Metadiscourse: designing interaction in genre-based literacy programs

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0. Linguistics for language teaching

The basic question I am focusing on in this paper is how to use linguistics, systemic functional linguistics in particular, in language education programs. From the perspective of genre-based literacy programs this involves two concerns. One has to do with how linguistics is used to design pedagogy and curriculum; the other has to do with how much linguistics literacy teachers and their students need to share to get on with learning to read and write. I'll contextualise these issues by briefly reviewing the writing development initiatives associated with the so-called 'Sydney School' in the 80s and 90s (Martin 2000a) and then turn to the reading development extensions of this work in Rose's evolving Learning to Read/Reading to Learn programs (Rose 2003).

1. Scaffolding writing development

Throughout the 80s and 90s the Sydney School drew on systemic functional linguistics both to characterise what needed to be learned and how it could be learned. Drawing for the most part on Halliday's functional grammar (Halliday & Matthiessen 2004) and Martin's discourse semantics (Martin & Rose 2003) functional linguists and their educational linguistics colleagues undertook analyses of writing across primary, secondary, tertiary and adult education sectors - in order to establish the kinds of writing required for success in school (and selected workplace contexts). At the same time, inspired by Halliday and Painter's work on language development (eg. Halliday 1975, 1993, 2004, Painter 1984, 1986, 1998, 2000, 2003a, 2004), they designed pedagogy which was used to apprentice students into the writing they were expected to control. Throughout this process genre theory was developed to interpret curriculum (what students were learning to write) and pedagogy (how they were taught), and so alongside its proper name (the Sydney School) this action research project has often been characterised as 'genre-based' literacy development.

Space precludes an outline here of our work on school and workplace genres (Christie & Martin 1997, Martin & Rose 2005a) and the learner pathways we constructed out of their relations to one another (Coffin 1997, Feez 1998). I will however include an outline of the macro-genre designed by Rothery and her colleagues (Rothery 1994, 1996) to scaffold genre development (Fig. 1 below). This teaching learning cycle consists of three main phases - Deconstruction, Joint Construction and Individual Construction. Deconstruction focuses on a model of the genre being learned; Joint Construction involves the teacher scribing student suggestions as they produce another model of the same genre, but involving a different subject matter; in the Individual Construction stage, students write a text of their own, changing the subject matter once again. Each stage includes activities building up knowledge of the relevant field (the domestic, professional or disciplinary content of the genre); and importantly for the discussion here, each stage both introduces
and deploys knowledge about language (KAL) to analyse and produce instances of the focal genre (Rothery 1989, 1996).

Using knowledge about language and genre to scaffold writing development was a radical innovation in Australia at the time, when the writing curriculum was strongly influenced by American progressivism (the process writing and whole language movements). Syllabus designers had interpreted progressivism as prescribing that KAL was both useless as far as literacy development was concerned (and harmful, since it took time away from writing). This meant that a generation of Australians, including teachers, had grown up with virtually no knowledge of the structure of their language - so almost any metalanguage we wanted to use we had to introduced from scratch. We began with terminology for names of genres and their principal stages (‘exposition’ with the stages ‘Thesis’, ‘Arguments’ and ‘Reiteration of Thesis’ for example; Derewianka 1990). In some cases, where in-service permitted, various dimensions of grammar and discourse analysis were also introduced and deployed (Rothery 1989, Williams 2000, 2004). Our interventions at the level of genre were ultimately quite successful, as reflected in primary school syllabus documents around Australia. Functional grammar on the other hand had to be snuck in the back door (Derewianka 1998) once New South Wales state politicians and talk-show hosts realised what was going on and legislated for ‘conventional’ terminology - their knee-jerk ‘back to basics’ (i.e. back to the 50s) riposte to successful innovation drawing on cutting edge linguistic research.

Alongside SFL our work drew on Bernstein’s sociology of education, especially his analysis of pedagogic discourse and educational failure (Bernstein 1975, 1990, 1996). For Bernstein, pedagogic discourse embeds an instructional discourse (ID) in a regulative discourse (RD), in a model where instructional discourse is concerned with the
classification of what is taught and regulative discourse with the framing of how this is transmitted. As functional linguists we preferred the term projection to embedding, treating the instructional discourse as projected by the regulative one - science discourse projected by varieties of teacher/pupil classroom interaction for example (Christie 2002). The pedagogic discourse implicated in Fig. 1 above is discussed in relation to Bernstein's notions of weak and strong classification and framing in Martin 1998.

We can adapt Bernstein's imagic notation for the projection of instructional by regulative discourse as follows:

![Diagram 1]

In our pedagogy however, the instructional discourse was in a sense bifurcated, since we projected instructional discourse in Bernstein's sense through our own functional linguistic metalanguage. As this terminology covered both language and social context (i.e. genre and register as well as grammar and discourse semantics), and later on attendant modalities of communication such as image and sound as well (Cope & Kalantzis 1999, Unsworth 2001), it can be referred to as a social semiotic instructional discourse (SSID). This means that as far as students and teachers were concerned, the pedagogy is better represented as the following:

![Diagram 2]

In our design of curriculum macro-genres, we were of course drawing on the SSID to project the regulative discourse as well; and some educators (e.g. Wells 1999) have argued that teachers and students should be encouraged to negotiate their regulatory discourse with one another, potentially drawing on SSID to do so. This takes us beyond the scope of the present discussion, but this radical possibility is outlined below (Martin 1988, Martin & Rose 2005b):

![Diagram 3]

In this paper however I will restrict discussion to the nature of the metalanguage involved in the SSID projecting ID in classroom interaction.

One final step before pursing this discussion is to position the Sydney School in relation to alternative positions as far as pedagogic discourse is concerned. Bernstein's 1990 (213-214) topology of theories of instruction has been adapted in Fig. 2 below. He outlines the key axes as follows:

The vertical dimension would indicate whether the theory of instruction privileged relations internal to the individual, where the focus would be intra-individual, or ... relations between social groups (inter-
group). In the first case... the theory would be concerned to explain the conditions for changes within
the individual, whereas in the second the theory would be concerned to explain the conditions for
changes in the relation between social groups. The horizontal dimension would indicate whether the
theory articulated a pedagogic practice emphasising a logic of acquisition or... a logic of
transmission. In the case of a logic of acquisition...the acquirer is active in regulating an implicit
facilitating practice. In the case of a logic of transmission the emphasis is upon explicit effective
ordering of the discourse to be acquired, by the transmitter. [Bernstein 1990: 213-214]

Bernstein also comments (1990:73): "It is a matter of interest that this top right-hand
quadrant is regarded as conservative but has often produced very innovative and
radical acquirers. The bottom right-hand quadrant shows a radical realization of an
apparently conservative pedagogic practice...each theory will carry its own conditions of
contestation, 'resistance', subversion."8 As the matrix implies, our approach in the lower
right-hand quadrant has been a visible and interventionist one (Martin and Painter 1986,
Hasan and Martin 19899, Cope and Kalantzis 1993) - with a relatively strong focus on the
transmission of identified discourse competences and on the empowerment of otherwise
disenfranchised groups in relation to this transmission. As such it resonates strongly with
the social constructivist position articulated by Mercer and his colleagues in Britain (1994,
1995, 2000), although it has to be said that American implementations of neo-Vygotskyan
ideals seem at times to slide rather seamlessly into a co-opting upper left-hand
progressivist quadrant (see for example Wells’ social constructivist manifesto10 in
Appendix I of Wells 1999). I’ll return to this topology of pedagogies in section 5 below,
once Rose’s approach to pedagogy and metalanguage has been introduced.

2. Scaffolding reading development
In the 00s, the main innovations to the literacy program outlined above have been undertaken by David Rose, drawing on his years of experience working in Indigenous communities in Australia, his literacy work with Brian Gray in South Australia (Gray & Cowey 1999, Rose et al. 1999), and his research in the fields of functional grammar and discourse analysis (with special reference to Pitjantjatjara and the discourse of science based industry; Rose 1997, 2001). Complementing 80s and 90s initiatives, Rose has focused on reading (alongside writing), on the design of micro-interaction in the classroom (alongside the global staging of curriculum genres) and on the use of everyday metalanguage to scaffold literacy instruction (alongside technicality drawn from SFL). These are crucial developments since they address three pressing problems: i. students who can't read the texts used to model genres ii. teachers who interact with students in ritualised IRF exchange sequences no matter where they are in a teaching/learning cycle; and iii. students and teachers who share no specialised knowledge about language with which to analyse and construct texts. Problems of this order, especially when combined with one another, can bring the pedagogic processes outlined in section 1 above to a grinding halt.

Rose's macro-genre for the global organization of his pedagogy is outlined in Fig. 3 (which correlates stages with metalinguistic foci). The General Preparation stage explores the field of the text in question and summarises its content and sequencing; the teacher reads the text aloud, briefly explaining key concepts where necessary. The Detailed Reading stage involves a sentence by sentence focus on the text; the teacher prepares the students for each sentence with meaning and position cues, the students identity and mark key wordings, and the teacher elaborates unfamiliar meanings. I will concentrate on this stage of the pedagogy below. The next stage is Note Taking, with a student scribe writing dot-points suggested by fellow students and negotiated with the teacher on the board; the metalinguistic focus here is on spelling. Then in the Rewriting from Notes stage, the students scribe a new version of the reading passage based on their notes, with the teacher in a guiding role, focussing on text structure, 'grammar', punctuation, spelling.

Fig. 3: Rose's reading focused curriculum genre
Alongside this global scaffolding Rose has also designed a generalised exchange structure for micro-interaction. Preparing involves cues for learners to identify groups of words, including their meaning in common sense terms and their position (often probed with a wh- phrase). Identifying has students picking out the relevant word or phrase in the text and highlighting it (e.g. underlining or colouring in with a marker pen). Elaborating is used to define technical terms, explain metaphors and abstract language, and to relate the text to students' experience.

Fig. 4: Rose's interaction cycle for Detailed Preparation stage

From a linguistic perspective what is interesting here is the kind of exchange structure Rose's scaffolding promotes. For this analysis I'll draw on Ventola's 1987 exchange structure (as developed in Martin 1992). In this model, an exchange consists of between 1 and 5 moves, according to the following structure potential - where 'D' stands for delay (a 'test' question or offer of goods & services manoeuvre), 'f' for follow-up, 'K' for knower (in information exchanges negotiating propositions), 'A' for actor (in action exchanges negotiating proposals), '1' for primary knower or actor (the primary knower has authority with respect to the validity of the information exchanged, the primary actor has responsibility for handing over goods or performing the service in an action exchange) and '2' for secondary knower or actor (the secondary knower is seeking information, the secondary actor is seeking goods or services); optional moves are placed in parentheses and '^' stands for sequence.

\[
((Dk1) \ ^K2) ^K1 \ (^K2f \ (^K1f))
\]
\[
((Da1) \ ^A2) ^A1 \ (^A2f \ (^A1f))
\]
Five move information, then action exchanges can be illustrated as follows, the first negotiating someone’s name, the second the loan of a book.

**Dk1** You’ll never guess who I am?
**K2** - Who?
**K1** - Rita.
**K2f** - Ah.
**K1f** - Yeah.

**Da1** Would you like to borrow it?
**A2** - Yes.
**A1** - Here you go. (handing over book)
**A2f** - Well, thank-you very much.
**A1f** - No worries, mate.

In a model of this kind, the IRF (Initiation, Response and Feedback) exchange so often explored in classroom based research (e.g. Sinclair & Coulthard 1975) is treated as a Dk1^K2^K1 sequence. The primary knower, the teacher, delays adjudicating the proposition in question by asking a test question (Dk1), to which students respond as secondary knowers (K2); the teacher then validates 'correct' responses or re-cycles the Dk1 move until an acceptable answer is proffered. This kind of sequence can function as a useful review strategy, once teacher and students share the knowledge that is being 'tested'. Appropriate consolidation along these lines is illustrated below with a passage taken from the Deconstruction stage of one implementation of the teaching/learning cycle outlined in Fig. 1 above. The Year 5 class is working on exposition, have already completed one cycle, and have been looking critically at some of the individually constructed expositions undertaken by the class. Before moving to another Joint Construction phase the teacher pulls together some of the key points she wants them to remember next time round.

**Teacher**  
**Dk1** What are some of the things I mentioned you are going to try to think about when we do this one today? Filippa?
**Filippa**  
**K2** Not to, um, put an argument into the thesis.
**Teacher**  
**K1** Good. Right.

**Teacher**  
**Dk1** Something else.
**Richard**  
**K2** Don’t repeat yourself
**Teacher**  
**K1** Don’t repeat. Excellent

**Teacher**  
**Dk1** Something else. Who can think of something? Yes.
**Nicole**  
**K2** Don’t put any other ideas in the paragraph you are talking about.
**Teacher**  
**K1** Good girl. Keep all the paragraph unified. Don’t start introducing new ideas into the same one.

**Teacher**  
**Dk1** Something else, to think about. Yes.
**Linh**  
**K2** The argument that you’re doing has to be like the topic or thesis that you choose.
**Teacher**  
**K1** Right. So you make sure you mentioned all your arguments in your thesis. Good.

One of Rose’s key points is that such IRF sequences work well when students already know the answer to the DK1 move, but can be extremely frustrating for both teacher and
student when they don’t. When used to scaffold interaction with poor readers for example, they can be quite alienating, since they position students to induce something they are trying to learn (Rose 2004a, in press). This is the principal motivation for Rose’s design of local exchange structure, as presented in Fig. 4. Following a cycle of this kind, the information students need to know to respond successfully in Dk1^K2^K1 sequence is front-loaded into the interaction, cyclically, until all members of the class can respond successfully in the Identification phase. Rose sees this as a more democratic approach to teaching reading than one involving just a few select students providing K2 moves in Dk1^K2^K1 sequences by way of moving the lesson along (e.g. Rose 2004a).

Let’s look now at some data from one of Rose’s classrooms, breaking the interaction down into exchanges following Ventola’s model. For this analysis I’ve included her notion of a move complex, namely, two or more clauses selecting independently for mood but jointly realising a single function in exchange structure. Below for example, the teacher plays the Dk1 move in the second exchange twice - once as a polar question projecting a wh question, Can you see what it is?, and again as a declarative, withholding the tonic syllable, 1984 to 1986…? Similarly the K1 move in the same exchange is accomplished by repeating the K2 move, Uprising, and by declaring that’s exactly right!

<table>
<thead>
<tr>
<th>Teacher</th>
<th>K1</th>
<th>And then the next words tell us… it’s a word for a rebellion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td>Can you see what it is?</td>
</tr>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td>1984 to 1986…?</td>
</tr>
<tr>
<td>Student</td>
<td>K2</td>
<td>- Uprising.</td>
</tr>
<tr>
<td>Teacher</td>
<td>K1</td>
<td>- Uprising.</td>
</tr>
<tr>
<td>Teacher</td>
<td>K1</td>
<td>- that’s exactly right!</td>
</tr>
<tr>
<td>Teacher</td>
<td>A2</td>
<td>Do the whole lot, OK, 1984 to 1986 uprising.</td>
</tr>
<tr>
<td>Students</td>
<td>A1</td>
<td>[students highlight]</td>
</tr>
</tbody>
</table>

Teacher | Dk1         | You know why it’s called an uprising?                         |
Teacher | Dk1         | Because what did the people do?                               |
Student | K2          | - Rise up.                                                    |
Teacher | K1          | - The people rise up, yes.                                    |
Teacher | Dk1         | And who were they rising up against?                          |
Student | K2          | - The government.                                             |
Teacher | K1          | - The government, that’s right.                                |
Teacher | K1          | that’s right.                                                 |

In Rose’s terms (Fig. 4 above), the first exchange above is treated as Prepare, the next as Identify, and the third and fourth as Elaboration (a line is skipped to demarcate exchanges in this and following examples).

From the point of view of exchange structure what seems to be going on here is that exchanges have been organised into exchange complexes, with the Identify exchange as nucleus, and the other exchanges as interdependent satellites (Martin 2000b). Since both Rose’s Prepare and Elaboration phases have the discourse semantic function of reformulating the meaning of the word or phrase in focus, I’ll revise his terminology here by replacing his term Elaborate with Extend (to avoid confusion when I use Halliday’s logico-semantic relation elaboration (‘=’) below to characterise what is going on). I’ll also further specify Rose’s phasing by distinguishing two functions, Focus and Highlight, which frequently occur as adjunct exchanges to the Identify Dk1^K2^K1 sequence. Focus
orients students perceptually to the word or phrase under negotiation (e.g. *Now have a look at your text*); Highlight gets students to act physically on the text (e.g. *Do that one for me*, prompting the students to highlight a word or phrase).

The text we are in fact working on here is taken from Rose’s work with Mike Hart in a secondary school in South Africa; the text involves abstract discourse from the discipline of history which was well beyond the reading level of the class. For documentation of this reading lesson see Rose 2003.

**Revolutionary days: The 1984 to 1986 uprising**

In the mid-1980s South African politics erupted in a rebellion in black townships throughout the country. The government’s policies of repression had bred anger and fear. Its policies of reform had given rise to expectations amongst black people of changes which the government had been unable to meet. The various forces of resistance, which we outlined in the previous section, now combined to create a major challenge for the government.

The townships became war zones, and in 1985 the ANC called on its supporters among the youth to make these areas ‘ungovernable’. The army occupied militant township areas. The conflict was highly complex and violent; it involved not only clashes between the security forces and the resisters, but violence between competing political organizations, between elders and youth, and between people who lived in shantytowns and those who lived in formal townships. (Nuttal et al 1998:117).

Rose’s first step is to deal with the Heading, which he contextualises through a five move K1 complex functioning as Prepare. He then instructs the students to look at their text (A2^A1-nonverbal realising Focus). For Identify he uses two exchanges, one dealing with the year beginning the uprising (1984) and one dealing with the end (1986). The first Dk1 exchange involves a three move complex; once 1984 has been identified, 1986 requires less scaffolding (a simple Dk1^K2^K1 sequence). Rose then gets the students to highlight the dates (A2^A1-nonverbal again), and moves on without an Extend exchange to deal with uprising (already analysed above).

<table>
<thead>
<tr>
<th>TURN</th>
<th>EXCHANGE</th>
<th>EXCHANGE COMPLEX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Heading</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>K1</td>
<td><strong>Prepare</strong></td>
</tr>
<tr>
<td></td>
<td>...</td>
<td>We’ll start off with the heading.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The heading’s called <em>Revolutionary days</em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>So of course it’s the days when the revolution started.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>That’s why they call it <em>Revolutionary days</em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>And then it tells us when the uprising started.</td>
</tr>
<tr>
<td>Teacher</td>
<td>A2</td>
<td><strong>Focus</strong></td>
</tr>
<tr>
<td>Students</td>
<td>A1 [nv]</td>
<td>Now have a look at your text,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[students look]</td>
</tr>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td><strong>Identify</strong> (x2)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td>and can anybody tell us when it started?</td>
</tr>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td>Revolutionary days the…?</td>
</tr>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td>What’s the first year there?</td>
</tr>
<tr>
<td>Student</td>
<td>K2</td>
<td>- 1984.</td>
</tr>
<tr>
<td>Teacher</td>
<td>K1</td>
<td>- 1984!</td>
</tr>
<tr>
<td>Teacher</td>
<td>Dk1</td>
<td>1984 to when?</td>
</tr>
<tr>
<td>Student</td>
<td>K2</td>
<td>- to 1986.</td>
</tr>
<tr>
<td>Teacher</td>
<td>K1</td>
<td>- to 1986, OK!</td>
</tr>
</tbody>
</table>
The first sentence in the text is longer and so takes more work. Rose begins with an exchange complex locating the uprising in time (in the mid-1980s). Note that in this complex the Focus and Identify functions are conflated in the Dk1 move *Who can see the words that tell us when?*

**First Sentence**

**Prepare**

Teacher K1

Now the first sentence tells us that the trouble blew up in the townships, and that the people were rebelling against the government.

Teacher & Students K1

*In the mid-1980s South African politics erupted in a rebellion in black townships throughout the country.* [joint reading]

Teacher K1

Now that sentence starts by telling us when they rebelling.

**Focus/Identify**

Teacher Dk1

*Who can see the words that tell us when?*

Student K2

*In the 1980s.

Teacher K1

*Erupted!*

Teacher *check

*Is she right?*

Students *rcheck

*Yes.*

Teacher K1

*OK.*

**Highlight**

Teacher A2

Let’s all do mid-1980s.

Students A1 [nv] [students highlight]

Rose then moves on to deal with erupted and the lexical metaphor at stake. Once again Focus and Identify are conflated (*Can you see the word that tells us…*). This exchange involves a dependent move complex (*Is he right? - Yes.*), which is used to affirm and celebrate the successful identification of erupted. In Ventola’s exchange model this sequence would be treated as dynamic rather than synoptic (i.e. as simply confirming the ideational meaning under negotiation rather than extending the exchange; see Martin 1992 on tracking moves). This is followed by the Highlight function, including Focus (*Can you see…*), and Extend, which mobilises several knowledge exchanges to explain the metaphor.

**Prepare**

Teacher K1

Then it tells us that South African politics blew up.

**Focus/Identify**

Teacher Dk1

*Can you see the word that tells us South African politics blew up?*

Teacher Dk1

*South African politics…?*

Student K2

*Erupted.*

Teacher K1

*Erupted!*

Teacher *check

*Is he right?*

Students *check

*Yes.*

**Highlight/Focus**
- Can you see the word that says erupted?

Teacher A2: Let's do that one, erupted.

Student A1: [students highlight]

**Extend**

Teacher K1: The reason they use the word erupted is because that's what volcanoes do.

Teacher K2: Have you heard that before?

Students K1: - Yes.

Teacher K2: - A volcano erupts?

Students K1: - Yes.

Teacher Dk1: – So what were the townships like?

Teacher Dk1: They were like…?

Students K2: - Volcanoes.

Teacher K1: – Exactly right,

Teacher K1: they were like a volcano,

Teacher K1: and there was all this pressure inside, waiting to blow up and erupt, with all this anger the people were feeling about the government's repression.

To end the sentence Rose turns to the nominalisation *rebellion*, which he renders verbally in Prepare (*were rebelling*), and then Identifies (including celebration and reinforcement through the checking moves).

**Prepare**

Teacher K1: OK, South African politics erupted and then it tells us that people were rebelling.

**Focus/Identify**

Teacher Dk1: Can you see the word that means people were rebelling?

Teacher Dk1: South African politics erupted in a…?

Students K2: - Rebellion.

Teacher K1: - Rebellion!

Teacher *check: *Is he right?

Students *rcheck: - Yes.

... Obviously there is more analysis to be done. By way of preparing for this enterprise, I'm suggesting here for Rose's Detailed Preparation stage of his global teaching/learning cycle that we recognise an exchange complex consisting of five phases. The nuclear phase is Identify, where 'reading' happens. Sandwiching this nucleus there are two elaborating phases, one initial (Prepare) and one final (Extend), whose job it is to shunt to and fro between the written text and spoken discourse that the students can understand. In addition there are two inter-modal phases, surrounding the nucleus and connecting the spoken discourse of the classroom to the writing - Focus which ensures students attend perceptually to the text, and Highlight which amplifies this by instructing them to physically highlight the words or phrases under scrutiny.

**Identify** nuclear IRF exchange ('reading')
Prepare prospective elaboration
Extend retrospective elaboration
Focus perceive text
Highlight modify image

These can be organised as a structure potential as follows, with \(^\wedge\) realising sequence, \(\,'()\) optionality, \(\,'/'\) for conflation and the \(\,'n\) superscript for recursion:

\[
\text{Prepare} \quad \wedge(\text{Focus})/ \quad \wedge\text{Identify}^{\wedge} (\wedge \text{check}) \quad \wedge\text{Highlight} \quad \wedge(\text{Extend})
\]

An alternative imagic representation is offer as Fig. 5 below, including turn taking by the Teacher (T) and student/s (S) involved.

\[
\text{T} (^S) \quad \text{T}^{^Ss(nv)} \quad \text{T}^{^S}T (^T^{^Ss}) \quad \text{T}^{^Ss(nv)} \quad \text{T} (^S)
\]

Fig. 5: Rose's exchange complex (Detailed Preparation stage)
It is important to stress here that this is a designed interaction, in the service of the Detailed Preparation stage of Rose's globally designed curriculum genre. It has been designed to discourage teachers from teaching reading as they may have been taught, via unscaffolded 'guess what's in my head' IRF sequences. And it acknowledges in its design that learning to read is not like learning to talk. Domestic interaction will not do. What is required is specifically designed interaction for teaching uncommon sense practices in institutionalised learning.

Looking beyond the orbital ideational structure of Rose's exchange complexing, we can recognise a wave of information structure with lots of information at the beginning and end of the complex and a much narrower band of relatively redundant information at its centre - a pulse of preparation content which wanes from an initial peak towards a central trough and then waxes again in the culminative extension. And beyond this it is important to recognise a prosody of positive affect radiating through the exchange complex, sustained paralinguistically through Rose's voice quality, rhythm and intonation, pleasantly embodied in his stance, facial expression and movements round the class, and amplified in the checking chorus he uses to celebrate successful identifications by the class. These tiers of ideational, textual and interpersonal structure are outlined in Fig. 6.

Fig. 6: Exchange complex: prosodic, periodic and particulate structure

3. Metalanguage

One of the most intriguing aspects of Rose's pedagogy in this Detailed Preparation stage is the way in which he refers to the text he is teaching students to read without using any specialised SFL metalanguage. Let's take a moment to see precisely how this is done.

As far as interpersonal resources are concerned, the key device is wh interrogatives which focus students' attention of relevant parts of a sentence without having to label participants, processes and circumstances as such:

Dk1: [who, what, which, when, where, why, how...]
K2: = wording
Teacher So who was it that couldn’t meet the changes, meet their needs?
Student The government.
Teacher - The government.

Textually there are two main resources at play. One was exemplified above, namely withholding the word or phrase containing a tone group's tonic syllable (a supportive 'fill in the blanks' exercise for students - Rose gives the co-text, students supply the rest):

Dk1: withhold tonic…
K2: = wording
K1: = repeat wording

Teacher Can you see the word that means policies to make things better?
Student Policies of Reform.

The other textual resource regularly deployed is the use of exophoric reference to target relevant parts of the text:

exophoric reference to text: it; this/that, the; next, first…

Teacher OK, let's do all of that, unable to meet.
Students [students highlight]

Ideationally, Rose uses behavioural processes of perception to get students to focus on the text, and general material processes to prompt their highlighting.

PERCEPTION have a look, look at, watch, see (Focus)
ACTION do, get (Highlight)

Where metadiscourse is used to name parts of the text, Rose restricts himself to common sense terms from everyday folk rhetoric (the resources documented by Halliday and Painter in their discussions of the role of talk about talk in early language development; see Painter 1996, 1998, 1999, 2003b):

VERBAL tell, say; call, mean; read; spell…
PREPOSITIONAL be about; word for…

And Rose uses a few relatively familiar terms from traditional school grammar:

NOMINAL part; word, words, sentence, text/book…
line, paragraph, heading…
comma, full stop, capital, line (under)
reasons…

Nothing here to outrage presumptuous premiers, meddling talk-back radio shock jocks, over-burdened teachers, concerned parents or struggling students.

As we have seen, given Rose's carefully designed exchange complexing, these resources are enough to interface his spoken scaffolding with the written word - patiently, cyclically, word by word and phrase by phrase, until he has the whole class reading. Deploying projection, he gets the students to tell him what the text means:
**people telling** (human Sayers projecting meaning):

and can anybody **tell** us [when it started]?
Can anybody at this table **tell** me [what that policy was]?
And who can **tell** me [the words that mean angry and frightened]?
Who can **tell** me [the word that means they gave rise to people expecting]?

And he gets the text to talk:

**text telling/saying** (text Sayers projecting meaning):

and then it **tells** us [that people were rebelling.]
Then it **tells** us [where that rebellion happened.]
  **it tells** us [when the uprising started.]
Then it **tells** us [that South African politics blew up.]
**it starts off by telling** us [that the government had a policy to make things better]
Then it **tells** us [expectations of what?]
And then it **tells** us [that the government couldn’t meet the people’s needs.]
Now **the first sentence tells** us [that the trouble blew up in the townships…]
Now **the next sentence tells** us [the reasons that you had this rebellion;]
**this sentence… by telling** us [which policy it was.]
And then **the next words tell** us…
… **the words** that **tell** us [when?]
… **the word** that **tells** us [South African politics blew up]?

So it **says** expectations amongst black people.
… **the word** that **says** erupted?

Via identification, he explores what things are called:

**identification** (naming)

*The heading’s called* Revolutionary days.
That’s why they **call** it Revolutionary days.
**why** it’s **called** an uprising?

Words are related to their meanings (as Tokens of written text to spoken Values):

**word/s meaning** (text Token, meaning Value):

  *the word* that **means** people were rebelling?
  *the words* that **mean** angry and frightened?
  *the word* that **means** they gave rise to people expecting?
  What’s *the words* that **mean** they couldn’t meet the people’s needs?

  [it’s a **word for** a rebellion.]

And meanings are related to one another (unfamiliar words to more familiar counterparts):

**meaning meaning** (meaning Token, meaning Value):

So what’s reform **mean**? To make things… [students] Better.
Expectations **means** they expected things to get better.
Rose's dialectic tunes the students in to the structure of the written text, and builds bridges between it and the spoken language they already know - until reading becomes part of their verbal repertoire.

From the perspective of multi-modal discourse analysis, what is going on here is that two separate modalities (verbal discourse and written artifact) are reconstructed as dimensions of relatively unified semiotic system (i.e. language). Books and pages don't simply inhabit the classroom as things (alongside waste baskets, desks and pencils); rather they talk - they say things and mean things (they project!). Nudging further, beyond this, books and pages mean; or putting this more technically, they realise meaning, as graphology (the expression form of written discourse). A crude outline of this recontextualisation if offered as Fig. 7.

- **projection to identification**
  [book tells us meaning --> writing realising meaning]

![Fig. 7: The recontextualisation of artifact as graphology](image)

At the same time, spoken and written discourse aren't left to inhabit the classroom as distinct languages, with Rose translating in between. By continually shunting from one to the other Rose reworks separation as complementarity - as registerial difference (transforming inter-modality to 'alter'modality if you will). A crude outline for this recontextualisation process\(^\text{16}\) is outlined in Fig. 8.

- **inter-modality to 'alter'modality**
  [talk about & look at/highlight artifact --> complementary registers]

![Fig. 8: The recontextualisation of speaking and writing as registers](image)
Everyone learns to read, which doesn't otherwise occur. And in Rose's classrooms it happens by design; it doesn't just happen.

4. Design and practice

What does all this cost? The bottom line is that we have to pay - by finding the money to in-service practising teachers, and finding the time to change pre-service training (where staff have invested heavily in the very practices we are trying to change). At first blush, a pedagogy that doesn't depend on SFL metalanguage seems an attractive option, since training in linguistics is expensive, and can provoke resistance of various orders (traditional grammar vs functional grammar, humanities vs science, 'creativity' vs technicality - the list goes on). At the same time we have to remember that Rose's pedagogy involves both global and local design. He's not just changing the macro-genre deployed for teaching reading and writing, he's changing the micro-interactions between teachers and students at every stage as well. And teaching teachers to teach differently from the ways they were taught is also costly, and can provoke resistance of a comparable order (teaching vs learning, authority vs facilitation, democracy vs elitism and so on).

Performing Rose's exchange complexing is also dependent on text analysis; it's not just an off the cuff, spur of the moment process. When apprenticing teachers, Rose recommends the following text preparation procedure:

**Analysing tasks: steps in lesson planning**

1. **Select text**
   According to genre (for modelling writing), field (key text in the topic), mode (right level of difficulty for grade), ideology (message you want to discuss). Blow up a passage for easy reading and lesson preparation. Number sentences.

2. **Identify phases**
   Phases are a few sentences long. Types of phases depend on genre, e.g. story phases can include settings, problems, reactions, descriptions, solutions, comments, reflections.

3. **Highlight key wordings in each sentence**
   Key information in factual texts and literate language patterns in stories.

4. **Write notes for general preparation before reading**
   On a separate sheet. Background knowledge (general field), what the text’s about (text field), what happens in the text (how the field unfolds through the text).

5. **Write preparation cues above highlighted wordings**
   ‘Wh’ cues like who, when, where, why or commonsense paraphrases for each wording.

6. **Write notes for sentence meanings and elaborations**
   Commonsense summary of the sentence meaning - numbered on separate sheet. Then note words to define, concepts to explain, points to discuss. [Rose 2005]

And this procedure depends on apprenticeship into at least the rudiments of genre, register and discourse semantics. Unless Rose himself annotates the texts he wants teachers to negotiate with the class, the teachers themselves will have to take control of
SFL metalanguage, whether they share this explicitly with the class or not. So there’s actually more SFL metalanguage involved in Rose’s project than meets the eye when we analyse his classroom interaction without taking into account the preparation that has gone into the Prepare, Focus, Identify, Highlight and Extend exchange complexing.¹⁷

That said, the basic question I am posing here is whether there is a kind of trade-off between designing micro-interaction and deploying explicit metalanguage. Both the writing pedagogy inspired by Rothery and her colleagues and the reading pedagogy developed by Rose design globally - continually refining the macrogenres introduced in Fig.’s 1 and 3 above. The difference comes when we consider metalanguage and exchange structure. Rothery emphasises the role of sharing explicit metalanguage with students in literacy development whereas Rose does not; at the same time, where Rothery stops designing pedagogy, Rose pushes on, modelling move by move interaction in the exchange complexes outlined above. Are local design and explicit metalanguage alternative strategies? Or would one enhance the other whichever pedagogy we are trying to use. We don’t know the answer to these questions at this time. But they are worth posing, and raise important issues the nature of the subversive literacy practices outlined in Fig. 2 above.

In Bernstein’s original topology his lower right hand quadrant was in fact empty (imagined rather than real). But radical implementations of this apparently conservative pedagogic practice can certainly be found and in Fig. 2 above we populated this region with transmission oriented, inter-group focussed pedagogues working with SFL and also CHAT (cultural historical activity theory as practiced by neo-Vygotskyan activity theorists such as Mercer or Wells; Mercer 1994, 1995, 2000, Wells 1996, 1999, 2002).¹⁸ Taking informing theory as one vector (SFL vs CHAT) and explicitly sharing metalanguage with students or not as another we can regionalise subversive pedagogies as outlined in Fig. 9 - with Rose and Rothery’s guidance through interaction in the context of shared experience nineteen complementing Mercer’s intermentality, and Rose and Mercer’s use of metalanguage to design practice (including local interaction) complementing Rothery’s use of metalanguage to both design practice and negotiate texts with students.²⁰
A third dimension we could add to this picture would be the complementarity of global and local design; but we won't pursue this variable here. Note in passing that modelling of this kind involves clines, not categorical distinctions; the topology allows for position by degree (so we might for example position someone like Wells, who works with activity theory but has been influenced by SFL, as closer to Rose than is Mercer).

Let me close by making a final point about metalanguage and a final point about design. First metalanguage and scaffolding. One of Rothery's motivations for sharing metalanguage with students was that we pass on to them the knowledge we use as functional linguists to analyse discourse and to read and write texts. The point of this is to make students more independent readers and writers, once the interactive support offered by the teaching/learning cycle in the classroom is taken away. Metalanguage in other words is intended to function as a permanent ideational scaffolding for text reception and production - a resource to be drawn on when a teacher's not to hand. So we might ask whether Rose's students are in a weaker position, in the absence of such a resource, when they encounter discourse that challenges their literacy repertoire across the curriculum or in other walks of life. Is metalanguage scaffolding that sticks around?

Finally there is the issue of design and teaching fashions. As our topological overview of pedagogies shows, there's more than one pedagogy around; and differences in emphasis are more often than not treated as oppositions rather than complementarities. Alexander, for example, in his brilliant study of pedagogies around the world reports on some progressivist propaganda prominently displayed on the classroom wall of one of his Michigan schools.
Important issues to me –

Process orientation vs product orientation
Teaching students vs teaching programs
Teacher as facilitator vs teacher as manager
Developing a set of strategies vs mastering a set of skills
Celebrating approximation vs celebrating perfection
Respecting individual growth vs fostering competition
Capitalizing on student's strengths vs emphasizing student's weaknesses
Promoting independence in learning vs dependence on teacher [Alexander 2000:548]

He then comments as follows:

Try replacing the ‘versus’ in the list above by ‘and’ and you create a refreshingly new and inclusive pedagogy. That is all it takes, but for many teachers and education ideologues such inclusivity is inconceivable; for what is education without its barricades? This adversarialism lies behind some of the problems in American and British pedagogy to which we have already alluded.” [Alexander 2000: 548-549]

Similarly Brophy, in his excellent survey of social constructivist pedagogy, argues in relation to ‘adversarialism’ that:

…comparisons are useful (transmission vs social constructivist pedagogy - JRM), but they must be interpreted carefully to avoid… implying that one must choose between these two approaches when logic and some data indicate the need for a judicious blend and implying that a particular choice or blend will have universal applicability, when there is good reason to believe that what constitutes optimal teaching varies with grade level, instructional goals, and other context factors. [Brophy 2002: ix.]

It is hard not to sympathise with these and comparable words of wisdom. But we do need to be careful here. One common reading of 'inclusive pedagogy' and 'judicious blend' might be that really it's up to teachers to decide what to do when. They're the experts after all and we need to respect their professional practice. If eclecticism is what they require, then that is what we should promote - in pre-service training and in-service support. The danger here of course is that we simply license teachers to teach as they were taught, and continue to produce the stratified literacy outcomes Rothery and Rose are struggling against.

My key point here is that if we want democracy in the classroom, then theory matters. Decisions we make about pedagogy have to be principled, theoretically informed and context sensitive (and this means we need a model of language in context - of what to do when; we can’t simply depend on sensitive practitioners). This makes theoretically informed design the key to future developments. Rothery and Rose have opened the door for literacy practices which offer students opportunities they have not been able to access before. And these doors are open because of the ways Rothery and Rose have mobilised the social semiotic theory underpinning their practice. Setting aside eclecticism we need to foster such practices, and find out more about the kinds of institutionalised learning SFL and affine theories afford.


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1. I am much indebted to Jeong Pil Cheon and Ingrid Westhoff for research inspiring this discussion, and especially to David Rose for ‘participating’ as both colleague and ‘data’.

2. Green & Lee 1994 introduced the term ‘the Sydney School’, in recognition of the instrumental role played by functional linguists and educational linguists in the Department of Linguistics at the University of Sydney. Ironically, by 1994 the name was already well out of date, since the research was being developed at all the metropolitan Sydney universities, at Wollongong University, at the Northern Territory University, at Melbourne University and beyond. Green & Lee’s christening was published in America and has become the name by which the work outlined here is known (e.g. Freedman & Medway 1994, Hyon 1996, Lee 1996, Johns 2002, Coe 2002, Hyland 2002).

3. Schleppegrell 2004 provides an excellent overview of this arena.


5. For discussion of curriculum genres as macro-genres see Christie 2002.

6. For a British perspective on the politics of KAL, see Carter 1990, 1996; Martin 1999, 2000b review the Australian ‘crisis’.

7. Few people would think of challenging innovation in science or mathematics in this way, but when it comes to language laypersons confidently assert their authority over professional linguists.

8. At the time of writing this, Bernstein was unaware of our pedagogic initiatives; see Christie 1998.

9. See especially the papers by Painter, Rothery and Jones et al therein.

10. To be fair, there are many places in Wells’ book (and in Wells 2002) where teacher centred activities are acknowledged - but the teacher is completely elided from the manifesto; Brophy 2002 provides a balanced over-view of social constructivist teaching initiatives. Muller 2000 critiques the very disturbing ‘progressive’ implementation of social constructivist principles in South Africa after apartheid (see also Taylor et al 2003).

11. For an introduction to Rose’s strategies see Rose 2003, 2004b, c, d.

12. Note that the K1 moves in the Deconstruction interaction presented above were all move complexes of this kind.


15. Not that Rose would object to using such metalanguage, if available; but the pedagogy has to work where it is not.

16. This is much further developed in the Note Taking’ and Rewriting from Notes stages of Rose’s cycle.

17. It is also important to note here that Rose typically introduces more metalanguage in the Rewriting from Notes stage of his macro-genre than in the Detailed Preparation stage we looked at closely here.

18. Bourne 2003 interfaces this perspective with Bernstein; see also Wells 1994 on the connection between SFL and neo-Vygotsykan activity theory.

19. For the seminal work on language development underscoring this principle see Painter 1986.

20. I apologise if I am being unfair to certain CHAT theorists here; my reading of their work is not deep enough for me to be sure that they don’t in fact teach cultural historical activity theory to students as a resource for negotiating pedagogy and curriculum with them.

[9686 words]