

Valdés, Guadalupe (1996) *Con Respecto: Bridging the Distance between Culturally Diverse Families and Schools; an Ethnographic Portrait*, New York.

Voegelin, Carl F. (1974) "Casual and noncasual utterances within unified structure", in: *Language, Culture and Society*, Blount, B., ed., Cambridge, MA, 178–188.

Watson-Gegeo, Karen A./Boggs, Stephen T. (1977) "From verbal play to talk story: the role of routines in speech events among Hawaiian children", in: *Child Discourse*, Ervin-Tripp, S./Mitchell-Kernan, C., eds., New York, 67–90.

Whorf, Benjamin L. (1940) "Science and linguistics", in: *Technological Review* 42, 229–231; 247–248.

Wodak-Engel, Ruth (1984) "Determination of guilt: discourse in the courtroom", in: *Language and Power*, Kramarac, C./Schulz, M./O'Barr, M., eds., Beverly Hills, CA, 89–100.

Yankah, Kwesi (1995) *Speaking for the Chief: Okyeame and the Politics of Akan Royal Oratory*, Bloomington, IN.

Zentella, Ana Celia (1997) *Growing up Bilingual: Puerto Rican Children in New York*, Oxford.

Muriel Saville-Troike, Tucson, AZ (U.S.A.)

12. Functional Sociolinguistics/Funktionale Soziolinguistik

1. Orientation
2. Uses of language (register & genre)
3. Users of language (semantic variation)
4. Future directions
5. Literature (selected)

1. Orientation

Functional linguistics is concerned with explaining language in relation to how it is used – an explanation which ultimately depends on the development of a model of language in tandem with a model of social context so that one informs the other in relation to this enterprise. It is probably most appropriate to use the term *functional sociolinguistics* for research in which a functional model of language is strongly implicated in the design of a model of the social. For this entry we will concentrate on one model of this kind, systemic functional linguistics (hereafter SFL) as developed around the thinking of M A K Halliday over the past 50 years.

This functional model has been used to study social variation according to both the uses and users of language (Halliday et al. 1964). In section 2 below we focus on uses of language, as explored through the development of register and genre theory. In section 3, we focus on users from the perspective of semantic variation and coding orientation. The strength of SFL in relation to both these bodies of work derives from its orientation

to meaning in discourse, for which it has developed a extensive range of analytical tools – for handling intonation (e.g. Halliday 1967, & check for Greaves & Halliday ref?), grammar (e.g. Halliday 1994, Matthiessen 1995) and discourse semantics (e.g. Halliday & Hasan 1976, Martin 1992, Halliday & Matthiessen 1999). Recently the model has been heavily involved in multimodal discourse analysis, further expanding its resources (e.g. Kress & van Leeuwen 1996, O'Toole 1994 on images, van Leeuwen 1999 on sound and music, Martinec 1998 on action; Martin and Rose, 2003).

2. Uses of language (register & genre)

SFL interest in uses of language stems from J R Firth's concern with context of situation as a level of analysis and his reservations about describing language itself in terms that generalise across contexts of use (Firth 1957). Mitchell's classic Firthian account of the language of the Moroccan marketplace (1957) laid the ground for later work by various scholars. The most influential models were those of Halliday et al. (1964), Gregory (1967) and Ure & Ellis (1977). A range of terminology is outlined in Table 1, including subsequent accounts by Halliday and Fawcett.

Of these models Halliday's 1978 framework has been the most widely deployed.

Tab. 12.1: Some alternative SFL models of context

Halliday et al 1964	Gregory 1967	Ure & Ellis 1977	Halliday 1978	Fawcett 1980
field	field	field	field	subject matter
mode	mode	mode	mode	channel
style	personal tenor	formality	tenor	relationship purpose
	functional tenor	role		pragmatic purpose

The term tenor is taken over from Gregory in place of style and three variables are preferred to four (cf. Gregory 1995, Gregory & Carroll 1978). Halliday characterises field, tenor and mode as follows:

FIELD– the social action: ‘what is actually taking place’

refers to what is happening, to the nature of the social action that is taking place: what is it that the participants are engaged in, in which the language figures as some essential component;

TENOR– the role structure: ‘who is taking part’ refers to who is taking part, to the nature of the participants, their statuses and roles: what kinds of role relationship obtain among the participants, including permanent and temporary relationships of one kind or another, both the types of speech role that they are taking on in the dialogue and the whole cluster of socially significant relationships in which they are involved;

MODE– the symbolic organisation: ‘what role language is playing’

refers to what part language is playing, what is it that the participants are expecting the language to do for them in the situation: the symbolic organisation of the text, the status that it has, and its function in the context, including the channel (is it spoken or written or some combination of the two?) and also the rhetorical mode, what is being achieved by the text in terms of such categories as persuasive, expository, didactic, and the like. [Halliday & Hasan 1985a: 12]

Although developed independently of work on the internal organisation of language, the main attraction of the field, tenor and mode model has been the way in which it meshes with the functional organisation of resources for construing meaning in language. These functional regions are referred to by Halliday as metafunctions, comprising ideational, interpersonal and textual resources. Ideational resources naturalise our linguistic perception of processes and the participants that engage in them (Halliday & Matthiessen 1999); interpersonal resources negotiate our social relations (Eggins & Slade 1997); and textual resources package information in ways that make it coherent and relevant (Martin 1992). Research across languages (Caffarel et al. in press) and modalities (e.g. Kress & van Leeuwen 1996) has strongly confirmed the generality of metafunctions as a resource for mapping meaning. A gloss on the functionality of organisation of this kind is outlined in Table 12.2.

By the late 60s it had become obvious that this intrinsic functionality could be mapped onto contextual variables, with ideational meaning implicating field, interpersonal meaning tenor and textual meaning mode (Halliday 1974). These proportions are outlined in Fig. 12.1, with the smaller circle representing language, and the larger circle representing social context as realised through language – and both levels organised by metafunction. In SFL models of this kind, the intrinsic functional organisation of language thus motivates the organisation of social context, which in turn explains the shape of language in relation to the generalised social functions it serves (Martin 1991).

Inspired by Halliday’s 1978 conception of language as a social semiotic, researchers have investigated field, mode and tenor variables in relation to their realisation in language. Some of the best developed work on field is on the discourse of science (Halli-

Tab. 12.2: Generalised regions of meaning and their function

METAFUNCTION	‘reality construed’	‘perspective’
IDEATIONAL (logical, experiential)	naturalised reality	(observer)
INTERPERSONAL	social reality	(intruder)
TEXTUAL	semiotic reality	(relevance)

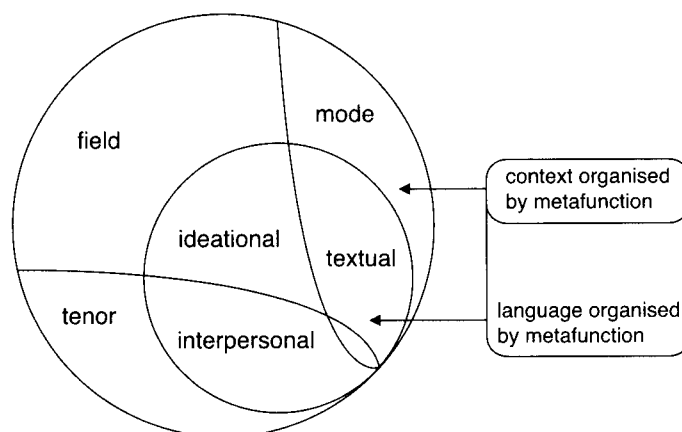


Fig. 12.1: Association of metafunctions with context

day & Martin 1993, Martin & Veel 1998), and has explored some of Martin's (1992) suggestions about mapping field as a set of activity sequences oriented to some global institution's purpose alongside focussing on the taxonomies of participants engaged in these activities. A number of other fields in the workplace and school are explored from this perspective in Christie & Martin (1997). For mode, differences between spoken and written language have been a central focus (Halliday 1985). In this work Halliday's notion of grammatical metaphor as a resource for texturing information flow has been critical (Halliday & Matthiessen 1999, Martin 1993). For tenor, Poynton's (1985) perspectives on power, solidarity and affect have inspired important work on intersubjective relations in casual conversation (Egins & Slade 1997). More recently affect has been elaborated as a resource for exploring solidarity (e.g. Martin 2000 on appraisal). A useful introduction to the research methodology deployed in these and related studies is provided in Unsworth (2000); Ghadessy (1993, 1999) provide useful collections of papers, including important theory focussed articles by Halliday, Hasan, Martin and Matthiessen.

The main elaboration of the model outlined in Fig. 1 has to do with the interpretation of genre in Australian research undertaken by Martin and his colleagues (e.g. Martin 1985, 1992, Ventola 1987, Christie & Martin 1997) – work best known through its application in genre-based literacy programs (Christie 1999, Cope & Kalantzis 1993, Hasan & Williams 1996). As reviewed in Martin (1999) this work attended to the

fourth contextual variable in Table 12.1. (functional tenor, role, pragmatic purpose), which was difficult to associate with any one metafunction and so has tended to be elided from models mapping intrinsic functionality onto context. Martin's suggestion was to add a level of genre to the model, realised through recurrent configurations of field, mode and tenor selections – realised in turn through ideational, textual and interpersonal meanings. This extended model is outlined in Fig. 12.2, which uses register as the name of the level of context comprising field, tenor and mode.

Lemke's (e.g. 1995) work on metaredundancy usefully captures the nature of the realisation relationship between levels – with register accounting for patterns of linguistic patterns, and genre dealing with patterns of register patterns (of linguistic patterns). Theoretically speaking then, genre in a model of this kind is a high level configuration of meanings responsible for describing the ways in which a culture goes about combining field, mode and tenor and phasing them together in discourse. As a working definition, for literacy programs in schools, genres were characterised as staged goal-oriented social processes – (i) staged because it usually takes us more than one phase of meaning to work through a genre, (ii) goal-oriented because unfolding phases are designed to accomplish something and we feel a sense of frustration or incompleteness if we're stopped and (iii) social because we undertake genres interactively with others.

Ventola (1987) applies this model to service encounters in Australia. Egins & Slade

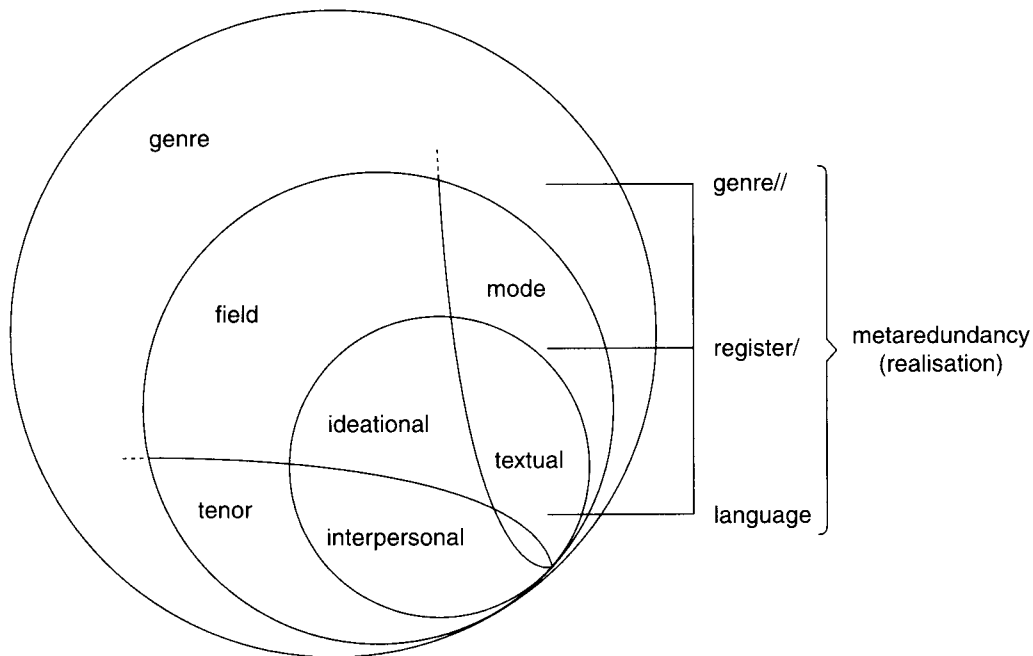


Abb. 12.2: Language in relation to register and genre

(1997) deal with gossip and narrative in casual conversation. Christie & Martin (1999) include applications of the model to classroom interaction, to school science, history and English, and to science industry, administration and the media. For alternative perspectives on genre in relation to field, tenor and mode as outlined in Fig. 1, see Hasan (1995, 1996, 1999), Leckie-Tarry (1995); for work on genre in related paradigms, see Hyland (2002).

3. Users of language (semantic variation)

Variation between users of language has largely been addressed in terms of relations between the social positioning of users and their linguistic interactions in relation to discourses in powerful institutional sites. Over the last four decades SFL has engaged in dialogue with theories of social transmission, reproduction and change, particularly Bernstein's coding orientation theory. Additionally, recent work has explored linguistic problems brought into focus by his model of the pedagogic device (Bernstein 1990, 1996) and his recent description of knowledge structures and their disciplinary distributions (1996, 1999, 2001).

The theoretical principles on which a metadialogue of this kind can be carried out are outlined in Hasan (1999). She distinguishes endotropic theories, those which 'are centred onto their own object of study, isolating it from everything else', from exotropic theories.

By contrast, an exotropic theory is not confined within the bounds of its object of study. Rather, it is cosmoramic, typically embedding its central problematic in a context where the processes of its maintenance and exchange originate in its interaction with other universes of experience. ... the gaze of the exotropic theory is relational: its problematic is at the centre of different kinds of processes, and there thus exists a greater chance for reciprocal engagement amongst them (Hasan, 1999:13)

The gaze of SFL is designed to be relational in this sense, since it is a theory of language as social semiotic, and in work on semantic variation the particular problematic is relations between social structure, its structuring effects on the habitual ways of meaning of users and 'official' discourses. Bernstein comments:

What we are asking here is how the distribution of power and the principles of control are transformed, at the level of the subject, into different, invidiously related, organising principles, in such a way as both to position subjects and to create the

possibility of changes in such positioning. The broad answer given this thesis is that class relations generate, distribute, reproduce, and legitimate distinctive forms of communication, which transmit dominant and dominated codes, and that subjects are differentially positioned by these codes in the process of acquiring them.

The linguistic problem has been to find ways of describing language use in everyday contexts which would enable linguists to test Bernstein's claims. His own initial predictions of the distinguishing linguistic features of different coding orientations proved not to be valid (for discussion, see especially Bernstein 1990: chapter 3) and they were withdrawn. This principled move led, perhaps inevitably, to widespread dismissal of the coding orientation hypothesis rather than re-exploration of the specific linguistic problems. However, the challenge was taken up by Hasan in work at Macquarie University in the early 1980s (for discussion of Hasan's move, see Bernstein, 1990:5; 1996). Hasan's research extended a proposal by Halliday (1973) to describe meanings available to speakers in contexts by writing semantic networks up to a reasonable degree of delicacy. (There was, of course, no suggestion that meanings could be *exhaustively* described.) Such networks are maps of relations between semantic features of systems from which a speaker can utilize in constructing meaning in contexts.

The research environment into which Halliday made this proposal was Bernstein's early work on maternal control situations such as 'threat' and 'punishment'. From a linguistic perspective the problem was to model the options which could be used by mothers to control young children's behaviour, and their linguistic realizations. The model had to describe two aspects of the meaning potential: the range of semantic options exhaustively up to a specified degree of delicacy; and the linguistic systems through which constraints on the choice of features could be realized. To illustrate through a small fragment of the descriptive framework, Halliday proposed a system comprising either **[threat]** or **[warning]**, with each feature expanded through further subsystems. For **[threat]** the dependent system comprised either **[physical punishment]** or **[mental punishment]** or **[restraint on behaviour]**. The linguistic encoding of these features was stated precisely in terms of lexicogrammatical realizations: for **[physical**

punishment] the realization statement was [clause; action; voluntary (*do* type); effective (two-participant): Goal = *you*; future tense; positive; verb from Roget #972 (or 972 and 276).

Halliday claimed for this network only that the options and relations between them were specific to the situation-type. Thus:

The behaviour options are specific to the given social context, which determines their meaning; for example, 'threat' in a motherchild control context has a different significance from 'threat' in another social context, such as the operation of a gang. This may affect its realization in language (1973:79).

Hasan's extension involved two significant theoretical moves: to describe semantic networks metafunctionally, and to increase the range of situation-types able to be explored. The metafunctional development enabled an extensive range of meanings to be described, which in turn meant that variation in coding orientation could be explored in terms of *relations between* quite large sets of semantic features. For example, people talking with their children in everyday contexts ask questions. But do they habitually ask the same kinds of questions? Does the distribution of question-types asked by children relate to the distribution of types asked by their parents? Does selection of modality features covary with question-type? Do parents usually address the point of questions raised by children? Do they do so typically in short utterances, or through longer ones?

If the response are longer, what logical relations between units such as clause are typically selected by speakers? Do selections of these features relate to social positioning of speakers? To explore these relations statistically Hasan and her colleagues used principal components analyses of variation. For discussion of the statistical technique and an example of its use in research on gender differences in talk between mothers and 3.5 year-old children, see Cloran (1989).

Extension of the descriptive range of semantic networks involved three key claims:

- i. relationships between claims are always in practice a matter of relative similarity/difference. Networks are written to be sufficiently context-dependent to describe the range of semantic options within the specific situation-types in a corpus;
- ii. extensions of the description are likely to presuppose the systems in these networks;

iii. more specific situation-type descriptions might be developed as a partial abstraction from these networks (Hasan, 1989:62).

To illustrate, Figure 3 presents a fragment of the network for describing demands for information used in empirical work by Hasan (1989), Hasan and Cloran (1990) and Williams (1999, 2001). The entry condition to each of the metafunctionally organised systems is the unit *message*, glossed by Hasan as ‘the smallest semantic unit that is capable of realizing an element in the structure of texts’ (Hasan 1995a). Messages are typically realized by *clause* in lexicogrammar. As with the earlier Halliday proposal, a lexicogrammatical realization statement is given for each semantic feature posited. For example, realization of the feature [demand information] in Figure 12.3. is given as [major clause: indicative: interrogative: nonpolar: wh/ conflated with Adjunct and Circumstance of cause why ΔFΔSΔP]

The outcomes of research using this descriptive framework indicate systematic variation in the coding orientation of speakers in contrasted social positions in the Sydney metropolitan area, broadly as predicted by Bernstein’s coding orientation theory. Hasan and her colleagues recorded 100 hours of casual conversation between mothers and their 3.5 year-old children in contrasted social locations and compared it with teachers’ talk with Kindergarten children in the first few month of formal schooling. Participants’ social locations were described in terms of *the relative autonomy of an agent to exercise power in the workplace* rather than the more commonly used criteria of socio-economic status, education levels or gross family income. These factors may, of course, well be related to social class differences but they were regarded as too indirect an indicator of social positioning for exploration of the potential for semantic variation.

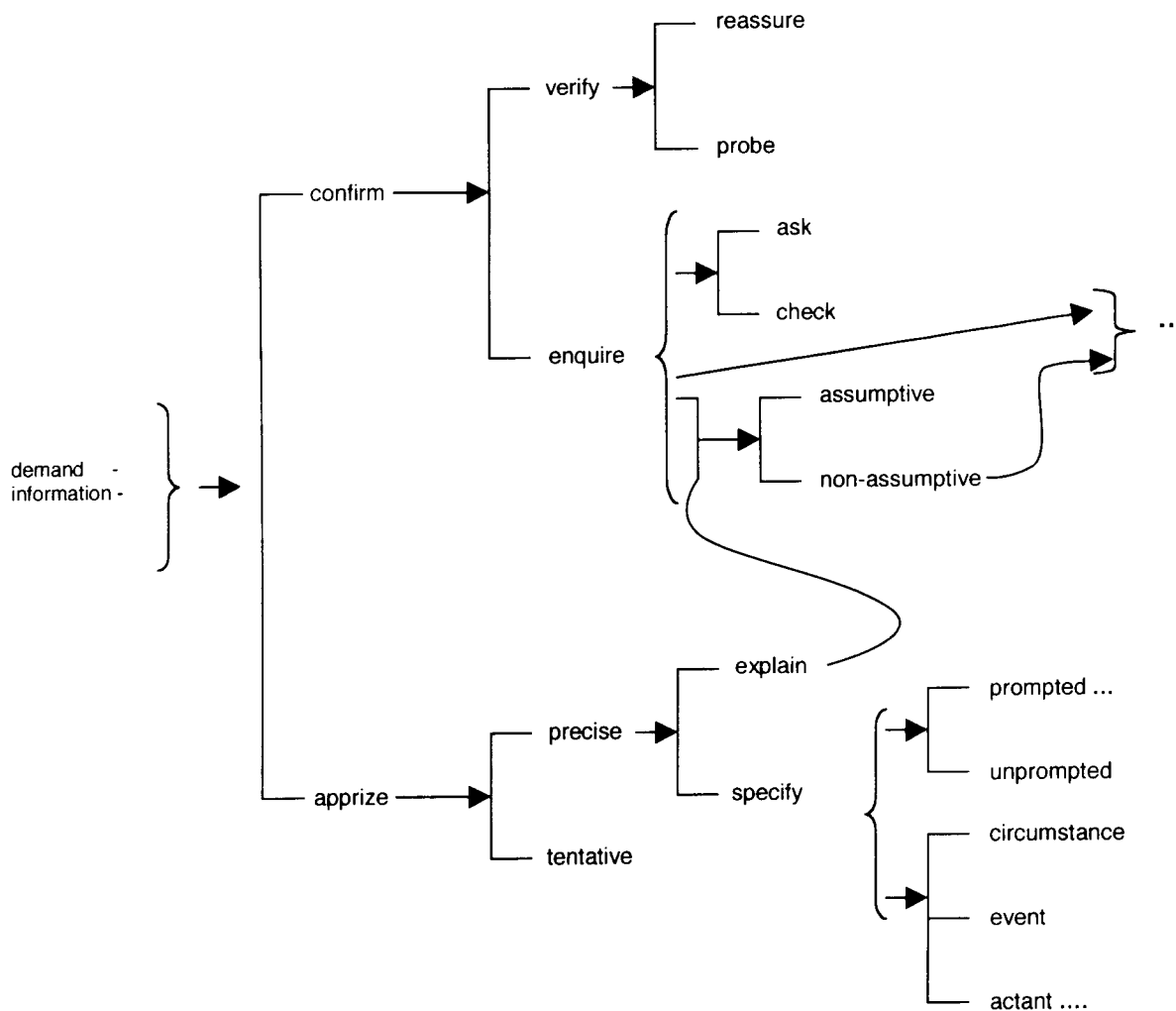


Fig. 12.3: An excerpt from Hasan’s network of choices in making demands for information (Hasan 1989)

Professional autonomy is regarded as a relative rather than a fixed feature of an occupation. The feature gives a cline of relationship between labour categories rather than sets of discrete levels of occupations. For example, a district manager in a government bureaucracy may have considerable autonomy from one perspective, as in making local budget decisions, but from another perspective, as in determining policy on staffing levels, the same worker has virtually no autonomy. Nevertheless it can be reasonably hypothesised that a social security clerk would *generally* have more workplace autonomy in making and transmitting decisions affecting other workers than a building labourer, but considerably less than a district manager in a government bureaucracy. (For reports of the results with respect to questions and answers, modes of reasoning and control strategies, and differential meaning relations between the higher autonomy, lower autonomy and Kindergarten school groups see for example Hasan, 1989, 1991, 1992, 2001; Hasan and Cloran, 1990).

In related research but using a different corpus, Williams explored meanings typically exchanged between mothers and four-year-old children in joint book-reading. He compared these with exchanges between teachers and children in the first month of formal schooling. Results from this research paralleled findings by Hasan and her colleagues, except that the higher autonomy group practices appeared to be an intensified form of school practice. Williams interpreted this difference as an effect of curricula which have promoted joint book-reading as a pedagogic strategy both in schools and in families preparing children for school entry. (For discussion, see Williams 1995, 1999a, 2001.) For transcripts of the conversations analysed in this research in both family and school contexts, see Williams 1996).

Networks have also recently been used to describe linguistic levels beyond *message* by Cloran (1994; 1999a; 1999b), who proposes *rhetorical unit* as a semantic unit intermediate between text and message, and by Butt to describe semantic cycles in text. At the contextual level, they have been used by Hasan to explore the structure of *field* (Hasan, 1999) in work which extends her long-term exploration of the interface between context and text as a semantic unit (Hasan, 1978; 1995b; 1996) and which provides a some-

what different account of generic structure from that utilized in research outlined in Section 2. For a very useful overview of relations between SFL theory and descriptive techniques see Butt (1996).

4. Future directions

Looking ahead, there are a number of key areas in which functional sociolinguistic research can be expected to prosper. We will touch on just four of these here.

i. tools – The issue here is the sheer human cost of manual text analysis while we wait for interactive workbenches to be developed that automate and semi-automate the rich analyses SFL affords. In the past, research into uses of languages has tended to deploy a wide range of analyses across relatively few texts, whereas research into users of languages has typically focussed on fewer variables across groups of speakers (see however Hasan, 1989, 1991, 1992; Hasan and Cloran, 1990; Horvath 1985; Nesbitt & Plum 1998; Plum & Cowling 1987; Williams, 1995; 1999; 2001). The quicker analysis can be semi/automated, the sooner this qualitative/quantitative complementarity can be overcome and negotiate more productively with research traditions such as that represented by Biber's multidimensional analysis (Biber & Finnegan 1994). Very significant developments have recently been achieved in the Meaning-Making Laboratory Project at Macquarie University under Christian Matthiessen's direction. (See especially resources at: <http://minerva.ling.mq.edu.au/>)

ii. sites – To date, funding has tended to dictate that studies of uses and users of language will be of relevance to issues in language education, though significant advances have also been made in semantic variation theory through grants attracted during the mid 1980s. In future we can expect more funding to become available for research in administrative, medical and forensic contexts (e. g. Iedema 2000, Jordens et al. 2001, Gibbons 2003) – especially in those areas where economic rationalists can foresee an immediate pay-off in relation to short term investment. In functional sociolinguists new sites have a tendency to impact directly on theory and description (Martin 1998), especially where interventions in practice are undertaken. This makes the politics of research into uses and users of

language an important theoretical concern. Within education itself, there have also been significant developments other than in the use of genre theory, for example in young children learning to use functional grammatical concepts as abstract resources in the Vygotskian sense in school literacy work (for example Williams, 1999b; 2000; in press). These have a potential to enable learners to use SFL beyond the initial task of understanding the expected structure of texts in key sites, particularly for reflective purposes (Hasan and Williams, 1996).

iii. modalities – As noted above, resources for analysing discourse were expanded in the 90s to include tools for modalities of meaning alongside language, including image, sound & music, action and most recently building design. This has opened up the field of multimodal discourse analysis, with its focus on the way in which meaning is negotiated among modalities in multimodal text (Baldry 2000, Cope & Kalantzis 1999, van Leeuwen & Jewitt 2001, Kress & van Leeuwen 2001, Kress et al. 2001) – a project which lends itself to the exploration of the emerging modes of electronic communication via CD-ROM and the web.

iv. genesis – Work on language variation, whether focussed on uses or users of language, has always been concerned with change. Because of its focus on semantic variation, functional sociolinguistics is in a strong position to study change across various depths of time – as a text unfolds (logogenesis), as an individual develops (ontogenesis) and as a culture evolves (phylogenesis). The challenge here will be to deepen our understanding of how it is that the micro-encounters of everyday life instantiate our culture in ways that accommodate both stability and adaptation. Significant transdisciplinary conferences involving primatology, archaeology, neuroscience and psychiatry have recently been organised by SF linguists, from which major theoretical developments can be expected (Williams and Lukin, in press).

Crucial to the theoretical and empirical developments outlined above has been Halliday's description of English grammar (1994), which has enabled the concept of realization to be better understood in the exploration of language in use. It is the most visible example of his rearticulation of de Saussure's distinction between *langue* and *parole* as in fact two sides of the one phenomenon, in one case language seen from 'a distance' as systems

of meaning-making resources and, in the other, language seen 'up close' as instantiations of those systems as language in use. This position has assisted researchers to produce systematic descriptions of language while, at the same time, building context and associated aspects of variation into the account as a descriptive level.

5. Literature (selected)

Baldry, A. (2000) *Multimodality and Multimediality in the Distance Learning Age*, Campobasso.

Bernstein, B. (1990) *Class, Codes and Control Volume IV: the Structuring of Pedagogic Discourse*, London.

–, (1996) *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique*, London.

Biber, D./Finnegan, E. (1994) *Sociolinguistic Perspectives on Register*, Oxford.

Butt, David G. (1996) "Theories, maps and descriptions: an introduction", in: *Functional Descriptions: Theory into Practice*, Cloran, C./Butt, D./Hasan, R., eds., Amsterdam, xv-1.

Caffarel, A./Martin, J. R./Matthiessen, C. M. I. M., eds., (in press) *Language Typology: a Functional Perspective*, Amsterdam.

Christie, F., ed., (1999) *Pedagogy and the Shaping of Consciousness: Linguistic and Social Processes*, London.

Christie, F./Martin, J. R. (1997) *Genre and Institutions: Social Processes in the Workplace and School*, London.

Cloran, C. (1989) "Learning through language: the social construction of gender", in: *Language Development: Learning Language, Learning Culture*, Hasan, R./Martin, J. R., eds., Norwood, N.J., 361–403.

–, (1994) *Rhetorical Units and Decontextualisation: an Enquiry into Some Relations of Context, Meaning and Grammar*, Nottingham.

–, (1995) "Defining and relating text segments: Subject and Theme in discourse", in: Hasan & Fries, eds., 361–403.

–, (1999a) "Contexts for learning", in: Christie, 31–65.

–, (1999b) "Context, material situation and text", in: Ghadessy, 177–217.

–, (2000) "Socio-semantic variation: different wordings, different meanings", in: Unsworth, 152–183.

Cope, W./Kalantzis, M., eds., (1993) *The Powers of Literacy: a Genre Approach to Teaching Literacy*, London.

Cope, B./Kalantzis, M. (1999) *Multiliteracies: Literacy Learning and the Design of Social Futures*, London.

- Eggs, S./Slade, D. (1997) *Analysing Casual Conversation*, London.
- Fawcett, R. (1980) *Cognitive Linguistics and Social Interaction: Towards an Integrated Model of a Systemic Functional Grammar and the Other Components of an Interacting Mind*, Heidelberg.
- Firth, J. R. (1957) *A Synopsis of Linguistic Theory, 1930–1955. Studies in Linguistic Analysis* (Special volume of the Philological Society), London, 1–31.
- Fries, P./Gregory, M., eds., (1995) *Discourse in Society: Systemic Functional Perspectives*, Norwood, N.J.
- Ghadessy, M. (1993) *Register Analysis: Theory and Practice*, London.
- , (1999) *Text and Context in Functional Linguistics*, Amsterdam.
- Gibbons, J. P. (2003) *Forensic Linguistics*, Oxford.
- Gregory, M. (1967) “Aspects of varieties differentiation”, in: *Journal of Linguistics* 3, 177–198.
- , (1995) *Before and Towards Communication Linguistics: Essays by Michael Gregory and Associates*, Seoul.
- Gregory, M./Carroll, S. (1978) *Language and Situation: Language Varieties and Their Social Contexts*, London.
- Halliday, M. A. K. (1967) *Intonation and Grammar in British English*, The Hague.
- , (1973) “Towards a sociological semantics”, in: *Explorations in the Functions of Language*, Halliday, M.A.K., London, 72–102.
- , (1974) “Interview with M. A. K. Halliday”, in: *Discussing Language*, Parret, H., ed., The Hague, 81–120.
- , (1978) *Language as a Social Semiotic: the Social Interpretation of Language and Meaning*, London.
- , (1985) *Spoken and Written Language*, Geelong, Vic.
- , (1993) *Aims and Perspectives in Linguistics*, Applied Linguistics Association of Australia Occasional Paper 13.
- , (1994) *An Introduction to Functional Grammar*, 2nd ed., London.
- , (1995) “Language and the theory of codes”, in: Sadovnik, 127–144.
- Halliday, M. A. K./Hasan, R. (1976) *Cohesion in English*, London.
- , (1985) *Language, Context, and the Text: Aspects of Language in a Social-semiotic Perspective*. Geelong, Vic.
- Halliday, M. A. K./Martin, J. R. (1993) *Writing Science: Literacy and Discursive Power*, London.
- Halliday, M. A. K./Matthiessen, C. M. I. M. (1999) *Construing Experience through Meaning: a Language-Based Approach to Cognition*, London.
- Halliday, M. A. K./McIntosh, A./Stevens, P. (1964) *The Linguistic Sciences and Language Teaching*, London.
- Hasan, R. (1978) “Text in the systemic-functional model”, in: *Current Trends in Textlinguistics*, Dressler, W., ed., Berlin.
- , (1989) “Semantic variation and sociolinguistics”, in: *Australian Journal of Linguistics* 9 (2), 221–276.
- , (1991) “Questions as a mode of learning in everyday talk”, in: *Language Education. Interaction and Development*, McCausland, M., ed., Launceston, 70–119.
- , (1992) “Meaning in sociolinguistic theory”, in: *Sociolinguistics Today: International Perspectives*, Bolton, K./Kwok, H., eds., London, 80–119.
- , (1995a) “On social conditions for semiotic mediation: the genesis of mind in society”, in: Sadovnik, 171–196.
- , (1995b) “The conception of context in text”, in: Fries & Gregory, eds., 183–283.
- , (1996) *Ways of Saying: ways of Meaning: selected papers of Ruqaiya Hasan* [Eds. C. Cloran, D. Butt & G. Williams], London.
- , (1999) “Speaking with reference to context”, in: Ghadessy, ed., 219–328.
- , (2001) “The ontogenesis of decontextualised language: some achievements of classification and framing”, in: *Towards a Sociology of Pedagogy: The Contribution of Basil Bernstein to Research*, Morais, A./Neves, I./Davies, B./Daniels, H., eds., London/New York, (History of Schools & Schooling 23), 47–79.
- Hasan, R./Cloran, C. (1990) “A sociolinguistic interpretation of everyday talk between mothers and children”, in: *Learning, Keeping and Using Language*, vol. 1, Halliday, M. A. K./Gibbons, J./Nicholas, H., eds., Amsterdam.
- Hasan, R./Williams, G., eds., (1996) *Literacy in Society*, London.
- Horvath, B. (1985) *Variation in Australian English: The Sociolects of Sydney*, London.
- Hyland, K. (2002) “Genre: language, context and literacy”, in: *ARAL* 22.
- Iedema, R. (2000) “Bureaucratic Planning & Resemiotisation”, in: *Discourse and Community: Doing Functional Linguistics*, Ventola, E., ed., Tübingen, 47–70.
- Jordens, C. F. C./Little, M./Paul, K./Sayers, E.-J. (2001) “Life disruption and generic complexity: a social linguistic analysis of narratives of cancer illness”, in: *Social Science and Medicine* 53, 1227–1236.
- Kress, G./van Leeuwen, T. (1996) *Reading Images: the Grammar of Visual Design*, London.

- , (2001) *Multimodal Discourse – The Modes and Media of Contemporary Communication*, London.
- Kress, G./Jewitt, C./Ogborn, J./Tsatsarelis, C. (2001) *Multimodal Teaching and Learning: The Rhetorics of the Classroom*, London.
- Leckie-Tarry, H. (1995) *Language and Context: a Functional Linguistic Theory of Register*, London.
- Lemke, J. (1995) *Textual Politics: Discourse and Social Dynamics*, London.
- Martin, J. R. (1985) *Factual Writing: Exploring and Challenging Social Reality*, Geelong, Vic.
- , (1991) “Intrinsic functionality: implications for contextual theory”, in: *Social Semiotics* 1, 1, 99–162.
- , (1992) *English Text: System and Structure*, Amsterdam.
- , (1993) “Life as a noun”, in: *Writing Science: Literacy as Discursive Power*, Halliday, M. A. K./Martin, J. R., eds., London, 221–267.
- , (1998) “Practice into theory: catalysing change”, in: *Language at Work*, Hunston, S., ed., Clevedon (British Studies in Applied Linguistics 13 [BAAL 13]), 151–167.
- , (1999) “Modelling context: the crooked path of progress in contextual linguistics” (Sydney SFL), in: Ghadessy, 25–61.
- , (2000) “Beyond exchange: appraisal systems in English”, in: *Evaluation in Text: Authorial Stance and the Construction of Discourse*, Hunston, S./Thompson, G., eds., Oxford, 142–175.
- Martin, J. R./Rose, David (2003) *Working with Discourse: Meaning Beyond the Clause*, London.
- Martin, J. R./Veel, R. (1998) *Reading Science: Critical and Functional Perspectives on Discourses of science*, London.
- Martinec, R. (1998) “Cohesion in action”, in: *Semiotica* 120–1/2, 161–180.
- Matthiessen, C. M. I. M. (1995) *Lexicogrammatical Cartography: English systems*, Tokyo.
- Mitchell, T. F. (1957) “The language of buying and selling in Cyrenaica: a situational statement”, in: *Hesperis* 26, 31–71 [reprinted in Mitchell, T. F., ed., (1975) *Principles of Neo-Firthian Linguistics*, London, 167–200].
- Nesbitt, C./Plum, G. (1988) “Probabilities in a systemic-functional grammar: the clause complex in English”, in: *New Developments in Systemic Linguistics*, vol. 2: Theory and Application, Fawcett, R. P./Young, D., eds., London, 6–38.
- O’Toole, M. (1994) *The Language of Displayed Art*, London.
- Painter, C. (1999) *Learning through Language in Early Childhood*, London.
- Plum, G./Cowling, A. (1987) “Some constraints on grammatical variables: tense choice in English”, in: *Language Topics: Essays in Honour of Michael Halliday*, Steele, R./Threadgold, T., eds., vol. II, Amsterdam, 281–305.
- Poynton, C. (1985) *Language and Gender: Making the Difference*, Geelong, Vic.
- Sadovnik, A., ed., (1995) *Knowledge and Pedagogy: the Sociology of Basil Bernstein*, Norwood, N.J.
- Unsworth, L., ed., (2000) *Researching Language in Schools and Communities: Functional Linguistic Perspectives*, London.
- Ure, J./Ellis, J. (1977) “Register in descriptive linguistics and linguistic sociology”, in: *Issues in Sociolinguistics*, Uribe-Villas, O., ed., The Hague, 197–243.
- van Leeuwen, T. (1999) *Speech, Music Sound*, London.
- van Leeuwen, T./Jewitt, C. (2001) *Handbook of Visual Analysis*, London.
- Ventola, E. (1987) *The Structure of Social Interaction: a Systemic Approach to the Semiotics of Service Encounters*, London.
- Williams, G. (1995) *Joint Book-Reading and Literacy Pedagogy: a Socio-Semantic Examination*, vol. 1 CORE 19 (3) Fiche 2 B01-Fiche 6 B01.
- , (1996) *Joint Book-Reading and Literacy Pedagogy: a Socio-Semantic Examination*, vol. 2 CORE 20 (1) Fiche 3 B01-Fiche 8 E10.
- , (1999a) “The pedagogic device and the production of pedagogic discourse: a case example in early literacy education”, in: Christie, ed., 88–122.
- , (1999b) “Grammar as a metasemiotic tool in child literacy development”, in: *Language Teaching: New Insights for the Language Teacher Series 40*, Ward, C./Renandya, W., eds., Singapore, 89–124.
- , (2000) “Children’s literature, children and uses of language description”, in: Unsworth, L., ed.
- , (2001) “Literacy pedagogy prior to schooling: Relations between social positioning and semantic variation”, in: *Towards a Sociology of Pedagogy: The Contribution of Basil Bernstein to Research*, Morais, A./Neves, J./Davies, D./Daniels, H., eds., London/New York, 17–45.
- , (in press) “Ontogenesis and grammatics: Functions of metalanguage in pedagogical discourse”, in: Williams, G./Lukin, A., eds.
- Williams, G./Lukin, A., eds., *Language Development: Functional Perspectives on Evolution and Ontogenesis*, London.

J. R. Martin/G. Williams, Sydney
(Australia)

13. The Geography of Language/Geographie der Sprache

1. The geography of language
2. Historical antecedents
3. Ethnolinguistic geography and geolinguistics
4. The cartographic representation of linguistic data
5. The geography of language functions
6. Geolinguistic atlases and regional development
7. Language boundary studies
8. Cultural transition zones
9. Geographic information systems and computer-aided mapping
10. Contextual analysis
11. The language of geolinguistics
12. The institutional context of geolinguistics
13. Literature (selected)

1. The geography of language

Geography is the science of distributed phenomena in space and over time. Language has figured prominently in the work of several early Geographers, but it was only in the 1970s that a systematic analysis of language in its geographic context was developed as a self-conscious sub-discipline termed *Geolinguistics*. By now it has established itself as a distinct and evolving branch of Human Geography which reflects the increasing concern of its parent discipline with social problems, and with devising more appropriate methodologies for the analysis of contemporary issues. This review of the scope and impact of Geolinguistics extends earlier reviews and uses a similar format to ease comparison (Williams, 1988, 1996a).

Geolinguistics has been defined as the systematic analysis of language in its physical and human context. It seeks to illumine the socio-spatial context of language use and language choice; to measure language distribution and variety; to identify the demographic characteristics of language groups in contact; to chart the dynamism of language growth and decline and to account for the social and environmental factors which create such dynamism (Williams, 1988, p. 2). The aims of the American Society of Geolinguistics capture this range well when they argue that their Society seeks 'to assess the relative practical importance, usefulness and availability' of different languages from the economic, psychological, political and cultural standpoints of specific speech milieu;

to understand variations in their basic grammatical, phonological and lexical structures, and to measure and map 'their genetic, historical and geographical affiliations and relations'.

The terminology of Geolinguistics reflects the syncretic nature of Geography, which is derived from Natural Science, Humanities and Social Science origins. Van der Merwe (1993, p. 23) has itemised the important geographical concepts which are employed i.e. 'location, space, place, perception, interaction, competition, centrality, regionalism, segmentation, segregation, social ecology, ethnicity, minority groups, cultural enclaves, institutional structures, and urbanisation being the most prominent.' To this we may add culture region, speech community, ecology of language, cultural transition zone, zone of language collapse, bilingual belt, heartland-hinterland relations, core, domain, periphery, urban multilingualism, language frontier and border.

This variety may be reduced to three main approaches.

Language Distribution: 'The identification of segregation patterns, zones of contact and core areas within a spatial framework of language diversity'

Language Change: 'The identification of areas of growth and decline amidst the dynamic structure of a language in time and space.'

Language Environment: 'The identification of the physical, social, historical, political and economic fabric within which the distribution of and changes in language take place' (Van der Merwe, 1993, p. 23).

2. Historical antecedents

The historical sources for Geolinguistics are many and varied. The earliest identifiable interest lay in the work of early twentieth century European cultural geographers such as Vidal de la Blache, H. J. Fleure, Jules Gillieron, Edmond Edmont and their successors such as Aldo Dami, Estyn Evans and E. G. Bowen. They were concerned with expressing the personality and character of unique regions in Europe by focusing on cultural markers such as language and religion. They treated human aspirations and artefacts as a contingent, but nevertheless integral, part of