the distinction between role archetypes in the source vs.



the recipient domains. If (as previously maintained) this distinction is natural and has a conceptual basis, we can predict its relevance for the description of case in various languages. An example is provided by Newari, as illustrated in (24):

(24)(a) raam-an cakku-n laa taala  
Raam-ERG knife-ERG meat cut  
'Raam cut the meat with a knife.'

(b) phas-an parjaa sankala  
wind-ERG curtain move  
'The wind moved the curtain.'

(c) ji-n baakas-an dhibaa kayaa  
I-ERG box-ERG money take  
'I took the money from the box.'

It is evident that the Newari "ergative" case is not confined to transitive subjects in accordance with the strict characterization of ERG offered earlier. Nor is it limited to agents in any restrictive sense--we see it marking an instrument in (24)(a), an inanimate force in (b), and even a locative source in (c). Though its ergative/agentive use can be regarded as central, the conventional values of this case essentially coincide with the roles of the source domain. "Source domain element" is thus a schematic characterization that subsumes its conventionally-sanctioned array of more specific senses.

Another systemic relationship involving role archetypes is the polar opposition between agent and patient. The cognitive salience of this maximal opposition has a variety of linguistic manifestations, one of which pertains to the distribution of zero marking (or the absence of a case predication). Very commonly, of course, subjects and direct objects--with AG and PAT as their respective prototypes--are indicated by zero, while other participants bear overt case markings; it is apparently natural for a cluster of values around each pole of the opposition to be left unmarked, with any in-between value being signalled overtly. The clusters of zero-marked values sometimes cross-cut the subject and object relations. In Guarani, for example, zero marks both subjects and inanimate objects, whereas animate objects take the postposition *pe* (which also occurs with certain obliques). Similarly, subjects and objects are unmarked in Spanish, except for the "personal *a*" that occurs with objects which (roughly) are both animate and specific. Granted the notion of a polar AG/PAT opposition, this type of split in the marking of objects makes sense: it is inanimate patients that stand maximally opposed to animate agents, so animate patients fall between the two extremes.<sup>20</sup>

These examples show a divergence between case and grammatical relations--i.e. the case system is less than fully correlated, since some objects are indicated by zero, while others take a case marker that also occurs with obliques. Such divergence is unsurprising in the present framework, for cases are treated as separate predications. Rather than being mechanically-induced for the marking of grammatical relations, cases are attributed independent semantic content, which does not in general match the value implied by the grammatical relation of the case-marked nominal (though it may in particular instances). It is therefore common for the case borne by a nominal and its grammatical relation



(however this might be signalled) to be sensitive to different factors, thus providing different kinds of information about the nominal's participation in an event.

This is nicely illustrated by the following data from Polish:

(25)(a) Rzucił piłkę do plotu.  
he:threw ball:INSTR up:to fence:GEN  
'He threw the ball up to the fence.'

(b) ?Rzucił piłkę do plotu.  
he:threw ball:ACC up:to fence:GEN  
'He threw the ball up to the fence.'

(c) Rzucił piłkę w mamę.  
he:threw ball:INSTR at mother  
'He threw the ball at his mother.'

(d) \*Rzucił piłkę w mamę.  
he:threw ball:ACC at mother  
'He threw the ball at his mother.'

Consider first grammatical relations. 'Ball' is uncontroversially the direct object of 'throw', which profiles the transmission of energy from an agent to a theme and the resultant motion of the latter. With this verb, the object relation assumes a prototypical semantic value: 'ball' constitutes the tail within the profiled portion of the action chain, and lies downstream from a participant subject. Now if the Polish case system were fully correlated, objects would always be marked accusative, but in actuality the correlation is only partial. In simple expressions like 'He threw the ball', the object can take either accusative or instrumental case; with the addition of a goal-specifying prepositional phrase, as in (25), INSTR is either preferred or required. Clearly, case must be reckoned on some basis other than grammatical relations, at least for this range of data.

Prototypically, INSTR marks an intermediary with respect to the flow of energy along an action chain, and ACC the endpoint. What appears to be happening with 'throw' is that these cases retain the value of indicating an intermediary or an endpoint along a path, but that the path in question is not identified with the flow of energy from agent to theme--instead, the spatial path followed by the thematic object provides the basis for computing intermediary vs. endpoint status. More precisely, INSTR and ACC take on the respective values "intermediate participant" and "final participant" with respect to movement along a spatial path. When the mover's destination is a saliently specified individual, it is naturally construed as the final participant; 'mother' is thus the final participant in (25)(c)-(d), making 'ball' (which moves from the subject to the prepositional object) an intermediary. As a consequence, the direct object 'ball' takes INSTR case, and cannot be marked ACC. The situation in (25)(a)-(b) is slightly different because 'fence' is construable as either a participant or a facet of the setting. To the extent that this latter interpretation prevails, 'ball' can be regarded as the final participant and hence inflected for ACC case. When there is no prepositional phrase at all, either case is permitted on the object. The analysis then predicts a subtle semantic contrast: INSTR should evoke some conception (however tenuous and schematic) of the



ball's destination, whereas with ACC, attention should be focused more narrowly on its flight.

Further illustration is provided by the dative case in Newari. In some of its uses, DAT codes classic indirect object roles, such as recipient, benefactive, and target of communication:

(26)(a) ji-n raam-yaata kitaab biyaa  
I-ERG Raam-DAT book give  
'I gave Raam a book.'

(b) gitaa-n raam-yaata jaa thuka  
Gitaa-ERG Raam-DAT rice cook  
'Gitaa cooked rice for Raam.'

(c) raam-an gitaa-yaata dhaala  
Raam-ERG Gitaa-DAT tell  
'Raam told Gitaa (something).'

Note that all of these roles involve some type of mental experience, and can thus be regarded as offshoots of the experiencer archetype, which anchors the DAT category. The Newari dative is further used to mark animate direct objects, either optionally or obligatorily (depending on the verb and other factors):

(27)(a) ji-n wa misaa-yaata khanaa  
I-ERG the woman-DAT see  
'I saw the woman.'

(b) ji-n wa misaa khanaa  
I-ERG the woman see  
'I saw the woman.'

When there is a choice, as in (27), the contrast between DAT and ABS (zero) correlates with the salience of the object's role as experiencer; hence (27)(a) suggests some kind of interaction between the subject and object, whereas in (27)(b) the object is unaffected by the perceptual contact (i.e. its role is ABS-ZERO). To some degree, consequently, the EXPER archetype motivates the occurrence of DAT with animate objects in this language. However, even were this usage to be "grammaticized"--so that all animate objects took DAT, without exception--the implied semantic extension from "experiencer" to "animate object" would still be cognitively natural, since only animate entities are capable of experience.

Because cases represent separate predications, and correlate only partially and contingently with grammatical relations, it is hardly surprising that even subjects are sometimes marked with role-based cases, notably dative. Dative-subject constructions are basically limited, as one would predict, to clauses where the subject is readily construed as an experiencer. If the profiled relationship has the form EXPER ----> ABS (or more precisely, EXPER ----> ABS-ZERO), the experiencer is the unmarked choice for subject by virtue of being the locus of cognitive activity, and thus responsible for effecting the abstract interaction between the central participants. At the same time, the EXPER archetype functions as the prototype and center of gravity for DAT, so there is a natural tendency for the subject to be marked with DAT in such clauses even when subjects are normally indicated by some other case. Two kinds of optimality then find themselves in conflict: consistent marking of subjects by a single case (NOM or ERG) regardless of semantic role, versus consistent coding of the EXPER role (by DAT case) irrespective of



grammatical relations. Some languages choose the latter option, or fashion a compromise position. The present framework affords an unproblematic analysis in either event.

Newari permits both options, and exploits the formal contrast to convey a difference in meaning. For example, (28)(a) might indicate that the speaker intends to include the addressee in his will, whereas (28)(b) simply describes a mnemonic experience:

(28)(a) ji-n chan-ta lumanke	(b) ji-ta cha luman
I-ERG you-DAT remember:ACTIVE	I-DAT you remember
'I will remember you.'	'I remember you.'

In (a), the subject is volitional and the object stands to be affected in some way by the profiled process; the formula AG-EXPER ==> EXPER is thus a rough approximation to its value, with ERG sensitive to the agentive character of the subject, and DAT to the experiential nature of the object. On the other hand, the contrasting formula for (b) is EXPER ----> ABS-ZERO; here DAT codes the experiential role of the subject, and zero (ABS) the absolute role of the object.

### Conclusion

My objective has been rather limited: to sketch the beginnings of a conceptual framework capable of supporting the cognitive-grammar analysis of case, grammatical relations, and related phenomena. The detailed description of individual languages has thus been left for future work, and so has the consideration of such clearly pertinent matters as agreement, reflexives, impersonal constructions, and causatives. Despite these limitations, I hope to have established the internal coherence and potential insight of a semantically-based approach to these problems. With an appropriate view of linguistic semantics, i.e. one that successfully accommodates polysemy and conventional imagery, it is possible to discern the conceptual basis for such constructs as case and grammatical relations, and to describe them by means of units all of which have conceptual import. The ability to do so is pivotal to the claim that grammar is inherently symbolic: it both structures conceptual content and specifies the conventional means of expressing the content so construed.

### Footnotes

<sup>1</sup>For extensive discussion and illustration of cognitive grammar, see Casad and Langacker 1985; Hawkins 1984; Langacker 1982, 1984, 1985, 1986a, 1986b, in press a, in press b; Lindner 1982; Rudzka-Ostyn to appear; and Vandeloise 1984.

<sup>2</sup>Observe that the definition makes no reference to motion--the trajector need not be a mover.

<sup>3</sup>The process designated by the finite verb is generally profiled by the clause as a whole. Thus, in X killed Y the designated process subsumes both the causation and the dying, which are construed as facets of a single event. By contrast, only the causation is profiled in X caused Y to die, and the dying is construed as a separate (though related) event.



<sup>4</sup>In a more detailed analysis, I would also attribute patient properties to the hammer in (2)(d); the hammer's absorption of energy by virtue of the impact motivates its selection as direct object.

<sup>5</sup>Cf. Givón's characterization of subjects and direct objects as "primary" and "secondary clausal topics" (1984, p.138). While I believe that subjects and objects are "topics" only prototypically (not universally), our analyses agree in that they both invoke some type of prominence (as opposed to specific conceptual content) to explicate the subject and object relations.

<sup>6</sup>I take subjects and objects to be inherent to a clause's semantic structure, regardless of whether they are spelled out by overt nominal expressions.

<sup>7</sup>Here and elsewhere, the reader will notice similarities to various ideas advanced by other scholars, notably DeLancey (1981), MacWhinney (1977), and Foley and Van Valin (1984); I will not attempt to spell them all out or discuss the points of divergence. Langacker 1982 presents a detailed cognitive grammar analysis of the English passive, and argues that the full process designated by a verb stem remains profiled in the passive formed on it.

<sup>8</sup>Also accounted for is the well-known fact that This bed has been slept in is felicitous only when the bed has been mussed up or otherwise affected by the sleeping: the bed must have participated in an interaction rather than simply being the location in which sleeping occurred.

<sup>9</sup>Smith (1985) has argued cogently that the failure of es to appear when a locative is preposed to the verb (e.g. Auf dem Tisch steht eine Vase) reflects its non-participant status; being nothing more than a setting with presentative function, it becomes superfluous when another element assumes this role. By contrast, those instances of es that co-occur with preposed locatives (e.g. Heute regnet es 'Today it's raining') are plausibly claimed to be setting-like participants in the profiled process.

<sup>10</sup>Katarzyna Dziwirek has contributed all my information about Polish.

<sup>11</sup>Note that the agent and instrument roles cannot be absolute, since they are defined with reference to the transmission of energy. The experiencer role is capable of an absolute/non-absolute contrast, e.g. Sheila was sad vs. Sheila was saddened (by the news).

<sup>12</sup>Givón refers to these factors as "semantic" and "pragmatic case-roles". To avoid confusion, I restrict the term case to its traditional sense, i.e. "surface case" marked directly on nominals (whether by inflection, affixation, clitics, or particles).

<sup>13</sup>These networks include the subject and object prototypes (AG and PAT respectively); other conventionally-sanctioned values (such as INSTR for subjects in English); and more schematic characterizations (e.g. "head of action chain", "relational figure").



14 Similarly, one does not encounter languages with over three degrees of contrastive stress. However, tone systems exploit multiple parameters (pitch, pitch contour, glottalization), and can therefore be considerably more elaborate; this richer phonological "content" is analogous to the conceptual content of cases based on role archetypes.

15 I am assuming that the standard identification of participants as subjects and objects is correct for ergative languages. Though it merits serious investigation, I incline away from an obvious alternative, namely to analyze the absolutive-marked nominal as the subject in both transitive and intransitive clauses. I suspect the advantages of this approach (e.g. the greater cross-linguistic similarity of case-marking systems) do not offset its liabilities. For instance, grammatical relations would be substantially different for NOM/ACC and ERG/ABS languages (the ERG-marked nominal could not be considered a direct object); moreover, in split ergative languages the operative grammatical relations would vary according to aspect, person, etc., even for a single verb.

16 Its function is precisely analogous to that of a root in word formation: a word's root is its irreducible morphological core, which supports the addition of less autonomous elements in the formation of complex words. (For extensive discussion, see chs. 8 and 9 of Langacker in press a.)

17 Note that absolutive case does not imply that a participant is absolute in the strong sense of being construed in abstraction from the flow of energy. However, since the case assignment procedure starts with the conceptually autonomous thematic core and works outward, energy input from the source domain is not yet a factor at the initial step when absolutive case is assigned.

18 Agreement often follows an ergative pattern. The Uto-Aztecan languages are strictly NOM/ACC in regard to case (if they have case marking), but generally have verb-stem suppletion showing ERG/ABS organization: intransitive verbs supplete for the number of their subject, and transitive verbs for the number of their object.

19 For Newari illustration (and also examples parallel to (23)) see Givón 1984, p.154-6.

20 A further systemic aspect of case is the tendency for one member of the system to take on an exceptionally wide range of values, so that in essence it functions as what might be called (haplologically) a default case. The dative assumes this role in German (see Smith to appear), and the instrumental in Polish.



### References

- Bolinger, Dwight. 1977. Meaning and Form. London and New York: Longman.
- Brugman, Claudia. 1981. 'The Story of Over'. Berkeley: University of California master's thesis.
- Casad, Eugene H., and Ronald W. Langacker. 1985. '"Inside" and "Outside" in Cora Grammar'. IJAL 51.247-81.
- Dahlstrom, Amy. 1983. 'Agent-Patient Languages and Split Case Marking Systems'. BLS 9.37-46.
- DeLancey, Scott. 1981. 'An Interpretation of Split Ergativity and Related Phenomena'. Language 57.626-57.
- Fauconnier, Gilles. 1985. Mental Spaces: Aspects of Meaning Construction in Natural Language. Cambridge, Mass., and London: MIT Press/Bradford.
- Fillmore, Charles J. 1968. 'The Case for Case', in Emmon Bach and Robert T. Harms (eds.), Universals in Linguistic Theory, p.1-88. New York: Holt.
- , 1982. 'Frame Semantics', in the Linguistic Society of Korea (eds.), Linguistics in the Morning Calm, p.111-37. Seoul: Hanshin.
- Foley, William A., and Robert D. Van Valin, Jr. 1984. Functional Syntax and Universal Grammar. Cambridge: Cambridge University Press.
- Givón, Talmy. 1979. On Understanding Grammar. New York: Academic Press.
- (ed.) 1983. Topic Continuity in Discourse: A Quantitative Cross-Language Study. Amsterdam and Philadelphia: John Benjamins.
- , 1984. Syntax: A Functional-Typological Introduction, vol. 1. Amsterdam and Philadelphia: John Benjamins.
- Hale, Austin, and Thakurlal Manandhar. 1980. 'Case and Role in Newari'. Papers in South-East Asian Linguistics 7.79-93. Canberra: Australian National University.
- Hawkins, Bruce W. 1984. The Semantics of English Spatial Prepositions. San Diego: UCSD doctoral dissertation.
- Hopper, Paul J., and Sandra A. Thompson. 1980. 'Transitivity in Grammar and Discourse'. Language 56.251-99.
- Keenan, Edward L., and Bernard Comrie. 1977. 'Noun Phrase Accessibility and Universal Grammar'. Linguistic Inquiry 8.63-99.



- Lakoff, George. In press. Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. Chicago and London: University of Chicago Press.
- Langacker, Ronald W. 1982. 'Space Grammar, Analysability, and the English Passive'. Language 58.22-80.
- , 1984. 'Active Zones'. BLS 10.172-88.
- , 1985. 'Observations and Speculations on Subjectivity', in John Haiman (ed.), Iconicity in Syntax, p.109-50. Amsterdam and Philadelphia: John Benjamins.
- , 1986a. 'An Introduction to Cognitive Grammar'. Cognitive Science 10.1-40.
- , 1986b. 'Abstract Motion'. BLS 12.455-71.
- , In press a. Foundations of Cognitive Grammar, vol. 1, Theoretical Prerequisites. Stanford: Stanford University Press.
- , In press b. 'Nouns and Verbs'. Language 63.
- Lindner, Susan. 1982. 'What Goes Up doesn't Necessarily Come Down: The Ins and Outs of Opposites'. CLS 18.305-23.
- MacWhinney, Brian. 1977. 'Starting Points'. Language 53.152-68.
- Perlmutter, David M. 1978. 'Impersonal Passives and the Unaccusative Hypothesis'. BLS 4.157-89.
- Rudzka-Ostyn, Brygida (ed.) To appear. Progress in Cognitive Grammar. Amsterdam and Philadelphia: John Benjamins.
- Smith, Michael B. 1985. 'An Analysis of German Dummy Subject Constructions in Cognitive Grammar', in Scott DeLancey and Russell S. Tomlin (eds.), Proceedings of the First Annual Meeting of the Pacific Linguistics Conference, p.412-25. Eugene: Department of Linguistics, University of Oregon.
- , To appear. The Semantics of Dative and Accusative in German: An Investigation in Cognitive Grammar. San Diego: UCSD doctoral dissertation.
- Talmy, Leonard. 1985. 'Force Dynamics in Language and Thought', in William Eilfort et al. (eds.), Papers from the Parasession on Causatives and Agentivity, p.293-337. Chicago: Chicago Linguistic Society.
- Tesnière, Lucien. 1959. Eléments de Syntaxe Structurale. Paris: Klincksieck.



Vandeloise, Claude. 1984. Description of Space in French. San Diego: UCSD doctoral dissertation.

van Oosten, Jeanne. 1977. 'Subjects and Agenthood in English'. CLS 13.459-71.

-----, 1986. The Nature of Subjects, Topics and Agents: A Cognitive Explanation. Bloomington: Indiana University Linguistics Club.