TEXT PRODUCTION AND DYNAMIC TEXT SEMANTICS

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1. Texture and semantic choice

When we imagine writing on a blank sheet of paper, it seems to us that all the semantic choices of the language system are initially available to us. With no further information about the context of situation or context of culture, perhaps they are. This is the situation described by a systemic account of the lexicogrammar, beginning from clause rank. We enter a "master system" such as CLAUSE and all the possible clauses of English, all the possible meanings that can be meant with clause-complexes in English, are available for selection.

We know that the paradigmatic systems of selection options that provide a systemic account of the lexicogrammar are ideally written without regard to context. If there are inherent weightings in the probabilities of some particular selections relative to others, then those weightings represent in some sense an average over all possible contexts, or a baseline, a default probability, which is then modified and re-weighted when specific contexts are taken into account. These context-sensitive re-weightings characterize a register.

But suppose we take a slightly different perspective. Imagine that we are about to write not the first clause on our blank sheet, but the second. Or the third. In principle, for each ranking clause, or clause-complex, all possible options are again available to us. But most sequences of clauses which we produce or encounter are not ones in which each clause is totally independent in meaning of the one(s) which precede(s) it. The sequences of clauses which language has evolved to enable us to produce are by and large texts; that is, sequences of clauses which are to some extent mutually predictive of one another. We know that texts, as opposed to random juxtapositions of clauses, have a quality that may be called texture (Halliday - Hasan 1976; Hasan 1985a), which is fundamentally a semantic property, realized through lexicogrammatical features. A text is, in this sense, a semantic unit (cf. Halliday 1977) in that it is characterizable by a unity of meaning, such that the meanings expressed in each of its clauses have some specific meaning-relations to those expressed in some or all of the others.

Insofar as a second or third clause helps to create a text with the preceding clause(s), not all semantic choices are equally open to us, in the sense in which they may have been in writing a first clause, and correspondingly, not all lexicogrammatical choices are available. More precisely, we can say that there is a re-weighting of selection probabilities that depends, in a first view, on the

selections already made in the preceding clause(s). The linkages, the relations of interdependency between clauses or clause-complexes in a text, are not essentially grammatical ones, though they have consequences for lexicogrammatical choices. They are essentially semantic relations.

Now we know well that lexicogrammatical selections within clauses and clause-complexes represent potential differences of meaning, and therefore some part of the semantic choices that are made in creating text-as-message (i.e. the semantic unit) "pre-select" or condition selections within the lexicogrammatical systems at CLAUSE and lower rank. We can call this lexicogrammatical semantics. But there must be "another part" of semantics: choices which describe the system of options for what kinds of meaning relations will be made between different clauses and clause-complexes of the same text. It is these text-semantic relations which account for the "texture of a text" (and, as I have argued elsewhere, for intertextual semantic ties as well; Lemke 1985).

We already know a little about text semantics in this sense. We know that successive clauses and clause-complexes of naturally-occurring texts tend to belong to the same register or "micro-register" (Halliday 1978; Gregory 1985). This is often a necessary, but hardly ever a sufficient condition for them to form a coherent text (Lemke 1985). But the more general semiotic notions that lie behind Halliday's three "metafunctions", and which are at the root of models of register, are still good guides to what sort of relations among the clauses of a text belong in an account of text semantics (Halliday 1978; Lemke 1989b, in press-a).

Their ideational relations can be described by methods such as my own Thematic Analysis (Lemke 1983, 1988a, 1990b, in press-b) or Hasan's approaches to lexical cohesion and cohesive harmony (1984a, 1985a). Their textual relations, I believe, correspond to those between different functional elements in a Genre structure (cf. Hasan 1984b, 1985b) and to relations of the clause-complexing (Halliday 1985: 192-251), conjunctive (Martin 1983), and rhetorical structure (Mann - Thompson 1987) types. Finally there are those of the interpersonal type, described in part by an "axiological" analysis of heteroglossia (Lemke 1990b, in press-a, in press-b), by Martin's work on macropropositions and macroproposals (in press), and by Thibault's (in press) notion of the Global Modal Program of a text.

Of course, these three types of text-semantic relations and their corresponding structures and global co-patternings across texts, are intimately interdependent in all real texts. Nearly all the analyses I have cited, as well as much work by many other analysts, combines discussions of elements that are semantically of all three types. This is particularly true in work on genre and ideology. The typology I have just offered is mainly one of convenience, to be used as a guide to remind us of the need to examine relations of all these kinds in our work.

With this view of text semantics, we already have a rich literature to draw on in characterizing the kinds of semantic relations between clauses that contribute to the semantic coherence of a text. Different clauses in the same text will likely be cohesive (grammatically and lexically) with one another and exemplify closely related components of one thematic formation (representational consistency). They will make selections such that we will construe them as belonging to functionally related parts of some rhetorical or generic structure (organizational consistency). And they will express a consistency of point-of-view toward addressees and the truth-value and "rightness" of what they affirm and deny (orientational consistency; for all these terms, see Lemke

1989b, 1990a: 194-206). In all these ways, second clauses and third clauses, and second and third paragraphs, are emphatically not independent, even in their specific lexicogrammatical choices, of the choices made in preceding portions of the same text.

2. Text production and dynamic vs. synoptic perspectives

If we do indeed shift our perspective from the independent or "initial clause" view to the interdependent, "medial clause" view, what are the implications for modelling text semantics? First of all, we are moving away from the paradigm of text analysis, which commonly assumes that there is a complete text available for study, and towards the stance taken, for example, in computational linguists' efforts at specifying the processes of text generation. To choose a more theoretically neutral term for the perspective I wish to develop, let me call it simply that of text production.

Text production is a process as well as a perspective: it is the process of making text by selecting features (lexicogrammatical and text-semantic) for successive clauses in such a way that the resulting sequences of clauses form a socially recognizable unit of linguistic action. By this I mean that the resulting text does indeed have a texture: the clauses form a unit with ideational, interpersonal, and textual coherence in the text-semantic sense. They are cohesive, thematically and orientationally consistent, and have a recognizable genre and/or rhetorical structure.

It is important to note that the text-production perspective is a dynamic one, while that of text analysis is synoptic (Lemke 1984, 1988b; Martin 1985; Ventola 1987). A dynamic perspective on meaning is one which enters into the flow of events and asks what is the meaning of an utterance as it occurs and what meaning attaches to how and when it is occurring. Synoptic perspectives, on the other hand, step back outside the flow of events and examine meanings retrospectively, in the full context of a total social event as it has occurred. In the dynamic analytical perspective meanings are taken to be more tentative, more anticipatory - their timeliness and manner more signifying. In the synoptic perspective, the same actions (including utterances) take their text-specific meanings in considerable measure from what follows them in the text, retroactively narrowing and focusing the what-could-be-being-meant of dynamic meaning into the what-evidently-must-have-been-meant of synoptic meaning.

The synoptic/dynamic distinction can be applied to the means by which we describe meaning-making as well as to meanings made. A "system" in the lexicogrammar is ordinarily written from the synoptic perspective; that is, it is written from a perspective that stands outside the meaning-making process, outside text production, and describes options that are "always" there (in principle). We could also introduce into our theory of linguistic meaning-making a notion of dynamic system: one which would describe the options available for a "next" clause, say, at some particular moment of text production. Such a theoretical entity obviously would be simply a tool, not a fundamental construct, since it would vary from clause to clause and from text to text. But it is very important for us to be able to say something about "how" and "why" it varies as it does. If we imagine the description of dynamic systems to be mainly a matter of the dynamic weightings of

selection probabilities, then we wish to know how the selections "up to now" condition the probabilities for selections "now".

One could imagine studying the process of text production by watching an illuminated wallchart of systems in which the probability of each option at each moment was represented by its brightness. At the beginning of text production, setting aside any knowledge of context of situation or register, illumination would vary across the chart solely to reflect universal inherent weightings within systems. As selections were made in a "pass" through the systems, selected options would brighten and unselected ones darken, but then the entire display would "refresh" itself for the next pass, the next clause. Perhaps the previous selection might be indicated in a special color, but now we would see not the same range of options and weightings as before, but a new set of weightings dependent on the previous selections. As text production proceeded, we would see - at each moment before actual next selections were made - the cumulative influence of past selections on the probability of each next option.

To proceed further, we must abandon this idealized fantasy and try to use what we already know of text semantics (cohesion, thematics, genre, rhetorical structure, orientational programs, etc.) to implement the text-production perspective. Most critically, we need to make use of our theories of the origins of texture, i.e., our notions of why people make the semantic units we call texts.

3. Pragmatics, semantics, and social semiotics

How can we account for the existence of texts? What is going on that leads to sequences of sayings and wordings that have a unity of meaning? What functions do the text-semantic relations between clauses and clause-complexes serve? When are they called into use?

Our naive notion of this is that language is being used for some social purpose, that there is a socially meaningful action being performed, at least in part through the use of language, and that the way in which it is being enacted leads to the production of a text of a particular type. The text-type is recognizable because of its association with a culturally identifiable type of social action. We insult people, we tell jokes, we perform marriages, we give instructions, we decribe events. Many social activity types give rise to one or more characteristic text-types, often called genres. The activities may be complex, consisting of sequences of particular functional acts, and so text-types similarly will usually have a functional structure of meaning elements, with a variety of possible relations among them.

This model is useful for many purposes, but it needs some important refinements. First of all, the naive model is too "top-down"; it describes social actions as determining text-types, when we know that language events and texts co-determine social action reciprocally and dialectically. We know that an utterance (a message-text) is itself an action and can change specific aspects of the context of situation in which it occurs. In this way the situation and the next-action or next-activity also depends dynamically on what has been said and otherwise done before, including what is being

said and done now. It is also probably true that linguistic text-types, being evolved, meta-stable social formations (see below) in their own right, are not simply responsive to fulfilling the actional function of the moment; they also have a certain "inertia" of their own, such that, once begun, they may carry forward even against the actional needs of the moment, changing the situation and the activity by their performance as a formation and not simply by the effect of particular sayings said in the course of that performance.

It is not only context of situation, but also context of culture that is dynamically implicated in a semantic view of text production. It is the context of culture that provides the larger scale social formations we call genres and activity-types. If the genre or the rhetorical formation that has been begun in the initial clauses of a text calls for a reversal or peripety, for a disjunction or contradiction, then from one clause to the next we may see probability weightings for selections in the systems MOOD or ATTITUDINAL LEXIS suddenly reverse. The context of culture may provide options for which genres are chosen or how they are implemented, and further condition those options on features of the context of situation.

Most theories of pragmatics too naively assume that social acts, including "speech acts", may be defined independently of the semiotic resource systems through which "they" are enacted. It reifies them and then looks for their "expression", rather than defining them in such a way that they are themselves contingent constructions resulting from the meaning-making process. Our folk-theories of the relations between words and deeds, and between intentions and actions, may be interesting as cultural data, but they cannot substitute for more sophisticated accounts of meaning-making practices.

Any adequate account of social meaning-making, of human semiosis, must include categories of meaning units (act-types, activity-types, etc.) more abstract than either conventional pragmatics' categories for acts and "intentions" or our linguistic categories of semantic features and relations. We need one unified account of meaning-making practices within which both linguistic text production and other forms of semiosis can be modelled and interrelated. This is true not just because so much of human communication and action uses both linguistic and other semiotic resource systems conjointly, but because linguistic semantics itself, in order to avoid the endless regress of mere formalism, must have a functional basis. Semantics must be constructed so as to mediate between the other strata of language and a social semiotic in which socially functional meanings are definable.

What does this mean for our account of text production? Essentially, it means that it is social function which must ultimately define the dynamic re-weightings of selection probabilities in lexicogrammar, not simply in the realization of a set of semantic features for each separate clause (though obviously it plays a critical role in that), but most crucially in order to insure that a sequence of clauses "means" as a text.

4. Semiotic formations and dynamic models of text production

It is a long way from the social semiotics of meaningful acts and events, through the mediating semantic options for both lexicogrammatical and text-semantic features and relations, to actual selections in lexicogrammatical systems and their realization in clauses and lower rank structures as strings of particular lexical items. That long pathway may be needed for a scientifically satisfactory account of either text production or the meanings of a finished text (and perhaps for the most universal computational text-generation or text-interpretation programs), but otherwise it seems unlikely either that such a comprehensive analysis would be attempted very often, or that people actually do have recourse to such a hypercomplex, multilevel scheme for making or interpreting texts.

Most texts are not highly original, whether they are in fact unique or not. They do not need to be original because they need only meet the needs of some local variation on a standardized, well-known, and familiar culturally recognizable situation. A complete paradigmatic account of the semiotics of human action is no doubt possible (whether practical or not), but any given human community enacts only a very restricted subset of all the possible action-texts its actional semiotic resources allow. In the same way, of course, most grammatically possible clauses never get said, and most possible sequences of clauses do not form recognizable texts in a given community.

There are, in absolute terms, relatively few kinds of social activity and relatively few text-types, genres, thematic formations, social relationships, issue viewpoints, etc. in a particular community. Mostly we speak in clichŠs, in textual "boilerplate", in pre-compiled (as the computationalists might say) formations - not word-for-word by any means (except, for example, in highly ritualized events), but by and large still within narrowly defined limits of selection and co-selection. This habit is not just a function of register or situational specificity; it applies as well to the structural organization of our texts and even to lexical realizations. It is text patterns, text formations, and not just registers or genres that we learn to speak.

I have discussed elsewhere the sense in which text formations (or discourse formations; cf. Bakhtin's "speech genres") as instances of the general notion of semiotic formations are complementary to paradigmatic, analytical notions like register or, more precisely, register-specific linguistic system, which are correspondingly instances of semiotic resource systems (Lemke 1985, 1988a, 1988b, 1989b, in press-b). Characteristically, "formations" tell us what is typically said and done in a community, while "systems" tell us what can be meant with the resources it in fact deploys only in more limited ways. Formations are less general, but more economical modes of description for certain purposes.

Formations provide a short-cut on the way from the semiotics of social action to the wording of texts, but they also provide an alternative way of asking our basic question about text production: How is it that the successive semantic selections of the text production processes, each modelled by the changing selection probabilities of dynamic systems, results in a text of a recognizable FORMATION? Whatever information a formation summarizes about the text-semantic relations appropriate to a given text-type, that same information must somehow enter into the shifting selection probabilities of text production.

Fortunately, a representation of that information which is wholly compatible with a paradigmatic model is available. Quite a long time ago, before making use of the notion of formations, I

proposed that the same kind of culture-specific information could be represented by extending the meta-redundancy notion of Bateson (1972) (see also Lemke 1984: 33-41). In essence, meta-redundancy relations describe a hierarchy of conditional probabilities, and this formalism is well suited to describing a social semiotic model of contextual meaning.

Social semiotics says that an event (or identifiable feature) A is meaningful insofar as its co-occurrence with other events (or features) B, in a given context C, is statistically predictable. Another way of saying this is that, in context C, A and B go together more often (or less often) than mere chance would predict. Moreover, since A and B are paradigmatic selections, the same may be true of other combinations of alternatives to A and to B, and usually is. This is equivalent to saying that in the context C there is a pattern of co-occurrences: not every possible combination of selections is equally likely or equally frequent. The pattern of co-occurrences of the various selections of each sort, then, is part of what "defines" (or constructs) the context C. In another context, there would be a different (or no) co-patterning of the A options and the B options. Indeed, those other patterns in part define other, alternative contexts to C.

The net logic of all this is that contexts are now seen to be simply higher-order features (or events), defined in their turn by patterns of co-occurrence with the patterns of co-occurrence among the A and B options. Substituting the information theory term redundancy for co-occurrence, a contextualization theory of meaning can be appropriately represented by specifying a hierarchy of redundancies of redundancies (meta-redundancies, Lemke 1984:33-41). This model has a pleasing absence of reification of entities at any level - an essential feature of social semiotics. Mathematically, the co-patternings are described as sets of conditional probabilities, and amount, in fact precisely to the re-weightings of dynamic systems needed for text production to produce texts of recognizable social formations.

The details of this argument are too complex to summarize in a brief paper such as this, but the outcome is that our idealized fantasy of a dynamic semantics of text production can in principle be made as realistic as we wish by including information about context of situation and context of culture. In fact, in order to account for texture, it is precisely this information which must be included. This is simply another way of saying that text semantics is in practice a mediation between social semiotic formations and lexicogrammatical system selections, and is therefore a problem of tractable complexity in the text-production perspective. In principle, of course, it is still equivalent to the fully articulated connections between social semiotic resource systems and the lexicogrammar, but specifying those for every text -directly would certainly not be a tractable problem in the text-production (or probably any other) perspective.

Thus, context of situation and context of culture, representing the kinds of text-semantic relations that give a text its texture in all the ways we have been learning about in the last several years (i.e., cohesion, thematics, genre, rhetorical structure, value-orientations, etc.) can also be analyzed in terms of the constraints they place on any next lexicogrammatical selection at a particular rank. Furthermore, the information they provide, if complete as an account in terms of formations, should also completely account for the probability distributions of selections across different clauses of the same text.

5. Text production and emergent meaning

As I have described the text-production perspective so far, it may seem to be excessively deterministic. That is only because I have been foregrounding the arguments needed to show that this dynamic approach to text semantics is feasible. But what is most surprising about this approach is its radical implications for the relative unpredictability of the creative process of text production. Because social semiotic models require us to take into account the ways in which actions reciprocally influence and alter the contexts of situation which called them into being in the first place, the dynamic model of text production provides a framework for analyzing, not just relatively predictable features, but phenomena of emergent meaning in text.

Every act or utterance means in the context it creates by occurring. That context is always newly emergent from the context that preceded the act or utterance. Very often, the shift in situation is either predictable or of a kind which in effect reinforces the categorization of situation-type, rather than altering it typologically (though it always alters it phenomenologically). But from the text-production perspective, what really matters is whether the total context of situation (including the state of the text-up-till-now) has been altered in a way that will influence the future direction of text production. And that almost always does happen.

It is most obvious in longer texts as we write (or speak) them. We set out to write a text of a given type for a given situation. But the textplan at the beginning only specifies certain typological parameters of the text-to-be-produced. It is that narrowing which begins to make text production tractable; only some paths can be followed in the immense space of all clauses and all successions-of-clauses (many of which are not even texts). But no textplan (except in rare, ritualized circumstances) pre-specifies the exact final text word-for-word! There are always many functionally equivalent (though systemically distinguishable) ways to meet the specifications of any text-type. Genres, rhetorical formations, field-specific thematic patterns, and orientational "stances" specify "generic" meanings and meaning relations at the level of social semiotic actions (social signifying practices), which may be instantiated semantically in a variety of linguistically distinct ways.

We begin by putting down some words that are "good enough" for present purposes. But we do not write (or speak) semantemes, just as we do not utter phonemes. Every real phonetic utterance has many acoustic features, quite recognizable and even meaningful in some circumstances, which are non-distinctive phonologically. Just so, every realization of the semantic specifications of a text plan contains "incidental" features which were not relevant to those specifications. Each is just one of many ways in which the meaning required could have been made. From each a more delicately different meaning can be made, but those differences were non-distinctive so far as the previously relevant formation (e.g. genre) was concerned. (We see here another consequence of the reduction in meaning potential from systems to formations. If formations specified meaning requirements as precisely as do systems, there would be no specificity to the culture of a given community, and there would be a unique text to each text-type.)

But once the meaning requirements of a formation are met by an actual, realized portion of text, the text itself becomes part of the context of situation, and potentially all of its linguistic (and graphic, if written, paralinguistic if spoken) features, including the previously incidental ones, may now become relevant to how succeeding portions of the text are realized. What we first wrote or said was one way of instantiating a part of the original text plan, and only some of its features were specified by that plan. Now we must go on to instantiate another part of the textplan, and again it will specify only some features. But how we instantiate those features now depends not just on the text-plan requirements, but also on how we happened to instantiate those of the previous portion(s) of the text. Principles of consistency now come into play that make previously irrelevant, "incidental" features highly relevant for text production. With each succeeding unit of text written, the range of options for fulfilling the remainder of the (potentially changing) textplan diminishes.

This is a purely dynamic phenomenon, not a synoptic one. A feature is "incidental" only dynamically, only from the point of view of constraints on selection prevailing as it is selected. Synoptically, such "accidents" will already have been given a more text-significant meaning by having become, retroactively, part of subsequent patterns of selections.

In this process, a new type of foregrounding takes place. Features which were essentially unpredictable (and irrelevant) so far as any text plan (or formation) was concerned are now co-determinants of how further higher-level (i.e., formational, text-semantic) semantic features will be realized. This foregrounding now potentially raises the status of these features, and their intertextual associates, to that of meaning elements which the text plan must be revised to take into account. Such meanings are truly emergent in the text-production process.

We have all had this experience in writing. We begin to write about something, and in the course of writing, we happen to choose a particular word when we might just as well have used another, and then a particular grammatical construction that was also only one possible way-of-saying, and the result is that two unplanned words are brought into an unexpected juxtaposition and invoke an association from another text, or lead us into a formation not part of our original plan, and we decide to stay with this theme or metaphor, or to develop it further, and our text plan changes.

In spoken language this sort of process is, for me at least, a major source of previously unmade connections, of serendipities whose probabilities of occurring and being noticed derive from the margins of half-formed formations. It is the creativity of action, in which we are surprised by actions-as-performed, beyond the expectations of actions-as-planned, into new senses of meaning. There is a slippage between the lexicogrammatical underspecification of formational meanings and the unpredictable polysemies of (retrospectively overdetermined) text. That slippage makes a dynamic model of text semantics both tractable and capable of accounting for creatively emergent meaning-making in the use of language and of all the other grammars of action.

6. Relevance to text generation, text analysis, and stylistics

Further development of the text-production perspective could provide a useful implementation of dynamic approaches to text semantics in several fields of investigation. In text-generation work, text planning strategies should take into account the post-selection consequences (and opportunities) of "incidental" realizations of text-plan goals. At a level below the globally invariant features of a text plan, there will need to be dynamically responsive strategies that can guide selections in subsequent clauses based on prior selections. This is not merely a matter of later "editing" for stylistic consistency; all textual coherence could be lost from a first version (especially of a long text) without this dynamic "channeling" of selections. Some day, it might even be possible for text-generation programs to "improvise" unpredictable but still meaningfully coherent texts in this way and to, for example, generate new hypotheses, speculate, and construct novel arguments or problem solutions. This would require dynamic modifiability of even very high-order text-plan parameters ("sub-goals") during text-generation, based on flexible criteria of the potential meaningfulness of "incidental" patterns created and monitored en route to prior goals.

In text analysis, the dynamic perspective suggests that part of the total meaning potential of a text (i.e., the set of all possible meanings that could predictably be made with it in an interpretive community) derives, paradigmatically, from the other texts a given text-up-to-this-point might have become if different "incidental" features were selected and/or eventually foregrounded. This implies a principle of prospective intertextuality to complement our more usual synoptic notions of retrospective intertextuality, which applies only to texts regarded as complete(d). Of all the texts that a text-up-to-here might have become, it did become this text. Prospective intertextual ties, i.e., those to possible continuations of a text (as well as of these hypothetical texts to still other associations), while conforming to the text formations of a community, have a greater potential for escaping its system of disjunctions, even ac/in-cidentally (Lemke 1984: 131-150). Perhaps that is one reason why society encourages people to learn to read far more than it encourages them to learn to write (cf. Kress 1982; Lemke 1989a). Speaking is, of course, also potentially highly subversive of the standardized use and co-patternings of formations, but it is less readily monitored for its "ac/in-cidentals" (which are so easily lost forever).

Finally, stylistic analysis, whether of texts regarded as literary or otherwise, might benefit from a shift in focus in linguistic work from characteristic (synoptic) patterns, which are likely to be shared with many other texts, to "incidentals" whose later effect on the direction of a text's stylistic choices might reveal something, not only of its uniqueness, but also of the creative process of its composition. Obviously in the case of short texts which have been extensively redrafted (e.g. poems), this approach may be limited, but elsewhere it could conceivably be of interest. Where earlier and later drafts of a text are available, however, this method would seem ideally suited. Possibly the greatest use of the approach might be in the development of a "poetics" of prose composition (cf. Halliday 1982).

I hope that in all our work on how meanings are made with text we will remember that the text is a product and a record of meaning-making processes which are essentially dynamic. These processes are social semiotic practices, the signifying practices of a community. It is these practices that make texts and make sense of texts, dynamically, dramatically, moment-to-moment, word-by-word, enacting meaning by words, in moments whose meanings the words make and change.

BIBLIOGRAPHY

Anderson, John (ed.)

   1982   Language form and linguistic variation. Amsterdam: Benjamins.

Bateson, Gregory

   1972   Steps to an ecology of mind. New York: Ballantine Books.

Benson, James D. - William S. Greaves (eds.)

   1985   Systemic perspectives on discourse. Vol. 1. Norwood, NJ: Ablex.

   1988   Systemic functional approaches to discourse. Norwood, NJ: Ablex.

Bloome, David (ed.)

   1989   Classrooms and literacy. Norwood, NJ: Ablex.

Coveri, L. (ed.)

   1984   Linguistica testuale. Rome: Bulzoni.

van Dijk, Teun - Jan Pet"fi (eds.)

   1977   Grammars and descriptions. Berlin: de Gruyter.

Flood, J. (ed.)

   1984   Understanding reading comprehension. Newark, DE: International Reading Association.

Gregory, Michael

   1985   "Towards communication linguistics", in: James D. Benson - William S. Greaves (eds.), 248-274.

Gregory, Michael (ed.)

 in press Relations and functions within and around language. (Papers from ALRWG International Spring Colloquium, Glendon College, York University, Toronto).

Gregory, Michael - Peter Fries (eds.)

in press Discourse in society: Functional perspectives. Norwood, NJ: Ablex.

Halliday, M.A.K.

1977   "Text as semantic choice in social context", in: Teun A. van Dyck - Jan Pet”fi (eds.)

1978   Language as social semiotic. London: Arnold.

1982   "The de-automatization of grammar", in: John Anderson (ed.), 129-159.

1985   An introduction to functional grammar. London: Arnold.

Halliday, M.A.K. - Ruqaiya Hasan

1976   Cohesion in English. London: Longman.

1985   Language, context, and text. Geelong: Deakin University Press. [Republished 1989, Oxford: Oxford University Press].

Halliday, M.A.K. - John Gibbons - Howard Nicholas (eds.)

1990   Learning, keeping, and using language: Proceedings of the International Congress of Applied Linguistics, Sydney 1987. Amsterdam: Benjamins.

Hasan, Ruqaiya

1984a "Coherence and cohesive harmony", in: J. Flood (ed.)

1984b "The structure of the nursery tale", in: L. Coveri, (ed.)

1985a "The texture of a text", in: M.A.K. Halliday - Ruqaiya Hasan, 70-96.

1985b "The structure of a text", in: M.A.K. Halliday - Ruqaiya Hasan, 52-69.

Kress, Gunther

1982   Learning to write. London: Routledge and Kegan Paul.

Lemke, Jay L.

1983   "Thematic analysis: Systems, structures, and strategies" Semiotic Inquiry 3: 159-187.

1984   Semiotics and education. (Toronto Semiotic Circle Monographs Series.) Toronto: Victoria University.

1985   "Ideology, intertextuality, and the notion of register", in: James D. Benson - William S. Greaves (eds.), 275-294.

1988a "Discourses in conflict: Heteroglossia and text semantics", in: James D. Benson - William S. Greaves (eds.), 29-50.

1988b "Text structure and text semantics", in: Robert Veltman - Erich Steiner (eds.), 158-170.

1989a "Social semiotics: A new model for literacy education", in: David Bloome (ed.), 289-309.

1989b "Semantics and social values" WORD 40: 37-50.

1990a Talking science: Language, learning, and values. Norwood, NJ: Ablex.

1990b "Technical discourse and technocratic ideology", in: M.A.K. Halliday -John Gibbons - Howard Nicholas (eds.)

in press(a) "Ideology, intertextuality, and the communication of science", in: Michael Gregory (ed.)

in press(b) "Intertextuality and text semantics", in: Michael Gregory - Peter Fries (eds.)

Mann, William C. - Sandra A. Thompson

1987   "Rhetorical structure theory: A theory of text organization", in: Livia Polanyi (ed.)

Mann, William C. - Sandra A. Thompson (eds.)

 in press Discourse description: Diverse analyses of a fund-raising text. Norwood, NJ: Ablex.

Martin, James R.

1983   "Conjunction: The logic of English text", in: Jan S. Pet"fi - E. Sozer (eds.)

1985   "Process and text: Two aspects of human semiosis", in: James D. Benson - William S. Greaves (eds.), 248-274.

 in press   "Macroproposals: Meaning by degree." in: William C. Mann - Sandra A. Thompson (eds.).

Petofi, Jan S. - E. Sozer (eds.)

1983   Micro and macro connexity of text. Hamburg: Buske.

Livia Polanyi (ed.)

1987   The structure of discourse. Norwood, NJ: Ablex.

Thibault, Paul J.

 in press "Interpersonal meaning and the discursive construction of actions, attitudes, and values",
in: Michael Gregory (ed.).

Robert Veltman - Erich Steiner (eds.)

1988b   Pragmatics, discourse, and text. London: Frances Pinter.

Ventola, Eija

1987   The structure of social interaction: A systemic approach to the semiotics of service
encounters. London: Pinter.