2 Cohesion and Texture

J. R. MARTIN

0 Beyond the Clause

In this chapter I will outline a modular perspective on text organization, which places cohesion analysis within a broader framework for analyzing discourse. Cohesion is one part of the study of texture, which considers the interaction of cohesion with other aspects of text organization. Texture, in turn, is one aspect of the study of coherence, which takes the social context of texture into consideration. The goal of discourse analysis in this tradition is to build a model that places texts in their social contexts and looks comprehensively at the resources which both integrate and situate them.

Cohesion can be defined as the set of resources for constructing relations in discourse which transcend grammatical structure (Halliday 1994: 309). The term is generally associated with research inspired by Halliday (1964) and Hasan (1968) in systemic functional linguistics (hereafter SFL) and by Gleason (1968) in Hartford-based stratificational linguistics.1 Halliday and Hasan (1976) is the canonical study in the former tradition, Gutwinski (1976) in the latter. Gutwinski draws on work by Halliday and by Hasan, and later SFL work by Martin (1992) was influenced by Gleason – so there has been a fruitful exchange of ideas across theories in this field. In section 1 below I will review the early work on cohesion analysis; then, in section 2, I will consider the next generation of research in this area, from the perspective of Australian SFL (for a complementary line of development see Winter 1982; Hoey 1983, 1991a; Jordan 1984).

Cohesion is one aspect of the study of texture, which can be defined as the process whereby meaning is channeled into a digestible current of discourse “instead of spilling out formlessly in every possible direction” (Halliday 1994: 311). Alongside cohesion, this process involves the text-forming resources of grammar and phonology2 – for example, Theme and New in English (Davies 1989, 1992; Halliday 1994). Cohesion will be reconsidered in relation to texture in section 2.

Texture is one aspect of the study of coherence, which can be thought of as the process whereby a reading position is naturalized by texts for listener/readers. Alongside texture, this process involves understandings and expectations about the social context a text dynamically construes. In SFL, social context is modeled through register

---

1. Gutwinski (1976) draws on work by Halliday and by Hasan, and later SFL work by Martin (1992) was influenced by Gleason – so there has been a fruitful exchange of ideas across theories in this field.

2. Cohesion involves the text-forming resources of grammar and phonology – for example, Theme and New in English (Davies 1989, 1992; Halliday 1994).
and genre theory (Halliday 1978; Halliday and Hasan 1985; Martin 1992; Christie and Martin 1997). Texture will be reconsidered in relation to social context in section 3.

All three variables – cohesion, texture, and coherence – will be illustrated from the children’s story *Piggybook* by A. Brown. Section 1 looks at traditional approaches to cohesion as nonstructural resources for textual organization. Then in section 2, a more semantic perspective on cohesion in relation to texture is presented. Subsequently, in section 3, the social motivation of texture is considered.

1 Cohesion

Early work on cohesion was designed to move beyond the structural resources of grammar and consider discourse relations which transcend grammatical structure. Halliday (e.g. 1973: 141) modeled cohesion as involving nonstructural relations above the sentence, within what he refers to as the textual metafunction (as opposed to ideational and interpersonal meaning). In Halliday and Hasan (1976) the inventory of cohesive resources was organized as:

- reference
- ellipsis
- substitution
- conjunction
- lexical cohesion.

Gutwinski (1976: 57) develops a closely related framework, including these resources (and in addition grammatical parallelism).

Reference refers to resources for referring to a participant or circumstantial element whose identity is recoverable. In English the relevant resources include demonstratives, the definite article, pronouns, comparatives, and the phoric adverbs *here, there, now, then*. Ellipsis refers to resources for omitting a clause, or some part of a clause or group, in contexts where it can be assumed. In English conversation, rejoinders are often made dependent through omissions of this kind: *Did they win? – Yes, they did.* Some languages, including English, have in addition a set of place holders which can be used to signal the omission – e.g. *so and not* for clauses, *do for verbal groups, and one for nominal groups*. This resource of place holders is referred to as substitution. Reference, ellipsis, and substitution involve small, closed classes of items or gaps, and have accordingly been referred to as grammatical cohesion (e.g. Hasan 1968; Gutwiniski 1976).

Also included as grammatical cohesion is the typically much larger inventory of connectors which link clauses in discourse, referred to as conjunction. For Halliday and Hasan (1976) this resource comprises linkers which connect sentences to each other, but excludes paratactic and hypotactic (coordinating and subordinating) linkers within sentences, which are considered structural by Halliday. Gutwinski, however, includes all connectors, whether or not they link clauses within or between sentences. This difference reflects in part a territorial dispute over how much work the grammar is expected to do in discourse analysis (see also Schiffrin, this volume).
The complement of grammatical cohesion involves open system items, and so is referred to as **lexical cohesion**. Here the repetition of lexical items, synonymy or near-synonymy (including hyponymy), and collocation are included. Collocation was Firth’s (1957) term for expectancy relations between lexical items (e.g. the mutual predictability of *strong* and *tea*, but not *powerful* and *tea*).

The relationship between a cohesive item and the item it presupposed in a text is referred to as a **cohesive tie**. Gutwinski (1976) contrasts the different kinds of cohesive tie that predominate in writing by Hemingway and James, with Hemingway depending more on lexical cohesion than does James. Halliday and Hasan (1976) provide a detailed coding scheme for analyzing cohesive ties, which takes into account the distance between a cohesive item and the item presupposed. This framework prompted a number of researchers to ask questions about the relationship between cohesive ties and evaluations of text as coherent or not (Rochester and Martin 1979; Fine et al. 1989), proficient or not (Hartnett 1986; Olson and Johnson 1989; Yang 1989), maturing or not (Martin 1983a; Chapman 1983; Nelson and Levy 1987; Pappas 1987), context dependent or not (Hawkins 1977), and so on. In general, the interpretation of patterns of cohesive ties depended in each study on the register, as had been predicted by Halliday and Hasan (1976: 23):

The concept of cohesion can therefore be usefully supplemented by that of register, since the two together effectively define a text. A text is a passage of discourse which is coherent in these two regards: it is coherent with respect to the context of situation, and therefore consistent in register; and it is coherent with respect to itself, and therefore cohesive.

As reiterated by Halliday (1994: 339), for a text to be coherent “it must deploy the resources of cohesion in ways that are motivated by the register of which it is an instance.”

### 2 Discourse Semantics

As noted in section 1, from the perspective of grammar, cohesion was positioned as a set of nonstructural resources in the textual metafunction. Later work concentrated on the semantics of these cohesive resources and their relation to discourse structure. Martin (1992) worked on reformulating the notion of cohesive ties as discourse semantic structure, inspired by the text-oriented conception of semantics of the Hartford stratificationists (Gleason 1968; Gutwinski 1976) with whom he studied in Toronto. In his stratified account, cohesion was reformulated as a set of discourse semantic systems at a more abstract level than lexicogrammar, with their own metafunctional organization. Halliday’s nonstructural textual resources were thus reworked as semantic systems concerned with discourse structure, comprising:

- identification
- negotiation
- conjunction
- ideation.
Identification is concerned with resources for tracking participants in discourse. This system subsumes earlier work on referential cohesion in a framework which considers the ways in which participants are both introduced into a text and kept track of once introduced. In addition, the ways in which phoric items depend on preceding or succeeding co-text, on assumed understandings, or on other relevant phenomena (images, activity, materiality, etc.) are considered. The questions addressed are similar to those pursued in Du Bois (1980) and Fox (1987).

Negotiation is concerned with resources for exchange of information and of goods and services in dialog. This system subsumes some of the earlier work on ellipsis and substitution in a framework which considers the ways in which interlocutors initiate and respond in adjacency pairs. Drawing on earlier work at Birmingham (e.g. Sinclair and Coulthard 1975) and Nottingham (e.g. Berry 1981), a framework for exchanges consisting of up to five moves was developed, alongside provision for tracking and challenging side-sequences (Ventola 1987). This work is closely related to studies in conversation analysis (CA) but with a stronger grammatical orientation (such as that canvassed in Ochs et al. 1996). Eggins and Slade (1997) introduce ongoing SFL research in this area, in relation to wider questions of discourse structure and social context (Coulthard 1992 updates the Birmingham-based work).

Conjunction is concerned with resources for connecting messages, via addition, comparison, temporality, and causality. This system subsumes earlier work on linking between clauses in a framework which considers, in addition, the ways in which connections can be realized inside a clause through verbs, prepositions, and nouns (e.g. result in, because of, reason). Drawing on Gleason (1968) a framework for analysing internal (pragmatic/rhetorical) and external (semantic/propositional) conjunctive relations was proposed, including the possibility of connections realized simply by the contiguity of messages (i.e. links unmarked by an explicit connector). This work is closely related to studies of relations between propositions in discourse by Longacre (e.g. 1976) and to rhetorical structure theory (RST) as developed by Mann, Matthiessen, and Thompson (e.g. 1992; Fox 1987).

Ideation is concerned with the semantics of lexical relations as they are deployed to construe institutional activity. This system subsumes earlier work on lexical cohesion in a framework which considers the ways in which activity sequences and taxonomic relations (of classification and composition) organize the field of discourse (Benson and Greaves 1992). Drawing on Hasan (1985), a framework for a more detailed account of lexical relations was proposed – including repetition, synonymy, hyponymy, and meronymy; in addition, collocation was factored out into various kinds of “nuclear” relation, involving elaboration, extension, and enhancement (as developed by Halliday 1994 for the clause complex). This work is closely related to the detailed studies of lexical relations in discourse by Hoey (1991a), Francis (1985), and Winter (1977), and to work on the development of an ideational semantics by Halliday and Matthiessen (1999).

The result of these reformulations is a semantic stratum of text-oriented resources dedicated to the analysis of cohesive relations as discourse structure. Once stratified with respect to lexicogrammar, these resources can be aligned with metafunctions in the following proportions:
Cohesion and Texture

- identification   textual meaning
- negotiation     interpersonal meaning
- conjunction    logical meaning
- ideation         experiential meaning

In a stratified model of this kind the study of texture amounts to the study of patterns of interaction among discourse semantics, lexicogrammar, and phonology/graphology in realization.

As far as this interaction is concerned, research has concentrated on the discourse structure in relation to experiential grammar (cohesive harmony) and in relation to textual grammar (method of development). Some discussion of discourse in relation to information structure and intonation (point) and in relation to interpersonal grammar (modal responsibility) is presented in Martin (1992), but will not be developed here (Halliday and Martin 1993; Martin 1995).

Cohesive harmony and method of development will be briefly illustrated with respect to the Orientation stage of Piggybook (Brown 1989):

[1] Mr Piggott lived with his two sons, Simon and Patrick, in a nice house with a nice garden, and a nice car in the nice garage. Inside the house was his wife.

   "Hurry up with the breakfast, dear," he called every morning, before he went off to his very important job.

   "Hurry up with the breakfast, Mum," Simon and Patrick called every morning, before they went off to their very important school.

   After they left the house, Mrs Piggott washed all the breakfast things . . . made all the beds . . . vacuumed all the carpets . . . and then she went to work.

   "Hurry up with the meal, Mum," the boys called every evening, when they came home from their very important school.

   "Hurry up with the meal, old girl," Mr Piggott called every evening, when he came home from his very important job.

   As soon as they had eaten, Mrs Piggott washed the dishes . . . washed the clothes . . . did the ironing . . . and then she cooked some more.

   [One evening when the boys got home from school there was no one to greet them . . .]

As far as identification is concerned this Orientation includes the following reference chains (in order of appearance):

Mr Piggott-his-his-he-his-they—he-Mr Piggott-he-his-they . . .
a nice house-the house-the nice garage—the beds—the carpets . . .
the breakfast-the breakfast-the breakfast things . . .
his two sons-Simon/Patrick-Simon/Patrick-their-they-the boys-they-their-they . . .
his wife-dear-Mum-Mrs Piggott-she—Mum-old girl-Mrs Piggott-she . . .
the meal-the meal-the dishes—the clothes—the ironing . . .
As far as ideation is concerned, the Orientation in addition includes the following lexical strings (based on repetition, synonymy, co/hyponymy, co/meronymy in this field of discourse):

- Mr-sons-wife-dear-Mum-Mrs-Mum-boys-girl-Mr-Mrs . . .
- nice-nice-nice-nice . . .
- every-every-all-all-every-every . . .
- morning-morning-evening-evening . . .
- important-important-important-important . . .
- hurry up with-hurry up with-hurry up with-hurry up with-cooked . . .
- breakfast-breakfast-breakfast-meal-meal . . .
- dishes-clothes-ironing . . .
- called-called-called-called . . .
- went off-went off-left-went-came home-came home . . .
- job-school-work-school-job . . .
- washed-made-vacuumed . . .

In cohesive harmony analysis we are asking how strings and chains interact as far as experiential grammar is concerned (Hasan 1984, 1985). For example, at group rank the "nice" string and the "house" string are related through nominal group structure as Epithet to Thing: nice house, nice garden, nice car, nice garage. Similarly, at clause rank, the "calling" string is related to the "time of day" string as Process to Circumstance: called every morning, called every morning, called every evening, called every evening. Hasan defines interaction as taking place when two or more members of a string or chain relate in the same way to two or more members of another string or chain. Space does not permit an exhaustive analysis of cohesive harmony in text 1 here. However, since this is a feminist narrative, let us look briefly at cohesive harmony in relation to gender.

To simplify things, we will look simply at what the family does. Mrs Piggott’s activity is outlined in table 2.1. To make this analysis work effectively it is important to lexically render the text – that is, to make explicit all of the ellipsis and substitution so that points of interaction are not missed. From this display we can see that Mrs Piggott’s identity chain interacts with two activity strings (cooking and cleaning), which in turn interact with domestic strings (“chores”). By definition, her identity chain does not interact with moving or work, since it relates to this activity (i.e. going to work) only once.

The boys on the other hand interact with verbal instructions every morning and evening; and with motion to and from work and school. The only thing they do not interact with at this stage of the story is eating (see table 2.2).

From this kind of analysis we can begin to access the construal of power relations in the story. At this stage only Mrs Piggott is agentive, and she affects only things inside the home. The boys on the other hand are not agentive; they do not transform or create anything inside the home but simply shout, come and go, and eat. The next phase of the narrative begins with Mrs Piggott leaving home, forcing the boys to try and act (unsuccessfully) on domestic goods; after a period of suffering she returns (I wonder why?), the boys become successfully agentive inside the home, and Mrs Piggott ends up outside mending the car.
Table 2.1  Mrs Piggott’s activities (in sequence)

<table>
<thead>
<tr>
<th>Agent (actor)</th>
<th>Process (range)</th>
<th>Medium (goal)</th>
<th>Circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Mrs Piggott]</td>
<td>hurry up with</td>
<td>the breakfast</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>hurry up with</td>
<td>the breakfast</td>
<td></td>
</tr>
<tr>
<td>Mrs Piggott</td>
<td>washed</td>
<td>all the breakfast things</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>made</td>
<td>all the beds</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>vacuumed</td>
<td>all the carpets</td>
<td></td>
</tr>
<tr>
<td>she</td>
<td>went</td>
<td>to work</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>hurry up with</td>
<td>the meal</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>hurry up with</td>
<td>the meal</td>
<td></td>
</tr>
<tr>
<td>Mrs Piggott</td>
<td>washed</td>
<td>the dishes</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>washed</td>
<td>the clothes</td>
<td></td>
</tr>
<tr>
<td>[Mrs Piggott]</td>
<td>did the ironing</td>
<td></td>
<td>some more</td>
</tr>
</tbody>
</table>

Table 2.2  Mr Piggott and the boys’ activities (regrouped)

<table>
<thead>
<tr>
<th>Agent (actor)</th>
<th>Process (range)</th>
<th>Medium (goal)</th>
<th>Circumstance</th>
</tr>
</thead>
<tbody>
<tr>
<td>he (Mr P)</td>
<td>called</td>
<td></td>
<td>every morning</td>
</tr>
<tr>
<td>Simon and Patrick</td>
<td>called</td>
<td></td>
<td>every morning</td>
</tr>
<tr>
<td>the boys</td>
<td>called</td>
<td></td>
<td>every evening</td>
</tr>
<tr>
<td>Mr Piggott</td>
<td>called</td>
<td></td>
<td>every evening</td>
</tr>
<tr>
<td>he (Mr P)</td>
<td>went off</td>
<td></td>
<td>to his... job</td>
</tr>
<tr>
<td>they (S and P)</td>
<td>went off</td>
<td></td>
<td>to their... school</td>
</tr>
<tr>
<td>they (Mr P/S/P)</td>
<td>left</td>
<td></td>
<td>the house</td>
</tr>
<tr>
<td>they (Mr P/S/P)</td>
<td>came (home)15</td>
<td></td>
<td>from... school</td>
</tr>
<tr>
<td>he (Mr P)</td>
<td>came (home)</td>
<td></td>
<td>from... job</td>
</tr>
<tr>
<td>they (Mr P/S/P)</td>
<td>had eaten</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For Hasan, the purpose of cohesive harmony analysis is to provide a measure of the coherence of a text. She defines peripheral tokens as meanings in the text which do not participate in identity chains or lexical strings, relevant tokens as meanings which do so participate, and central tokens as relevant tokens which interact (as illustrated above). She then suggests that:

- the lower the proportion of peripheral to relevant tokens, the more coherent a text is likely to be;
- the higher the proportion of central tokens to noncentral ones (i.e. of interacting to noninteracting relevant tokens), the more coherent a text is likely to be.
She also raises the issue of breaks in the overall pattern of interaction in a text, such as that which occurs in Piggybook when Mrs Piggott leaves home – obviously her identity chain does not interact much until she returns. Breaks of this kind may of course simply reflect the genre of a text as its moves from one stage to the next. As long as they are generically motivated, such breaks will not be felt as disruptive. However, it is likely that generically unmotivated breaks in string/chain interaction will affect coherence. Hasan’s technology for measuring coherence has been taken up by a number of scholars; see especially Pappas (1985) on children’s stories, Parsons (1990, 1991) on scientific texts, and Yang (1989) (cf. Hoey 1991b and Martin 1992 on nuclear relations for closely related approaches to cohesion and coherence). To the extent that scholars feel that readers’ feeling about the coherence of a text is something that needs to be quantified, cohesive harmony is an effective, though labour-intensive, tool.

Note that cohesive harmony analysis is incomplete in various respects as an analysis of texture. For one thing it does not draw on conjunction analysis, so that temporal organization in text 1 is elided. But the point of the Orientation is to establish a habitual sequence of activity, through a series of messages that are either explicitly or implicitly related to each other with respect to temporal progression (explicit connections underlined, implicit connections in square brackets):

“Hurry up with the breakfast, dear,” he called every morning, before he went off to his very important job. [before/after/while?] “Hurry up with the breakfast, Mum,” Simon and Patrick called every morning, before they went off to their very important school. [later] After they left the house, Mrs Piggott washed all the breakfast things . . . [then] made all the beds . . . [then] vacuumed all the carpets . . . and then she went to work. [later] “Hurry up with the meal, Mum,” the boys called every evening, when they came home from their very important school. [before/after/while?] “Hurry up with the meal, old girl,” Mr Piggott called every evening, when he came home from his very important job. [later] As soon as they had eaten, Mrs Piggott washed the dishes . . . [then] washed the clothes . . . [then] did the ironing . . . and then she cooked some more.

Nor does cohesive harmony analysis consider negotiation, which is relevant to the projected demands to hurry up in text 1 and the implied compliance by Mum. Nor is method of development, point, or modal responsibility considered. So while it has been proven a remarkably sensitive technique for measuring coherence, cohesive
harmony analysis is not an adequate analysis of coherence, since in performing such analysis so many relevant parameters of texture can be aside.

Turning to the analysis of method of development, analysts are concerned with the interaction of identification and ideation with information flow in clause grammar, in particular Halliday’s concept of Theme (which in English is realized via sequence, in clause-initial position). The canonical study is Fries (1981), who introduces the term (for a survey of recent work inspired by his seminal paper see Ghadessy 1995). Following Halliday (1994), *Piggybook* opens with an unmarked Theme, Mr Piggott; the next Theme is a marked one – a circumstantial item setting the story inside the house:

Mr Piggott lived with his two sons, Simon and Patrick, in a nice house with a nice garden, and a nice car in the nice garage. Inside the house was his wife.

As far as participants are concerned this establishes the story’s perspective on its field, which is overwhelmingly masculine. Mr Piggott is selected as Theme in 21 messages and his sons in 18; Mrs Piggott on the other hand is Theme in just 8 messages. This moral tale, in other words, is aimed at men.

Subsequently the Orientation unfolds in parallel waves (cf. Hymes 1995). The method of development iterates as follows:

“Hurry up with the breakfast, dear,”
he called every morning,
before he went off to his very important job.

“Hurry up with the breakfast, Mum,”
Simon and Patrick called every morning,
before they went off to their very important school.

After they left the house,
Mrs Piggott washed all the breakfast things . . .
[ ] made all the beds . . .
[ ] vacuumed all the carpets . . .
and then she went to work.

“Hurry up with the meal, Mum,”
the boys called every evening,
when they came home from their very important school.

“Hurry up with the meal, old girl,”
Mr Piggott called every evening,
when he came home from his very important job.

As soon as they had eaten,
Mrs Piggott washed the dishes . . .
[ ] washed the clothes . . .
[ ] did the ironing . . .
and then she cooked some more.

Read globally, we have a cycle of morning activity followed by an evening one. Both cycles consist of three further cycles, two by the boys and one by Mum. Within the boys’ cycles, Theme selection takes us from the quoted command (Hurry up with) to the commander (he, Simon and Patrick, the boys, Mr Piggott), temporally related to
movers (before he, before they, when they, when he). For Mum’s cycles, Theme selection takes us through a temporal transition (after they, as soon as they) to Mum working (Mrs Piggott – three times, twice ellipsed), extended temporally to Mum working some more (and then she). Overall then, the method of development in this part of the text takes us twice from the command to the boys, to Mum. The angle on the field this pattern constructs is that of domestic activity, verbally instigated by the boys and undertaken by Mum. Theme selections thus construe a method of development which foregrounds the division of labour in the home which the story works to deconstruct.

We will have to cut off our close reading of this text here. The main point we are focusing on at this stage is the sense in which cohesion is simply one aspect of texture, which has to be understood with respect to the interaction of identification, negotiation, conjunction, and ideation with each other and with the lexicogrammatical and phonological systems through which they are realized. Space also precludes a discussion of grammatical metaphor (Halliday and Martin 1993; Halliday 1994), which is a critical resource for catalyzing this interaction. Put simply, grammatical metaphor is a resource for grammatically reconstruing meanings as alternative wordings. Note for example the movement from a verbal to a more nominal construal of phenomena in the following series (Halliday and Martin 1993: 56):

- (the question of how) glass cracks,
- (the stress needed to) crack glass,
- (the mechanism by which) glass cracks,
- as a crack grows, the crack has advanced, will make slow cracks grow, speed up the rate at which cracks grow, the rate of crack growth, we can increase the crack growth rate 1,000 times . . .

What starts out as a process ends up as a participant, through an accumulating process of nominalization. Examples such as these underscore the power of grammar to construe and reconstrue participants in discourse (alongside realizing them) and shows the importance of adopting dynamic perspectives on texture which complement the synoptic accounts fossilized in tables, diagrams, counting, statistical analysis, and the like (Martin 1985).

Can we have texture without cohesion? Yes, providing our examples are short enough and carefully selected enough (cf. the two-sentence constructed example and excerpts presented as evidence in Brown and Yule 1983: 196). But in naturally occurring texts of more than a couple of clauses, some manifestation of cohesion is overwhelmingly the norm, even in discourse felt by listeners to be incoherent (cf. Rochester and Martin 1979 on thought-disordered schizophrenia).

3 Modeling Social Context: Register and Genre

To this point we have considered cohesive resources in relation to other aspects of text organization, and the contribution such texture makes to our sense that a text hangs together – its coherence. Can we have coherence without texture? Yes again, providing our examples are short and carefully excerpted – and providing we can access the social context of such examples. This brings us to the question of modeling
social context in a functional theory which looks at what cohesion is realizing alongside the ways in which it is realized. In SFL social context is modeled through register and genre theory. Following Halliday (e.g. 1978), a natural relation is posited between the organization of language and the organization of social context, built up around the notion of kinds of meaning. Interpersonal meaning is related to the enactment of social relations (social reality) – tenor; ideational meaning is related to the construction of institutional activity (“naturalized reality”) – field; and textual meaning is related to information flow across media (semiotic reality) – mode. A summary of these correlations is outlined in table 2.3.

Following Martin (1992), field is concerned with systems of activity, including descriptions of the participants, process, and circumstances these activities involve. For illustrative work see Rose et al. (1992), Halliday and Martin (1993), and Martin and Veel (1998). Tenor is concerned with social relations, as these are enacted through the dimensions of power and solidarity. For relevant work on tenor see Poynton (1985) and Iedema (1995). Mode is concerned with semiotic distance, as this is affected by the various channels of communication through which we undertake activity (field) and simultaneously enact social relations (tenor). For exemplary work on mode in print and electronic media see Iedema et al. (1994); for differences between speech and writing, see Halliday (1985).

In these terms, as far as Piggybook is concerned, the mode is written monologue, supported by images; the field, broadly speaking, is domestic activity; and the tenor involves adult-to-child narration about changing tenor relations in the Piggott family. The register motivates the patterns of cohesion in the text and their realization in turn through lexicogrammar. For example, its mode is reflected in the density of the lexical strings, which are denser than speaking but not so dense as more abstract writing; its tenor is reflected in direct imperative commands, implied compliance and patriarchal vocatives (dear, Mum, old girl); its field is reflected in the cohesive harmony and conjunctive sequencing analysis presented above.

Martin (1992) refers to the system of tenor, field, and mode collectively as register. Technically, the relation of texture to register is termed “realization”, which by definition implies that interpersonal, ideational, and textual meaning construe, are construed by, and over time reconstrue and are reconstrued by tenor, field, and mode. Realization in other words is a dialectical process whereby language and social context coevolve.

Following Martin (1992), an additional level of context, above and beyond tenor, field, and mode, has been deployed – referred to as genre. This level is concerned with systems of social processes, where the principles for relating social processes

Table 2.3  Types of meaning in relation to social context

<table>
<thead>
<tr>
<th>&quot;Reality construal&quot;</th>
<th>Contextual variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td>Social reality</td>
</tr>
<tr>
<td>Ideational (logical, experiential)</td>
<td>“Natural” reality</td>
</tr>
<tr>
<td>Textual</td>
<td>Semiotic reality</td>
</tr>
</tbody>
</table>
to each other have to do with texture – the ways in which field, mode, and tenor variables are phased together in a text. In Australian educational linguistics, genres have been defined as staged, goal-oriented social processes (e.g. Martin et al. n.d.), a definition which flags the way in which most genres take more than a single phase to unfold, the sense of frustration or incompleteness that is felt when phases do not unfold as expected or planned, and the fact that genres are addressed (i.e. formulated with readers and listeners in mind), whether or not the intended audience is immediately present to respond. In these terms, as a level of context, genre represents the system of staged, goal-oriented social processes through which social subjects in a given culture live their lives. An overview of this stratified model of context is presented in figure 2.1; this image includes Lemke’s (e.g. 1995) notion of metaredundancy, whereby more abstract levels are interpreted as patterns of less abstract ones – thus register is a pattern of linguistic choices, and genre a pattern of register choices (i.e. a pattern of a pattern of texture). For further discussion see Christie and Martin (1997), Eggins and Martin (1977), Martin (1992, 1999), and Ventola (1987).

In terms of genre, Piggybook belongs to the narrative family of cultural practices (for relevant SFL research see Martin 1996b, 1997; Martin and Plum 1997; Rothery 1994). We analyzed the first phase of the narrative, its Orientation, above; this is followed by two phases in which equilibrium is disturbed. In the first, Mrs Piggott leaves home and the boys have to fend for themselves. In the second, their attempts to restore order create even more disequilibrium, to the point where they are rooting around as pigs for scraps on the floor; at which point Mrs Piggott arrives home (casting her shadow across the page in the relevant image). As predicted by Labov and Waletzky...
(1967), the two crises of disruption are signaled by strongly evaluative language – first You are pigs, then P-L-E-A-S-E come back.

Beyond texture, then, we have the coherence deriving from the social context a text simultaneously realizes and construes. We read the text with respect to our expectations about the field of domestic activity, the evolving tenor of gender relations, and the nature of verbiage-to-image relations in children’s books. And beyond this we read the text as a story, which in this case we recognize as a moral tale (related to fables, parables, exempla, and gossip; Eggins and Slade 1997). The genre phases field, tenor, and mode parameters together into a text with a message. It has been carefully designed to nudge along the redistribution of power across genders in western culture – to naturalize us into a reading position that interprets cohesion in relation to texture, and texture in relation to genre.

As readers, we may of course resist this positioning; or respond tactically, by refusing to read the text globally in a way that takes as many meanings as possible and their integration into account (e.g. simply snickering at the images and “piggy” lexis as the boys turn into swine: pigsty–squealed–grunted–root around–snorted–snuffled). But as discourse analysts we have a responsibility to build a model that accounts as fully as possible for the position that is naturalized, and this means building a model that places texts in their social contexts and looks comprehensively at the discourse semantics, lexicogrammar, and phonology (or graphology) that realize them.

4 Cohesion, Texture, and Coherence

In this chapter I have outlined a modular perspective on text, which places cohesion analysis within a broader framework for analyzing discourse. Following Martin (1992), I described the ways in which cohesion can be recontextualized as discourse semantics (identification, negotiation, conjunction, ideation). Subsequently, the study of texture was briefly reviewed, drawing attention to work on patterns of interaction among discourse semantic, lexicogrammatical, and phonological systems (cohesive harmony, method of development, point, and modal responsibility). Finally, I approached coherence from the perspective of social context, suggesting that texture is motivated by tenor, field, and mode, and the way in which genre phases these register variables together into a trajectory of meanings that naturalizes a reading position for reader/listeners.

From an SFL perspective, I expect that in the future our understandings of cohesion, texture, and coherence will be enhanced by further work on cohesion in relation to other modules (both linguistic and social) – so that our sense of how the social motivates patterns of cohesion is improved. I expect some of these patterns to emerge, as recurrent units of discourse structure somewhere between what we currently understand as genre structure and clause structure. Early work on phase (e.g. Gregory 1995) and rhetorical units (Cloran 1995) has been encouraging in this respect. Heeding Firth (1957), however, it may be that a good deal of this kind of structure will turn out to be specific to particular registers, and not something we will choose to generalize across social contexts.
NOTES

1. For related European perspectives, see de Beaugrande and Dressler (1981).

2. For related work on cohesion and intonation see Gumperz et al. (1984).

3. Ellipsis and substitution are sometimes treated as a single resource (e.g. Halliday 1994). From the perspective of English, ellipsis is substitution by zero; more generally, looking across languages, it might be better to think of substitution as ellipsis (signalized) by something.

4. It is more than obvious from quotations such as these that Halliday and Hasan did not equate cohesion with coherence; cf. Brown and Yule (1983: 190–201).

5. For definitions of “phora” terms (e.g. anaphora, cataphora, endophora, exophora, homophora) see Martin (1992).

6. For work on cohesion in other languages other than English see Aziz (1988); Callow (1974); Martin (1983).

7. The terms “internal” and “external” are from Halliday and Hasan (1976), van Dijk (e.g. 1977) opposes pragmatic to semantic relations. The contrast is between He came, because I just saw him (internal = “why I’m saying he came”) and He came because I saw him and told him to (external = “why he came”).

8. I use the term “construe” to place emphasis on the role texts play in making meaning (knowledge if you will) and thus constructing social context (reality if you must); cf. Halliday and Matthiessen (1999).

9. In SFL the ideational metafunction includes two subcomponents, the experiential and the logical; experiential meaning is associated with orbital structure (mononuclear), and logical meaning with serial structure (multinuclear); Martin (1996).

10. The father-and-son chains join at times through they, included in each chain at this stage of the analysis.

11. An example of bridging (Clark and Haviland 1977; Martin 1992): the garage, the bed, and the carpets are bridged from the house (predictable contents), as the clothes and the ironing are later on from the dishes (predictable chores).


13. Ellipsed participants rendered in square brackets.

14. Treated as a phrasal verb.

15. Arguably home is a circumstance of location; but in the absence of either deixis or a preposition I have taken it as a specification of the process here.

16. Fries (1992) discusses the influence of cohesive harmony on the interpretation of words, demonstrating the dialectic between global and local features in the texturing of discourse.

17. Note that one of the advantages of implicit conjunction is that it is underspecified; we can read the connection here in various ways – as succeeding, preceding, or possibly simultaneous.

18. In the framework being developed here Brown and Yule’s (1983: 196) There’s the doorbell. – I’m in the bath. would be analyzed through conjunction as involving implicit internal concession (“although you’re telling me to answer the door, I can’t because I’m in the bath”), and through negotiation as involving an indirect command followed by a challenging rejoinder justifying noncompliance.

19. This text, and children’s stories in general, foreground the cohesive
agency of grammatical parallelism (as suggested in Gutwinski 1976; Hasan 1985).

Halliday and Hasan (e.g. 1985) prefer the terms “context of culture” for these systems and “context of situation” for their instantiation, reserving the term “register” for the pattern of linguistic choices put at risk from one context of situation to another (for discussion see Matthiessen 1993).

The value of cohesion analysis is not something that can be separated from the general model of analysis in which it is positioned, something that seems often to have been lost on critics who take up an eclectic position as far as tools for discourse analysis are concerned – and who have been prepared to critique, say, Halliday and Hasan (1976) without taking into account its theoretical context, as provided by SFL.

REFERENCES


Cohesion and Texture


Iedema, R. 1995. Literacy of Administration (Write it Right Literacy in Industry Research Project – Stage 3). Sydney: Metropolitan East Disadvantaged Schools Program.


Martin, J. R. 1983b. Participant identification in English, Tagalog and


Rose, D., D. McInnes, and H. Körner. 1992. *Scientific Literacy (Write it Right)* Literacy in Industry Research Project
Stage 1. Sydney: Metropolitan East Disadvantaged Schools Program.


