SEMANTIC TOPOGRAPHY AND TEXTUAL MEANING

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Textual Meaning

Why do we make meaning with texts? Why are not clauses or sentences enough? What kinds of meanings do we make with texts beyond what can be made with their constituent units? What do texts as such add to the semantic resources of language? And what do we need to add to the descriptive apparatus of linguistics in order to account for specifically text-level meaning?

One way to approach these problems is to ask how we combine clauses and sentences according to their meanings to make texts of different sorts. For example, we can attempt to formulate principles which describe exchanges in dialogues, where the sequencing patterns of, typically, clause-level utterances depend on such semantic features of the clauses as whether they give information or demand it, whether they represent information assumed to be known to one participant or to both, etc. Another approach is to ask how we might describe the similarities and differences in meaning of two texts. The pioneering work of Michael Gregory on the theory of linguistic

registers (Gregory 1967, Gregory & Carroll 1978) enables us to relate the overall semantic features of a text to its specific communicative context of situation. Thus the meaning of a text is normally relevant to such features of the situation as the interpersonal relations of participants, their mode of communication, and their topic or activity.

In later work, equally critical for our problem, Gregory and his students explored the "micro-registerial" variety within texts and developed the techniques of phasal analysis (Gregory & Malcolm 1981, Gregory 1985) to describe it. What they found was that there were many intermediate scales of semantic continuity and discontinuity within texts, some corresponding to major structural-functional divisions, and others, often at greater delicacy, to a host of semantic nuances down to, and even within, the scale of the clause. Moreover, while clusters of semantic features co-varied on particular scales, foregrounding different semantic variables might lead to overlapping but distinct divisions. Texts in general have a fractal semantic topography.

For this reason, more and more delicate descriptions of "the register" of a text cannot lead to a description of its meaning; for at the most delicate, micro-registerial level of des-

cription, texts are normally semantically heterogeneous. The most precise possible specification of a register, of a commu-

nicative context of situation, in terms that would be predictive of selections in the lexicogrammatical systems of mood and modality, transitivity, thematization and information structuring, would in fact specify a single unique clause (cf. Mann & Matthiessen 1985). A registerially or semantically homogeneous text on this scale of delicacy would simply endlessly repeat itself. Such texts would not make meanings that clauses do not. We would not need anything beyond lexicogramamtical semantics to describe their meanings.

Thus text is not "most delicate register" semantically in the sense that lexis is most delicate grammar (cf. Hasan 1985, 1987). A clause, or a nominal group, makes just one semantically-motivated grammatical selection in each relevant system at its rank. A text normally re-selects again and again, clause after clause, and systematically makes different selections in some features as well as repeating the same selection in others. And the probability of a particular selection in a second or later pass clearly depends on what was

selected previously. In addition to the conditional probabilities of selection in relation to situational context (register as interpreted in Halliday 1991), there are also transitional or successional probabilities (Halliday 1992, Lemke 1991) in relation to prior selections on many scales.

What makes the semantic topography of a text fractal in nature are these multiple scales. They include, but go beyond, the rank scales of lexicogrammar. For each semantic feature (system selection) that we wish to follow, and for each cluster of covarying features, there will be characteristic scales across which these features will remain constant or show more complex patterns (e.g. alternation, as in many exchange patterns). As we proceed to greater and greater delicacy, we find micro-phases within micro-phases, subtler semantic variations within grosser ones. The continuities across scales of identifiable patterns contribute to the cohesion and coherence of a text; they enable us to make sense of its semantic discontinuities as still representing variations within the same text or textual unit. There are subtle and important relations between the textural or cohesive semantic continuities of a text and

its structural or constitutive semantic discontinuities (cf. Hasan 1984; Lemke 1988b, 1994).

The metaphor of "topography" uses the fractal character of natural landscapes, their capacity for similar kinds of variations on all scales of distance from the mountain range to the mineral grains of a pebble, to remind us of the interplay of semantic continuity and variation across the landscape of a text as it unfolds clause by clause. Raised up over the unfolding surface linearity of a text is the complex multi-dimensional space of semantic selections in lexicogrammatical

systems. This is even a true topological space since we can, with system networks and the notion of delicacy, define a rough topology of relative nearness or distance among selections, and so among more-to-less agnate clauses of a text (see Lemke, forthcoming in Network, for the idea of an induced topology on text-types or genres).

There is, finally, a third approach to textual meaning from text stylistics and critical semiotics as applied to literary texts (cf. Gregory 1974, 1978, 1982; Halliday 1982; Hasan

1989a; Thibault 1991). The interweaving or polyphonic orchestration of textual themes, both overt and covert, permits us to make meanings by the ways in which we connect or merely juxtapose them: meanings that cannot be made in the clause or the sentence. Moreover, texts, and not just those of consummate verbal artistry, make meaning by a variety of intertextual connecting practices available in the speech community (cf. Kristeva 1980, Riffaterre 1980, Lemke 1985). These include not only typical textual formations, but what Kress and Threadgold (1988, 1989) have called "cultural narratives," typical or prototypical stories of particular or generic events in the life and traditions of a community. These perspectives show us that texts use the text-level meaning of other texts as a semiotic resource.

I would like to elaborate on some of these arguments in order to begin to sketch out in more detail what might be meant by a specifically textual order of meaning, built from, but not reducible to, the lexicogrammatical order of meaning and its semantics.

The Order of Systems and the Order of Texts

In order to better understand the kinds of meaning relations that can be construed as holding between texts (and not simply between clauses or sentences), or the kinds of meanings made by connecting particular texts or classes of texts, it helps to inquire first into the relation between text and register. In some ways, the relation between texts and registers is like that between clauses and systems: in each case the former belongs to the order of instantiations of meaning, the latter to the order of systematic meaning potentials.

Let us begin with the notion of a linguistic register. The phenomenon which gives rise to the need for such a notion is the observed variation in the frequency of selection of various lexicogrammatical options across different activity-types in which lexicogrammatical resources are being deployed to make meaning. Differences in agnate lexicogrammatical selections within a system correspond, by construction, to distributionally distinct meaning potentials for any wordings that

realize the features they index. If there is any systematic

tendency in a community to make different kinds of meanings in the course of enacting different activity-types, then register variation is expected, provided that at least some sorts of meaning differences require corresponding wording differences, or at least are redundant with them.

If we ignore the particular activity context in which wording choices are being made, or try to average over all such contexts, then we will of course find a direct statistical relation between wordings and ... what? It is not sufficient here to just say between wordings and meanings, because outside of a specific context of meaning-production, there are no meanings in the sense of use-meanings. Outside of a text and its contexts, a wording has only a meaning potential, a formal or system-meaning. Whenever we mean, we mean in some context of limitless specificity (not all that specificity may be relevant, of course); we mean use-meanings, we construct meaning-in-context, not meaning potential; we construct texts, not systems. In fact, from an ecosocial perspective (Lemke 1993, in press), it is text-making which is the process that participates directly in both semiotic system and material system couplings with other processes, while system potentials like register are merely distributional epiphenomena.

Notions of system potential, including that of register, belong to a different order of ecosocial phenomena from text, or more precisely from text-making as a material-semiotic activity. Linguistic systems may be used to describe certain features of texts, but they more usefully describe meaning-relevant differences in wording, whose maintenance across texts makes linguistic semiosis possible. They systems do not maintain those differences; the processes/practices of the ecosocial system, including text-making, do.

Register, then, is meaning potential, specified to an activity, an ecosocial context, but it is still always potential, it is always of the order of system. Formally, it is a skewed lexicogrammar, one in which the general probability weightings for selections within each system (conjectured to have equilibrium values either close to equiprobable or skewed far from it, say to 0.1 and 0.9) have been replaced by new weightings specific to the activity context (i.e. the general, default weightings are multiplied by situation-specific factors).

Can a register be specified so far that it corresponds to a unique text? Can text be conceptualized as `most delicate register' as we can think of lexis as `most delicate grammar'? Lexis and grammar are of the same order, the order of system,

and can be unified in this way. But register and text are not,

and if we think carefully, we can see that register as a distributional potential can perhaps be specified to generate a unique clause, a unique nominal group, but once a unique selection has been made once in a system, only that same selection can be made on future re-entries to the system, unless the register is dynamic, i.e. unless it resets its probability weightings in just the right way just in time for each next pass through the network (see Lemke 1991). The lexicogrammar is not a model of text structure; it describes resources only as far as the scale of the clause-complex. It is not meant to be dynamic, which would in effect move it to the order of ecosocial processes like text-making, and if it is not dynamic, then it cannot generate text, cannot describe a unique text. Something else is needed for that.

Register of course is not intended to describe text. It describes the lexicogrammatical resources which are potentially most useful in making the meanings a particular activity context calls for. But it neither specifies wordings nor determines or describes particular texts.

When the methods of register analysis are actually applied to texts, as has been done under the name of phasal analysis by Gregory and others (1981, 1985), the results show that as we progress from clause to clause (or from one nominal or verbal group to the next) through a text, there are local regions of

micro-registerial consistency (the `phases'), and these occur on different scales, with larger phases containing smaller scale sub-phases, and so on. Selections in some systems, especially at low delicacy, may tend to constant throughout a text, but other in other systems, or in systems at greater delicacy, there will be frequent shifts. These shifts show patterns characteristic of particular textypes, with phases at some scales corresponding closely to the stages recognized in genre analysis. Texts normally show this internal heterogeneity beyond some level of delicacy in register.

Register covaries with activity context, there is redundancy between them. But their connection must be a very indirect one. The problem is that register does covary with activity context, but activity context is dynamic, while register is not. An activity-type is dynamic, or at least it specifies

syntagmatic as well as paradigmatic contingencies, and therefore it specifies organization across multiple scales. A text is the product of an activity-type, and the internal semantic heterogeneity of a text, the fact that it says different sorts of things at various points in its development, corresponds exactly to the course of enactment of an activity-type. A particular text is the outcome or product of the enactment of a particular meaning-making activity.

An activity-type is an actional semiotic formation. As such it is a sort of action text-type. It is text-like in that an enacted activity (a performance) is, like a text, the product of deploying the resources of a semiotic system, here the actional semiotic resource system. It is a type in that it is a semiotic-cultural formation, that is, a regular, repeatable and repeated, recurrent pattern of deployment of those resources. Activity-types or actional formations specify a sequence of contingent actions to be performed by and on various Participants through various Processes in various Circumstances. The enactment of these processes construes, maintains, and alters the states of various entities (actants,

Process-Participants and Circumstance-Participants), all of which are in the broadest sense Participants (i.e. actants) of the formation, including those that would be considered elements of `context'. A text can be fully described, indeed is far more than fully described, by a description of the enacted activity (activity-token, hereafter enactment or `performance', when needed to distinguish it from `activity' in the sense of activity-type) in which it was produced.

The "context" of situation relevant to the production and interpretation of a text is also a dynamic activity-token -like construct. It is dynamic not simply for external reasons, but also because the process of making the text up to any given point has itself altered the present-moment context of situa-

tion (cf. Lemke 1991). Registers cannot stand in one-to-one relation with dynamic contexts or activities in this sense, but texts can. Registers and linguistic systems belong to the order of meaning potential, what I will call the order of systems; they are synoptic abstractions from many texts, ignoring their dynamic semantic heterogeneity, describing the relatively slowly-changing background of intertextual expectations

against which we make sense of each text, context, or activity from moment to moment. These latter, I will say, belong to the complementary order of texts.

We know very well how to construe relations of meaning on the order of systems: how to compare systems themselves, registers, meaning potentials of lexical items, clauses defined by their system-feature choices. We know much less well how to compare the meanings of texts, or contexts, or activities, either as tokens or as types. When we do so by various schemes of agnation or static representation by potential as for genres (cf. Martin's agnation scheme, 1992, or Hasan's GSP in Halliday & Hasan 1989), we ignore the semantic heterogeneity of text found by Gregory's phasal analysis, a heterogeneity which is the product of the dynamic character of activity which always changes its own context by occuring.

The Order of Semiotic Formations

Ecosocial semiotics emphasizes the differences between and the

essential complementarity of theoretical constructs on the order of system (meaning-potentials, distributional statistical ensembles) and those on the order of text, or semiotic enactment. The former are systems of differences, abstracted from texts, that serve as resources for meaning-making. The latter are actually-deployed resources, meaning-making activities themselves as events or processes. The former have no material couplings and are uni-modal, the latter always have material couplings and are always multi-modal, co-deploying resources from multiple semiotic resource systems. The former are relatively slowly changing, and their change is totally dependent on the sets of texts they describe; the latter are inherently dynamic, changing moment to moment, or, more conveniently, they are temporally extended entities, defined across multiple scales. The former are few, the latter are legion.

While the system-perspective and the text-perspective on meaning-making are complementary, they do not exhaustively describe the metaredundancy relations (Lemke 1984, in press) that characterize an ecosocial system. System tells what can be done; text tells what has been done; but what tells us what is normally, typically, or usually done in a particular context? System gives us many independent sets of options, which

can in principle be combined in many ways. Text tells us how, on each occasion, they were combined. But there is more information in the metaredundancy relations which describe the meaning-making practices of a community: information about which combinations go together when. This information is represented, not by semiotic resource systems, and not by records of enactments (texts, semiotic productions), but by the cultural semiotic formations of a community.

Among these formations, the most fundamental in ecosocial semiotics are the actional formations, the activity-types of a community. All others can be derived from these (e.g. as products or consequences or participants or contexts constructed in and through them). They form a third order of semiotic construct, with some features of each of the other two. Formations are types, not tokens (systems are systems of relations among types; texts and enactments are tokens). But they are also specifying (not mere potential, they tell how-it-is-done, not what-can-be-done), multi-modal (i.e. not just language but also other semiotics play their roles), and temporally scaled (i.e. they define sequential as well as simultaneous contingencies, and even the expected pacing of events; they are quasi-dynamic representations).

What good are semiotic formations? They translate directly between the metaredundancies that describe a particular ecosocial system and the events, enactments, texts of that system.

Even metaredundancy relations are of the order of system, and the distance between system and text, between what can be and what is, is very great. It is a distance in the combinatorial space of multiplicative possibilities. The semiotic formations define the well-traveled routes in that space. As we will see later, there are good arguments that meaning-making is a sort of bricolage played with formations, rather than a direct accessing of the full system potential. The system is in a sense too big, it offers too many possiblities, requires too many choices, built as it is to characterize every kind of meaning-making.

Actual meaning-making activities are always already contextualized, always already embedded in other meaning-making activities that have preceded them. They are always elements on some scale in a larger, multi-scale organization of interactions among ecosocial processes. In these contexts, the choices are fewer, and the semiotic formations both indicate the options and how the choices are to be combined. If the semiotic activity is to design a house, not every possible kind of design is in play, not just because we select an architectural register in which not all the possibilities of the

visual semiotic of design schematics will be at risk, but because we are someone, trained somewhere, in a culture, in a period of history, hired by someone with certain needs, resources, expectations, sharing notions of what a `house'

should be, and with a set of design procedures and models at hand.

In the case of linguistic system and text, why is register not enough to do this job? As we have seen, mainly because it is still purely system, purely potential. Registers both say too little and too much. They say too little in that that they allow for many different texts, must allow for many different texts because they are potential. They allow for all the combinations of all their options, but not all those combinations, the metaredundancy description tells us, can be equally likely in a real community. They also say too little because they are synoptic, because they specify only simultaneous contingencies, not sequential ones; or if interpreted sequentially, they (under-)specify the same contingencies for every phase of the text.

Something else is needed to enable linguistic text analysis to

take into account the actual ways in which a particular community deploys its linguistic resources, and the differences between how different communities do so. Something else is need to specify which combinations of experiential, interpersonal, and textual resources will combine to make a text of a recognizable type, and why. Something else is needed to map out the sequential phases or stages of texts on various scales, including the changes in register potential in each phase.

I will call this something an intertextual, or more simply a textual formation. Its semantic character arises from an inquiry into the meaning relations that are contrued in a community between texts. This text semantics differs from our more usual lexicogrammatical semantics precisely in that it looks at text-text meaning relations rather than system-system ones; i.e. it operates closer to the order of texts than to the order of systems, closer to the necessary semantic heterogeneity of extended instances than to the idealized semantic homogeneity of meaning potentials. Textual formations are composed of semantic relations at the order of systems, just as texts are composed with the resources of lexicogram-

matical meaning potential.

Semantics and Intertextuality: System-System vs Text-Text Relations

Originally, semantics was mainly lexical semantics. It concerned itself with the meanings of words, and later with the kinds of meaning relations that we can construe between words, or between the abstract `semantemes' that are the proper formal arguments in lexical semantic relations. Hasan's work on cohesion (see Halliday & Hasan 1976) has revived interest in lexical semantics, showing how lexical semantic relations are

the basis for the construal of chains of thematic meaning through a text, and part of the basis for the textural organization of text.

It is important to see that lexical semantic relations are not relations between words as such (which are morphological, not semantic units), and neither are they relations between the meanings of the words, if by their meanings we imply fixed and invariable meanings. Only use-meanings, fully contextualized

meanings, are definite meaning tokens. A word, as a form, has rather, a meaning potential. In Hasan's (1985, 1987) work on lexis as most delicate grammar, she shows how lexical items function as realizations of system potential. Like all potential, they may be made to serve a wide range of meaning purposes when welded into a text-in-context. The lexical semantic relations, such as synonymy, antonymy, hyponymy, meronymy, and the like are also relations between the meaning potentials of lexical items. Two items may often be used as antonyms, but in a particular text they need not be, their semantic opposition can be neutralized. Two items whose meaning potentials are close synonyms can, in textual context, be distinguished and used to word a much greater difference in meaning.

Semantic relations are relations between meaning potentials, not just in the case of lexical items, but generally. They belong to the order of system. This is equally true of the

semantic relations between grammatical functions, such as the relation between Agent and Material Process, and of the relations between feature selections within a system (as between, say, Affirmative and Interrogative).

In the most fully developed model of semantics in systemic theory, Hasan's semantic networks (1989b, in press) for interpersonal meaning potential, one begins with the entry condition that there be a Message, and then proceeds to specification of the interpersonal meaning potential of a Message at greater degrees of delicacy, starting from divisions between Message as Demand or Offer and Message concerning Information or Goods&Services. The possible cross combinations result essentially in the recognizable categories of Question, Statement, Command/Request, and Offer, and their diverse subspecies. The realization forms for selection expressions in semantic networks are pre-selections or specifications `from above' of choices in lexicogrammatical networks. In making these networks, working from a corpus of instances, Hasan seems to be using the reasonable strategy of refining semantic options in delicacy toward the point where a semantic difference corresponds to a possible lexicogrammatical difference.

Semantic relations, as we see, are relations between meaning potentials. They can be construed between the meaning poten-

tials of lexical items, lexicogrammatical network options or selection expressions, and semantic network features.

What can we mean then by the semantic relations between two texts? Remembering that text here means fully contextualized meaning-text, not the abstract lexical-item-string notion of text, so we do not have a `meaning potential' any more. We are not speaking now of a text that can still have multiple interpretations, but of an actually interpreted text. There are no semantic relations in the traditional sense of systemic semantics between meaning-texts regarded as unitary constructs. But surely there are meaning-relations between texts? and surely these can be described in terms of semantic features of those texts?

In what sense do we construe meaning relations between texts? In the sense that our community determines that some texts `go with' other texts in various ways. We may say that two texts are `similar' or `of the same type', indicating that we have practices for classifying and categorizing texts. We may say that two texts go together in the sense that they form the parts of a whole, even if they are in many respects very different. We may say that one text is a relevant context for the interpretation of another, again, even if the texts differ in many ways. We may say that two texts are `about the same thing' or that they `express similar viewpoints'. We may also

say that the texts `look at the same thing in different ways'. All these social practices construct relations between texts and make meanings through these `ties' between the texts that go beyond the meanings made with individual, isolated, single texts.

The ties which are construed between texts at the same time construe patterns in the texts which are then counted as abstract features of the texts. If two texts are construed as being, say, `of the same genre', then in each text the genre-pattern is being construed, and the texts are said to `have' the features which define this pattern. What kinds of patterns do we construe in texts on the basis of which we construct intertextual relations between them? It is these patterns that will begin to exemplify what I mean by textual formations.

I have previously suggested a number of these kinds of patterns (e.g. Lemke 1983, 1988a, 1988b, 1990a, 1992, 1994), and more become apparent as research in this area proceeds. Each pattern is a pattern of semantic features construed in the text. Elements and relations within the patterns belong to the order of system. Isolated from the patterns, and more generally from the texts and contexts in which they occur, these elements and relations have meaning potential. But when they are

arrayed in a particular pattern, and that pattern further particularized by its textual and extratextual contexts we move

to the order of semiotic formations, insofar as the same pattern is recognized in different texts, and to text meaning itself insofar as a pattern may be `instantial', i.e. may be used to construct a meaning unique to its text and context (the order of text or performance).

These patterns are simply of a different order, an order intermediate between system potential and textual deployment of that potential. They are like systems OF made texts rather than systems FOR making texts. But they are not Systems in the sense of systemic linguistics, for they are not purely paradigmatic, nor do they fundamentally act to classify texts. They act to construe patterns in texts, which can then be indirectly classified by saying that they do or do not exhibit the pattern. There is no agnation of these patterns, no minimal contrast pairs.

The reason why there is no simple agnation between semiotic formations is that they are not homogeneous in the features

that define them. They are not defined by single features which are consistent throughout, but by complex patternings of features, including sequential as well as simultaneous patternings, in which feature values change or modulate as part of the pattern.

Our culture construes relations between texts other than ones based purely on semantic consistency. We can and do construct intertextual relations between texts of different registers. The classes of texts which are defined by the metalinguistic text-tie construing practices of a community (its system of intertextuality) cannot in general be entirely accounted for by notions of register for two fundamental reasons:

(1) the semiotic, social, cultural principles of intertextuality are not exclusively based on semantic consistency

(2) they are based, in part, on meaning connections WITHIN texts of a given type (discourse coherence strategies) that cannot be described by register alone because they are defined in terms of features which require too delicate a level of

register description to be able to encompass their global ties between different such micro-registers (phases) within a text.

What kinds of intertextual relations and corresponding patterns does our community construe? There are the patterns I have called thematic formations, which consist of (mostly) ideational semantic relations among elements which, in the order of system, would be semantemes corresponding to small sets of near-synonymous lexical items, but here, in the order of formations, have definite thematic meanings, defined, not by their lexical or semantic paradigms (though of course con-

sistent with these), but by the particular thematic formation pattern in which they occur. Contextualization toward definite, fully contextualized text- or use- meaning has proceeded part-way, insofar as these lexical items' meaning potential has been greatly specified already by the rest of the thematic pattern. Texts in which the community construes the same thematic pattern, co-thematic texts, are frequently said to be `about the same thing' and to be considered `relevant to one another's interpretation'. Expository discourse is largely built by weaving thematic formations togeth-

er to produce new, text-specific meanings (see Lemke 1983, 1985, 1988a, 1990b, 1994).

Our community also construes what we have been calling genre formation patterns in texts, defining sets of co-generic texts. These are considered to be `texts of the same kind' rather than texts `about the same thing' and are considered to be relevant to one another's interpretation only in a very general way.

These are the two primary bases for saying that two texts are similar, but two texts need not be similar to be conventionally relevant to each others' interpretation, i.e. to be intertexts for one another. They may also be texts that are considered to form two parts of the same whole, or two texts that show different but related (including opposite) `viewpoints'.

The most general case of the former relation is that the two texts are produced or are `used' as part of the same activity-type. These are then co-actional texts. If one thinks of complex activities such as trials (or legal cases though all the stages of their proceedings), and all the kinds of spoken texts and documents (not to mention constructions involving

non-language semiotic systems), of many genres, many registers, many thematic formations, one sees how actional formations make meaning by tying such diverse texts together intertextually (see Lemke 1985, Bazerman 1994).

Finally there are texts whose relation to each other is that they present opposed or complementary viewpoints. The texts of Right and Left on political issues, of various religions on theology and morals, of different viewpoints in a scientific debate, different sides in a litigation, or just the kinds of texts that index Us vs. Them. The patterns construed in these texts (in this case, as often in the previous one, different patterns in the related texts) we can call heteroglossic formations, corresponding to Bakhtin's seminal notion of the different `social voices of heteroglossia' to be heard in each (cf. Lemke 1988a; Thibault 1991).

All the same kinds of relations that can be construed between two texts also can be and frequently are construed between two parts of what is considered one and the same text. This is be-

cause intertextual relations are construed on the basis not of

whole texts in their entirety, but of particular patterns of features (semiotic formations), which may be instantiated in a part of a text as well as by a text as a whole. We could as well call these patterns textual formations as intertextual formations.

There are (inter-)textual formations of many kinds. They are tools for meaning-making every bit as much as are semiotic resource systems like lexicogrammar or semantics. Their metafunctional components reinforce one another just as do those of resources at the order of system. They cannot be reduced to those resources (though they cannot be described without, in part, using those resources to do so). Textual meaning-making cannot be understood, cannot be accounted for, without analysis in terms of (inter-)textual formations as well as constructs at the order of system such as register.

Textual Formations

How do we use textual formations as resources for meaning-making? How do we use them in ways that are different from the ways that we use systems of linguistic meaning-potential? What kinds of textual formations are in use in our community and how do they help us to create meaning within single texts and by construing relations among multiple texts?

Textual formations are a different order of resource for meaning-making than are the systems of meaning-potential which make them possible, and accordingly we deploy them differently. Recently Threadgold and Kress (1988, 1989), have argued for a generalization of the notion of genre to what they call `intertextual resources'. Not only do they point out, as I have here, that earlier models of genre have tended to emphasize constituency organization over other modes of textual organization, and that we need to pay more attention to the Orientational meaning strategies of genres than we have so far, but they note that such notions as `discourse types' and `cultural narratives', which may not be the same as genres, seem to play similar functions. Martin has seen this claim as offering a model that is in direct competition with system-based, register-like theories of text analysis, rather than, as I would see it, a necessary complement to them.

Consider the `cultural narrative' construct. The original idea here, a literary one, is that there are in every culture particular stories that have been given central roles in the culture's textual definition of itself. They are part of the community's processes of collective identity construction. They may be myths or legends, they may be idealized historical accounts. The stories of the central events of the life of

Christ, or of Buddha, as constructed long after by communities

of their followers are cultural narratives in this sense. National stories, like American stories about the Revolution and the making of the Constitution, or the First Thanksgiving story (Pilgrims and Indians), or the Mayflower Compact story, would also qualify. There are also more generic stories. In (hegemonic) American culture, there are the Frontier story-types: Wagon-train and settler stories, Indian massacre stories, Gunfighter-Sheriff stories, even Rancher-Herder stories. Note that what are meant here are the plots typical of such stories, and not their genre forms as such. There are, finally, the less `officially' canonical stories, about important kinds of events in people's lives that are often recapitulated and form a sort of ideal: the Falling-in-Love-and-Getting-Married story, the My-Child-Says-Its-First-Word story, etc. And these perhaps shade into the narrative forms in which we describe the consciously known recipes for activity-type performances.

At one end of this continuum are highly specific stories, at the other, genres of stories in which only the details change, but most of the plot is predictable. Clearly there is no

`agnation' among stories. What is a story that is minimally different from The Crucifixion? one is which Chist is rescued at the end instead of dying? one in which the Jews, not the Romans, try and execute him? one in which the cross is made from pine rather than cedar? one which is told from Pilate's

viewpoint? But how easy it is to invoke this story with a word, with a pattern of events, with a reference to historical enmities. How much is missed by readers who may not know it. How much meaning is made intertextually between this story and other stories, between this text and texts of many registers and genres. How important this meaning-making has been to the social semiotic of many communities.

But clearly it is a story, not necessarily a text as such, that matters here. That is, there are many tellings of essentially the same culturally salient stories, many texts that render them in ways that still count culturally as being `the same story'. That story is a specific meaning pattern construed by the community in all those texts; it is a textual formation (or, in relation to the reading, or telling, practices that construe it, a product of an actional formation).

The intertextual meaning-making practices that depend on (i.e. build meaning in part by construing) this sort of textual formation are many. To the meaning of how many texts, in how many different ways, would the members of various communities consider the story of The Crucifixion relevant?

The notion of cultural narrative as textual formation is only one example. I have discussed thematic formations and their roles in intertextual, and intra-textual, meaning-making in many places (see references above). They, too, cannot be fit

into agnation schemes; they are not meaning-potentials, they do not have purely paradigmatic relations to one another; they are more than the sum of the parts they are made from, which, ultimately, do have such relations.

We can gain further insight into the special qualities of textual formations by taking genre patterns to be such formations and then reconsidering the relation of genre to register once again.

Multi-Scale Formations, Register, and Phase

Genre, and the other sorts of textual formations, have two essential relations to Register, and to system potential generally. First, Genre describes which simultaneous combinations of Fields, Tenors, and Modes are most probable under the conditions in which the Genre itself is appropriate (or in the full actional model, the conditions which the activity-type underlying the genre, itself defines or redounds with). Second, Genre describes the sequential progressions of shifts or changes in meaning patterns throughout the unfolding of a text of that genre. Genre determines Register in this sense across scales.

In the simplest sense this means that a text formation may specify both the large-scale shifts in register from say one sequential element or Stage of a genre in a text to another

(e.g. Orientation to Initiation to Complication to Resolution, etc.) and the smaller scale shifts within these (as from specification of time, to place, to persons within Orientation in a folktale or nursery story), across many scales from the morphophonology of names and sobriquets to the consistency of narrative tense throughout the text.

The notion that textual formations describe semantic patterns on many scales simultaneously is extremely important. It is a feature they inherit in the theory from actional semiotic formations and ultimately from ecosocial processes generally (see Lemke 1993, in press). Ecosocial systems, regarded synoptically, couple processes on the same, but also on different scales of time, space, and all other parameters. In doing so, they actually create, or generate, their own relevant spatial, temporal, and parameter scales, usually across a hierarchy spanning orders of magnitude in their values. Ecosocial systems are mosaic entities, consisting of `patches' on different scales which have their own histories and characteristics. Texts, and textual formations, are also mosaics on many scales. They are heterogeneous on these scales, with their local patch-specific semantic patterns shifting from patch to patch at each scale. The phasal structure of texts found by Gregory is a general feature of semiotic formations as well. A textual formation specifies patternings on many scales; it is a patterning-across-scales, a multi-scale pattern.

This view can help us solve two important problems in the theory of register, genre, and text. In the first place, we

know that some activity-type features which are realized through language, have, at least in some cases, realization principles or strategies other than specific semantic feature selections or feature selection probabilities. For example Poynton, as cited by Martin (1991), has formulated realization principles for Tenor feature selections that include Reciprocity (for the feature [Status:Equal]), Proliferation and Contraction [Contact:Involved], and Amplification [Affect:Intense]. These are not simple consistent weightings for probabilities of lexicogrammatical selections. Rather, they may operate on different scales, and may in fact imply quite different actual selections or weightings, or relations between weightings, for different units on different scales, and in different lexicogrammatical systems.

It is a fundamental consequence of the difference between Genre as an construct on the order of formations, and Register as a construct on the order of systems, that `realization relations' between them must have this complex multi-scale character. Certainly such `realization principles' will not simply assign features (i.e. do `pre-selection') for constituency units on a single scale, but will have to do so across multiple scales, in general. Moreover, they will also

have to assign features whose distribution patterning in the texts of the genre do not follow constituency principles at all, but prosodic-like contour principles, or periodicity principles.

A second issue, closely related to that of understanding the origin and nature of these complex multi-scale `realization principles'
is that of Genre's determination of semantic development (sequential progression of semantic patterning) within a text. At each scale of the text there are newly re-available selection options in systems in which prior selections have already been made (the next stage or phase, the next clause, the next group, the next word, etc.). Probabilities for next-selections depend empirically on prior selections as well as on other context-features. Or we may say that the prior selection has slightly altered the context, refined it.

A model in which Genres are multi-scale textual formations helps us resolve the apparent contradiction which arises here in that a context feature, say, A, which has selected for x rather than y on the prior choice, setting the feature to [A:x], now selects in the next round for y! How can a refinement of the x-preferring A prefer y? This obviously happens in the very simple case of turn-alternation in any dialogue genre. The problem arises from not having Genre set features

at more than one scale simultaneously. Imagine that what A actually redounds with is, then, not a feature which selects the next speaker, but with the pattern of alternation between x and y itself (cf. Poynton's more complex Reciprocity principle). Now A has realizations both on the scale of the unit where there is an x vs y choice (only one possible per unit, e.g. one speaker per turn unit) and on the global text-scale (or at least at one scale larger than that unit, for example, a turn-pair Exchange unit).

Textual Formations and Bricolage

We know that it is possible to make very interesting analyses of textual meaning using the concepts of Register theory and the systemic meaning-potential approach (e.g. Gregory 1978, 1982; Halliday 1977, 1982; Martin 1986). One can even take the position that text is the direct actualization of system meaning potential, provided, as we have seen, that you do not foreground the kinds of cultural meaning-patterns I have been calling (inter-)textual formations. Is it possible, reciprocally, to build a theory of text based entirely on the formational perspective?

Alton Becker (1992) has recently been developing a theory of text-meaning based on his studies of the problems of translating ancient, sacred texts (Javanese) into modern languages

(English, Bahasa). In this and other culture-and-language work, Becker has come to the position that text-making is a sort of bricolage with language `units' on different scales, or at least this is my interpretation of his position. He believes that the way in which we actually make textual meaning is primarily intertextually: that we borrow language associated with meanings we wish to make from other places where it has made a similar meaning, or where we wish for other reasons to be borrowing from. The position has a lot in common with Bakhtin's notion of making the language of the Other our own, though Becker's non-Western cultural context suggests that people also borrow the language of the Other and leave it, intentionally, as Other.

Bricolage, a term popularized by Levi-Strauss (1966), refers to a sort of improvisational practice in which we see what is available in our tool-kit, our bag-of-tricks, and turn it to whatever is the task at hand. For Levi-Strauss, the tool-kits

are relatively fixed features of the culture; for Becker, they can be added to by selective borrowings. But the notion of improvisation is the significant one here. Do we not do bricolage with the textual formations in our bag of meaning-making tools? with genres, stories, discourses and social voices, thematics? I believe that Becker carries the improvisational model a little further than I would, because he is skeptical of the power of semiotic formations to constrain

actional improvisation. He focuses on the uniquenesses, the differences; I look more at the commonalities. Both are important, and certainly systemic meaning-potential models (or the metaredundancy model) seem less constraining than do formational models. There needs to be a balance, especially in an dynamic theory where change is natural and inevitable.

We improvise within textual (and more generally actional semiotic) formations. We also improvise with these formations. And, collectively, we improvise on these formations, changing them. But we do more. We improvise against formations, and we improvise outside formations. I believe that relatively little improvisation is of the last of these kinds; Becker perhaps

sees it looming larger.

Textual formations, as much as lexicogrammatical and semantic systems, are resources for meaning-making. They are tools. And like the tools of the bricoleur, they may be turned to many purposes, not merely the ones that historically or normatively they are tools for. Bakhtin (1986) has pointed this out for language forms in general, and for speech genres in particular. Speakers appropriate forms, making what begins as an Other's wording serve our own purposes. This is especially true of modern, or perhaps we should say post-modern, ways with words.

We improvise with genres, colliding them with each other like so many subatomic particles to see what the debris of their collisions can tell us about the inner workings of language and culture. If we do not consciously do so in our writing, then we can always learn how to do so in our reading of any text, reading it not only against its primary genre, but, following Bakhtin, sniffing out where it may invite us to read it with the help of genres that stand in significant heteroglossic relations to elements we can construe, with their help,

within it. No word, no idiom, no stylistic convention, no feature or fragment of a textual formation must be construed within a text solely from the perspective of one single genre. We use all the textual formations we please to make meaning with texts, not merely the genre in which the text seems originally to have been produced. Is this perverse? is it naughty? does it make meanings the author did not?

So what if it does? is it not the nature of meaning-making to make meanings, rather than find them self-presented by a given reality? Meanings from texts are no more self-presenting than meanings from other enitities in the ecosocial system. And once we begin to use textual formations to multiply meanings (cf. Lemke, in press) as we read or write, and not merely to constrain them, we begin to make use of their full power. Who knows where this can lead? It certainly cannot be contained within the safe limits of meaning-making that support the so-

cial status quo. Because it accepts the risks of chaos, it can subvert ruling ideologies that make rulers as well as meaning-making safe.

In an ecosocial semiotics, the very processes of using formations lead them to change. This is a large subject I will not develop further here (see Lemke 1993, in press). But it is important to see that a focus on text rather than on system can go much further even than the formational half-way house I have been building here. In is in the order of text that the processes of change are at work. Insofar as we focus on the unique meanings in texts, rather than on their commonalities with other meanings, we are led away from the reassuring stability of system toward the unpredictable chaos of happenings. But at the same time we are also led away from the rule-governed order of the rulers and the ruled, toward the semogenetic improvisation of the players and their play.

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