

PEDAGOGIC DISCOURSE: CONTEXTS OF SCHOOLING¹

by
James R Martin and David Rose

In pursuit of democratising education outcomes, this paper analyses contexts of schooling from the perspectives of two powerful models of social context: the model of text-in-context developed within systemic functional linguistic theory (SFL), and the model of pedagogic contexts developed in the sociological theory of Basil Bernstein (1975, 1990, 2000). In the first section, a model of social context as levels of meaning, including both genre and register, is outlined and argued for, and then applied to analysing varieties of 'knowledge genres' written in the school. In the second section, Bernstein's model of pedagogic discourse is re-configured in terms of register and genre theory, to describe the contexts of classroom learning as 'curriculum genres', through which knowledge is acquired in the school. This model is then applied to analysing varieties of classroom discourse, to reveal the enactment of authority and identities in the pedagogic relations of the classroom.

1. Introduction

Building on Halliday's view of linguistics as an ideologically committed form of social action, a major goal of language research in the Sydney School (Hyon 1996; Johns 2002; Martin 2000; Rose 2008; 2011; Rose & Martin 2012) has been to analyse and redesign the pedagogic contexts through which school knowledge is acquired and evaluated. The research has drawn on two complex theories of social context, including the model of text-in-context developed within systemic functional linguistic theory (SFL), and the model of pedagogic contexts developed in the sociological theory of Basil Bernstein (1975, 1990, 2000). The Sydney School model stratifies social context as register, including fields of activity, tenor of social

relations, and mode of semiosis, woven together at the level of genre, defined as 'goal-oriented social process' (Martin 1992, 2001; Martin & Rose 2008). Bernstein's model stratifies pedagogic contexts in terms of production, recontextualisation and reproduction of knowledge. On one hand, the Sydney School research has applied the model of text-in-context to describe the systems of 'knowledge genres' that students are expected to read and write in school. On the other, it has adapted Bernstein's theory of pedagogic discourse to describe the 'curriculum genres' (Christie 2002) through which control of the written genres of schooling are acquired and evaluated.

This article begins by outlining the model of language and context that has evolved in SFL theory, and applies this model to analysing some of the texts that students write in school. It then introduces Bernstein's model of pedagogic discourse and articulates it with the SFL model of genre and register. This derived model is applied to analysing curriculum genres, at the level of their generic structuring and the classroom exchanges that realise them. The analysis is applied to redesigning curriculum genres, to enhance their potential for enabling all students to achieve success. The articulated model of pedagogic discourse is a significant development in the field, that offers researchers new tools for interpreting pedagogic contexts.

2. *Modelling context in SFL*

Halliday (in Martin 2013: 215) rehearses the question 'Can we actually model and represent and interpret context within the framework of what is generally involved as a theory of language?', noting that his teacher Firth thought you could and that he thinks so too, 'if only because it's the best chance you've got.' His remarks reflect the longstanding concern in Firthian and neo-Firthian linguistics with modelling context as a level of meaning (Monaghan 1979). As Firth comments (1968: 200-201), 'The meaning of texts is dealt

with by a dispersal of analysis at mutually congruent series of levels, beginning with contexts of situation and proceeding through collocation, syntax (including colligation) to phonology and phonetics...'. Halliday, more influenced by Hjelmslev (1961) and W S Allen than Firth in this regard, had modelled this dispersal as a realization hierarchy such as that outlined in Fig. 1, with phonology realizing lexicogrammar, lexicogrammar realizing semantics, and semantics realizing context. This privileges context as a stratum of meaning in Halliday's model (akin to Hjelmslev's connotative semiotics), realized through patterns of language choice (e.g. Halliday 2005).

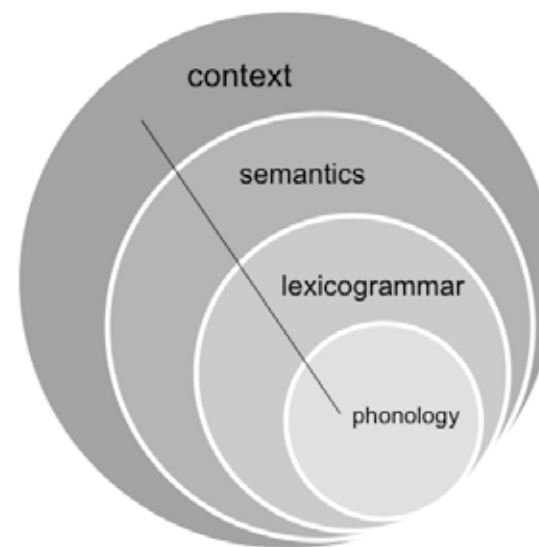


Fig. 1: *Context as a stratum of meaning*

Halliday's linguistic perspective on context, in which language construes, is construed by and over time reconstrues and is reconstrued by context, can be termed supervenient. It contrasts with the circumvenient perspective whereby language is conceived as embedded in context, where context is treated as extra-linguistic

and not itself modelled in linguistic terms as a system of meaning. The two perspectives are outlined in Fig. 2, using co-tangential circles for the supervenient perspective and concentric circles for the circumvenient one.²

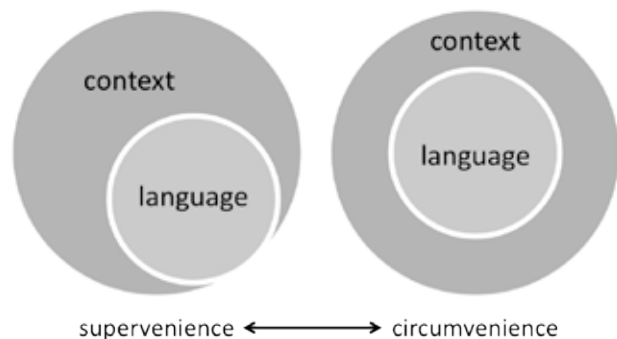


Fig. 2: *Supervenience and circumvenience*

Martin (e.g. 1985, 1992) further develops the supervenient perspective, suggesting that Halliday's stratum of context needs itself to be stratified into two levels which he calls register and genre (Fig. 3 below). In doing so Martin is proposing a model in which context can be mapped as a system of genres (Christie & Martin 1997; Martin & Rose 2008), realising through field, tenor and mode systems (collectively referred to as register). One of his reasons for stratifying context as genre and register is to foster Halliday's proposals (e.g. 1978) for using intrinsic functionality (ideational, interpersonal and textual meaning within language) to map extrinsic functionality (field, tenor and mode respectively) as dimensions of context (Martin 2001), without having to incorporate considerations of genre that muddy the waters (for argumentation see Martin 1999, 2001). Also significant is Martin's recontextualisation of Halliday's semantics (cf. Fig. 1) as discourse semantics (e.g. Martin 1992; Martin & Rose 2003), by way of emphasising that register

and genre are realised through meaning relations in text which regularly extend beyond the clause. Context is not in other words a pattern of lexicogrammatical patterns, but a pattern of pattern of lexicogrammatical patterns – the basic unit of analysis in contextual linguistics has to be text, not clause.

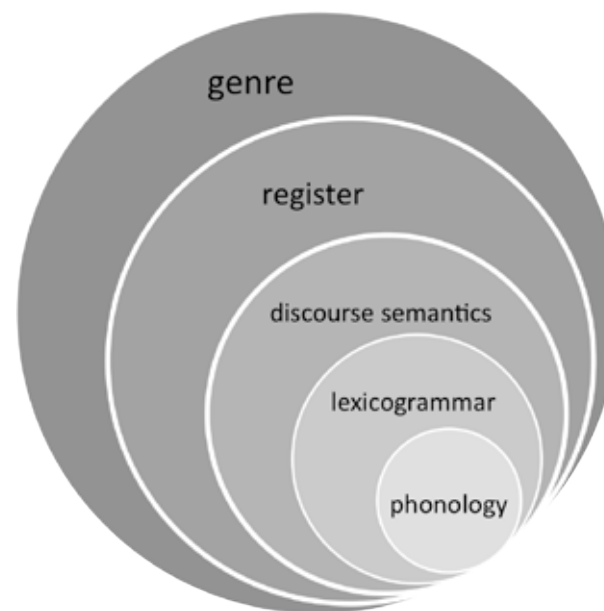


Fig. 3: *Martin's supervenient model of language and social context*

Martin's supervenient model differs from that deployed by Halliday, Hasan, Matthiessen and others in that it stratifies context as register and genre, rather than working with a single stratum called context. As explored in Martin 1992, 1999, 2001 perhaps the crucial issue here has to do with how relations among genres are modelled. In Martin's model the recurrent configurations of field, tenor and mode variables constituting genre are related to one another at the level of genre – as high level systems of meaning. These recurrent configurations of meaning are then factored into ideational, inter-

personal and textual perspectives at the level of register as field, tenor and mode respectively. In single stratum models on the other hand relations among these recurrent configurations of meaning are either ignored or are developed within one contextual variable or another. For example, Hasan 1985 derives obligatory elements of genre structure from field, thereby arguing that relations among genres are primarily a matter of field. Similarly Matthiessen (e.g. Matthiessen et al. 2008) maps relations among the social processes modelled by Martin at the level of genre as a matter of field.

If Hasan and Matthiessen are following Halliday as far as the relation of intrinsic to extrinsic functionality is concerned, then what they are suggesting is that genres are primarily related to one another through ideational meaning. Martin argues on the other hand that genres are realised through a recurrent mapping of ideational, interpersonal and textual meaning onto one another, unfolding through recurrent stages³ in discourse. His model does not privilege ideational relations as far as genre relations are concerned. As noted above, this makes Halliday's suggestion that field is by and large construed ideationally far more plausible than would be the case if genre relations were a matter of field. Decades of work on story genres for example has focussed on the interaction of ideational and interpersonal meaning as far as the point of a story genre is concerned (e.g. Labov & Waletzky 1967; Martin & Plum 1997; Martin & Rose 2008). Hasan (e.g. 1999: 294 on narrating) and Matthiessen (e.g. Matthiessen et al. 2008: 191 on recreating) explore these relations within the context variable field, placing themselves in the position of either having to argue that relations among the relevant genres relations are mainly ideational, or that Halliday's correlation of field with ideational meaning cannot be sustained.⁴

The major challenge for supervenient modelling of this kind is multimodality, since genres are typically realised in texts that involve more than one semiotic system (Bateman 2008). Consequently SFL research, inspired by Kress & van Leeuwen 1996 and O'Toole 1994,

has pushed hard at the frontiers of what can be modelled as systems of signs, using a range of theoretical tools – axis, metafunction and rank in particular (for a synopsis of these parameters see Matthiessen & Halliday 2009). Alongside Kress & Van Leeuwen's and O'Toole's landmark studies of image, sculpture and architecture, systemic functional semiotics has also gained a purchase on music (e.g. van Leeuwen 1999), space (e.g. Stenglin 2009), gesture (Hood 2011), picture books (Painter et al 2012), film (Baldry & Thibault 2006; Bateman 2007), web pages (Martinec & van Leeuwen 2009) and action (Martinec 1998, 2000, 2001). Martinec 2005 reviews these developments; for surveys of recent work see Dreyfus et al. 2011, O'Halloran 2004, O'Halloran & Smith 2011, Royce & Bowcher 2007 and Ventola & Guijarro 2009. Bateman (2005, 2009) and Martin (2011) offer critical reviews of the theoretical assumptions underlying some of this work; Martin 2010 proposes developing instantiation theory in directions that will facilitate the modelling of interaction among modalities as they construe, enact and compose genres.

A crude map of what is at stake here, from the perspective of realisation, is offered as Fig. 4, which positions contextual systems (i.e. genre and register) as realised through language and other semiotic systems. For all its limitations as far as instantiation is concerned, Fig. 4 reinforces the supervenience perspective on context outlined above. Supervenience means that context is being modelled as exhaustively as possible as configurations of meaning, avoiding as far as possible the need to consider relations between semiosis and contextual variables modelled in other terms. This is to adopt a radical social semiotic perspective on context, conceiving it in linguistic terms as systems of meaning. Ultimately this is pushing towards a model of meaning and matter in which social semioticians work on an interdisciplinary basis with neurobiologists as far as the embodiment of language and semiosis in brains is concerned, bypassing as far as possible philosophical and psychological accounts

of concepts and cognition in their various characterisations of mind (for discussion of this bypass strategy in relation to Edelman's work see Halliday 1994).

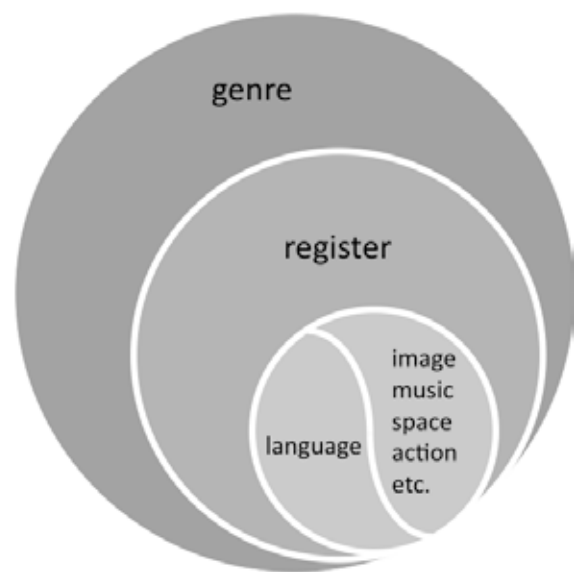


Fig. 4: *The multimodal realisation of genre*

3. *Analysing text in context – student writing*

Contextual semiotics as just outlined can be used in educational arenas to explore both the knowledge genres that students read and write alongside the curriculum genres through which they learn to read and write. In this section we'll deploy the model to explore some student writing from primary school, and turn our attention to classroom practice in the following section. We begin with an exposition arguing about a community issue, and then turn to a report and explanation about a scientific phenomenon.

Conal, then age 8 in Year 3, wrote the following text as the outcome of the independent construction stage of a genre-based literacy program teaching/learning cycle (Rose & Martin 2012, Chapter 2). His punctuation and spelling is reproduced below; the issue addressed was provided by his teacher.

*[1] Should we eat out at McDonalds regularly?
I think we shouldnt eat at McDonalds
It is not healthy because, it has alot of fat in it.
And you shoulde eat at home because you could of made it healthy.
McDonalds has lots of pigs fat in their ice-cream.
It is ok to eat McDonalds accationally but it is not healthy to eat there
alote.*

As far as ideational meaning is concerned, the text deals with students' everyday understanding of their world – whether to eat at home or at McDonalds fast food restaurant in particular:

Actor	Process	Goal	Location
students	eat		at McDonalds
students	eat		at home
you (family)	make	food	at home

The specialised knowledge in the text, learned at school, has to do with the composition of McDonalds' food – the amount of fat in general, and the amount of pigs fat in the ice cream:

Carrier	Process	Attribute	Location
McDonalds' food	Have	alote of fat	in it (McDonalds' food)
McDonalds	Have	lots of pigs fat	in their ice-cream

The field thus bridges across everyday and schooled experience (across horizontal and vertical discourse in Bernstein's terms (Bernstein 1996/2000)).

Interpersonally, the argument foregrounds personal opinion (Martin & White 2005) – what Conal thinks and what he proposes people should or shouldn't and could do:

*I think
Should we eat out at McDonalds regularly?
we shouldnt eat at McDonalds
And you shoulde eat at home
because you could of made it healthy.*

How often people should eat at McDonalds is graded along a scale of high to low:

*Should we eat out at McDonalds regularly?
It is ok to eat McDonalds accasionally
but it is not healthy to eat there alote.*

But the amount of fat in McDonalds' food is scaled as high:

*because, it has alote of fat in it.
McDonalds has lots of pigs fat in their ice-cream.*

As far as attitude is concerned, Conal appreciates McDonald's food as unhealthy, compared to food made at home, but legitimates an occasional fast food meal as acceptable:

*It is not healthy
you could of made it healthy
but it is not healthy to eat there alote.
It is ok to eat McDonalds accasionally*

The tenor thus negotiated positions Conal as someone arguing personally with peers, using the range of interpersonal resources (i.e. implicitly subjective and objective modalities of obligation

and usuality, graded quantity, polarity and attitude) he shares with fellow students.

Textually, Conal begins with unmarked topical Themes referring to students and McDonalds restaurants, and complements these orientations to his subject matter with News about student eating habits and the quality and composition of McDonalds' food. His last two clauses use theme predication to foreground attitude (ok, not healthy) as Theme and News, thereby highlighting his considered opinion.

Topical Theme	(extended) New
<i>We</i>	<i>(eat out at McDonalds) regularly</i>
<i>I</i>	<i>Think</i>
<i>We</i>	<i>(eat) at McDonalds</i>
<i>It [= McDonald's food]</i>	<i>Healthy</i>
<i>it [=McDonald's food]</i>	<i>(has) a lote of fat</i>
<i>you</i>	<i>(eat) at home</i>
<i>you</i>	<i>(made it) healthy</i>
<i>McDonalds</i>	<i>(lots of pigs fat) in their ice-cream</i>
<i>Ok</i>	<i>(to eat at McDonalds) accasionally</i>
<i>(not) healthy</i>	<i>(to eat there) alote</i>

As far as higher level periodicity is concerned, the title of the exposition can be taken as macro-Theme, Conal's initial recommendation that we shouldn't eat at McDonalds as hyper-Theme and his compromise suggestions that eating there occasionally is OK as hyper-New. His rhetorical sandwich, reflective as it is of planned edited discourse in written mode is outlined below.

macro-Theme

Should we eat out at McDonalds regularly?

hyper-Theme

*I think
we shouldnt eat at McDonalds
It is not healthy
because, it has alot of fat in it.
And you shoulde eat at home because you could of made it healthy.
McDonalds has lots of pigs fat in their ice-cream.*

hyper-New

*It is ok to eat McDonalds accasionally
but it is not healthy to eat there alot.*

From the perspective of genre, these patterns of ideational, interpersonal and textual meaning are phased onto one another in stages as they construe the field, enact the tenor and compose the mode of Conal's exposition. The actual scaffolding deployed in his class for the staging of the genre is provided below, beginning with name of the text type in question (Exposition) and continuing with the stages of Conal's text (Statement, numbered Arguments and Conclusion).

Exposition

Should we eat out at McDonalds regularly?

Statement

I think we shouldnt eat at McDonalds

Arguments

1. *It is not healthy because, it has alot of fat in it.*
2. *And you shoulde eat at home because you could of made it healthy.*
3. *McDonalds has lots of pigs fat in their ice-cream.*

Conclusion

It is ok to eat McDonalds accasionally but it is not healthy to eat there alot.

From a theoretical perspective, genre thus accounts for the field, mode and tenor combinations a culture allows and the staging that maps one variable into another. As Fig. 5 outlines, it thus affords an integrating monocular perspective on Halliday's trinocular metafunctional (ideational, interpersonal, textual) world view. The stratified model of context enables us to map together what intrinsic functionality has pulled apart.

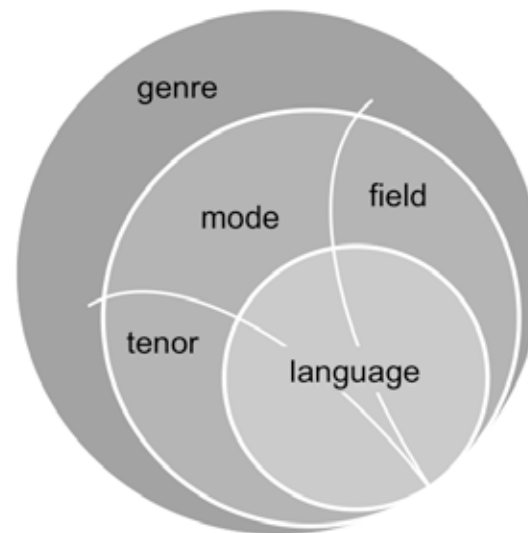


Fig. 5: Genre as a pattern of field, mode and tenor patterns realised through language

The teacher's prompt in text 1 above (*Should we eat out at McDonalds regularly?*) in fact positions Conal's text as a response – thereby recontextualising his exposition proper as an instance of pedagogic discourse. This means that Bernstein's (e.g. 1975) notions of regulative and instructional discourse are both at play. In the next section we re-interpret his conception of pedagogic discourse from the perspective of the model of context being introduced here. At

this point we simply note that two instructional discourses are at play in Conal's text, one having to do with eating at McDonald's (food composition and quality) and the other with the linguistically grounded theory of genre (text types, stages and linguistic features) informing Conal's apprenticeship into written discourse. Martin 1999 refers to the former of these simply as instructional discourse (ID) and the latter as social semiotic instructional discourse (SSID). As noted above the instructional discourse in Conal's exposition involves only a little uncommon sense (i.e. the fat in McDonald's food). In text two on the other hand, a report on volcanoes, much more vertical discourse is at play. This text was also written in year 3, when Conal's brother Hamish was 8 years old. As we can see, Hamish's teacher explicitly invites him to display his knowledge of technical terms encoding geological knowledge about volcanoes.

[2] *What is a Volcano?*

In pairs write your own definition. You might like to use some of these words: openings, surface, earth, gas, hot, molten rock, magma, escape land sea floor, lava, cools, hardens, ash, cinders, pile, vent, cone.

A volcano is an opening in the Earth's crust where lava ash and hot gasses develop and eventually shoot out. But not all volcanoes are active all the time most of the volcanos in the world are dormant which means inactive. Not all volcanoes are on land many volcanoes are under the sea and believe it or not many volcanoes under the sea erupt all the time. When a volcano erupts under the sea the lava hardens and it turns into rock. In fact that is how the Hawaiian islands were made and that why there so many volcanoes in the Hawaii. That is why the Hawaiians praise the fire goddess and they that she is in the volcanoes in Hawaii and that is why people praise the volcanoes if they're from Hawaii.

In response Hamish begins by defining volcanoes as an opening in the earth's crust where lava and hot gases develop and eventually shoot out. He then distinguishes between active and dormant volcanoes,

notes that volcanoes can be found on land or under the sea and that if enough lava hardens into rock when volcanoes erupt under the sea then islands such as Hawaii are formed. At this point he switches fields, from geology to social studies, and comments on the sacred status of volcanoes in traditional Hawaiian religious practices.

This report on volcanoes contrasts with the explanation in text 3. This time round Hamish begins with a comparable definition (invited once again by the teacher's question) but what follows is a step-by-step geological explanation of how volcanoes are formed, not a classification of types of volcano and their cultural significance. Many of the same technical terms are involved (volcano, Earth's crust, hot gases, ash, rock, erupt, lava) but as the causal and temporals linkers indicate (caused, although, if, when, eventually, after, then, as), a scientific implication sequence is foregrounded over taxonomy here (Unsworth 1997; Veel 1997).

[3] *What are Volcanoes?*

A volcano is an opening in the Earth's crust caused by a mixture of hot gases, ash and molten rock gushing up and breaking a weak spot in the earth's crust.

The earth's crust is made up of huge plates of solid rock. Although these plates only move one to ten centimetres a year, if they bump together it can cause earthquakes or volcanoes to erupt.

When the plates bump together it pushes magma from the mantle into the earth's crust. When it's in the earth's crust it forms a liquid pool of magma called a magma chamber.

The magma chamber is full of moving gases which moves the magma around and eventually pushes the magma to the surface of the earth. After this happens it eventually makes a tunnel called a vent.

The vent is full of magma and eventually the magma reaches the surface. When the magma is on the surface of the earth it is then called lava.

The lava can flow out like a stream or explode out with ash, smoke

and hard bits of lava. As the lava keeps moving it colls and hardens into solid rock.

As the hardened lava and ash up it forms into a cone shape. This cone can build up after many eruptions and make a volcanic mountain.

Volcanic mountains usually have a very wide hole in the top. This hole is called a vent.

Genres are configurations of meaning, recognisable by their particular configurations. Globally this includes their staging, such as the Statement^ Arguments^ Conclusion stages of Conal's exposition. Such staging realises the genre's social goals, in this case stating a position and arguing for it. Different types of social goals produce different types of generic structuring. For example, explaining a sequence of causes and effects produces a serial structure, such as Hamish's explanation of volcano formation, consisting of a series of steps, distinguished by paragraphing. Conal's argument on the other hand begins with a position statement as its nucleus, from which each supporting argument radiates, in an orbital structure, illustrated in Fig. 6. Similarly, Hamish's report begins with a general definition of volcanoes, from which sub-types radiate orbitally.

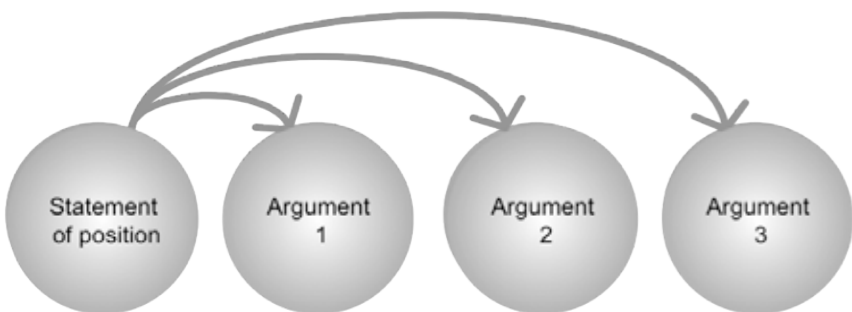


Fig. 6: *Orbital structure of Conal's exposition*

One strategy for mapping the genres of a culture is to group them according to their broad social goals, and distinguish them by their

local organisation (Martin & Rose 2008). Fig. 7 presents such a map of genres that students are expected to read and write in school, identified in Sydney School research, that we have referred to as 'knowledge genres'. They are classified firstly in terms of three general functions: engaging readers, informing them, or evaluating texts or points of view. Of course any text has multiple purposes; it is its primary social goal that generates the recognisable staging of the genre. For example, we might assume that the function of news stories is to inform readers, but in fact they typically begin with a Lead stage whose function is to engage readers with the nub of the story, before reviewing it from various Angles that serve to engage as well inform. This genre is therefore grouped with other stories, but distinguished as non-time structured.

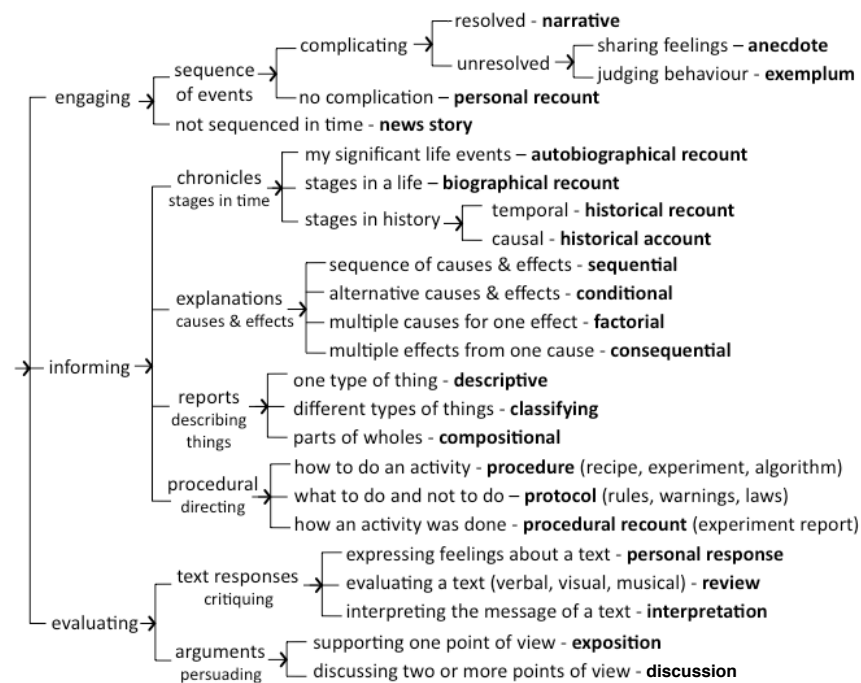


Fig. 7: *Knowledge genres in the school*

4. *Teaching text in context – curriculum genres*

On the face of it, the respective social semiotic functions of Conal's and Hamish's exposition, report and explanation were to argue for a position, describe types of volcanoes, and explain their formation. But within the pedagogic contexts in which they were written, they served a different function, that is to demonstrate the knowledge that Conal and Hamish had acquired through activities of the school. These classroom activities would have included discussion of fields such as fast food consumption and the geology of volcanoes, reading associated information texts, and writing new texts with guidance from the teacher. Both the fields discussed and written about, and the genres in which they were composed, originated in other contexts, other fields of social activity – everyday fields such as eating out at McDonald's, political fields of public debate, and specialised fields of health sciences and earth sciences.

Knowledge originating in these other contexts is recontextualised in the school as pedagogic knowledge and practices, with new functions. Where the goals of research in fields such as health and earth sciences are to understand and manage aspects of the natural and social worlds, their recontextualised functions in the school are to apprentice children into the structures of school knowledge. The functions of children writing about these fields include demonstrating the knowledge they have acquired, so that teachers can evaluate their acquisition.

To interpret these pedagogic contexts we turn now to the sociological theory of Basil Bernstein (1975, 1990, 2000), looking for potential articulations with the SFL theory of social context outlined above. Bernstein provides two complementary perspectives on pedagogic contexts, as institutional structures, and as rules governing institutional practices. From the structural perspective, he describes education systems as a 'pedagogic device' operating at three levels: 1) fields of production of knowledge, primarily in

the upper echelons of academe; 2) recontextualising fields, where this knowledge is transformed for pedagogic purposes, e.g. teacher training or textbook publishing; 3) fields of reproduction, where recontextualised knowledge is transmitted and acquired by learners. From the perspective of sociological rules, Bernstein distinguishes 1) distributive rules regulating the distribution of resources to social groups, including discursive resources distributed by education; 2) recontextualising rules regulating the transformation of knowledge into pedagogic discourse; 3) evaluative rules regulating transmission and acquisition of knowledge.

These three levels of rules are interrelated. Evaluation regulates the distribution of different types and levels of education to different groups of students through their school years, and hence to professional, vocational or manual levels of occupations. Distributive rules in turn shape the forms in which knowledge is recontextualised for different groups of students, according to their evaluations, for example as detailed scientific knowledge for students destined for science based occupations, or as simple hands-on science activities for less successful students.

All these dimensions of the pedagogic device are realised in the school as what Bernstein terms pedagogic discourse, in which he distinguishes two aspects: an instructional discourse "which creates specialised skills and their relationship to each other", and a regulative discourse "which creates order, relations and identity" (2000: 46). Bernstein emphasises that the instructional is embedded in and dominated by the regulative, that the acquisition of knowledge is regulated by the social order and relations underpinning pedagogic discourse.

From the standpoint of genre and register theory outlined above, Bernstein's use of the term discourse refers to fields of social activity, coloured by tenor.⁵ Thus pedagogic discourse can be interpreted as a pedagogic register, which includes sequences of learning activities (field), pedagogic relations between learners and teachers (tenor),

and modalities of learning – spoken, written, visual, manual (mode). These three dimensions are summarised in Fig. 8. In this perspective, it is the social relations enacted over time in pedagogic activities that create 'order, relations and identity'.

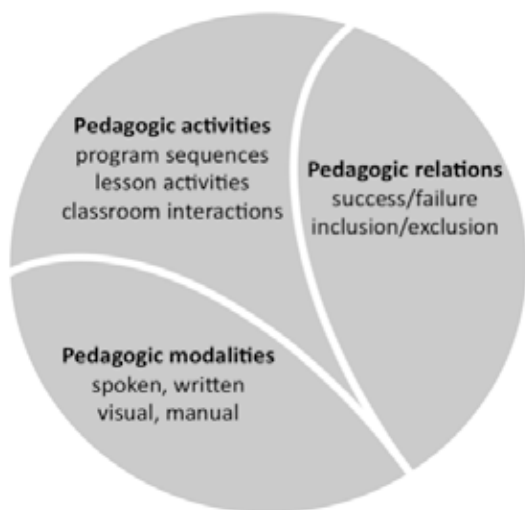


Fig. 8: *Pedagogic register*

The instructional discourse thus includes the fields of knowledge (or skills) acquired through these pedagogic activities, relations and modalities. In social semiotic terms, the fields of knowledge are projected by the pedagogic register, as the act of saying projects a locution, or thinking projects ideas (in Halliday's 1994/2004 terms). On this model, knowledge is projected by activities of teaching and learning. There are thus two fields in Bernstein's instructional discourse: the field of pedagogic activity, and the field of knowledge projected by it. The entire configuration of pedagogic activities, relations, modalities and projected knowledge constitutes a genre that Christie (2002) has termed a curriculum genre, illustrated in Fig. 9.

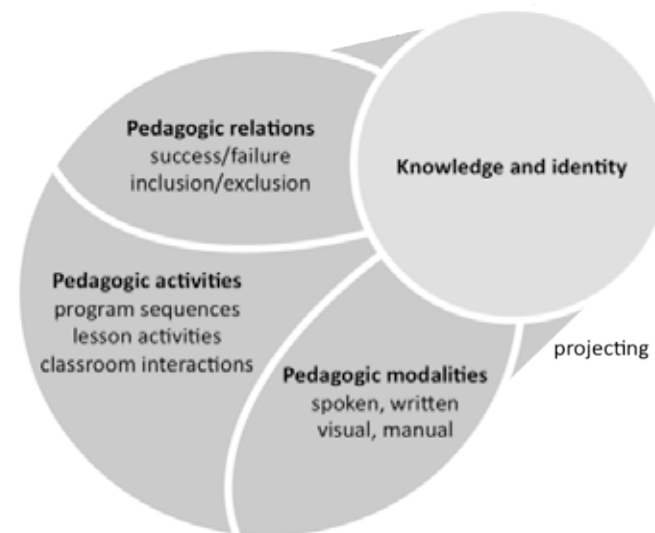


Fig. 9: *Curriculum genre*

As Fig. 9 suggests, it is not only knowledge that learners acquire through pedagogic activities, relations and modalities, but identities as learners that are more or less successful, and more or less included in the community of learning in the school. Differentiation in learner identities is a product of 1) continual evaluation, which positions them on a hierarchy of success and failure, 2) varying degrees of engagement in lesson activities and classroom interactions, and 3) varying control over modalities of learning, particularly reading and writing. By these means, pedagogic discourse creates an unequal social order and asymmetric social relations. The creation of differential learner identities internalises and thus naturalises the social order produced by the pedagogic device. As Bernstein (2000: 5) asks "How do schools individualize failure and legitimize inequalities? The answer is clear: failure is attributed to inborn facilities (cognitive, affective) or to the cultural deficits relayed by the family which come to have the force of inborn facilities."

5. *Curriculum genres*

We are now in a position to distinguish two sets of genres associated with education: the knowledge genres through which academic knowledge is presented, such as Conal's and Hamish's exposition, report and explanation, and curriculum genres through which knowledge genres are acquired in the school.

With respect to generic structuring, we can identify a generalised nuclear structure to curriculum genres. At the core of each curriculum genre is a learning task, through which learners acquire the target knowledge. In a formal pedagogic context, each learning task is initiated by a task focus. This may be a question or direction, such as the question heading text [1] above, or the teacher's direction in text [2]. In addition, each learning task is ultimately evaluated, either immediately or once the product is presented to others. Bernstein emphasises that "the key to pedagogic practice is continuous evaluation... evaluation condenses the meaning of the whole device" (2000: 42-50). The nucleus of each curriculum genre thus consists of three phases – Focus, Task, Evaluate, as in Fig. 10.



Fig. 10: *Nuclear phases of curriculum genres*

These nuclear phases are typical components of a curriculum genre, but optional components may include a preparation phase that supports learners to perform the task successfully. For example, manual tasks are typically first modelled by an expert who may then observe

and guide as learners practise the task. Furthermore, the knowledge acquired through the learning task may be elaborated, following successful completion. For example, a common learning task in school is to read passages of text aloud, or to listen as the text is read. Such readings are typically elaborated by discussing key meanings, and evaluated with comprehension questions. These optional phases of Prepare and Elaborate are presented as marginal elements in Fig. 11.



Fig. 11: *Marginal phases of curriculum genres*

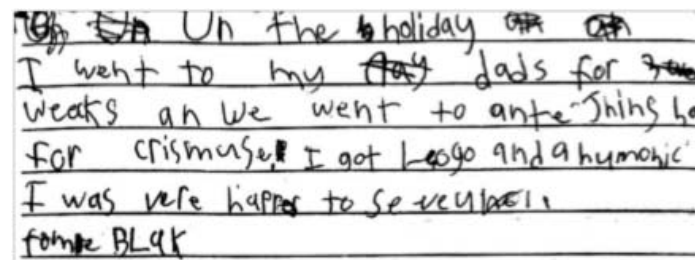
Any pedagogic activity may be analysed in these terms, to bring out not only its generic structuring, but its values in field, tenor and mode. For example, at the time genre-based literacy pedagogy (hereafter 'genre pedagogy') was first developing in the early 1980s, 'process writing' was being widely adopted in anglophone primary schools as an appropriate approach for children learning to write. The progressivist/constructivist principle behind this now endemic approach is that learning emerges from within each individual, and should not be constrained by 'teacher interventions'. Its leading exponent, Donald Graves, considered that "The most important thing children can learn is what they know and how they know it" (1991: 116). The instructional field is thus recontextualised from the child's experience of home and community; the child's task is to discover her own knowledge.⁶

The core task in the process writing genre is widely known as 'drafting', preceded by 'pre-writing' in which children are told to 'think about what you want to write', and followed by 'editing' in which the draft is shown to others for suggestions to improve it. The ideal writing topic in this approach is "a subject the child is aware that he knows something about" (Graves 1985: 118), so one common Focus for writing is 'What you did on your holidays/ weekend'. As learning is expected to emerge from within the child, teacher evaluation is reconstrued as 'conferencing', in which the draft is shown to teacher and peers for 'suggestions'. The progressivist/constructivist ideal is to reverse the roles of child learner and adult teacher, by means of prescriptions such as Graves (1994: 59) "the purpose of the writing conference is to help children teach you about what they know so that you can help them more effectively with their writing." Evaluation is thus reconstrued as 'children teaching the teacher what they know'. The stages of the process writing curriculum genre can be analysed as follows.

Prepare	Focus	Task	Evaluate	Elaborate
Pre-writing	Choose topic	Drafting	Conferencing	Editing

One thing glossed over by progressivist/constructivist ideals is the vastly different experiences with written texts that children begin school with, from up to 1000 hours of parent-child reading in literate middle-class families to little or none in less literate families (Adams 1990; Williams 1995). Where 'thinking about what you want to write' may be sufficient for some children to prepare for writing, for others it is plainly inadequate. The huge disparity in the quality of texts that children are able to produce in process writing activities exposes the fallacy that language merely emerges from within the child. Text [4] illustrates a common standard for some students in upper primary school, after four or five years of process writing (Gray 1987; Martin 1990; Rose 1999; Rose, Gray & Cowey 1999).

[4] Process writing in upper primary



Graves (1985: 120) celebrates similar writing standards in the early years of school, followed by an example of teacher/student 'conferencing'.

[5] *My Grdan*

I help my Dad with the grdan ferst you have to dig it up an than you rake an get the racks out of it. Than you make ros an you haveto be cerfull to make it deep enuff so the letis will come up.

Graves categorised this child with 'learning disabilities', claiming that "Billy's breakthrough as a writer came when his teacher discovered his interest in and knowledge of gardening". His teacher "helped him to teach her about this subject" (ibid).

Graves' 'conferencing' exchange is analysed here using the same terms outlined above for curriculum genres. Here however, the analysis is applied to micro-phases of the exchange that constitutes the generic stage, bringing out fractal relations between the structure of curriculum genres and the interaction cycles that realise them (Rose 2004, 2005; Martin 2007; Martin & Rose 2007; Rose & Martin 2012).

The exchange begins with the teacher evaluating Billy's efforts in writing, and elaborating on what he has written, by re-interpreting it in standard English.

[6] Exchange in process writing (Graves 1985: 120)

Teacher	Evaluate	<i>You've been working hard, Billy.</i>
	Elaborate	<i>I see that you work with your dad on your garden.</i>
	Evaluate	<i>You know just what you do;</i>
	Elaborate	<i>you dig it up, rake it to get the rocks out, and then you have to be careful how deep you plant things.</i>
	Check	<i>Did I get that right?</i>
Billy		<i>Yup.</i>

This task evaluation is followed by a series of focus questions, for which Billy's task is to propose a response from his knowledge, which the teacher then evaluates. Each exchange thus consists of the learner's task, preceded by a focus, and followed by evaluation.

Teacher	Focus	<i>Well, I was wondering, Billy. You say that the lettuce has to be planted deep enough so the lettuce will come up. Could you tell me more about that? I haven't planted a garden for a long time.</i>
Billy	Propose	<i>Well, If you plant it too deep, it won't come up. Lettuce is just near the top.</i>
Teacher	Evaluate	<i>Oh, I see.</i>
	Focus	<i>And did you plant some other things in your garden?</i>
Billy	Propose	<i>Yup, carrots, beans, turnips (I hate 'em), spinach (that, too) beets, and tomatoes; I like tomatoes.</i>
Teacher	Evaluate	<i>That's quite a garden, Billy.</i>
	Focus	<i>And what will you be writing here next?</i>
Billy	Propose	<i>You have to water it once you plant it.</i>
Teacher	Evaluate	<i>Then you already know what you'll be doing, don't you</i>

The teacher's last move here simultaneously evaluates what Billy has said, and directs the next 'editing' stage of his writing task, to write more detail. This task focus is phrased as though the direction is coming from Billy, yet the teacher clearly has the authority to direct and evaluate the learner's utterances as well as his writing products. However the only criteria the teacher provides are to 'do what you already know'. No other criteria for evaluation are revealed to the child.

Bernstein (1975: 119-120) contrasts this type of pedagogy with one in which criteria are made explicit:⁷

An **invisible** pedagogy is created by:

- (1) implicit hierarchy;
- (2) implicit sequencing rules;
- (3) implicit criteria.

The underlying rule is: '**Things must be put together.**'

A **visible** pedagogy is created by:

- (1) explicit hierarchy
- (2) explicit sequencing rules
- (3) explicit and specific criteria.

The underlying rule is: '**Things must be kept apart.**'

The consequence of apparently inverting teaching authority, and leaving evaluation criteria implicit, is that students like Billy may be writing at a similar standard year after year, as text [4] illustrates. Meanwhile, other successful students progress steadily through the curriculum sequence of the school, by intuiting its implicit hierarchy, criteria and sequencing rules.

In contrast, genre pedagogy aims to make the criteria for successful writing as explicit as possible, to both teachers and students, in order to give all students equal opportunities to progress. A foundation for

this is the teacher's explicit authority as an expert in the structuring and language patterns of knowledge genres. The curriculum genre designed by Joan Rothery for teaching writing (e.g. 1994) consists of a sequence of explicit preparation phases, before students are expected to write for evaluation.

In the first preparation phase, the teacher guides the class to deconstruct a model text, identifying and naming its stages, and salient language patterns. In the second preparation phase, the teacher guides the class to jointly construct a new text, following the same staging, and incorporating similar relevant language patterns. The Focus then specifies the genre and register that students are expected to write. The students' Task is an independent construction of a new text of the same genre. Evaluation criteria are thus explicitly framed as the specified genre and register. Elaboration may include the class reviewing how criteria were achieved in students' texts (see example in Rose & Martin 2012, chapter 2). These stages are analysed as follows.

Prepare	Focus	Task	Evaluate	Elaborate
Deconstruction^ Joint construction	Specify genre & register	Independent construction	By genre & register criteria	Review criteria

The following example of a Joint Construction [7] is with a class of junior secondary students whose literacy skills are comparable with the author of text [4]. Science education for these students would typically be restricted to simple hands-on activities that avoided engaging with science textbooks.

However, with the teacher's guidance, the class has read an explanation on the water cycle in a textbook. As each paragraph was read, the teacher guided students to identify key information, which they then wrote on the board as notes. As they read the text and made the notes, the teacher has also guided them to label each stage and phase of the text, to make its structure explicit (example in Rose & Martin 2012, chapter 4).

The teacher now begins the Joint Construction, by pointing to the notes and the labels they have written to organise the information. She then asks a student to scribe on the board (labelled below as Direct), as she guides the class to put the notes into new sentences. In response to her focus questions, various students propose wordings, which she accepts and adjusts as they are scribed on the board. Each exchange cycle is distinguished with borders around its nuclear phases (Focus-Propose-Evaluate).

[7] Exchange in Joint Construction

Teacher	Prepare	<i>So what we're going to do now is write our own explanation, making sure that we remember about the sequence of steps. So we're going to follow the same pattern in our writing as the text that we've just read. We need to have the same introduction, identify what it is we're going to talk about, move through the steps, and finish it with a conclusion.</i>
	Direct	<i>How about Peter? Can you come up and start the first sentence please?</i>
	Focus	<i>We're going to start with water.</i>
Student	Propose	<i>'moving'</i>
Teacher	Evaluate	<i>It's moving. OK, good.</i>
	Focus	<i>What does it do? I can't say 'water moving', can I? We've got to change the word.</i>
Student	Propose	<i>'keeps on'</i>
Teacher	Evaluate	<i>We could say 'keeps on moving'. So yep 'keeps on'.</i>
	Direct	<i>So Peter, if you can write up, remember capital to start the sentence. 'Water keeps on'. [student scribes]</i>
	Focus	<i>What's it keeping on doing?</i>
Student	Propose	<i>'moving'</i>

Teacher	Evaluate	<i>'keeps on moving' So it's moving. [student scribes]</i>
	Focus	<i>What else is it doing? Jeremy, from our notes up here, what else is it doing?</i>
Student	Propose	<i>'changing'</i>
Teacher	Evaluate	<i>Changing. Good.</i>
	Focus	<i>What's it changing?</i>
Student	Propose	<i>'state'</i>
Teacher	Evaluate	<i>State,</i>
	Elaborate	<i>...from solid, liquid, gas, OK.</i>
	Focus	<i>So we're going to try to build that into the sentence.</i>
Student	Propose	<i>'It constantly changes state'</i>
Teacher	Evaluate	<i>OK, great idea Trent. 'It constantly changes'. [student scribes]</i>
	Direct	<i>[spells out 'constantly' 'changes state'.]</i>
	Focus	<i>What if we said, here in our notes, that it's going from...</i>
Student	Propose	<i>'liquid water'</i>
Teacher	Evaluate	<i>Liquid water, yep,</i>
	Focus	<i>to...</i>
Student	Propose	<i>'to vapour, to ice, to liquid'</i>
Teacher	Evaluate	<i>OK, excellent.</i>
Student	Propose	<i>'back to solid'</i>
Teacher	Elaborate	<i>Maybe to a solid.</i>
Student	Propose	<i>'maybe to a solid' [student scribes]</i>
Teacher	Direct	<i>[spells out 'solid']</i>
	Evaluate	<i>You're doing well, that's alright.</i>

	Prepare	<i>And we want to get this idea of a cycle.</i>
	Focus	<i>Where did it finish?</i>
Student	Propose	<i>'back to the liquid'</i>
Teacher	Evaluate	<i>OK. [student scribes]</i>

In this exchange, teacher and students are negotiating, not just the wordings to write new sentences, but the scientific concepts associated with the water cycle, of water moving through the environment and simultaneously changing state. The paragraph they create is as follows:

The Water Cycle
Water keeps on moving to different places in the water cycle. It constantly changes state from liquid to gas, maybe to a solid, and back to a liquid.

They then return to their notes to negotiate the next paragraph. The teacher prepares by drawing their attention to the topic of the next step in the explanation, and asks the students to repeat the technical term for the process.

Teacher	Prepare	<i>So the main idea we've got to convey in this paragraph is that it's about 'evaporates'.</i>
	Focus	<i>Or the word for the process is... Can we say that together again?</i>
Students	Propose	<i>'Evaporation'</i>
Teacher	Evaluate	<i>Exactly.</i>
Teacher	Focus	<i>What's this third dot point? Which section of our writing did we label it as?</i>
Student	Propose	<i>'Step 1'</i>
Teacher	Evaluate	<i>It's part of Step 1, yeh.</i>
	Focus	<i>So how am I going to show that in our rewrite?</i>
Student	Propose	<i>'Start a new paragraph'</i>
Teacher	Evaluate	<i>Start a new paragraph, fantastic.</i>

Along with the technical terms in the scientific field, the teacher uses explicit metadiscourse to refer to elements of the text, such as introduction, steps, conclusion. After labelling the original text and the notes, the students can now confidently name text phases such as 'Step 1', and recognise that such phases of meaning are expressed as paragraphs (Rose 2006). Now the teacher again points to the notes, to negotiate the paragraph.

Teacher	Prepare	<i>Starting from here,</i>
	Focus	<i>What was it about the sun that actually causes the evaporation?</i>
Students	Propose	<i>'the heat'</i>
Teacher	Evaluate	<i>The heat.</i>
	Direct	<i>So let's start with that, Zac, 'evaporates' [student scribes]</i>
	Focus	<i>And what was it we were evaporating?</i>
Student	Propose	<i>'from the water surface'</i>
Teacher	Elaborate	<i>So 'water from the surface'. [student scribes]</i>
Teacher	Focus	<i>So what do I want to say about the vapour? Ng, Where's it coming from, this time?</i>
Student	Propose	<i>'trees and other plants'</i>
Teacher	Evaluate	<i>Trees and other plants.</i>
Student	Propose	<i>'Water vapour is coming from'</i>
Teacher	Evaluate	<i>Absolutely. Great idea, Nathan.</i>
Student	Propose	<i>'Water vapour comes from trees and other plants'</i>
Teacher	Elaborate	<i>It's not the only place, is it? So let's include the word 'also'. [student scribes]</i>
	Focus	<i>We're going to keep the technical term.</i>
Student	Propose	<i>'so this is called transpiration'</i>
Teacher	Evaluate	<i>It's not really a 'so' link.</i>

Student	Propose	<i>'which is called'</i>
Teacher	Evaluate	<i>Which is called. You're right. Good one.</i>
Student	Propose	<i>'which is called transpiration'.</i>
Teacher	Evaluate	<i>Name the process. Well done Rodney.</i>
Student	Direct	<i>[spells out 'transpiration']</i>
Teacher	Direct	<i>So in your books, can we label it again so we can still see this section.</i>
	Focus	<i>So what was this paragraph called?</i>
Students	Propose	<i>'Phenomenon'</i>
Teacher	Evaluate	<i>Yep.</i>
	Focus	<i>And this paragraph?</i>
Students	Propose	<i>'Step 1'</i>
Teacher	Elaborate	<i>This paragraph, we've started our sequential explanation.</i>

The paragraph is scribed as follows:

The heat from the sun evaporates water from the surface of rivers, lakes, streams and the soil. The change from liquid water to gas is called evaporation. Water vapour also comes from trees and other plants, which is called transpiration.

The combination of explicit guidance, with increasing handover to the students, and the use of metadiscourse for elements of the text, ensures that all students will ultimately be able to successfully write their own texts in the same genre, using the kinds of scientific language they have negotiated in the Joint Construction. Teachers consistently report that students who would previously produce only a few lines in writing tasks (as in text [4]) now write extended coherent texts. They also consistently report that students who rarely participate in class discussion now actively respond.⁸ By embedding

scientific literacy in science teaching, students who would otherwise be excluded from success in secondary science learn to control both the technical field, and the language that realises the field.

This kind of pedagogy emerges from a view of language that treats its contexts as strata of meaning, including both register and genre, as we outlined above. The instructional field of this curriculum genre includes both the scientific field under focus, and the metadiscourse that teacher and students use to negotiate it. In this brief extract, metadiscourse has included terms such as sequential explanation, Phenomenon, Steps, sequence of steps, text, section, paragraph, introduction, conclusion, process, technical term, main idea, notes, dot points, sentence, capital.

The goal of this type of pedagogy is to address the inequalities in participation and outcomes that continue to plague education systems. Curriculum genres such as Graves advocates for 'process writing' above, have served to maintain these inequalities, by individuating learning tasks, and leaving evaluation criteria and sequencing rules implicit. As a result students progress at different rates, successful students tacitly acquire the knowledge about language (KAL) they need to read and write the knowledge genres of the curriculum, while weaker students acquire only low level knowledge about language and curriculum fields. This type of bifurcated curriculum genre is diagrammed in Fig. 12.

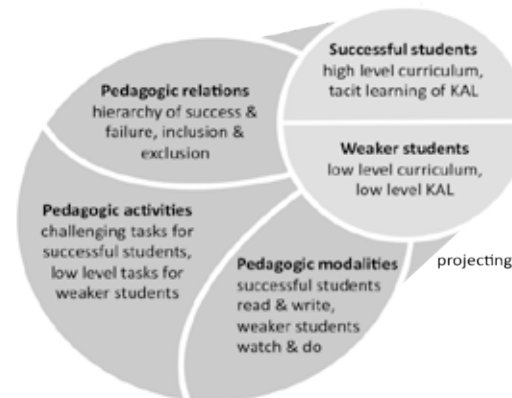


Fig. 12: *Standard curriculum genre creates inequalities*

In contrast, the curriculum genres of genre pedagogy⁹ are designed to emphasise learning as a social activity guided by expert teachers. The location of knowledge in written texts is made explicit, as is the knowledge about language that students need to read and write these texts successfully. Outcomes include access for all students to the same level of curriculum fields and metadiscourse, and potentially successful learner identities for all, diagrammed in Fig. 13.

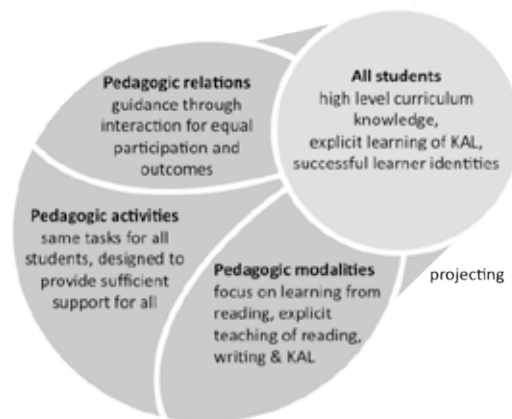


Fig. 13: *Genre pedagogy fosters equality of pedagogic activities, relations, knowledge and identities*

6. *Conclusion: pedagogic identities*

To this point in our discussion of language/context relations, we have focused on the hierarchy of abstraction from language to register to genre. We have also incidentally touched on instantiation, a hierarchy of generality from language systems to actual texts, by exemplifying systems of knowledge genres with actual texts written by children in school, and systems of curriculum genres with actual teacher-student exchanges.

Alongside instantiation, another hierarchy of generality we have incidentally addressed is individuation, from language communities to individual users. In this regard we have been concerned with differences between learners in their engagement in curriculum genres, their mastery of knowledge genres¹⁰, and their identities as learners (cf. Maton forthcoming). In Bernstein's terms, individuation relates the reservoir of meanings in a culture to the repertoire available to a person.

I shall use the term repertoire to refer to the set of strategies and their analogic potential possessed by any one individual and the term reservoir to refer to the total of sets and its potential of the community as a whole. Thus the repertoire of each member of the community will have both a common nucleus but there will be differences between the repertoires. There will be differences between the repertoires because of the differences between members arising out of differences in members' context and activities and their associated issues (2000: 158).

Each person possesses a set of strategies for recognising contexts, and for realising the texts expected in a context, for which Bernstein uses the terms recognition and realisation rules. In terms of genre and register theory, a student may be able to recognise the curriculum

genre that their class is engaged in, but may not be able to realise the responses needed to participate successfully in the classroom exchange. Or they may be able to neither recognise a knowledge genre, such as an explanation of natural processes, nor to realise it successfully as a written text.

Bernstein's recognition and realisation rules are related to his notions of classification and framing; classification refers to the strength of boundaries between categories, framing to the nature of communication within them. Furthermore, classification and framing are associated with power and control respectively. Differences in power are linked to one's membership of social categories, most generally master identities of class, ethnicity, gender, age and disability. So power is associated with the recognition of such categories, of boundaries between identities. Conversely, individuals exercise control within a context through their capacity to realise legitimate communication, to negotiate their identities. Martin (2010) refers to this perspective, of persons identifying themselves in social groupings, as 'affiliation'. In the school, evaluation is the pivot on which individuation and affiliation turn. Students are categorised on their capacity to recognise and realise the genres of the school, and over time they come to affiliate themselves and each other with the categories decided by their evaluations. Learner identities are a product of both individuation and affiliation.

Yet Bernstein also points out that each person possesses an analogic potential, which we understand as the potential for expanding one's repertoire from the known to the new. A central function of the school is to facilitate the expansion of each student's repertoire to incorporate more and more of the culture's reservoir of potential meanings. For some students the expansion of their repertoire builds steadily, year by year, in sync with the curriculum sequence of the school, while the repertoire of others lags behind, sometimes far behind.

These differences in the realisation of students' analogic potential are not incidental to the functioning of the school; they are central

to the creation and maintenance of social inequalities, not only in the resources that education affords, but in the personal identities that are shaped by education, as Bernstein (2000: 5) warns: "Biases in the form, content, access and opportunities of education have consequences not only for the economy; these biases can reach down to drain the very springs of affirmation, motivation and imagination."

To counter these biases, Bernstein (2000: 8) proposes for each student, three "pedagogic democratic rights of 'enhancement', 'inclusion' and 'participation' as the basis for confidence, *communitas* and political practice." 'Enhancement' we interpret as the expansion of each student's repertoire, building confident identities as successful learners as they progress through the school's curriculum sequence. In terms of genre and register, this includes accumulating knowledge of curriculum fields through reading, and control of knowledge genres in writing. 'Inclusion' we interpret as active engagement in the curriculum genres of the school, building identities as authoritative members of a community of learners. This requires enabling all students to respond successfully in classroom exchanges, to be continually affirmed, and so benefit equally from pedagogic activities. 'Participation' we will interpret as an outcome of enhancement and inclusion, since both knowledge and belonging are necessary conditions for exercising informed citizenship; they are as Bernstein says, 'the necessary and effective conditions for democracy'.

James R Martin and David Rose
Department of Linguistics
The University of Sydney

Notes

1. An early draft of this paper was radically revised as Rose & Martin in press; only the first five paragraphs of the early draft survived the revision and have been repeated, very slightly adjusted, here.
2. We are indebted to Chris Cleirigh for this terminology (which he no longer deploys); we are not using the terms in quite the way he originally intended.
3. The importance of staging as far as mapping genre relations is concerned is central for both Hasan (e.g. 1977, 1979, 1984, 1985) and Martin (1985, 2002) Martin & Rose (2008). For Martin staging can be usefully explored from the perspectives of particulate, prosodic and periodic structure (e.g. Martin 1994, 1995, 1996).
4. Treating genre relations as a matter of field also raises questions about how disciplinarity is modeled in SFL, which will not be pursued here. For work on field in relation to knowledge structure see Christie & Martin (2007), Christie & Maton (2011).
5. The term 'discourse' is also used similarly by critical theorists and discourse analysts such as Gee (e.g. 2005) to refer to fields coloured by tenor.
6. The pedagogic principle of 'self-discovery' seems to be originally recon-textualised from religious fields, where knowledge is acquired through introspection and revelation.
7. For useful breakdowns of this opposition see Alexander 2000: 548-9 and Brophy 2002: ix, both of whom argue for a judiciously inclusive pedagogy in place of crusading adversarialism.
8. In our professional learning programs, teachers typically report that only 2-3 or 4-5 students consistently respond in classroom exchanges. Nuthall (2005: 920) concurs: "Teachers depend on the responses of a small number of students as indicators and remain ignorant of what most of the class knows and understands".
9. Sydney School curriculum genres have now evolved over several decades. Rose & Martin 2012 review various developments; see also de Silva, Joyce & Freez 2012.
10. Our focus on the mastery of genre is based on our conviction, following Bakhtin among others, that creativity depends on mastery of the genre: "The better our command of genres, the more freely we employ them,

the more fully and clearly we reveal our own individuality in them ... the more flexibly and precisely we reflect the unrepeatable situation of communication – in a word, the more perfectly we implement our free speech plan." (Bakhtin 1986:80). Examples of students recontextualising genres for civic and domestic purposes are given in Martin (1999), Rose & Martin (2012), Martin & Matthiessen (in press). Sydney School curriculum genres regularly include a focus on the creative exploitation of and critical orientation to genres (cf. Macken-Horarik 2002), as part of any teaching/learning apprenticeship. The point of the pedagogy is not reproduction, but rather to create possibilities for deployment, creative exploitation and re-contextualisation by students who would otherwise not have been able to access the relevant discourse (without, it must be said, prescribing for the 'other' what they have to do with genres once they control them).

References

- Baldry, Anthony & Paul J Thibault. 2006 *Multimodal Transcription and Text Analysis: a multimodal toolkit and coursebook with associated on-line course*. London: Equinox.
- Bateman, John A. 2007. Towards a grande paradigmatique of film: Christian Metz reloaded, *Semiotica* 167.1/4. 13-64.
- Bateman, John A. 2008. *Multimodality and Genre: a foundation for the systematic analysis of multimodal documents*. London: Palgrave.
- Bateman, John A. 2009. *Film and representation: making filmic meaning*. W Wildgen & B van Heusden (eds) *Metarepresentation, Self-Organisation and Art (European Semiotics)*. Bern: Peter Lang. 137-162.
- Bateman, J. (2011). The Decomposability of Semiotic Modes. In K. L. O'Halloran & B. A. Smith (eds), *Multimodal Studies: Exploring Issues and Domains*. London & New York: Routledge. 17-38.
- Bednarek, Monika & James R Martin (eds). 2010. *New Discourse on Language: functional perspectives on multimodality, identity and affiliation*. London: Continuum.
- Bernstein, Basil B. 1975. *Class, Codes and Control 3: towards a theory of educational transmissions*. London: Routledge & Kegan Paul (Primary Socialisation, Language and Education).

- Bernstein, Basil B. 1990. *Class, Codes and Control 4: the structuring of pedagogic discourse*. London: Routledge.
- Bernstein, Basil B. 2000. *Pedagogy, Symbolic Control and Identity: theory, research, critique*. London & Bristol, Penna.: Taylor & Francis. (Revised ed.) Lanham, Maryland: Rowan & Littlefield.
- Christie, Frances (ed.). 1998. *Pedagogy and the Shaping of Consciousness: linguistic and social processes*. London: Cassell (Open Linguistics Series).
- Christie, Frances. 2002. *Classroom Discourse Analysis*. London: Continuum.
- Christie, Frances & James R Martin. (eds). 2007. *Language, Knowledge and Pedagogy: functional linguistic and sociological perspectives*. London: Cassell.
- Christie, Frances & Karl Maton (eds). 2011. *Disciplinary: functional linguistic and sociological perspectives*. London: Continuum.
- Dreyfus, Shoshana, Sue Hood & Maree Stenglin. (eds). 2011: *Semiotic Margins: reclaiming meaning*. London: Continuum.
- Firth, John R. 1935. The technique of semantics. *Transactions of the Philological Society*. (reprinted in Firth 1957a, 7-33).
- Firth, John R. 1957a. *Papers in Linguistics 1934-1951*. London: Oxford University Press.
- Firth, John R. 1957b. A Synopsis of Linguistic Theory, 1930-1955. *Studies in Linguistic Analysis (Special volume of the Philological Society)*. London: Blackwell. 1-31. (reprinted in F R Palmer 1968 (ed). *Selected Papers of J R Firth, 1952-1959*. London: Longman. 168-205).
- Ghadessy, Mohsen (ed.). 1999. *Text and Context in Functional Linguistics*. Amsterdam: Benjamins (CILT Series IV).
- Graves, Donald. 1985 *All children can write*. In S. Stires (ed.), *With promise: Redefining reading and writing for "special" students*. Portsmouth NH: Heinemann, 115-125
- Graves, Donald. 1994. *A Fresh Look at Writing*. Portsmouth NH: Heinemann
- Halliday, Michael. 1978. *Language as a Social Semiotic: the social interpretation of language and meaning*. London: Edward Arnold.
- Halliday, Michael. 1994. On language in relation to the evolution of human consciousness. S Allen (ed.) *Of Thoughts and Words*. London: Imperial College Press. 45-84.
- Halliday, Michael. 1994. *An Introduction to Functional Grammar (2nd*

- edition). London: Edward Arnold. (1st ed. 1985, 3rd ed. with C M I M Matthiessen 2004).
- Halliday, Michael. 2005. Computing meanings: some reflections on past experience and present prospects. *Computational and Quantitative Studies*. (Volume 6 in the *Collected Works of M A K Halliday*, edited by Jonathan Webster). London: Continuum. 239-267.
- Halliday, Michael & Ruqaiya Hasan. 1985. *Language, context, and text: aspects of language in a social-semiotic perspective*. Geelong, Vic.: Deakin University Press (republished by Oxford University Press 1989).
- Hasan, Ruqaiya. 1977. Text in the systemic-functional model. W Dressler, *Current Trends in Textlinguistics*. Berlin: Walter de Gruyter. 228-246.
- Hasan, Ruqaiya. 1979. On the notion of text. J S Petofi (ed.) *Text vs Sentence: basic questions of textlinguistics*. Hamburg: Helmut Buske (Papers in Textlinguistics 20.2). 369-390.
- Hasan, Ruqaiya. 1984. The nursery tale as a genre. *Nottingham Linguistic Circular 13* (Special Issue on Systemic Linguistics). 71-102.
- Hasan, Ruqaiya. 1985. The structure of a text. In M Halliday & R Hasan 1985. 52-69.
- Hasan, Ruqaiya. 1999. Speaking with reference to context. In Ghadessy (ed.). 219-328.
- Hjelmslev, Louis. 1961. *Prolegomena to a Theory of Language*. Madison, Wisconsin: University of Wisconsin Press.
- Hood, Sue. 2011. Body language in face-to-face teaching: a focus on textual and interpersonal meaning. Dreyfus et al. 31-52.
- Hyon, Sunny. 1996. Genre in Three Traditions: implications for ESL. *TESOL Quarterly* 30.4. 693-722.
- Johns, Ann M (ed.). 2002. *Genre in the Classroom: applying theory and research to practice*. Mahwah, N.J. : Lawrence Erlbaum.
- Kress, Gunther & Theo van Leeuwen. 1996. *Reading Images: the grammar of visual design*. London: Routledge (Revised 2nd ed. 2006).
- Labor, William & Joshua Waletzky. 1967. Narrative analysis. J Helm (ed.) *Essays on the Verbal and Visual Arts* (Proceedings of the 1966 Spring Meeting of the American Ethnological Society). Seattle: University of Washington Press. 12-44. (reprinted in *Journal of Narrative and Life History* 7.1-4. (Special Issue: Oral Versions of Personal Experience: three decades of narrative analysis; M Bamberg Guest Editor). 1997. 3-38).

- Macken-Horarik, Mary. 2002. 'Something to shoot for': a systemic functional approach to teaching genre in secondary school science. in Johns (ed.) 17-42.
- Martin, James R. 1991. Intrinsic functionality: implications for contextual theory. *Social Semiotics* 1.1. 99-162.
- Martin, James R. 1985. *Factual Writing: exploring and challenging social reality*. Geelong, Vic.: Deakin University Press (republished London: Oxford University Press. 1989).
- Martin, James R. 1992. *English text: system and structure*. Amsterdam: Benjamins.
- Martin, James R. 1995. Text and clause: fractal resonance. *Text* 15.1. 5-42. (reprinted in Martin 2010. 264-300).
- Martin, James R. 1996. Types of structure: deconstructing notions of constituency in clause and text. E H Hovy & D R Scott (ed.) *Computational and Conversational Discourse: burning issues – an interdisciplinary account*. Heidelberg: Springer (NATO Advanced Science Institute Series F – Computer and Systems (reprinted in Martin 2010: 343-385).
- Martin, James R. 1999a. Modelling context: the crooked path of progress in contextual linguistics (Sydney SFL). in Ghadessy (ed.) 25-61. (reprinted in Martin 2012a: 222-277).
- Martin, James R. 1999b. Mentoring semogenesis: 'genre-based' literacy pedagogy. F Christie. 123-155. (reprinted in Martin 2012b: 224-254).
- Martin, James R. 2000. Grammar meets genre – reflections on the 'Sydney School'. *Arts: the journal of the Sydney University Arts Association* 22. 47-95. (reprinted in *Educational Research on Foreign Languages & Arts*. Guangzhou: Sun Yat Sen University (Special issue on Functional Linguistics & Applied Linguistics) 2. 2006. 28-54).
- Martin, James R. 2001. A context for genre: modelling social processes in functional linguistics. J Devilliers & R Stainton (eds) *Communication in Linguistics: papers in honour of Michael Gregory*. Toronto: GREF (Theoria Series 10). 287-328.
- Martin, James R. 2007. Metadiscourse: designing interaction in genre-based literacy programs. R Whittaker, M O'Donnell & A McCabe (eds). *Language and Literacy: functional approaches*. London: Continuum. 95-122.
- Martin, James R. 2010. Semantic variation: modelling system, text and affiliation in social semiosis. In Bednarek & Martin. 1-34.
- Martin, James R. 2011 *Multimodal semiotics: theoretical challenges*. Dreyfus et al. 243-270.

- Martin, J R 2010 SFL Theory. Vol. 1 in the Collected Works of J R Martin (Wang Zhenhua Ed.). Shanghai: Shanghai Jiao Tong University Press.
- Martin, James R. 2012a. Genre Studies. Vol. 3 in the Collected Works of J R Martin. Wang Zhenhua (ed.). Shanghai: Shanghai Jiao Tong University Press.
- Martin, James R. 2012b. Language in Education. Vol. 7 in the Collected Works of J R Martin. Wang Zhenhua (ed.). Shanghai: Shanghai Jiao Tong University Press.
- Martin, James R (ed.). 2013. Interviews with Michael Halliday: language turned back on himself. London: Continuum.
- Martin, James R & Christian M I M Matthiessen. In press. Modelling and mentoring: teaching and learning from home through school. (J R Martin & C M I M Matthiessen) L Barrat & A Mahboob (eds) English in a Multilingual Context.
- Martin, James R & Gunther Plum. 1997. Construing experience: some story genres. *Journal of Narrative and Life History* 7.1-4. (Special Issue: Oral Versions of Personal Experience: three decades of narrative analysis; M Bamberg Guest Editor). 299-308. (Reprinted in Martin 2012a. 152-160).
- Martin, James R & David Rose. 2003. Working with Discourse: meaning beyond the clause. London: Continuum (2nd rev. ed. 2007).
- Martin, James R & David Rose. 2007. Interacting with Text: the role of dialogue in learning to read and write, *Foreign Languages in China*. 4 (5). 66-80.
- Martin, James R & David Rose. 2008. Genre Relations: mapping culture. London: Equinox.
- Martin, James R & Peter R R White. 2005. The Language of Evaluation: appraisal in English. London: Palgrave.
- Martinec, Radan. 1998. Cohesion in action. *Semiotica* 120. 1/2. 161-180.
- Martinec, Radan. 2000. Types of process in action. *Semiotica* 130-3/4. 243-268.
- Martinec, Radan. 2001. Interpersonal resources in action. *Semiotica*: 135-1/4.
- Martinec, Radan. 2005. Topics in multimodality. In R Hasan, C M I M Matthiessen & J Webster [Eds.] *Continuing Discourse on Language*. London: Equinox. 157-181.
- Martinec, Radan. & Theo Van Leeuwen 2009. *The Language of New Media Design: theory and practice*. London: Routledge.

- Maton, Karl. Forthcoming. *Knowledge and Knowers: Towards a realist sociology of education*, London: Routledge.
- Matthiessen, Christian M I M & Michael Halliday. 2009. *Systemic Functional Grammar: a first step into the theory*. Beijing: Higher Education Press.
- Matthiessen, Christian M I M, Kazuhiro Teruya & Wu Canzhong. 2008. Multilingual studies as a multi-dimensional space of interconnected language studies. In Webster (ed.) 146-220.
- Monaghan, James. 1979. *The Neo-Firthian Tradition and its Contribution to General Linguistics*. Tübingen: Max Niemeyer.
- O'Halloran, Kay (ed.). 2004. *Multimodal Discourse Analysis: systemic functional perspectives*. London: Continuum.
- O'Halloran, Kay & Bradley Smith (eds). 2011. *Multimodal Studies: exploring issues and domains*. London: Routledge.
- O'Toole, Michael. 1994. *The Language of Displayed Art*. London: Leicester University Press (a division of Pinter) (2nd rev. Ed. Routledge 2011).
- Painter, Claire, James R Martin & Len Unsworth. 2012. *Reading Visual Narratives: image analysis in children's picture books*. London: Equinox.
- Rose, David. 2004. Sequencing and Pacing of the Hidden Curriculum: how Indigenous children are left out of the chain. In J. Muller, A. Morais & B. Davies (eds) *Reading Bernstein, Researching Bernstein*. London: RoutledgeFalmer. 91-107.
- Rose, David. 2005. Democratising the Classroom: a Literacy Pedagogy for the New Generation. *Journal of Education*, 37. 127-164. http://dbnweb2.ukzn.ac.za/joe/joe_issues.htm
- Rose, David. 2006. Reading genre: a new wave of analysis. *Linguistics and the Human Sciences* 2(2). 185-204.
- Rose, David. 2007. Towards a reading based theory of teaching. Plenary paper in L. Barbara & T. Berber Sardinha (eds.). *Proceedings of the 33rd International Systemic Functional Congress, São Paulo: PUCSP*, 36-77. ISBN 85-283-0342-X <http://www.pucsp.br/isfc/proceedings/>
- Rose, David. 2008. Writing as linguistic mastery: the development of genre-based literacy pedagogy. R. Beard, D. Myhill, J. Riley & M. Nystrand (eds.) *Handbook of Writing Development*. London: Sage. 151-166
- Rose, David. 2010. *Meaning beyond the margins: learning to interact with*

- books. S. Dreyfus, S. Hood and M. Stenglin (eds.) *Semiotic Margins: Reclaiming Meaning*. London: Continuum. 177-208.
- Rose, David. 2011. Genre in the Sydney School. In J Gee & M Handford (eds) *The Routledge Handbook of Discourse Analysis*. London: Routledge. 209-225.
- Rose, David & James R Martin. 2012. *Learning to Write, Reading to Learn: Genre, knowledge and pedagogy in the Sydney School*. London: Equinox.
- Rose, David & James R Martin. In press. Intervening in contexts of schooling. J. Flowerdew (ed.) *Discourse in Context(s)*. London: Bloomsbury.
- Rothery, Joan. 1994. *Exploring Literacy in School English (Write it Right Resources for Literacy and Learning)*. Sydney: Metropolitan East Disadvantaged Schools Program.
- Royce, Terry & Wendy Bowcher. 2007. *New Directions in the Analysis of Multimodal Discourse*. Mahwah, N.J.: Lawrence Erlbaum.
- Stenglin, Maree. 2009. Space Odyssey: towards a social semiotic model of 3D space. *Visual Communication* 8.1. 35-64.
- Unsworth, Len. 1997. Explaining explanations: enhancing scientific learning and literacy development. *Australian Science Teachers Journal* 43.1. 34-49.
- van Leeuwen, Theo. 1999. *Speech, Music, Sound*. London: Macmillan.
- van Leeuwen, Theo. 2011. *The Language of Colour: an introduction*. London: Routledge.
- Veel, Robert. 1997. Learning how to mean – scientifically speaking: apprenticeship into scientific discourse in the secondary school. Christie & Martin. 161-195.
- Ventola, Eija & Jesus M Guijarro. 2009. *The World Told and the World Shown: multisemiotic issues*. London: Palgrave Macmillan.
- Webster, John (ed.). 2008. *Meaning in Context: strategies for implementing intelligent applications of language studies*. London: Continuum.