Towards a Transitive Prototype: Evidence from Some Atypical English Passives
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1. Introduction

This paper provides evidence for the cognitive rather than the syntactic or lexical basis of the English passive, a structure central to the study of grammar in recent years. Passivizability in English is widely assumed to be a reflex of the transitivity of some aspect of the active clause: either of the verb, the verb phrase, or the semantic content of the sentence as a whole. Hopper and Thompson's 1980 paper on global transitivity represents a substantial achievement towards our understanding of this phenomenon. In the wake of this seminal paper, much research has sought to refine their 10 original factors [1] which they propose affect a clause's transitivity (DeLancey 1982, Hopper 1985, and Jacobsen 1985). Some of this research has even suggested a prototype approach to semantic transitivity, but always as a synthesis of the Hopper and Thompson factors and never as a transcendent notion removed from the purely linguistic sphere. I agree that transitivity is something above and beyond the lexical or logical definition: a verb taking a direct object or one sustaining two arguments. But I'll argue that transitivity is not inherent to or derivable from properties of the morphology of the clause as assumed in the Hopper and Thompson model and extensions thereof. The relevant parameters of transitivity are not always objectively given in the content of the sentence per se, but may be imposed from without, i.e., subjectively, by the speaker. Thus, transitivity operates much the way that counterfactuality or hypotheticality are used--as a means of conveying information about the speaker's interpretation of the event in question. Rather than a lexical or grammatical category, transitivity is instead part of the intensional/construal arsenal available to a speaker and employed to organize and communicate something about an event other than content.

I will show that English clauses passivize not according to their satisfaction of the usual constituency requirements, [NP V NP], but rather due to their adherence to a transitive prototype characterizable in conceptual terms. Our ability to form prototypes and assess the relative deviation of items from such prototypes is a productive part of our conceptual system and a natural basis for grammatical organization within any given linguistic community (Lakoff 1977). Hopper and Thompson's 10 components fall short of providing a coherent prototype of a transitive event because their factors are by and large couched in linguistic terms. They seek transitivity in the overt morphology of the clause, in transitive markers, perfective aspect markers, definite articles, etc. These factors do not

always correlate nor do their values (presence or absence) reliably covary within a clause. As such, in and of themselves, they do not enhance our understanding of transitivity as an integrated phenomenon.

For the formulation of a transitive prototype I turn instead to non-linguistic models of real world action and interaction. Langacker (1986b) has discussed two of these models, which he terms metaphorically the *stage model* and the *billiard ball model.* These models describe our conception of canonical events and interactions between entities in the physical world and are even purported to have a developmental basis (Slobin, 1982). We observe events as unfolding against some spatial or temporal setting and we organize events around the interaction of individuated entities which move about and affect one another. Simple folk models such as these about entities moving and changing in time and space and affecting other entities influence to a degree the way we talk about such things. Indeed, these cognitive models can serve as the underpinnings of a transitive prototype. The stage model contributes notions about how we as observers tend to segment or group events into unitary actions among a fixed number of participants acting within some setting. The billiard ball model suggests how one entity's externally or internally supplied energy is translated into movement or force against some other entity and how the two entities do not share equal status. This model thus captures the notion of both movement by one participant and effect of the other.

The two models can be collapsed to yield a schema concerning our observation of two entities interacting withing some setting, a schema similar to the transitive prototype that we intuitively and traditionally make use of. The *prototypical transitive event* can thus be characterized in this non-linguistic fashion: Two entities, which are usually conceived of as being asymmetrically related, are involved in some activity; the interaction between them is unidirectional; because there is movement and effect, contact between the two entities is presumed to take place, with the second entity being directly affected by the contact instigated by the first; finally, the entities are taken to be distinct from each other, from their locale or setting, and from the speaker/observer/conceptualizer. Force-dynamics (Talmy 1985) also play a role in the construal of an event as transitive or not, as does the unique nature of the event--whether it happened once or habitually--and whether or not the effect the action has on some participant involves an internal or external reaction. When aspects of the prototype are missing or skewed by the speaker (for example, when the participants are not well-defined or distinct, or when the action or contact is incomplete or ineffective) the overall transitivity of the clause describing such an event is diminished and the passive counterpart may not be felicitous. This transitive prototype can accomodate sentences coding events that depart from the canon, for example, because the events are construed as transpiring in non-physical space (such as the mental space of

perception or ideation, or in discourse space), as long as notions such as asymmetrical interaction, directed contact, effect, or distinctiveness of the participants are present. I maintain that a cognitive characterization such as the one presented here supplies the essence of a model of transitivity. The degree to which sentences stray from this canonical account is reflected in their transitivity as will be measured by the acceptability of their passive counterparts. Obviously, I do not presume that transitivity is an all or nothing phenomenon. Languages will vary in the degree of departure they will tolerate in an event-coding clause. Furthermore, clauses can be made more or less transitive. When and why a clause reaches some global threshold of transitivity (and passivizes) is a complex problem that I will only begin to address here.

2. The Phenomenon

Two types of clausal patterns will be examined, neither of which are generally elicited as typical transitive exemplars. First, I'll discuss the behavior of sentences featuring prepositional verbs. These fail to meet the standard phrasal requirements for passive because they feature the constituency, [NP V P NP]. Second, I present some imperfective verbs such as KNOW and RESEMBLE which appear in structures meeting the constituency requirements for passive, [NP V NP], but which usually fail to passivize. Most interestingly, many clauses featuring such verbs can be made passivizable through the addition of negative markers, certain adverbials, modals, past tense markers, or more generic nominal participants. These factors are discussed in relation to the transitive prototype, not so much in terms of how they affect the content of the event/clause being predicated, but in the way they affect the construal of the event/clause by the speaker.

2.1. Prepositional Verb Constructions

There are thousands of prepositional verbs (VPPs) in English, verbs to which a preposition has coalesced grammatically and semantically. These verbs are usually initially intransitive, but with the addition of the preposition they are often rendered transitive and passivizable:

(1) a. The widow was spoken to by each of the mourners.
    b. *The citizens of Kiev were spread to by the radioactivity from Chernobyl.
(2) a. The mysterious cargo plane was fired at by the Sandinistas.
    b. *The café was remained at by the couple long after everyone else left.
(3) a. The cabbie was argued with by the bus driver for 20 minutes.
    b. *Elaine was sung with by Ted in the contest.
(4) a. This bed has been slept in again by that flea-bitten dog.
    b. *The living room is exercised in by Mary.

(5) a. *The treehouse was descended from by the boy.
b. *These reports are too contradictory to be generalized from by the committee.
(6) a. *The stool was fallen off by the child.
b. *The family trust can be lived off by Mark once he turns 21.

Most syntactically oriented frameworks call the acceptable (a) sentences in (1-4) "pseudo-passives" or else handle them lexically. By any definition, these constructions present atypical transitive sentences. As (1-6) demonstrate, not all of these complex verbs exhibit passive versions. To a degree, the passivizability of such clauses is dependent on the meaning of the preposition, since most of the English prepositions have spatial and non-spatial senses that can either complement or oppose properties of the transitive prototype. However, the main determination of transitivity for these constructions is dependent on the event/clause's conceived distance from the transitive prototype. Recall that our transitive prototype is characterized in physical world terminology and primarily involves spatial motion. The English prepositional system is also primarily spatial. English prepositions typically define the spatial location or trajectory through some setting that entities take although the prepositions are also applicable across multiple cognitive domains. Due to metaphoric extension, they can define locations or trajectories in non-physical space as well. Moreover, the individual prepositions have inherent semantic properties which allow them to be grouped together in a variety of ways. Hawkins (1984) examined the spatial senses of the English prepositions and proposed one such classification based on whether prepositions described an initiative path (e.g. FROM, OFF, OUT) or a terminative path (e.g. TO, AT, ON, IN) for an entity's trajectory through space with respect to some landmark.

I looked at a corpus of nearly 3,000 VPPs with examples constructed from each of the English prepositions and, not surprisingly, found a strong correlation between preposition type and the passivizability of the entire construction. I propose that to some extent properties of the prepositions echo or induce properties of transitivity for the whole clause. Therefore, VPPs constructed from certain source-oriented prepositions, such as FROM, OFF, and OUT, should strongly resist passive. In my corpus, only a handful of the hundred or so phrasal verbs I found involving these prepositions occurred in sentences which could be made to passivize. On the other hand, well over 60-70% of the nearly one thousand VPPs formed from the goal-directed or contact-oriented prepositions, such as TO, AT, ON, and IN, occurred in clauses that have passive counterparts.

More interesting, however, were the cases in which the same preposition matched with different verbs allowed the variable construal of the prepositional object as participant in some interaction rather than as the setting for some event. As a case in point, compare sentences (4a) and

(b) given above which share similar categorial elements: NP V in NP. IN, recall, marks a terminative path or endpoint and as such is a contact preposition and should naturally bias the VPP constructed from it toward a transitive construal. I repeat these sentences in their active versions:

(7) That flea-bitten dog has slept in this bed again.
(8) Mary exercises in the living room.

(7) is construed as a transitive clause while (8) is construed as intransitive. Very schematically, (8) specifies something about a single participant acting within a setting, whereas (7) specifies something about a participant acting on and affecting an entity which we might otherwise construe as a setting. However, the effect the subject has on the apparent setting in (7) turns the latter into a full-fledged participant of the action. Furthermore, (7) passivizes while (8) does not as (4a) and (b) demonstrate. Since both sentences involve animate agents and inanimate locations, what is it that contributes to the fact that (7) has a passive version, in essence, to the construed transitivity of (7)? Is it some property inherent to SLEEP, SLEEP IN, THIS BED, or even THAT FLEA-BITTEN DOG versus some property lacking in EXERCISE, EXERCISE IN, THE LIVING ROOM, or MARY? By shuffling lexical items and creating new minimal pairs we discover a continuum of acceptability for different passive sentences:

(9) a. *The living room was slept in by Mary.
b.??The living room was slept in by that flea-bitten dog.
c. This bed was exercised in by Mary.

In (9b) and (c), there is something which suggests that "the living room" and "this bed" were affected by the activity in question, either that there are now fleas in the living room or that the bed is completely mussed up. On the other hand, a (nonfamous) person can normally sleep in a living room without disturbing it and so it is usually construed as a setting for such an action; thus the passive (a) clause is unacceptable and the event it predicates is intransitive. We find from these examples that the predication *as a whole* must be taken into consideration in deciding the transitivity of an event since neither the prepositional verb nor the choice of nominals alone licences passive.

There are other minimal pairs involving an identical VPP and agent combination where variation of the post-prepositional nominal is sufficient to skew the construal of the event towards either the transitive or intransitive end of the continuum. Compare (10) and (11):

(10) a. Mary, who needed advice, rushed to John.
b. John was rushed to by Mary, who needed advice.

(11) a. Mary, who needed a rest, rushed to the countryside.
b. *The countryside was rushed to by Mary, who needed a rest.

In both (10a) and (11a), the agent is animate and volitional. Furthermore, RUSH TO appears to conform to our transitive prototype. It involves energetic, directed motion towards some goal or endpoint. The operative difference between these two examples, I believe, lies in the nature of the endpoint nominal. Animacy is not relevant here for determining participant status so much as the *discreteness* or *specificity* of "John" versus the *diffuseness* of "the countryside". Proper nouns usually signal highly individualized entities. Geographic descriptions as a rule do not. The more diffuse or spacious the endpoint is, the less likely it will serve as a *participant* to the action and the more likely it will be construed as a *setting*. Of course, this distinction is not categorical, but a matter of degree. Note the unacceptability of (12), which involves a plural or multiple though still animate object participant:

(12) *All of her relatives were rushed to by Mary, who needed money.

Another example of variable construal affecting passivizability is provided by (13), which has multiple interpretations:

(13) David fought with Bill.

This sentence is ambiguous and can mean either "David fought *against* Bill" or "David fought *alongside* Bill against some unspecified third participant." The *against* reading is conceptually consonant with notions of contact, asymmetrical interaction between co-participants, force-dynamic opposition, and external reaction--notions all derivable from the transitive prototype. Conversely, the *alongside* reading is related to notions of proximity rather than contact, minimal differentiation between participants, and pure movement or action within some setting. Notice in (14) that it is only the *against* reading of (13) that passivizes as this sentence is not ambiguous:

(14) Bill was fought with by David.

I turn now to a different set of passive data in English for which similar transitivity effects obtain.

2.2. Imperfectives

This section investigates the lexical extension of passive for English imperfective verbs. Imperfective verbs are those such as KNOW and RESEMBLE which describe situations that are constant or static through

time. They are distinguished operationally from inherently perfective verbs like HIT on a number of counts. First of all, they need no special interpretation in the simple present tense. In addition, unlike perfectives, imperfectives cannot felicitously take a progressive ending. Imperfectives are also traditionally distinguished in the transformational literature by their inability to take manner adverbials like "carefully." Imperfective verbs were chosen here because they represent atypical examples of transitive verbs. In the Hopper and Thompson approach, they are nonactional, atelic, and nonpunctual and therefore marked by three of the main components of *low* transitivity. I tested sentences containing various imperfective verbs for their passivizability holding constant present tense and the definiteness of third person participants. Those sentences which appeared not to passivize were then subjected to an array of manipulations. These included change of tense, change of definiteness, and addition of adverbs, negative markers, modals or extra context. Many of these factors produce quite tolerable passive sentences, although they initially rank low on the Hopper and Thompson scale. What emerges from the data is a paradox for models which look for transitivity in the overt morphology of a clause: Components that correlate with low transitivity actually enhance the passivizability of many imperfectives. I argue that the transitivity parameters of Hopper and Thompson do not necessarily covary with transitivity because they do not adequately reflect the transitive prototype, adherence to which actually determines a clause's transitivity and passivizability. Instead, many subtle *conceptual* factors may also enter into an appraisal of transitivity. Indeed, grammar and conceptualization are assumed to be inextricably linked, with grammaticization in language being an emergent property of the latter.

As we shall see, the naturalness of a passive construction decreases as the action-effect event specified by the verb and its arguments departs from the transitive prototype. This prototype has the agent and patient participants maximally opposed for some set of *abstract* parameters such as directed movement, energy transfer, or force resistance. The effects of these parameters and insufficiencies associated with models that adhere too firmly to strictly morphological or grammatical determiners of transitivity will be demonstrated in what follows.

2.2.1. Conceptual Imperfectives

Many verbs which I call conceptual imperfectives occur in clauses which resist passive. Some examples are given in (15):

(15) a. *The couple next door is known by John.
b. **Pat's smoking is minded by Sam.

These sentences are rather bad, but they improve slightly in the past tense,

which encourages a more punctual, completed rendering:

(16) a. ?The couple next door was known by John.
b. ??Pat's smoking used to be minded by Sam.

Strangely enough, negativity (a low transitivity component in the Hopper and Thomson paradigm) also enhances these imperfectives as illustrated by the sentences in (17):

(17) a. ?The couple next door is not known by John.
b. ?Pat's smoking isn't minded by Sam.

Certain adverbs also have a demonstrable effect on passivizability. Not surprisingly, adverbs like "completely," "absolutely," "thoroughly," "totally," "entirely," etc., which signal a sense of completion or goal-attainment, behave as transitiving components. Rather unexpectedly, however, adverbs like "barely," "hardly," "scarcely," and "only," which signal *incompletion*, can enhance transitivity as well. Note the effects of these adverbs on the sentences from (15) given in (18) and (19):

(18) a. The couple next door is thoroughly/barely known by John.
b. ?Pat's smoking is completely/scarcely minded by Sam.
(19) a. The couple next door is only known by John.
b. Pat's smoking is only minded by Sam.

The adverb "only" has a much narrower scope interpretation than the adverbs in (18). In (18), the adverbs have scope over the "action" of the verb and specify whether it is partial or complete. In (19), "only" restricts the action of the verb to a particular agent and is otherwise indifferent to the degree of completion of the action. The effect of "only" is to reduce the affectedness of the object by greatly limiting the possible agents or by insinuating, perhaps, that the actual agent somehow deviates from the norm. In either case, the adverb only serves to heighten the degree of differentiation between the participants.

Irrealis mode, reportedly a low transitivity component, also affects passivizability in positive ways. In English, modals encode events as occurring in a non-real or contingent world and should detransitivize a clause. Nevertheless, modals enhance the passivizability of the sentences in (15) given in (20) below:

(20) a. The couple next door should be known by John (since he married their daughter)!
b. Pat's smoking might be minded by Sam (because he's got emphysema).

The modal probably plays a central role here in licensing passive, especially in the past tense. Past tense modals usually foster an epistemic reading. What such modals contribute is either a notion of an event's *potentiality* or its *value*. With epistemic modals, the aspectual character of the event itself remains indeterminate while some abstract scale is superimposed semantically on the scene. The scale represents the evaluation of an event in terms of the possibility of its occurring or in terms of its subjective goodness for some *outside* participant, specifically, for the speaker who utters the sentence. These abstract scales reflect very subtle appraisals of the overall event as performed by the speaker-conceptualizer and may be related to a telic or goal-oriented interpretation, an integral part of the transitive prototype. Similar aspects of the prototype seem to be at play in rendering symmetrical imperfectives more passivizable.

2.2.2. Symmetrical Imperfectives

As discussed above, prototypical transitive events are asymmetrical, unidirectional, and punctual in nature. There is a small subclass of imperfective verbs for which it is rather arbitrary which participant functions as the subject or object in an inherently equivalent and stative relation. RESEMBLE is a fairly symmetric imperfective verb. It is slightly asymmetric in that it takes either chronology or precedence into account in the subjective appraisal, but sentences with this verb nevertheless resist passive:

(21) a. Tommy resembles the milkman.
b. *The milkman is resembled by Tommy.

The passive is better or completely acceptable for RESEMBLE if other aspects of the transitive prototype can be directly invoked:

(22) a. The milkman used to be resembled by Tommy.
b. The milkman isn't resembled by Tommy at all!
c. The milkman couldn't possibly be resembled by Tommy.
d. The milkman is unmistakably resembled by Tommy.
e. Everyone is resembled by someone.

In (22a), the situation is given a more punctual rendering as a completed event. In (b), (c), and (d), the imperfective situation as a whole achieves some endpoint along an abstract scale of possibility as imposed by the speaker/conceptualizer. Here, the *content* of the clause is less important than the *construal* of the clause as a potential event, that is, as a potential instance of resemblance. In (b) and (c), the event is construed as nearly impossible, while in (d), it is completely possible. Such extremes along a subjective goodness-of-fit continuum as a potential event can transitivize

an otherwise intransitive clause. Finally, the (e) sentence with its generic participants is also completely acceptable. To be sure *everyone* and *someone* represent extremes along a scale of potential participant, but I cannot begin to suggest how they interact with the transitive prototype. Let us now move on to a different class of verbs, the configurational imperfectives.

2.2.3. Configurational Imperfectives

This class of imperfective verbs underscores the importance of looking beyond subcategorization for reasons behind the differential syntactic behavior of fairly synonymous verbs. In (23), CONTAIN and OCCUPY appear to be slightly different versions of the same spatial arrangement:

(23) a. The yard contains the swimming pool.
b. The swimming pool occupies the yard.

Yet the passive counterparts of these sentences as given in (24) are not equally acceptable:

(24) a. *The swimming pool is contained by the yard.
b. ?The yard is occupied by the swimming pool.

Because the sentences in (24) *do* differ in grammaticality, one would expect a corresponding difference in the way they construe the same stative containment situation semantically. In fact, there is a difference. OCCUPY suggests that the container (here, the yard) is filled more or less to its boundaries, while the CONTAIN relation fails to convey a sense that the container is filled up at all. Hence, CONTAIN predicates a purely configurational situation without regard necessarily to any sense of completion or boundedness. The presence or absence of this quality of boundedness may be related to Hopper and Thompson's telic/atelic distinction. Note, in any case, that boundedness here is imposed on the sentence as a function of the speaker's subjective construal of the scene and is not objectively marked morphologically.

Extending CONTAIN beyond its configurational sense, a passive version is acceptable for force-dynamic situations as given in (25):

(25) a. The lake is contained by the dam.
b. The demonstrators were contained by the police.

In these sentences, the agents exert force on the objects or patients by physically restraining them. Passive obtains grammatically for these sentences because a sense of *dynamism* is present in each situation semantically, a notion very important to the transitivity prototype.

Based on the case of CONTAIN, several other configurational

verbs, which likewise signal a container/containee relation, might be expected to behave in the same way with respect to passive, but surprisingly, they do not. ENCIRCLE, SURROUND, ENCLOSE, and RING are configurational predicates that all passivize easily. They do so, I believe, for neither arbitrary nor exceptional reasons, but because motion is imposed on the static physical scene subjectively. This subjective motion introduces a sense of completion because it allows the speaker/conceptualizer to trace mentally around the containment and access the containing situation as a whole. (26) illustrates:

(26) a. The house is encircled by (the) trees.
b. The castle is surrounded by a/the moat.
c. The pool is enclosed by a/the fence.
d. The city is ringed by its suburbs.

I contend that these imperfectives suggest a particular interpretation of the scene they describe as a completed event. Indeed, the verbs in (26) suggest conceptual gestalts: CIRCLE, ROUND, CLOSURE, RING. This notion of geometric completeness, whether actual or not, may again be related to the telic/atelic distinction in the Hopper and Thompson paradigm. A sense of completion or goal attainment, no matter how abstract, may give a more punctual rendering to an imperfective situation. This is especially evident in the next set of examples. Compare (27a) and (b):

(27) a. *The swimming pool is contained by the yard.
b. The swimming pool is enclosed by the yard.

Both sentences in (27) predicate similar stative containment relations. However, the containment in (b) seems to highlight a sense of perimeter, and, by extension, of conceptual boundedness. The speaker-conceptualizer is able to access the containment relation sequentially and thoroughly by making a mental tracing around the swimming pool. This imposition of subjective motion on a static, physical scene, is akin to what causes the semantic contrast in pairs like those given in (28):

(28) a. The roof slopes upward over the patio.
b. The roof slopes downward over the patio.

Here, there is a clear difference in the two ways the same objective scene is being described. The sentences contrast semantically because they impart a different directionality to the manner in which the speaker-conceptualizer accesses and moves through the scene. Langacker (1986a) ascribes the contrast in pairs like those in (28) to differences in how the conception of some configurational scene is built-up or activated in processing time by the

speaker. Thus, just as the same overall configuration may be subjectively construed or experienced in various ways, so may it be differentially encoded grammatically. Returning to the sentences in (27), the yard in (b) becomes more mobile relative to the pool by virtue of subjective motion. The verb ENCLOSE suggests a definite, traceable perimeter, while CONTAIN does not. While directionality of the motion is not a factor here as it is in the sentences in (28), the motion itself is. This motion seems to put the objective scene in (27b) in line with more canonical transitive situations where the agent is more mobile relative to the patient and passivizability results. Notice how the differential grammaticality of these similar passive clauses turns on this notion of subjective motion as applied to an essentially static physical layout.

3. Conclusions

Such variable behavior with regard to passive for clauses sharing similar or identical propositional content (predicate-argument structure) is usually ignored by standard syntactic approaches or dismissed as exceptional or lexical. Nevertheless, data such as these seriously compromise even lexical approaches to passive because they would require a radical extension of the lexicon to encompass individual verbs, complex verbs, verbs with different types of nominal arguments, larger phrases with different types of sentential adverbials, and multiple listings of identical clauses representing different construals on a scene. On the contrary, I believe there is a lot to be gained by studying such marginal transitive clauses. Recurring patterns of behavior evinced by large numbers of different construction types can be indicative of fundamental conceptual constraints underlying grammatical organization in language. The phenomenon of transitivity is much more complex than we linguists would usually care to admit. Hopper and Thompson-like components take us part of the way towards a characterization of transitivity, but how such components would differentially apply to morphologically transitive and intransitive sentences which do or do not passivize is not straightforward. Passivizability was used here to indicate the degree to which sentences deviate from or approximate some transitive prototype. The viability of passive constructions in English was found to involve an interplay of all sorts of abstract factors, some of which dovetail the Hopper and Thompson components, some of which do not.

There is no cut-off point demarcating transitive and intransitive or passivizable and non-passivizable because the "transitivity threshold" that correlates with passive changes under varying lexical and clausal conditions. The way we construe our world conceptually is reflected in our linguistic systems. Grammaticization, therefore, is assumed not to be arbitrary but the product of systematic cognitive processes and organizational strategies. I have tried to demonstrate how grammatical coding reflects our *conceptualization* of events in the world and not necessarily external

properties associated with those events per se. The way we construe a scene or event, the way we conceive of participants interacting within an event, the way we access and experience it cognitively is what determines its transitivity profile. Transitivity is foremost a conceptual description applicable to events and not simply a label for types of linguistic expressions that meet certain morphological or predicate-argument requirements. For linguistic description and analysis to be fully accurate, it must make reference to this conceptual level of organization, a level of subjective construal beyond the reach of formal grammatical categories, logical form, and lexical exception.

Notes

[1] The Hopper and Thompson (1980) Transitivity Paradigm:

	HIGH TRANSITIVITY	LOW TRANSITIVITY
PARTICIPANTS	2 or more (A and O)	1 participant
KINESIS	action	nonaction
ASPECT	telic	atelic
PUNCTUALITY	punctual	nonpunctual
VOLITIONALITY	volitional	nonvolitional
AFFIRMATION	affirmative	negative
MODE	realis	irrealis
AGENCY	A high in potency	A low in potency
AFFECTEDNESS OF O	O totally affected	O not affected
INDIVIDUATION OF O	O highly individuated	O nonindividuated

References

DeLancey, Scott. 1982. "Aspect, transitivity, and viewpoint," in Paul Hopper (ed.) *Tense and Aspect*, pp. 167-183. Amsterdam: John Benjamin.

Hawkins, Bruce. 1984. "The semantics of English spatial prepositions," UCSD Phd Diss.

Hopper, Paul. 1985. "Causes and affects." *CLS* 21.67-88.

Hopper, Paul, and Sandra Thompson. 1980. "Transitivity in grammar and discourse." *Language* 56(2):251-299.

Jacobsen, Wesley M. 1985. "Morphosyntactic transitivity and semantic markedness." *CLS* 21:89-104.

Lakoff, George. 1977. "Linguistic gestalts." *CLS* 13.236-287.

Langacker, Ronald. 1986a. "Abstract motion." *BLS* 12.455-471.

-----. 1986b. "Transitivity, case, and grammatical relations: A cognitive grammar prospectus. Ms.

Slobin, Dan. 1982. "The origins of grammatical encoding of events," in Paul Hopper and Sandra Thompson (eds.), *Syntax and Semantics*, vol. 15, *Studies in Transitivity*, pp. 409-422. New York and London: Academic Press.

Talmy, Leonard. (1985). "Force dynamics in language and thought," in William Eilfort *et al.* (eds.), *Papers from the Parasession on Causatives and Agentivity*, pp. 293-337. Chicago: Chicago Linguistic Society.