The Coerciveness of Discourse

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"A short story is a narrative that has a beginning, middle, and end." This definition, paraphrased from Aristotle's *Poetics*, has been repeated so often we may be forgiven for thinking we understand what it means. It seems to say that a short story has a structure, and that that structure is a manifestation of some logical or causal necessity. A "beginning," we say, if we wish to spell out the logic, "is that which necessitates something to follow but nothing to precede it." In turn, a "middle" is that which… but we can easily imagine what follows. Thousands of creative writing students have dutifully written it down in their notes, and wondered at the clarity of it, and berated themselves for not being able to *reason* their way to the opening lines of their next short story.

But that is the way of Western thought in general. We have the habit of thinking that behind the vagaries of verbal expression there must be something solid, some grounding principle, some set of *a priori* axioms from which we can derive the truth of the matter. This habit—or as I would put, this *illusion*—of logically systematic thought, inherited from the Greeks, underpins most of our ideas of truth. By and large, we take it to be the foundation of meaning itself. If the hapless student of creative writing cannot then go on to derive an actual story line from this advice, then that is his fault, not the fault of his logic.

But it is, I want to argue here, an illusion to think so. What makes meaning possible is not an abstract logicality (formal logic, UG, "language of thought," computer machine-code, take your pick) underlying language, but rather the fact that discourse itself has an underlying structure, a felt necessity which governs what is meaningful and what is not meaningful, and dictates its necessities to us whenever we construct sentences. We feel its pressure whenever we

hesitate in choosing the next word; we feel relief when we have satisfied it, and anxiety and doubt when we haven't. I am not referring to syntax, though syntax is one of its *means*. I mean a kind of *coerciveness* that belongs to language itself, especially to language *in use in discourse;* it is expressed through distinctions which themselves depend on *which* discourse we are in.

Obviously, since there are many discourses, even within one language, there are many kinds of distinctions. In one discourse, for example, the opposite of "out" is "in"; in another, the opposite of "out" is "safe." I realize this argument commits me to what some would call a relativistic epistemology—I would rather say pluralistic—but I do believe that what lies at bottom of our thinking is only a kind of coerciveness that comes from discourse itself. Like logic it can provide, with its asymmetrical and local rules, an underlying discipline—even an ontology if you please—that structures thought, controls ambiguity and "slippage," and is the ground which invests every (correct) usage with meaning.

What does this "coerciveness" mean? Many people might argue that they don't feel any sense of being coerced by discourse. They might object that if we know English, or any language for that matter, we can say anything we wish to say, and we are not limited at all except by the limits of our own imaginations.

But can we say anything we wish? I propose an analogy. That claim is like saying that if we have a car, we can drive anywhere we wish. But in fact we can't. First of all, we have to stay on the streets. We can't drive through fields and creeks and into people's houses. We have to go where the streets go. Now, the streets go where they went yesterday, following the contours of the terrain and on routes which developed historically, each one at an economical distance from the next one (though intersecting at convenient places), and tracking from some place to some other place that people have wanted to get to in the past. Of course you can argue that, well, the streets

go everywhere anybody would want to go, and that's good enough. And of course it is, unless we are trying to get somewhere nobody has been before.

This analogy suggests two broad senses of the word "discourse." In the large sense, "a discourse" is a set of semantic relationships that have become conventionalized to the point of being recognizable: i.e., "the discourse of baseball" or "American political discourse" or "post-structuralism" or "Keynesian economics". "Discourse" in this sense is analogous to a map of a city's streets, with the recognition that a map of Los Angeles doesn't look at all like a map of San Francisco, because its streets intersect with each other in a totally different pattern.

By contrast, "discourse" in a small sense is a specific piece of writing or speaking or conversation, local to a time and place and fully immersed within "a discourse" in the other sense. Such a piece of discourse is like a single drive across the city, using some of its streets to get from one place to another. Such a piece of discourse registers the coercion of the larger discourse; it is not possible to be in more than one discourse at a time any more than it is possible to be in more than one city at a time.

When I say that discourse is coercive, then, I mean that it dictates what we can say in the same way the street layout of a city dictates where we can drive. When we switch from the discourse of, say, baseball to the discourse of football, it is analogous to moving from the streets of San Francisco to the streets of Los Angeles. Perhaps the techniques of driving are very much the same, but the routes and the destinations are different. Slopes, curves, and speed limits are different, as well as what streets intersect with what other streets. Statements like "Pedro scoops up the ball and fires to first base for a touchdown" are as impossible[1] as crossing the Golden Gate Bridge and turning off on Sunset Boulevard.

[1] I mean, of course, impossible in discourse terms, not in grammatical terms.

Discourse in the small sense has an additional feature the larger one doesn't have: it has **directionality.** When we take a drive across a city, we usually have a destination in mind. Analogously, a piece of discourse has purpose, intention, aim; these things are registered in a number of ways, including *salience order* (a kind of discourse markedness) and *focus*. In both speaking and driving, one is always situated at **one** location, but heading toward another, in some direction and with some destination in mind. In both speaking and driving we can see only one or two avenues from the driver's seat. We have to make a new choice at each intersection, and every choice narrows the next choice to a smaller set of alternatives. As we get closer, likely we will slow down, get off the freeway and make more turns, zeroing in on our target location. Of course we make these turns with more confidence if we have circumnavigated the terrain before. If we haven't, we may have to backtrack and reroute a few times before we find our way. There is a good side to that, though; by not knowing exactly where we are we may find ourselves exploring many sidetracks and back alleys. But soon we will navigate with confidence, knowing not only what roads to take but where the other roads go as well.

The dominant school of linguistics consists of formalists who believe that the essential thing to understand about language is how to generate *sentences.* They seem to assume that this is done instinctively, by reference to a universal grammar; they in effect argue that we have a built-in GPS, or a Satellite Navigation System. That is, we can always know where we are by an inborn reckoning sense, based in quantitative logic (or a UG), which tells us where we are at all times. More recently, many of them have been forced to recognize the importance of things like focus, which is in my view to be seen more comprehensively as destination: as purpose, intention, aim.[2] Such analyses are all committed to a bottom-up command structure, that is, the obedience of

[2] Some of them, like Nomi Erteschik-Shir (1997), typically try to incorporate focus-structure as just another (computable) annotation on syntax, in which topic and focus constituents are marked, lying between the syntax and the semantics.

sentence-rules to an underlying constituent logic based in a universal grammar. I argue here for a top-town structuring, in which sentences seek to satisfy the discourse-level demands of purpose, intention, and aim.

Thus discourse is coercive in several ways. One is that, like streets, sentences run at a discrete distance from each other, distinct in purpose and intention and without overlapping. Another is that words, like streets, string each to each in ways that are already established; that is, both words and streets exist in *mutual presupposition*, and each one has its place on the map by permission of all the others already there. And third, streets like sentences have directionality. They go in one direction or another, but not sideways, or backwards, or in random directions. A trip across town on the city streets takes us from one place to another; we always have a destination, and that destination is what gives meaning to our choice at every intersection.

Let me take up each of these points in turn.

I. The Discontinuous Landscape

The landscape of the linguistically possible is radically discontinuous rather than continuous. Sentences, as they develop, keep their distances from each other both in meaning and structure. As they differentiate themselves from each other in meaning, they also differentiate in form. Quite probably, this is so for reasons of communicative economy: in the noisy real world, precise and effective communication requires maximal, not minimal differentiation.

Writers learn of this quality of discourse when they try to revise their sentences. Changing one word invariably requires changing something else too, as if meaning can't be changed by a single increment. In speaking as well as driving, you can't just drive a little to the right or left; you have to choose one street or another. Suppose we have written a line of dialogue in a story:

(1a) "I hope we can visit you again next week."

and we decide to change "hope" just a shade, to a near synonym, "want".

(1b) *"I want we can visit you again next week."

Obviously that won't do. What about "wish"?

(1c) *"I wish we can visit you again next week."

That won't do either. To make it work we must adjust some other words in the sentence:

(1a) "I hope we can visit you again next week."

(1b) "I want us to visit you again next week."

(1c) "I wish we could visit you again next week."

But these are distinctively different sentences. In the case of the third sentence, the overall meaning has nearly *reversed* itself: instead of expressing the speaker's desire to visit again, it expresses her regret that she *cannot* visit again!

What caused this reversal of meaning? It is difficult to account for it either by the lexical change or the syntactic change. "Wish", "want," and "hope" are near synonyms; exchanging one for the other should not reverse the meaning. By the same token, changing the present tense "can" to the past tense "could" should not cause a negation of the original meaning. Here someone will instantly answer that by changing the tense I changed the "voice" from "indicative" to "counter-indicative" or some such thing. But how? And is that a lexical issue? The answer lies not in constituency theory or even in syntax. It lies somewhere else, among issues—I started to call them rules, but on second thought, I think not—that I think belong to the coerciveness of discourse.

Every practicing writer knows that an alteration of word choice accompanies—and requires—an alteration of structure, often for no apparent reason. Is there a rule that says that "hope" requires a sentence complement, but "want" requires an infinitive in the accusative?

(2) I hope she sleeps well tonight.

(2a) *I hope she/her to sleep well tonight.

(3) I want her to sleep well tonight

(3a) *I want she/her sleeps well tonight.

Yes, perhaps so; but it's not a "rule", it's just an alternative meaning, with its alternate form, to go in an alternate discourse. Inventing two different contexts illustrates the difference in meaning:

(2) "Jane's tired**. I hope she sleeps well tonight."**

(3) "I gave Jane a sedative. **I want her to sleep well tonight."**

Another pair of sentences that are nearly identical also have radically different meanings:

(4a) He has little money.

(4b) He has a little money.

By "minimal pair" logic—and if discourse meanings really depended on word meanings, minimal pair logic *should* work—the word "a" would seem, weirdly, to flag the second sentence with its opposite, positive meaning. But of course it doesn't. They are not a minimal pair; they belong to different discourses, where different semantic relationships obtain:

(4a) "I'm not sure Fred would go for a trip to Bermuda. **He has little money** for that sort of thing."

(4b) "Why don't you ask Mr. Buffett to consider investing in your idea? **He has a little money**."

Indeed, some pairs of utterances are entirely identical, but have different meanings. We call them *puns*, of course, which may seem to disprove my point about all meanings being radically discontinuous; but the multiple meanings of a pun are given it by its membership in multiple discourses. Puns are like intersections, points where one can be momentarily on two streets at once. For example, the phrase "trapped in one bad lie after another" might belong to the discourse of politics or the discourse of golf. The accident of sharing a single expression in two different discourses is fun, but it proves, not disproves, my point that the meaning comes from the discourse rather than the lexical items themselves.

In every different context we instinctively reach for the form that works, little realizing that the many choices are not simply evidence of the prolixity of forms available in English, but evidence of its ability to register fine distinctions among purposes, intentions, and aims. It may not matter much, from a semiotic perspective, whether the choices are lexical or grammatical; the fact that one choice works here in this context, and another works there in that context, reveals the *discipline* available to our discourse. In the discourse of baseball, for example, we are familiar with the verb-construction "strike out". It can be found in both transitive (5a) and intransitive forms (5b):

(5a) He struck out nine batters tonight.

(5b) He struck out three times tonight.

But notice that the transitive sentence is always about the pitcher, while the intransitive sentence is always about the batter.

Does this mean that a fundamental grammatical distinction (transitive/intransitive) results from a need to disambiguate a piece of baseball terminology? Of course not. More likely it is simply that when the discourse requires a distinction, any distinction will do. And since "strike-

outs" apply to both pitchers and batters, adapting a handy grammatical distinction can serve the purpose as well as a lexical one can.

And very likely the point is *not* that the distinction is *grammatical*. The difference between the transitive and the intransitive sentence is merely the presence or the absence of an object. An alteration of pattern may not belong to one grammatical *category* or another; it may merely be idiosyncratic. For example, suppose we are describing some unfortunate children in a small mining village, and consider two versions of the sentence:

(6a) They go to work at dawn and they will not return home **before** dark.

(6b) They go to work at dawn and they will not return home **until** dark.

At first glance this particular alteration seems successful. In this negative context, the two choices seem to mean very nearly the same thing, and we can change one word without changing any others. Yet there is a palpably different "feel" to the two sentences. I suggest this is because "before" and "until" behave, in *affirmative* sentences, very differently indeed:

(7) They will return home before dark.

(7a) *They will return home until dark.

And if we change the verb from "return" to "stay", we get yet another pattern.

(8) *They will stay before dark.

(8a) They will stay until dark.

Why should it matter whether words like "before" and "until" are used with positive or negative arguments? Logically it shouldn't matter, but the case demonstrates that changing from positive to negative entails not merely a lexical change but also a change in salience. Consider this

exchange that was reported to have occurred during the impeachment hearings of U.S. President Bill Clinton. When Monika Lewinsky was on the stand she testified, according to the story,

(9a) "He (Pres. Clinton) told me that I wouldn't have to give up the presents – if I didn't have any."

But President Clinton, when he was on the stand, said,

(9b) "I didn't say that. I said she *would* have to give up the presents – if she had any."

President Clinton insisted on a distinction between the two versions. But don't they mean the same thing? Don't two negatives equal a positive? Grammatically, yes, but rhetorically, no. Unfortunately for Mr. Clinton, Lewinsky's version very likely suggested to her listeners that Mr. Clinton *had* given her presents, and meant for her to get rid of them. I suppose Clinton understood that, and tried to repair the damage. Negatives and positives have very different weightings in discourse, and represent another covert disciplining structure.

II. Mutual Presupposition

Another sense in which discourse is coercive is that all of its elements exist, as Greimas (1983) insisted, in a relation of *mutual presupposition*.[3] This means that no word can inhabit a sentence without the permission, so to speak, of every other word there.

When we generate a discourse we cannot merely follow syntactical patterns, inserting lexical items into slots at will. Standard syntactic theory suggests that we should be able to do that, and so sentences like the following create problems for syntacticians:

(10a) She's sitting in a café having a cup of coffee.

[3] Greimas (1983: 8, 118).

(10b) *He's walking into his office having a briefcase.

If one can "have" a cup of coffee, why can't one have a briefcase? Well, of course one can "have" a briefcase, one just can't be "having" a briefcase.

(10c) He has a briefcase. *He is having a briefcase.

Anomalies like these call attention to the fact that what objects are permissible depends not merely on the particular object and the particular verb, but may also vary from form to form. Discourse discipline requires combinatorial restrictions that are beyond categorical rules, and are unique even to the different forms of the verb. *Categorizing* all the permissible combinations may not even be theoretically possible.

(11c) "She's having the Phillips' over tomorrow night."

"What's the occasion?"

"She's having a party."

(11d) *"She's having a party and the Phillips' over tomorrow night."

Why should (11c) be permissible but not (11d)? Formalists have typically explained such sentences by adding "lexicosemantic" rules. But this means acknowledging that, as Adele Goldberg puts it, "the syntactic subcategorization frames of a verb may be uniquely predictable from the verb's lexical semantics".[4] This is a polite way of saying that they persist in the search for such rules even though *every* verb may require its own set of rules. Functionalist grammars like those of Givón (1984) and Halliday (1994), on the other hand, try to answer such questions by specifying a new semantic category, sometimes called a case-role, for every distinguishably different verb-object complex. But that effort too runs afoul of special cases (like these),

[4] Goldberg (1995) cites Levin (1985), Chomsky (1986), Levin & Rapoport (1988), and Pinker (1989).

especially within local colloquialisms, requiring an ever-greater elaboration of categories, to the point where the effort seems less and less worth doing.[5]

If categorization doesn't work, what does? Goldberg, in the spirit of "Construction Grammar", tries to go beyond the traps of categorization by positing *constructions.* She argues for the primacy of certain idiomatic structure-meaning match-ups which she says are a special subclass of constructions that "provides the basic means of clausal expression in a language".[6] Her move to individual constructions is an acknowledgement of the likelihood that categorical rules are not sufficient.

III. Directionality.

If, as this evidence suggests, every word in every sentence evinces a complex and perhaps unique potentiality for combining with other words, then this is bad news for those who would generate computable rules for predicting all the possible sentences of a language. But at the same time it follows that discourse always and already possesses the discipline required for organizing its meanings. In fact, every string of words dictates what can follow it; and the longer the string, the more limited the possibilities. This is what it means to say that there is *directionality* in every piece of discourse. The words which come first predetermine those that come later, and the ones

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[5] Notice for example the elaboration of categories in Kay & Fillmore's Glossary entry for "valence", which is meant to indicate a verb's capacity for taking complements:

> The *adjective* "afraid" can be said to "take" a *subject* which expresses an *experiencer*, and a *complement* which expresses the *content of the experience*, this expressed either with a *finite clause* ("I'm afraid he'll lose the election") or a *prepositional phrase* headed by "of" ("I'm afraid of earthquakes"). The representation of the *valence* of this *adjective* is expressed as a *set* whose members are *feature structures* specifying the values of three *attributes: grammatical function, "theta" role, and morphosyntactic form.* . . . (emphases mine)

Cf. the Berkeley Construction Grammar website at http://www.icsi.berkeley.edu/~kay/bcg/ glossary.html.

[6] By this she means various kinds of relations between verbs and their objects: the Ditransitive, the Caused Motion, the Resultative, the Intransitive, etc. Goldberg (1995: 3).

that come later presuppose the ones that come earlier in a kind of purposive abduction. And this means that a piece of discourse is a disciplined sequence of elements in **a chain of increasing salience**.[7] English is most salient at the end of the sentence; i.e. at its most salient, the restrictions are greatest. It is at this point we can see the productive implications of this coerciveness.[8] That is, this salience structure is what indicates the ***purpose, aim, and intention*** of the discourse. What comes first—the topic—appropriates some bit of the ongoing familiar discourse and orients the reader/listener to the new discourse by claiming *scope* over the rest of the argument. This assertion of scope is a projection of aim, so that what comes later fulfills the expectation of what comes earlier. All of this is indicated by a salience-default word order, as manipulated by salience-raising or salience-lowering alterations, and these alterations enable us to communicate our intentions and purposes to each other.

(12) "How do you like these new walking shorts the girls are wearing?"

(12a) "They are very cute but they aren't a bit sexy!"

(12b) "They aren't a bit sexy, but they are very cute!

Clearly, in English, the emphasis comes at the end; the last words are often taken, even, as *more true* than those which come earlier, as propaganda writers know:

(13a) "Coalition forces claimed the air strike killed 29 radical Islamist insurgents, but local officials said the dead were all innocent students at a local religious school."

[7] All the Romance languages have a structure of increasing salience. Others, like Japanese, combine word order with overt salience markers to indicate a generally decreasing salience. But every language has some means of indicating salience.

[8] I have omitted a major implication of this coerciveness from this paper: the way the salience structure of discourse focuses on what I call a *molecular sememe*, which is the "arena" in which word meaning-in-context is created. For more about that, see Caldwell (2004) and Caldwell (1989).

(13b) “Local officials said the victims of the air strike were innocent students, but a coalition spokesman said the mission killed 29 Islamist insurgents hiding at the school.”

(14a) “Palestinian officials said the rocket attacks were in response to continued air strikes on civilians in the Gaza strip by Israeli warplanes.”

(14b) “Israeli officials said the air strikes in Gaza were in retaliation for continued rocket attacks by Palestinian terrorists.”

Clearly, the differences in import of these sentences are not owing to lexical or grammatical matters so much as to the *directionality* of the discourse. Fillmore (1968, fn49) noticed a similar effect in the following sentences:

(15a) Bees are swarming in the garden.

(15b) The garden is swarming with bees.

The first sentence implies that there are bees in some part of the garden; the second implies that the *whole* garden is full of bees. Another subtle problem, noted by Goldberg (1995: 3), is represented by the following pair:

(16a) I am afraid to fall down.

(16b) I am afraid of falling down.

in which the first is felicitous only if there is some intention to deliberately fall down, while there is no such implication in the second version.

Many people have noted such subtle shifting of meaning even in sentences which use the same words, leading them to agree with Dwight Bolinger that “A difference in syntactic form always spells a difference in meaning” (1968, 127). In other words, there is no synonymy among grammatical forms any more than there is true synonymy among words. This principle has

already been enunciated, as Adele Goldberg says, by many linguists working in the areas of Functional Grammar.[9]

But it's more than that. It's the *discourse salience* that is important. For example, let me offer an explanation for Goldberg's example (9) above:

(16a) I'm afraid to fall down.

(16b) I'm afraid of falling down.

The point is that these two sentences belong to different discourses. Anyone could imagine contexts within which they would make sense: here, to illustrate, are two:

(16a) "What? You want me to rush out of the bank with my gun in my hand, and then trip over the fire hydrant and fall flat on my back in the street? No way. Get me a stunt double. **I'm afraid to fall down.** I'm 68 years old and I'll surely break something."

(16b) "That's a nice bike, Dave, but I don't think I want to take a ride on it. **I'm afraid of falling down** and breaking a leg or something!"

That is, in context (a) the idea of falling down is already established, and therefore does not have to be given a marked position in the sentence in question. It can be demoted to the infinitive form, leaving "afraid" as the salient term:

(a) I'm → **afraid** ← to fall down.

In the other context, however, it's the fear which has already been suggested, so its specific *object* is what needs to be called attention to. Thus, 'falling down" is the salient element of the sentence:

(b) I'm → afraid → of **falling down.**

[9] See for example Givón (1985), Langacker (1985), Clark (1987), and Wierzbicka (1988). Goldberg (1995: 3).

Salience is not merely a left-to-right (print) or a time-relative (speech) directionality in actual discourse. It is also an expression of the *relevance order* of the elements of the discourse; in turn, relevance is an expression of *the intention, aim, or purpose* of the speaker of the discourse. Linguists have historically avoided any discussion of intention or purpose or relevance because of the subjectivity of the issue, that is, the difficulty of finding objective indications of it for empirical study. But as I can show, there *are* objective indications of it, in the raising or lowering of levels of specificity relative to the left-to-right *directionality* of the discourse.[10] In short, discourse does have a beginning, middle, and end, but not because of logical necessity. It has its own necessities.

In this paper I have tried to demonstrate three kinds of discipline exerted on the forms of sentences by discourse. I want to combat the prevailing view that sentence syntax is the only, or primary, kind of command structure that language needs in order to function. I also want to counter the prevailing view that the meanings of language, compared with the rigors of logic, are full of vagaries and imprecision, confusions and indeterminateness. Such is not the case. Rather, it is our *understanding* of discourse, with our insistence on relying on categorical procedures for understanding that is lacking.

Indeed, discourse enforces the disciplines detailed above, and discipline in itself implies structure. Normally when we think of structure, we mean some phenomenon whose organization has been dictated by a set of rules, or whose features are the manifestation of a set of rules. But this is not the only way, certainly not the only way in nature, and quite possibly not the only way in language either. Language may well be more like biology than logic, more like a growing thing than a diagram or blueprint. Discourse, having its own discipline, has the power to organize

[10] For more detail, see Caldwell (2002).

semiosis—that is, by limiting how each of its signs can be *used*, it can cause each possible combination to have its own unique meaning.

How does discipline, by itself, enable meaning? Let me shift the metaphor one last time. Imagine trying to walk on ice. Without traction, one can only flail about, getting nowhere. But put a blade on each shoe, limiting its sliding to two directions, and one can then turn helplessness into grace, and motivate oneself in any direction with precision and high speed.

Bibliography

Bolinger, Dwight L. 1968. Entailment and the Meaning of Structures. *Glossa* 2:119-127.

Caldwell, Price. 1989. Molecular Sememics: a Progress Report. *Meisei Review* 4: 65-86.

Caldwell, Price. 2002. Topic-Comment Effects in English. *Meisei Review* 17: 49-69.

Caldwell, Price. 2004. Whorf, Orwell, and Mentalese (The Molecular Sememe: some implications for semantics*). Meisei Review* 19: 91-106.

Chomsky, Noam. 1986. *Knowledge of Language.* New York: Praeger.

Clark, Eve V. 1987. The Principle of Contrast: A Constraint on Language Acquisition. In B. MacWhinney, ed., *Mechanisms of Language Acquisition,* 1-33. Hillsdale, N.J.: Laurence Earlbaum Associates.

Erteschik-Shir, Nomi. 1997. *The Dynamics of Focus Structure.* Cambridge: Cambridge University Press.

Fillmore, Charles J. 1968. The Case for Case. In E. Bach and R. T. Harms, eds., *Universals in Linguistic Theory,* 1-88. New York: Holt, Rinehart and Winston.

Fillmore, Charles J. 1988. The Mechanics of "Construction Grammar." *Proceedings of the 14th Annual Meeting of the Berkeley Linguistics Society,* 35-55.

Givón, T. 1984. *Syntax: A Functional-Typological Introduction*. Amsterdam/Philadelphia: John Benjamins.

Givón, T. 1985. Function, Structure, and Language Acquisition, in D.I. Slobin, ed. *The Crosslinguistic Study of Language Acquisition,* vol 2, 1005-1028. Hillsdale, N.J.:

Laurence Earlbaum Associates.

Goldberg, Adele E. 1995. *Constructions: a Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.

Greimas, A. J. 1983. *Structural Semantics: An Attempt at a Method.* Trans. by Daniele McDowell, Ronald Schleifer & Alan Velie. Lincoln: University of Nebraska Press.

Halliday, M.A.K. 1994. *An Introduction to Functional Grammar* (2nd Edition). London: Arnold.

Kay, Paul, and Fillmore, Charles. 1997. The Berkeley Construction Grammar website: Glossary: "Valence." http://www.icsi.berkeley.edu/~kay/bcg/glossary.html.

Langacker, Ronald W. Observations and Speculations on Subjectivity. In J. Haiman, ed., *Iconicity in Syntax*, 109-150. Amsterdam: John Benjamin.

Levin, Beth. 1985. Lexical Semantics in Review: An Introduction. In B. Levin, ed., *Lexical Semantics in Review.* Lexicon Project Working Papers 1. Cambridge, Mass.: MIT Center for Cognitive Science.

Levin, Beth, and T. Rapoport. 1988. Lexical Subordination. *Papers of the 24th Annual Regional Meeting of the Chicago Linguistic Society, Part 1, 275-289.* University of Chicago.

Pinker, Steven. 1989. *Learnability and Cognition: The Acquisition of Argument Structure.* Cambridge, Mass.: MIT Press.

Wierzbicka, Anna. 1988. *The Semantics of Grammar.* Amsterdam: John Benjamin.