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Grammatical Ramifications of the Setting/Participant Distinction
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I will assume some version of cognitive grammar (Langacker 1986a, 1987), and start by presenting a few of its basic claims. It is asserted, first, that all constructs required for the proper characterization of grammatical structure are inherently symbolic, and thus have some kind of conceptual import. Second, a grammatical construct resembles a lexical item in that semantically it constitutes a complex category, i.e. it has a network of alternate semantic values clustered around a prototype (cf. Lakoff 1987). In some instances this network includes a highly abstract or schematic value which subsumes all the others as special cases. A third claim is that semantic structures are characterized relative to cognitive domains (also called "frames" or "idealized cognitive models"). Any type of conceptualization is capable of serving as the domain for a linguistic expression. Finally, it is claimed that an element's semantic value does not reside solely in its conceptual content, but crucially depends on how this content is construed. Aspects of construal include the perspective from which a scene is viewed, the relative prominence accorded its various substructures, the effect of expectations and background assumptions, and so on.

Elsewhere I have argued (in press a, b) that the prototypical semantic values of certain fundamental grammatical constructs pertaining to clause structure are characterized with reference to a particular cognitive model. This archetypal model, sketched in Fig. 1, amounts to the conception of a canonical action. It involves the energetic interaction of discrete, mobile participants within a stable and inclusive setting, any fragment of which can be regarded as a location. Participants merely occupy locations, but they interact with one another through physical contact and the consequent transmission of energy. In a canonical action, participant interactions assume the form of an action chain leading from an agentive energy source, through a possible intermediary with instrumental function, to an energy sink which undergoes a resultant change of state.

Figure 1
Prototypically, a finite clause profiles (i.e. designates) an action of this sort construed as constituting a single event. The agentive energy source is coded as the clausal subject, and the energy sink as direct object; the agent and patient roles thus serve as prototypes for these central grammatical relations. Locations and non-central participants (e.g. instruments) are generally coded by noun phrases explicitly marked as oblique, while settings are expressed by clause-level adverbs. A sentence like (1) therefore represents the unmarked linguistic coding of a canonical action, with the constructs mentioned assuming their prototypical values.

(1)  In the kitchen, Seymour sliced a salami
     (clausal adverb)  (subject)  (verb)  (object)
     on the counter  with a knife.
     (oblique)  LOCATION  (oblique)  NON-CENTRAL  PARTICIPANT

Of course, not every situation described by a finite clause conforms to the archetype in Fig. 1, and a situation need not be construed or coded linguistically in the maximally unmarked fashion. When clauses depart from the unmarked coding of canonical actions, the grammatical constructs in question assume non-prototypical values. For instance, conventional patterns of English grammar allow the subject to be an instrument or an inanimate force rather than an agent, and the object to be a mover or an experiencer rather than a patient undergoing a change of state:

(2)(a) This knife won't cut the salami.
     (b) The wind blew the leaves about.
     (c) Tommy tickled his new secretary.

To accommodate both the prototypes and these secondary values, we can characterize a subject more schematically as the head with respect to the explicitly coded and profiled portion of an action chain, and a direct object as the tail in such a chain (hence the subject is the participant farthest upstream in the flow of energy, while a direct object is the participant farthest downstream).

Of course, many subjects and objects elude even these more schematic definitions:

(3)(a) Joey saw a comet last night.
     (b) Line A intersects line B.

If schematic characterizations compatible with the full range of clausal subjects and direct objects are possible at all, they must
therefore be highly abstract, with very little intrinsic content. It is my working hypothesis that a subject is properly characterized as **figure** with respect to the profiled relationship; what all subjects have in common is thus a matter of construal (figure/ground organization), whereas the category prototype further invokes specific conceptual content (Fig. 1). A direct object can perhaps be characterized as the second most prominent clausal participant (apart from the subject), with the further proviso that it must lie downstream from the subject either in the flow of energy or in some abstract analog of energy flow. In a sentence like (3)(a), the gaze or perceptual path leading from the subject to the object is construed as the analog of energy flow. The limiting case, in which the requisite directionality is entirely subjective, is illustrated in (3)(b): the profiled relationship is inherently symmetric in terms of its content, but the speaker—by choosing line A as relational figure and mentally scanning its expanse—construes it as reaching line B and extending beyond (cf. Langacker 1986b).

Observe that the above definitions, without additional specifications, neatly accommodate passive clauses. Both sentences in (4) profile an action chain involving energy flow from an agent to a patient:

(4)(a) Some workmen trampled the grass.
   (b) The grass was trampled by some workmen.

By choosing the action-chain head as subject, (4)(a) codes the scene in unmarked fashion, and the grass qualifies as direct object because it lies downstream from the subject in the flow of energy. The coding effected by a passive, on the other hand, is marked: the tail (not the head) of the action chain is selected as figure within the profiled relation. As relational figure, the grass in (4)(b) nonetheless conforms to the most schematic definition of a subject, which abstracts away from semantic roles. Moreover, some workmen is correctly excluded by the definition of direct objects, since the workmen lie upstream (not downstream) from the subject in terms of energy flow. The passive agent therefore qualifies as neither subject nor object; if coded at all, it must be expressed periphrastically by an oblique (cf. Langacker and Munro 1975; Langacker 1982).

By the proposed definition, a direct object must be construed as a participant rather than a setting or location. The role of construal is essential, since the setting/participant distinction is anything but absolute. Though some entities invite a particular construal, others—like the **counter** in (5)—are ambivalent:
(5)(a) He sliced a salami on the counter. (LOCATION)
    (b) The sharp knife marred the counter. (PARTICIPANT)
(6)(a) Everything is peaceful in the countryside. (SETTING)
    (b) The napalm bombs scorched the countryside. (PARTICIPANT)

Even a prototypical setting like the countryside sometimes functions as a participant, as we see in (6), and the converse also occurs. The status of an entity as setting or participant is not imposed by objective factors, but depends instead on how a speaker conceives and portrays a given situation.

The setting/participant distinction is one factor explored by Sally Rice (1986) in relation to transitivity and passivization. In particular, she examined the possibility of a Verb + Preposition sequence being analyzed as a complex verb, with the following NP then treated as its direct object. Rice noted data like the following:

(7)(a) Fred rushed to Marsha, because he needed advice.
    (b) Marsha was rushed to by Fred, because he needed advice.
    (c) Fred rushed to the countryside, because he needed a rest.
    (d) *The countryside was rushed to by Fred, because he needed a rest.

The evidence of passivization suggests that rush to coalesces to form a complex transitive verb when the following NP is human (hence a canonical participant), but fails to do so with an NP like the countryside, which inherently favors construal as a setting. Transitivity and passivization are therefore not lexical properties of the V + P sequence, but reflect how the scene is construed on the basis of the NP's meaning and the full sentential context. Rush to forms a complex verb in (7)(a) because Fred is construed as interacting with Marsha, whereas in (c), the countryside is merely portrayed as Fred's final location.

Both the model in Fig. 1 and the proposed characterization of direct objects pertain to clause-level organization. There is consequently no reason why objects at other levels of organization, notably prepositional objects, might not occasionally be construed as settings or locations. Consider in this regard the data in (8).

(8)(a) I sent the flashlights to Colonel North.
    (b) I sent the flashlights to Australia.
    (c) I sent Colonel North the flashlights.
    (d) *I sent Australia the flashlights.

Colonel North and Australia are each capable of serving as the object of to, since either a participant or a location is readily construed as the endpoint of a spatial path. By contrast, only the former is possible as the first post-verbal NP in the "dative shift" construction, as illustrated in (c)-(d). I analyze this NP
as the true direct object of send, and have argued (1986a) that
this construction predicates a resultant possessive relationship
between the first post-verbal NP and the second. Because of its
interactive role as both recipient and final possessor, the first
NP must be construable as a participant.

Some prepositions may actually require that their objects be
locations rather than participants. Mike Smith (in preparation)
has noted that this appears to be so for the German preposition
bis 'until, up to':

(9)(a) Ich fahre nur bis Stuttgart.
     'I'm driving only as far as Stuttgart.'
(b) Ich arbeitete bis zehn Uhr.
     'I worked until ten o'clock.'
(c) Er begleitete mich bis an die Türe.
     'He accompanied me up to the door.'

Cities and points in time are normally construed as locations, and
an NP which profiles such an entity occurs unproblematically as
the object of bis. However, when the endpoint of the path is even
slightly more participant-like, such as the door in (9)(c), bis
requires a following prepositional phrase instead of a simple NP.

Independently-established notions of cognitive grammar afford
a straightforward account of this construction. Despite its form,
I analyze the prepositional phrase an die Türe as nominal rather
than relational in (9)(c), i.e. it profiles a spatial region, and
is consequently acceptable as the locational complement required
by bis. The region in question corresponds to what Hawkins (1984)
calls the prepositional phrase's search domain: the set of points
to which a locative expression confines the located entity. There
is independent evidence that grammatical constructions can refer
to a region so defined (cf. Langacker 1986a). Moreover, the use
of a prepositional phrase as a nominal expression to designate its
search domain is attested by sentences like the following:

(10)(a) Near the fire is warm.
     (b) Under the bed is all dusty.

A parallel nominalization of the normally relational an die Türe is
posited for (9)(c).

The setting/participant distinction is a matter of conceptual
construal, and need not be marked overtly (cf. (7)(a) vs. (7)(c),
(8)(a) vs. (8)(b)). In particular, there is no reason to expect
that a location will invariably be marked as oblique, especially
when its non-participant character is readily apparent. Since
only participants qualify as direct objects, it is therefore
possible for a clause with two non-oblique nominal complements to
be intransitive nonetheless. Sentences of this form, involving
motion verbs, are found in Classical Nahuatl:
(11) ne?waat'l in aalteepetl ni-ya-?
I ART town I-go-PAST
'I went to (the) town.'

Nothing marks in aalteepetl as oblique—its form is the same as when it functions as subject or (under participant construal) as direct object. Yet the clause is clearly intransitive: if in aalteepetl were a direct object, it would be cross-referenced by an object prefix on the verb. The nouns that occur in this construction are mostly place names (Andrews 1975, p.281), so their analysis as locations is unproblematic. They are complements of the motion verb (designating the endpoint of the profiled path), but not direct objects.

Intransitives with two non-oblique nominals are also found in Mixtec (Brugman and Macaulay 1986):

(12)(a) bîlu wââ hiţaa nuû-ţuu
    cat that be:located face-mat
    'The cat is on the mat.'
(b) ni-ndečë șsâ Īzata-ţûnu
    PERF-fly one bird back-tree
    'A bird flew behind the tree.'

For the most part, Mixtec employs noun compounds based on body-part terms in lieu of relational expressions like a prepositional phrase. The first member of such a compound is the noun regularly used for the body part in question, and Brugman (1983) has argued persuasively that in these compounds they retain their nominal character. A noun, however, can profile either a participant or a location. Though a body part per se would generally be thought of as a participant, it can perfectly well be construed more abstractly as a location (presumably, position and spatial extension are thereby highlighted at the expense of material substance). The use of Īzata in (12)(b) thus reflects a series of semantic extensions: from '(human) back (PARTICIPANT)' to '(human) back (LOCATION)'; from there to designating the analogous location with respect to some non-human entity (such as a tree); and then to indicating a contiguous region in space.

The definitions proposed earlier treat subjects and direct objects asymmetrically. The most schematic definition of a subject specifies nothing more than its status as relational figure: it need not be a participant, nor does it require the presence of an object. By contrast, a direct object must be a participant, and further requires a subject (conceptually if not overtly) that is also a participant and lies upstream in the flow of energy (or some analog). The notion of a direct object is thus tied fairly closely to transitivity and the endpoint of an action chain, whereas that of a subject is inherently more flexible and variable (cf. Givón 1984, p.187).

This asymmetry has grammatical consequences, one of them being that single-participant clauses (e.g. Abernathy died) have
subjects rather than direct objects. Other consequences reflect our capacity, easily demonstrable on non-linguistic grounds, for imposing alternate figure/ground alignments on a scene. The phenomenon of figure/ground reversal, for instance, is manifested linguistically in the active/passive contrast: whereas an active clause chooses the head of an action chain (or its analog) as relational figure, a passive reverses the natural alignment and confers this status on the action-chain tail. Moreover, nothing rules out the possibility that even a non-participant might be selected as clause-level figure. In particular, I suggest that a substantial array of grammatical constructions are revealingly analyzed as elevating some type of setting to the status of figure and clause-level subject.

The special character of these setting-subject constructions is schematized in Fig. 2. Heavy lines indicate prominence (one aspect of construal). In Fig. 2(a), which represents the unmarked coding of a scene, the most prominent entities are the profiled activity and the participant selected as subject; the setting has no special prominence and need not even be explicitly coded. A setting-subject construction, depicted abstractly in Fig. 2(b), may have precisely the same conceptual content, but differs in its construal. The setting itself is chosen as subject and thereby rendered prominent. Since a subject is characterized as the figure within a profiled relationship, elevating the setting to this status has the automatic consequence of expanding the profile to include the relationship between the setting and the activity unfolding within it; I have indicated this "container"/"contents" relation with a dashed line. Thus, if V stands for the profiled activity in 2(a), the profiled relationship in 2(b) has a value something like 'be the setting for Ving'.

One kind of setting-subject construction is illustrated in (13):

(13)(a) This arena witnesses many thrilling contests.
(b) Tuesday saw yet another surprising development.
The subjects in (a) and (b) represent a spatial and a temporal setting, respectively, and the profiled relationships have the approximate value 'be the setting for witnessing/seeing'. It is well known that sentences of this type do not passivize:

(14)(a) *Many thrilling contests are witnessed by this arena.
(b) *Yet another surprising development was seen by Tuesday.

Their failure to do so is predicted by the present analysis. Passivization only affects transitive clauses, but since the subjects in (13) are settings rather than participants, the post-verbal NP's do not qualify as direct objects.

Spatial and temporal settings are prototypical, but do not exhaust the possibilities. A film, for example, is plausibly construed as a setting for its actors. This explains the data in (15):

(15)(a) Fellini features Yakov Malkiel in his new film.
(b) Yakov Malkiel is featured by Fellini in his new film.
(c) Fellini's new film features Yakov Malkiel.
(d) *Yakov Malkiel is featured by Fellini's new film.

The subject in (15)(a) is a participant, hence the post-verbal NP is a direct object and passivization is permitted. However (15)(c) does not passivize, for it lacks a direct object because the subject is construed as a setting.

Though I have not studied them in detail, I suspect that various so-called "dummy-subject" constructions are better analyzed as setting-subject constructions, where the setting in question is either abstract or maximally schematic. I see nothing implausible in the notion that the "dummy" there might refer to an abstract setting such as the realm of 'existence' or, as proposed in Bolinger 1977, of speaker/hearer 'awareness':

(16)(a) There are many llamas in Peru.
(b) There's somebody on the roof.

Attributing such a value to there, and further according this abstract setting the status of clausal figure, may well account for the "presentative" function of this sentence type. The same is true for German sentences with "dummy" es in the genre of (17):

(17)(a) Es steht eine Vase auf dem Tisch.
'There stands a vase on the table.'
(b) Es spielt ein Kind im Garten.
'There's a child playing in the garden.'

According to this type of analysis, (17)(a) evokes the conception of an abstract realm of existence or awareness and then establishes within this setting the relationship of a vase standing on the table (cf. Smith 1985). I would further propose
that the "ambient" it occurring with weather verbs be interpreted
as a maximally schematic setting, i.e. it has no intrinsic content
apart from that which constitutes the very notion of a setting,
and as such is amenable to variable construal consistent with the
It follows, of course, that when such a verb takes an additional
NP as complement (e.g. It's snowing big flakes), this complement
is not a direct object, and the sentence does not passivize. The
examples in (16)-(17) are similarly non-transitive.

A further class of constructions involve a person or body as
a whole being construed as the setting for phenomena occurring
within its confines. My favorite example is (18)(a) (cf. The
garden is swarming with bees; The sidewalks are bustling with
shoppers):

(18)(a) My cat is crawling with fleas.
     (b) *Fleas are being crawled with by my cat.

The fleas are the ones doing the crawling, but when the cat is
raised to the status of clausal figure, the profiled relationship
assumes the approximate value 'be the setting for crawling'.
Since this is a setting-subject construction, fleas cannot be a
direct object. The V + P sequence crawl with is consequently
incapable of coalescing into a complex transitive verb, so the
passive, (18)(b), is decidedly ill-formed.

The so-called "double-subject" constructions can also be
analyzed along these lines. The following Luiseño examples are
from Steele (1977), who argues that both the clause-initial
pronoun and the following body-part noun are subjects:

(19)(a) noo=p no-te? tiiwu-q  (b) noo=p no-puuŋ konokniŋ
I=3s my-stomach hurt-TNS I=3s my-eye green
'I have a stomach ache.' 'I have green eyes.'

Central to Steele's argument is the behavior of the subject-
agreement clitic, which follows the first word or constituent of a
sentence: although the clitic generally agrees with the possessed
body-part noun, as in (19), it occasionally agrees instead with
the preceding pronoun (in which case =n '1s' would occur in lieu
of =p). My own proposal is that these expressions represent a
setting-subject construction, as sketched in Fig. 2(b): the
initial pronoun functions as the clause-level subject, which
specifies the setting for the relationship involving the body
part. How, then, is the behavior of the clitic to be accounted
for? In a typical finite clause, the clitic agrees with an NP
that combines several properties: (i) it is construed as a
participant; (ii) it is the subject (relational figure) with
respect to the verb; and (iii) it is also the subject at the
clausal level of organization. By definition, however, these
properties cannot all be associated with a single NP in a
setting-subject construction. In particular, the body-part term
in (19) retains properties (i) and (ii), while (iii) attaches to the initial pronoun. Hence agreement in this construction cannot conform to the prototypical pattern, and there are alternate ways in which a partial match can be achieved. Thus ambivalence in the choice of clitic is hardly surprising.

Japanese also has a double-subject construction, which I would analyze in parallel fashion. Shibatani (1986) cites the following example:

(20) Taroo ga hana ga hikui.
   Taro SUBJ nose SUBJ flat
   'Taro has a flat nose.'

Observe that both the subject (construed as a setting) and the body-part term are capable of being marked by ga. In prototypical uses, ga marks an NP that manifests all of properties (i)-(iii) cited above, but in (20) these properties are split between Taroo and hana. Japanese accommodates this special construction by allowing ga-marking with either NP, each of which approximates the prototype in certain respects.

Shibatani also discusses constructions in which ga seems to be marking a direct object:

(21) Taroo ni eigo ga wakaru.
   Taro DAT English SUBJ understand
   'Taro understands English.'

In accordance with an independently motivated analysis of dative case (Langacker in press a, b), I propose that Taroo is construed in (21) as the setting for a mental experience. It follows that eigo 'English' is not a direct object, whether Taroo is analyzed as the subject or simply as a preposed, non-subject setting expression (cf. (1)). These alternate analyses are sketched in (22).

(22)(a) Taroo ni eigo ga wakaru.
   SETTING PARTICIPANT (subject)

(b) Taroo ni eigo ga wakaru.
   SETTING PARTICIPANT (subject) (non-object)

In (22)(a), eigo is the subject, and thus takes ga by virtue of properties (i)-(iii) above. Suppose, on the other hand, that Taroo is the subject, as in (22)(b). In this event the occurrence of ga with eigo is non-prototypical, but motivated by the fact that this NP is a non-object and the most prominent clausal entity with participant status. Observe that the difference between these two analyses is not a drastic one in the present framework—they correspond respectively to Figs. 2(a) and 2(b), which contrast only in the figure/ground organization imposed on their shared
conceptual content. Viewing things in these terms, one can readily envisage a preposed-setting construction evolving historically into a setting-subject construction.

Let us conclude by returning to the basic assumptions of cognitive grammar, notably the claim that all valid grammatical constructs have some type of conceptual import. I have attempted to specify the conceptual basis for constructs and phenomena normally treated in purely "syntactic" terms: these include the subject and direct object relations; certain types of "chômeurs"; "dummy" or "expletive" subjects; and various restrictions on passivization. The foregoing discussion is not offered as either comprehensive or definitive. It may however suggest the naturalness and potential insight of approaching grammar in this fashion, and also the widespread grammatical significance of the setting/participant distinction.

References


------. 1986b. 'Abstract Motion'. BLS 12:455-471.


------. In press a. 'Settings, Participants, and Grammatical Relations'. Proceedings of the Second Annual Meeting of the Pacific Linguistics Conference.
-----. In press b. 'Case and Grammatical Relations in Cognitive Grammar (with Special Reference to Newari)'. Linguistic Notes from La Jolla.

-----, and Pamela Munro. 1975. 'Passives and Their Meaning'. Language 51.789-830.

Rice, Sally. 1986. 'Transitivity and the Prepositional Verb in English'. Manuscript.


