GENDER AND GEOGRAPHY:
LITERACY PEDAGOGY AND CURRICULUM POLITICS

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This thesis is presented for the degree of Doctor of Philosophy at Murdoch University 1992.
I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary institution.

Alison Lee
Abstract

This thesis is an investigation into processes of gendered subject production in literate practices in school settings. Focusing on student writing in geography, the study explores gender differences in written texts with a view to asking what is differently at stake for girls and for boys in ‘becoming literate’ in school geography.

The study is an ethnographic case study of a geography classroom, focusing in particular on contexts for the production of two texts which are subject to close textual analysis. Drawing on a range of theoretical and methodological perspectives: curriculum studies, linguistics and feminist theory, the thesis argues that classrooms are sites of multiple and competing discourses. Student texts are oriented discursively and generically in different ways. These orientations both reflect and produce wider discursive alignments within the discipline of geography and elsewhere. The thesis investigates the politics of these differences.

Part I builds a detailed account of the Year 11 geography classroom as a set of curriculum contexts within which students’ literate practices are located. Readings are produced of the official curriculum resources, focusing in particular on the syllabus and the classroom textbook material. The spoken language dynamics of the classroom are investigated in terms of the materiality of processes of speaker positioning along gender lines in the production and negotiation of geographical meanings.

Part II produces detailed readings of two student essays: one by a girl, one by a boy. Differences between the two are investigated, drawing links between the texts and the discursive contexts of their production and reception. The argument is made that the two texts enact a significant gender difference in and through different geographies.

Part III discusses the consequences of the thesis findings for contemporary debates about literacy pedagogy. This includes a critique of one dominant framework within which the notion of ‘critical literacy’ is being engaged: that of educational linguistics. Finally, the argument is made that existing accounts of ‘subject-specific literacy’ need to be expanded to engage two senses of the word ‘subject’: both the specificity and multiplicity of the discourses of subject-disciplines and the concomitant production of different human subject positions through textual practice. To investigate the implications of this, theories of literacy pedagogy, it is argued, need to engage more substantially with available theories of the subject, such as feminist theories, while at the same time engaging sophisticated analytics for the exposure of the material workings of discursive practices in school-literate productions.
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I would like to thank the teacher of my study, Alan A, who generously made his classroom and his time available for me. Alan was always prepared to consider and confront the gender politics of the study. He was a skilled practitioner and I learned a great deal of geography. I would like to thank Karen and Rowan, who tolerated my curiosity, though I am not sure they understood it. I would also like to acknowledge the students of the Year 11 class, who accommodated my presence with equanimity.

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Notes on notation

1. References in the text will consist of surnames only, except where two writers carry the same name. In this case, they will be differentiated by the inclusion of an initial with a full stop, for example, C. Luke.

2. References in the Bibliography will include full names where known, except where it is clear that the writer uses and prefers initials. This is done for political reasons, to foreground gender – that is, to prevent a default attribution of masculine gender to women writers.

3. A glossary of technical linguistic terms used in the text is included on pages viii-xi following this note. These will not include terms considered to be in common usage, but rather terms specific to systemic functional linguistics. Linguistic terminology will be used for the most part without definition in the text. The notational convention within systemic functional linguistics of using capital letters to distinguish categories of different orders has not been adopted, since the analyses are not highly technical and there is little danger of confusion of categories.
Glossary of Linguistic Terms

The terms listed here are substantially as they have been formulated by Halliday in *An Introduction to Functional Grammar* (1985a), unless referenced otherwise. The list consists only of terms used in the thesis, so significant grammatical categories are absent. The order is alphabetical for ease of initial reference, but items are further grouped into super-ordinate categories for explanatory efficiency.

**actors, goals:** see transitivity structure: participants

**amplification:** a mode of realisation of the ‘affect’ dimension of tenor (see register); the process of ‘saying it louder’, either literally or metaphorically, i.e. by repetition (Poynton 1990a)

**attributive relational process:** see transitivity structure: process

**carrier, attribute:** see transitivity structure: attributive relational process

**circumstantial element:** see transitivity structure: participant

**classifier:** see nominal group

**congruent:** the most transparent or ‘natural’ coding of elements of an event with respect to either or both transitivity or mood (see grammatical metaphor).

**epithet:** see nominal group

**field, tenor, mode:** see register

**grammatical metaphor (incongruent):** a coding within one linguistic function which would more ‘naturally’ appear in another (see nominalisation).

**hypertheme:** organisation of sections of text with respect to the textual metafunction (see metafunctions and theme/rheme); a clause or clause complex announcing the departure point of a paragraph-level message (Martin/in press).

**hypotactic, paratactic:** Hypotaxis is the relationship between clauses of unequal structure; parataxis is the relationship between clauses of equal structure.

**identifying relational clause:** see transitivity structure: process

**lexis:** ‘content’ vocabulary as distinct from grammatical vocabulary
**macrotheme, macronew:** organisation of whole text with respect to the textual metafunction (see metafunctions and theme/theme). A macrotheme is a clause or clause complex announcing departure point of the whole text; macronew is the arrival point at the end of the whole text (Martin/in press).

**material process:** see transitivity structure: process

**metafunctions:** language functions in the most general sense related to or deriving from an understanding of distinct strands of linguistic structure. There are three metafunctions: the ideational (experiential and logical) realised at clause level in transitivity structures; the interpersonal, realised at clause level in mood structures, and the textual, realised at clause level in thematic structure.

**minor clauses:** commonly consisting simply of nominal groups; minor clauses do not participate in either the transitivity structures or the mood structures of major clauses.

**modality:** one of the linguistic technologies associated with the register variable, tenor, which realises interpersonal meaning. The term can be used in a general and a specific way. Generally, modality refers to the linguistic resources that negotiate the terrain between positive and negative polarity. More specifically, modality, as distinct from modulation (see below) is concerned with negotiating *propositions* in terms of possibility, probability and usuality.

**modulation (see modality):** the linguistic resources negotiating the terrain between positive and negative polarity in terms of proposals, speech acts concerned with negotiating action or potential action. Modulation codes degrees of inclination, obligation and necessity with respect to commands and offers.

**mood structure:** that aspect of linguistic structure which constitutes the major clause-level realisation of the interpersonal metafunction and which constitutes the clause as a social as distinct from a propositional act.

**nominal group:** a structure primarily organised around a headword, commonly a noun. It may consist of a noun alone or include one or more modifying elements. Modifiers are distinguished functionally as follows:

- **epithet:** a defining or describing element capable of intensification;
- **classifier:** a defining or describing element that subcategorises;
- **qualifier:** performing similar functions but following the headword and usually consisting of a prepositional phrase or a clause.
nominalisation: (see grammatical metaphor): an item that functions as a noun, both structurally and functionally, but which derives from a process congruently realised as a verb.

participant: see transitivity structure

process: see transitivity structure

register: the conjunction of a particular set of semantico-grammatical options associated with a particular social context or situation type. The three contextual variables, field, tenor and mode, are realised through probabilistic rather than categorical selections from the three metafunctions of the language system:

field (what is 'going on') is realised in terms of the ideational metafunction, particularly, lexis and transitivity;

tenor (relations among interactants) is realised in terms of the interpersonal metafunction, including particularly choices of mood, modality/modulation, invocation;

mode (the role of language in the situation) is realised in terms of the textual metafunction, particularly theme/rheme and information structure (Halliday and Hasan 1985).

relational process: see transitivity structure: process

theme/rheme: organisation of the clause with respect to the textual metafunction. Theme announces the departure point of the message (realised in English by initial position); the rest of the clause constitutes rheme.

token, value: see transitivity structure: participant

transitivity structure: a basic grammatical technology for constructing representations at clause level. i.e., realising the experiential metafunction, and related to the register variable, field. Transitivity structures consist of three potential functional elements: process: the 'core' of the structure, usually realised in verbal groups; participant: the entities associated with particular roles within a particular process, and circumstance (an optional element).

Process: Process types include material (or 'doing') processes, verbal (or 'saying' processes, and relational (or 'being') processes. Relational processes are distinguished between attributive, involving attribution of some quality to an entity, and identifying, which specify an entity in relation to some role or 'identity'.
Participant: an entity associated with a specific process type; for example, actor and goal ('doer' and 'done to') with respect to a material process, carrier and attribute (entity and quality) with respect to an attributive relational process, and token and value ('identified' and 'identifier') with respect to an identifying relational process.
Preface

Any beginning is determined by the exclusions it operates and the conclusions it repeats. A beginning is not an origin; there can be no founding or finding of first principles which would be prior to the working out of those principles in the course of an argument.

(Frow 1986:1)

This thesis is about writing; it is also an exercise in writing. Its field of concern is the politics of school literacy theories and pedagogic practices; its form conforms to the specifications and constraints of a specific written genre: the thesis. It is impossible to separate these two dimensions of the enterprise which meet at the site of this text; indeed, it is extremely productive to consider the relation of one with the other. Another way of saying this is to note that the thesis is a particular kind of “student text” (P. Gilbert 1989).¹ At the same time, within this text, other student texts are made the object of investigation. It is in this sense, for instance, that this Preface stands as much for being a ‘Preface’ of a specific genre, a textual exercise governed by specific institutional rules, as it attempts to stand as an account of a field: a secondary school geography classroom and its literate practices.

This primary move of intrication is a deliberate and necessary production and pronouncement of a complexity. That is, rather than clouding the issue, it brings a necessary complexity to light – a complexity concerning the production, performance and status of knowledge in specific institutional locations. Questions of literacy and schooling are what this thesis is about, in both of the ways indicated in the opening sentence. Here the term ‘literacy’ is understood as both access to particular discourses and subjection to the rules of those discourses. First, the title, Gender and Geography: literacy pedagogy and curriculum politics, indicates, among other things, that the thesis is concerned with questions of school literacy, the specific reading and writing practices of the subject-disciplines of compulsory schooling. Literate practices in the school context concern the (re)production of legitimate knowledges in appropriate textual forms. To be deemed school-literate is to have participated, more or less non-coercively, in what Lather terms “the textual staging of [school] knowledge” (Lather 1988).

¹ This is not to deny or gloss over important distinctions between doctoral- and school-level writing, not the least of which is that the thesis is also in important ways a ‘public’ text, as I consider in more detail below.
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1 This is not to deny or gloss over important distinctions between doctoral- and school-level writing, not the least of which is that the thesis is also in important ways a ‘public’ text, as I consider in more detail below.
Second, the thesis, as genre and as text, also functions as a particular, disciplined performance of knowledge. As a product of research (understood as a production of new knowledge) it nevertheless functions also as *initiation* into a disciplinary or professional community, with its particular regimes of truth. To be authorised as a proper text, then – indeed, to be intelligible at all – a thesis must reiterate those meanings and forms which are available to, and have currency among, the scholars who will receive it. The production of a thesis, then, is itself also a matter of access and subjection. It is a matter of performance, of *writing*. That is, it is a specialised form of literate practice.

Literacy is understood here as textual practice and textual practice is a form of social practice. All texts are produced within particular relations to particular and multiple contexts. The production of this text, for instance, is readily and complexly contextualised in relation to a particular school classroom, a particular geography curriculum, a particular university with its particular politics of knowledge production, a particular feminist writing group, a contemporary international debate over literacy pedagogy, a thesis examination process. At issue for all instances of textual production and reception, then, are some complex relationships: between text and context; between literacy and learning; between the performance of knowledge and self-formation; between social and cultural reproduction and the making of the new.

What is important to point out, therefore, is that a text has no necessary or transcendent identity. Rather, the attribution of meaning to a text will only ever be the assignation of a provisional identity, within the specific institutional context of its production and reception. In the case of the thesis, this state of affairs is powerfully illustrated in terms of the strategic selection of examiners. Who will read me? Who is reading me now? In the case of school texts, as will be mapped in some detail in the following chapters, there are multiple and complex determinants brought to bear on what ultimately any single piece of student writing is deemed to be. Of course, to argue for the necessary provisionality of textual identity is not to deny the power-full implications of particular ascriptions of identity, the particular consequences for writers situated in subordinate positions within institutional regimes.

This thesis is informed by particular kinds of critical theory: theory which demands that both complexity and provisionality of knowledge claims define the arena within which the text is produced and received. To refuse this complexity – to claim transparency and autonomy for the thesis (defining it classically in terms of the constitution of particular, unproblematised relations of subject and object; knower and known) – would be to efface it as *writing*. ‘Writing’ here is provisionally understood as the production of particular kinds of subject positions. Without preempting methodological considerations taken up in Chapter 1, it is important to signal here that the refusal of the productivity of
writing would necessarily also delimit *what can count as writing* in the case of the body of school texts which, through the production of this thesis, I have constituted as the research domain. If these school texts are to be available for certain kinds of readings and re-writings, in accordance with the research agenda, then this thesis, understood as *writing*, must itself also become part of the data. This means that this text asks to be read in some of the same ways as the school texts are read throughout the thesis – that is, in terms of the production of subjectivities, and of the politics of such production. This is in part, then, a 'student text' about 'student texts'. What follows is an elaboration of this point.

As an exercise in writing and about writing, this Preface functions, and and also seeks to function, as a statement of its intertextual location. As Frow (1986:1) puts it, “a beginning is the more or less differential repetition of a series of other texts”. “However”, he goes on, “it is also, in Edward Said’s sense, a point of departure, a determinate production of difference.” The act of constituting a research domain – which makes possible the production of a thesis – is in the last analysis a political act. While no resulting analysis can escape the metaphysics of presence, a certain essentialism becomes the necessary condition for the point of departure which is motivated by a politics – a desire to produce a difference.

This Preface is a first attempt, then, to be explicit about the exclusions the thesis operates and the conclusions it repeats in the process of setting up the conditions of possibility for that particular form of conceptual and political exchange on the topic of gender and school writing which constitutes the thesis text. At the same time, it represents an attempt to explicate the function of the Beginning in the whole text as the signal of a “coming between – an intervention, or a mediation” (Frow, 1986:1). For instance, by beginning with Frow’s words on beginnings, I signal to a reader familiar with his work a concern with what contemporary literary theory might bring to current debates about literacy and schooling. In the present climate of debate on writing pedagogy in Australia, this in its turn signifies some important inclusions, exclusions and conclusions, and a clearly interventionist agenda.

As a beginning, then, it is necessary to locate a point of intersection of a particular “series of other texts”; to invoke a set of intertextual relations brought to bear on the constitution of the research field: gender, writing and schooling. It should be pointed out here, briefly (and expanded in a discussion of methodologies in Chapter 1) that the notion of ‘text’ is not limited to literary or academic published ‘written’ texts, but rather one which includes any form of semiotic production. Texts exist in complex relations with other texts. Hence, notions of context and intertextuality require (and will in the thesis receive) careful formulation. The purpose here is to begin to construct and position a textual ‘self’, a
writing subject in this text situated explicitly and in particular ways within an educational project. Writing, understood simultaneously as knowledge production and subject formation, is construed first and foremost as a form of positioned practice. Again, there are two significant dimensions to this exercise: that of the thesis as 'student text' within the institutional contexts of its production and reception; and that of the very specific and powerful regimes of schools and their attendant practices and pedagogies of literacy.

In relation to the first dimension, the concept-metaphor of positioning is useful to explicate the politics of text production. The post-graduate writer-subject is positioned in particular ways within that specific process of institutional training, the PhD. What the student-writer is required to do is to take up an appropriate position — that is, one of an appropriate kind and degree of authority — within a text which is to stand as evidence of the success of that training. Hence, the production of an account of intertextual location functions in part as a rite of passage: the establishment of the right to speak. In such instances, what is traditionally performed is the reiteration of sets of statements derived from the texts of knowledge — those privileged texts which have, in Barthes’s (1977) sense, become “works”. This is not to suggest that intertextuality as history can be so neatly identified and marked off from the production of the new. On the contrary, following Derrida, all the linguistic choices which have been made in the building of this text to this point bear the trace of other texts, and hence this text is only ever readable in terms of those traces. The thesis text itself can only function as a particular re-writing of a history and a passage towards a point of beginning.

In relation to the second dimension, the task, within the text of the thesis, is to construct a writer-‘self’ explicitly positioned within current debates about literacy and schooling. Here, I stress the function of the beginning, in Frow’s terms, as a strategic “production of difference”. To this end, I am at pains to articulate an investment in this project, and an intellectual commitment to intervention in current and currently-prescribed literacy-pedagogic practices. The writing position, then, is one of a particular relation to pedagogic practice. It is marked off, on the one hand, from a critical position ‘outside’ which might constitute ‘the school’ as an object of scrutiny informed by particular (other) disciplinary concerns. It is a position marked, on the other hand, by its difference from currently-dominant representations of, and interventions into, that practice. From this beginning, the task of the thesis can be understood as an elaboration and defence of that latter difference.

To do this, I draw also on a series of other “other texts” (to reiterate Frow’s words): texts which do not enjoy the status of “works”. These other texts are action texts, life texts, texts of histories, of anecdotes and of experiences. Among others, these are the texts of a certain ‘insider knowledge’; a set of experiences and concerns produced from ten years of
labour as a teacher in a secondary school English classroom. These are only apparently of a different order of knowledge from those knowledge traditions chronicled above. Here, they are not proposed so as to be either valorised or subordinated, or even essentially distinguished, with respect to these other intertexts. Rather, what is signalled here, by way of introducing a methodology for this thesis, is a re-valuing of the piecemeal and the local nature of curriculum action: the anecdotal, the experiential and the biographical, together with other marginalised texts in the field of literacy research and pedagogy. These are articulated here as one important “reading formation” (Bennett 1984) among others at hand. This is an assertion of the validity and importance of revisiting what is most materially ‘at hand’, that which is marginalised and suppressed in the terms of more orthodox forms of inquiry. This is an essential process if social regimes which produce these knowledges are to be interrogated and if new kinds of knowledge are to be made.3

I have briefly sketched a writing ‘self’ within this text, located within a multiplicity of intertexts. This is, then, a multiple ‘self’. The ‘I’ in this text is simultaneously a writer, a student (writer), an ‘apprentice’ academician, a substantive academic, a teacher, and a woman. To ‘be’ one thing is not to ‘not-be’ another. In particular, this formulation raises the question of gender, and with the introduction of gender comes issues of power and of a particular form of politics. The nineteen nineties are being hailed in some quarters as the era of ‘post feminism’. It almost seems inevitable in a ‘post-’ era, a time of general demise of grand narratives and oppositional discourses, that feminism, too, is deemed to have ‘passed on’. In such a climate, intellectual work carried out in the name of feminism appears to be less than engaging. Indeed, a common cry amongst the ‘smartest’ academic circles in recent times has been that they’ve “heard it all before”. It might be fair to conclude that this is the decade which will mark the resolution of the gender/power struggle, and that all there is to be known and done in the redressing of masculine hegemony is about to materialise.

That this position is articulated from a position of privilege should surprise no one. That it is (young, thin, heterosexual) white male cultural theorists4 who want to refuse the

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2 I take from Patterson (1989) the use of a lower case ‘e’ to mark English as a school subject-discipline and to distinguish it from English as a language.

3 The category of ‘experience’ becomes central to the development of an argument about the politics of subject production through textual practice in an educational context. What is important to point out here, however, is that it is not proffered at this stage in an unproblematised privileging of the personal and the individual which characterises liberal-humanist discourses in education and elsewhere. Nor is it a paradoxical return to empiricism. Rather, feminism and postmodernism both produce important ways of both valorising and politicising the particular, which disrupt the authority of orthodox disciplinary work.

4 I owe this list to Elizabeth Ellsworth (1989), who has developed the richest description of positionings of social dominance that I have encountered.
legitimacy of feminists' struggles to name their subordination and marginalisation within the academy and elsewhere should indicate that 'post feminism' is in fact nothing more than the latest mutation in a long genealogy of strategies to silence women. It is in this climate, and with the intention of placing issues of pedagogy and schooling firmly in the 'mainstream' arena of the concerns of the human sciences, that this thesis situates itself as feminist work. Its brief is to demonstrate that 'gendering' is a central and crucial function of schooling; that currently available ways of engaging the issue have not succeeded in changing the distribution of power along gender lines, and that what is needed for there to be any possibility of effective challenges to masculine power is more and better ways of investigating and representing the processes and effects of gendering practices in schools.

Within the state institutions of the university and the school, as well as more generally within what might be termed the 'universe of discourse', all characterised in feminist critiques as patriarchal, an explicit self-positioning in gendered terms is powerfully productive of difference. That is, to write as a woman within these contexts — or at least, to signal the construction of an explicitly 'feminised' writer-subject — is for my purposes an important political project. This means, on the one hand, the textual production of a critical commentary with respect to the institutional regimes in question. On the other hand, it means that certain reading positions become available, differentiated along the lines of gender-belonging and gender conscientisation. To engender the writer is always to engender the reader. Again to be noted here is an important coming-together of what in more orthodox forms of educational research would be considered as two distinct dimensions of the project — those of writer-subject and research-object — in a newly intricated relation, one with the other. I simultaneously write as a woman within one educational-institutional context, and write about writing-as-a-young-woman (and indeed also about writing-as-a-young-man) within another. There are complex relations of power and of identification among the various realisations of these relations to be investigated, in the course of constructing an account of literate practices in a specific curricular location.

There is at this intersection an opening of a field, a framing of an agenda. A beginning in many respects marks an end, or at least, as Brooks (1984:94) notes, it must, in some way "be determined by the sense of an ending". There is a politics at stake here; an explicit positioning of the researcher/writer within the field of literacy and schooling, marked indeed at the outset, in the title of the thesis, by the priority assigned the category 'gender'. Gender politics above all, then, motivate this research project. The "ending" might even at this stage be "sensed", albeit dimly, in terms of a genre of 'gender and education' research. At issue, generally, will be questions of representation, of participation and of power. This will be a project of critique but also one for the imagining of other possibilities.
More precisely, however, there is the question of the relationship of the work performed in this thesis to other work in the field of literacy studies. In particular, in a field dominated by considerations of competences and outcomes, what is the function and significance of working within critical cultural- and social-theoretical perspectives and traditions? What for instance will be at issue in dialogue with other, currently prevailing, representations of literacy pedagogy? How can pedagogy be otherwise conceived? Again, the prioritising of gender in an investigation of school writing informed by feminist and poststructuralist theorising puts a particular set of problems on the agenda: the relationships between gender and power, between power and knowledge, between textual practice and (gendered) subject production.

More precisely still, there is the question of the specific site for this investigation of issues of gender, writing and schooling: a senior secondary school geography classroom. For many reasons, problems of school literacy, of writing and indeed of gender have traditionally (though of course not exclusively) been raised in the domain of the school subject-discipline of English. While important, this has been both limited and limiting, as the following brief sketch will show. First, early literacy instruction has focused in large measure on reading and the writing of fictional narratives, such that literacy has, even in the primary school, often come to count primarily as literary literacy (Dixon [1975], Martin and Rothery [1980, 1981], B. Green [1986]). Second, it is English teachers who have, on the whole, taken responsibility for post-primary literacy education, within a general (largely unexamined) curricular separation of ‘content’ and ‘language’, and with an accompanying continued privileging of the literary. Third, influential debates about what counts as appropriate language education and hence literacy education have centred until recently within the English teaching lobby, at least in England and Australia. Proponents of ‘basic skills’ have vied with ‘whole language’ advocates, and with custodians of the ‘Great Tradition’ (Dixon 1975), for what counts as an appropriate initiation for the young into a literate culture. Outside the field of English teaching, school literacy education has all-too-often remained an issue of ‘functional’ levels of competence, within a conceptualisation of literacy as a generalised and generalisable body of autonomous ‘skills’ (Grant 1986, Levine 1986).

Finally, much of the work on the gendering of language has been done in the field of literary texts, and there is no comparable body of analysis of other discursive domains. Within the mainstream literary tradition, a whole post-nineteen-sixties generation of Anglo-American and French feminist literary critics have written, and have themselves been intensively written about (Moi 1985). This collection of work, together with other work in disciplines such as psychology and linguistics, has made possible a substantial project of gender research in the field of literary education, and specifically, on the
gendering of children’s reading and writing in English (for example, P. Gilbert [1987], P. Gilbert and Rowe [1989], Mellor, O’Neill and Patterson [1989], Patterson [1990]). Indeed, recent syllabus developments in English and literature (in Western Australia and elsewhere) are informed in part by this work, and it is now possible to argue that English teaching’s female majority, together with some male colleagues, have some sense of the significance of gender in the literary fictions which are read and written in their classrooms. (See, for example, English in Australia 95 (1991), special edition titled Reading Differently).

While English is understood to be about ‘language’, in one sense or other of that word, the other ‘academic’ school subject-disciplines, the sciences and social sciences, are presented principally in terms of their ‘content’. This content is in turn typically represented in terms of its objectivity, neutrality and rationality. This is particularly so in the secondary school, as these subjects increasingly take on the identity of the disciplines from which they derive. Here, a powerful set of cultural binaries is aligned in perhaps their most effective and enduring form, within the school curriculum:

- content/language
- content/process
- objectivity/subjectivity
- rationality/irrationality
- man/woman

While English, language, and ‘subjectivity’\(^5\) are in this sense feminised, the sciences are understood in terms of universal truths. Geography, which will be described in Chapter 1 as an ‘emergent science’, is no exception to this. Geographical representations of the spatial world come to stand for the world itself, a world which can be thoroughly mapped and gridded by means of the descriptive and explanatory discursive tools of the discipline. While the subject-discipline of English has been openly fraught with conflict and contestation over its principles and its practices, content-area knowledge is typically regarded as ‘simply there’, self-evident and independent of the social context in which it was produced, and the conditions of its incorporation into the curriculum. Similarly, it is seen as independent of the language in which it is ‘transmitted’.

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\(^5\) The term as used here is fundamentally different from the way in which it is used in the thesis generally, as outlined in Chapter 1, subsection 1.1.3; here, there is a ‘commonsense’ opposition with ‘objectivity’ invoked. I return to this point in Chapter 8.
There are two important consequences for educational theory and practice in such a 'commonsense' account. First, the myth of the neutrality and objectivity of scientific knowledge means that it is assumed to be free of issues of gender. Second, the transparency of this knowledge means that it is somehow separable from the language in which it is encoded. In the case of the former assumption, even the growing body of work in gender and science education has not adequately addressed the serious critiques mounted within poststructuralist and feminist critical theories of such issues as the masculinism of dominant versions of scientific rationality and their realisation in discourse, curriculum and pedagogy. Rather, it has confined itself largely to issues of participation and equity (Kenway and Modra 1989).

In the latter case, it has not been until very recently indeed that rigorous analytic work has been done on what participating in scientific-literate practices might involve (for example, work in the systemic-functional linguistic tradition to be reviewed in Chapter 7). However, even this work has on the whole confined itself to description and analysis for the purpose of more effective reproduction. The point to be made briefly here is that poststructuralist and other recent work on discourse has effectively problematised realist conceptions of the world which see language as a “conduit” (Reddy 1979) for knowledge concepts which exist in an unmediated relationship with ‘reality’. This critical work stresses the productivity of language, together with the historical and social specificity of the knowledge which is produced by means of language. The vast bulk of what goes by the name of ‘knowledge’ is discursive and there is no absolute or necessary distinction between the production of knowledge and its exposition or presentation. This point opens the way for a project of investigation of the social relations of production of knowledge, and the realisation of these relations in knowledge discourses. The argument here will be that gender, as one powerful social dynamic, is inscribed in discourse in the sense that subject positions are set up and taken up differently by males and females in and through participation in discursive practices in specific institutional sites. Rather than claim this as a universal truth, however, the thesis investigates processes by which this happens in a specific location.

During the history to date of this PhD research project – in the process of reaching a point which could be characterised as what Frow calls the “sense of an ending” which marks the possibility of arriving at a beginning – many exclusions have been operated. This beginning has been set up by a series of closures. Chief among these, perhaps, is the editing-out of a rich body of data produced within a secondary school English classroom. Of course, this work leaves its trace, continuing, even though in a muted way, as a point of dialogue and comparison/contrast with the material which remains. There are many reasons that could be given for this particular exclusion, but the one that I will assign
primary status can serve to make an important theoretical and methodological point. English is too obviously gendered, too obviously writing-based (Doyle 1989). English is too central and obvious a site for tracing the effects of gendered subject production in textual practice. English takes textuality as its subject-matter, and it sets up the problematic text as its object of analysis. This is so at all levels of education and inquiry, to collapse what are otherwise important distinctions between the domains of English literature as a discipline in universities and the subjects, English and literature, in the school curriculum.

The important move, then, has been to take the notion of the problematic text from its territory within English and apply it to another site: to read geography from an unexpected direction. This move has allowed an important glimpse at the productivity of discourses—the power of disciplinary formations to circumscribe what is to count as intelligible and proper within their boundaries. To locate the discussion within geography is to confront discursive productivity where it is least expected. In geography, as in all modernist sciences, the myth of the transparency of scientific discourses functions to efface its discursivity and its partiality and interestedness. At the beginning of the research project which informs this thesis, there was, on the part of both the collaborating geography teacher, Alan A and myself, a considerable uncertainty as to what significance gender would have in the classroom. Geography purports to be an objective, rational discipline, concerned to order, classify and explain spatial phenomena. However, what became clear to both of us through our observation and analysis over time was that what had counted so readily as ‘gender-neutral’ across a whole range of classroom events had to be reconstrued as the ascription of universality and neutrality to a hegemonic masculinism. Through the study, this became visible as a contradictory but necessary condition for the production of the authorised version of geography within the curriculum enterprise. To demonstrate or perform this reconstruction, and to consider its consequences for literacy (and) pedagogy became the task of the thesis.

An ending for this project might now be envisaged in terms of the substantiation of a claim for the ubiquity of gender as a determining factor in the production of differentially intelligible and powerful positions and identities within a literate and schooled culture. There remains now the task of producing a reader. Indeed, to produce an argument is, among other things, to produce a reader. This is in many ways an arbitrary exercise, but one of a complexity to match that chronicled above in the task of constructing the writer. The reader is similarly positioned in particular ways within the (con)text. They must consent to a certain, duplicitous performance, both knowing and not knowing what the writer is going to say. On the one hand, the reader-examiner is presumably one who can judge the worth of the performance, and hence in important ways may already ‘know’ the
arguments. On the other hand, the arguments must be constructed as though that were not at all the case, and so there is an other reader, or other readers, projected, who must be convinced, or overcome, in order that the thesis's project of 'making a difference' in the field can be fulfilled. In particular, these readers would best be constructed as those who read from a range of different positions which the thesis engages, contests or distinguishes itself from. These positions include instrumental realist/technicist, functionalist, marxist, liberal and humanist reading positions, the major positions underpinning the discourses of key other players in current literacy debates. The actual readers must perform their examiner function and keep the gates of the academy, while at the same time allowing for the possibility of subverting their gatekeeping duties. This is because of the inherently contradictory nature of the process being undertaken here by all participants.

Having provisionally sketched in a writer and a reader in the text, then, there remains only to stage a performance.
CHAPTER 1

INTRODUCTION:

LITERACY, GENDER AND SCHOOLING: THE CASE OF GEOGRAPHY

Rowan: Well, what’s a geographer? Probably someone like Harry Butler. He goes around, studies animals and trees, plants and maps out areas and stuff like that.

(transcript of interview)
Introduction

This chapter consists of three sections. Section 1.1 is an overview of the thesis study, together with a brief account of significant current theoretical and political contexts within which the study itself is located. Section 1.2 introduces the classroom study, discussing methods used in the initial collection of materials, in the readings which these materials are subjected to, and in the structuring of the thesis text. Section 1.3 is a preliminary discussion of the significance of geography as a site for an investigation of the gender politics of school literacy.

1.1: Politics of literacy

1.1.1: The thesis study: an overview

This thesis is an investigation of issues of literacy, schooling and social power with specific reference to gender. An important argument developed in the thesis is that gender is a significant factor in the positioning of students with respect to curricular knowledge. Differently gendered students encounter curricular knowledge differently and, as a consequence, re-construct or re-write it differently. The school classroom is conceived as a complex social site within which gendered subject positions are set up and taken up in the production and transaction of school knowledge in local and specific ways. The thesis considers what is differently at stake for girls and for boys in engaging in literate practices within the subject-disciplinary domain of school geography.

The particular focus is on school writing, framed within a conceptualisation of literacy as a plural concept involving a notion of a plural textuality. Literacy is understood in the thesis as always being situated within particular social-institutional contexts. School literacy is thus understood as being 'subject-specific', a term defined provisionally as "the particular literacy, or set of literacy competencies that is inextricably part of the operation of specific subject areas as contexts for learning and meaning" (B. Green 1988:157; see also Lemke 1988).2 Student 'writings' are read in the light of the specific subject-disciplinary and curriculum contexts in which they were produced and received.3

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1 I engage the term 'politics', not as a discrete discourse, but as a term which marks the constant struggle of discourses competing for hegemony in any social-institutional site.

2 The term 'subject' is provisionally understood at this point as referring to what I call the specific 'subject-disciplines' of the school curriculum. This term captures something of the complex relationship between disciplines and their school-curricular versions, a relationship explored extensively in the thesis. In Chapter 8, I reconsider the term 'subject' in the light of the theorisation of the production of human subjects through literate practices. The notion of 'subject', then, does double duty in the thesis in quite productive ways.

3 The term 'writings' is used in a gerundive as well as a nominalised sense to deliberately refer to both the writing practices as well as the resultant scripts.
The notion of ‘context’ is explored and elaborated as a complex set of relational dynamics produced from and producing particular instances of textual practice. Briefly, the argument is that a ‘text’ is an effect as well as constitutive of ‘context’, and that both are contingent rather than essential categories. The dynamics of ‘context’ are understood as local and specific, but also as available for reading in terms of larger regimes of social differentiation, such as gender. The written texts produced by the students are read in terms of the politics of literate practices in specific curricular contexts. According to this conceptualisation, literacy implies curriculum; that is, curriculum produces, and is produced by, specific forms of literate practice.

The thesis develops and elaborates a particular way of reading the texts of the curriculum – the ‘official’ texts of curriculum structure and content, as well as the spoken and written texts of the enacted curriculum. This ‘way of reading’, outlined below, is distinguished from already-existing professional methods of reading curricular texts – methods such as content analysis, formal linguistic analysis and ethnomethodology. As a method, it explicitly engages the complexity of the politics of textual practice in school settings. Texts written by students are situated as ‘central’ in the assemblage of curricular texts, because of their status as the ‘currency’ of schooling. It is students’ written texts which count as the outcomes of schooling – the ‘evidence’ of their learning. The readings of curricular texts that are produced here represent an attempt to explore a complex of relations between public and private domains of existence, between notions of the ‘individual’ and the ‘social’, between literacy and what might count as ‘learning’, between self-formation and social reproduction. These issues are principally engaged through an investigation of relations between language and subjectivity, as these categories are developed in feminist and poststructuralist theorising.

As a study, the thesis is located at the intersection of three broad disciplinary domains, constructing a matrix of disciplinary-theoretical relations within which questions of literacy and literacy pedagogy are posed. The first of these domains is what might broadly be termed curriculum studies. While the thesis does not purport to be a study in (or of) formal curriculum theory, it nevertheless draws on a range of texts theorising issues of curriculum and schooling. These range from the complex debates concerning the relations between education and power within critical educational sociology to a wide range of work in curriculum history and critical analysis in the specific curricular domain of school geography. The work in curriculum studies has supplied what might be termed the ‘objects’ of this investigation: the particular selections of classroom talk, interview material, textbooks, essays and other curriculum documents, which are subjected to close readings in the later chapters of the thesis.
The second disciplinary domain in which the thesis situates itself, albeit once again in an other than 'formal' way, is linguistics. By this I mean that this is not a thesis 'in' linguistics any more than it is a thesis 'in' formal curriculum theory and therefore the method is not confined to fulfilling those particular institutional imperatives. However, linguistics has emerged in recent years as an important discipline for literacy studies. In particular, linguists in the systemic functional tradition have become major participants in contemporary Australian literacy debates. There are two main, though quite different, reasons for this, and the thesis thus engages linguistics in two quite distinct ways.

One level of engagement, which I will term a 'productive' engagement, takes aspects of the analytics of systemic functional linguistics as an important part of the method of investigation. The thesis performs a version of textual analysis of student writing, deploying aspects of functional grammar, register categories and genre, among other reading technologies. Linguistic analysis supplies a way of engaging with the density and specificity of texts, something that is all-too-often missing in much of the non-linguistic work in literacy studies at the present time. Although a relatively marginalised form of linguistics, both nationally and internationally, systemics provides useful ways of considering social relations of textual practice, since it seriously engages, within the terms of its analytic methodology, the question of context. Section 1.2 considers more closely methodological issues of the thesis study.

The other level of engagement with linguistics is what I will term a 'reactive' engagement. Much of the shape this thesis study has taken is as a result of, and in response to, the current influence of interventions into literacy pedagogy by systemic linguists in Australia. The thesis does not, principally for reasons of space economy, mount a full critique of what is known as the 'genre' approach to writing pedagogy within the project of Educational Linguistics. However, the study of writing in geography developed in the first six chapters establishes very strongly the conditions for such a critique, and produces, in Chapter 7, a detailed critique of one aspect of this work, and a suggestion of some of the terms on which a more generalised critique could be constructed.

The third domain making up the principal strands in the interdisciplinary matrix within which the thesis is situated is feminism. This study is specifically about issues of gendered subject production in school-literate practices. Curriculum outcomes in the form

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4 I use initial capitals to designate the work of a specific group. 'Educational Linguists' refers to those engaged in the systemic pedagogic work on genre deriving from the Writing Project of the Linguistics Department of the University of Sydney in the 1980s. Clearly there are other linguists working in the area of literacy education and there is a need to distinguish this use of the term from other, broader uses (for example, Halliday 1990).
of student texts which count as evidence of learning in geography are read from the perspective of feminist theories of representation and subjectivity. Feminist poststructuralist theories of the subject and of discourse supply a political context and a theory, or rather a way of making theory, about literacy. The thesis works to construct a theory of subject formation in a specific curricular location, and to relate this process to the broader socio-political context of gender/power relations.

To summarise: questions of literacy, schooling and social power are engaged in ways which interconnect the domains of curriculum studies, linguistics and feminist theory. In addition to this, the thesis engages theories of discourse and subjectivity from within poststructuralism more generally, with particular attention to Foucault’s work on discourse and discipline. The thesis works to explore connections between Foucauldian notions of discourse and language, as that term is conceived within linguistics. It is in the assemblage of this particular configuration in an investigation of school writing that this thesis makes a specific contribution to literacy studies. Other work has investigated literacy issues in one, or particular combinations of two, of these disciplinary domains. For example, issues of literacy and curriculum have been consistently engaged in the movement within educational sociology known as ‘critical pedagogy’. Influenced in large part by the work of Freire (1971), literacy in the work of theorists such as Giroux (1989), McLaren (1989) and Aronowitz (1985) is understood as being intimately implicated in the project of the democratisation of the curriculum, and connected to issues of critical agency in a pedagogic project of education for critical democracy. Closer to home, the work of Lankshear and Lawler (1987) draws strongly on Freirean perspectives in the articulation of a literacy pedagogy for critical social action. Two points concerning this corpus of work are pertinent here. First, ‘critical pedagogy’ has not, by and large, engaged with theories of language or close textual analysis; rather, it has remained at levels of abstraction over points of political principle. Second, the list of major theorists of critical pedagogy cited above consists entirely of men. That is not to suggest that women have not been involved in the movement, but rather that questions of literacy and curriculum in the tradition of critical pedagogy has remained, until very recently, for the most part, gender blind. Significantly, women such as Ellsworth, who have been closely connected to critical pedagogy, are now contributing to a growing body of feminist critiques of the movement, pointing out the marginalising of issues of gender in the work of the principal theorists (Ellsworth 1989, Weiler 1991; see also the collection of papers in C. Luke and Gore 1993).

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5 A representative bibliography of each of these, not to mention other, major theorists of critical pedagogy is too extensive to include here, as the point is only marginal to the particular concerns of this thesis. Accordingly, I have cited one key piece from each writer. For a more comprehensive coverage of major issues, see the Harvard Educational Review 1980-1992.
In terms of bringing current curriculum theorising together with studies in literacy with a linguistic focus, there has to date been very little work. A notable exception is B. Green’s edited collection, *The Insistence of the Letter*, in the Falmer Press ‘Critical Perspectives on Literacy and Education’ series (B. Green 1992). This collection attempts to redress the lack of communication and collaboration between these two disparate fields of study in education. However, the text, important as it is as an intervention into contemporary literacy studies, contains no sustained focus on issues of gender, and lacks a contributing chapter from a feminist-theoretical perspective.

The most politically focused feminist work in literacy studies has, with a few exceptions (notably Walkerdine [1984a] Thomas [1990, 1991] and Moss [1989] in Britain and Christian-Smith [1987, 1989], Brodkey [1989, 1992] and Rockhill [1987] in the USA), been produced in Australia in recent years. To assert this point is also not, of course, to deny the importance for feminist literacy studies of the work of poststructuralist feminist theorists and researchers in education more generally, such as Lather, working in the USA. In particular, though Lather’s work is not strictly ‘in’ literacy studies, her conceptualisation of curriculum as “the textual staging of knowledge” is useful for investigating the literacy/curriculum nexus within what she terms an “openly ideological approach to critical inquiry” (1991a:12). However, beyond the positing of such a notion, there remain questions of realisation: questions concerning the actual transactions that are involved in literate practices in specific sites.

In Australia, the feminist work in literacy has focused in large part, though not exclusively, on the primary and English curriculum areas, looking at the gendering of literary texts and at gendered reading practices and gendered writing practices in schools. This work has drawn on a range of theoretical and methodological perspectives, principally English curriculum studies, literary theory and feminist poststructuralist theorising (for example, P. Gilbert [1988], C. Luke [1989] Mellor and Patterson [1991]), curriculum theory (Davies [1990]) and most recently, systemic functional linguistics (Kamler/forthcoming). Apart from Kamler, however, the bulk of this work too has not engaged closely in issues of the textual realisation of particular relations of gender power in curriculum texts, since it does not draw on theories of language which make available close text-analytic technologies. Interestingly, while there is a growing body of important work in the area of language and gender from within linguistics (for example, Kramer [1981], Thorne, Henley and Kramer [1983], Kristeva [1984], Cameron [1985], McConnell-Ginet [1988], Threadgold [1988], Poynton [1985, 1990b]), literacy studies has yet to engage the work closely in and through critical dialogue. The work of this thesis distinguishes itself from other feminist work in literacy through its engagement with feminist linguistics.
Contributions to literacy studies from a linguistic perspective vary in the extent to which they engage in social analysis. Leaving aside the influence of psycholinguistics on literacy development in past decades, socially-based linguistic perspectives offer analyses of linguistic diversity and barriers to access to literacy. Deriving from the anthropological work of Sapir, Whorf and Boaz in the 1920s, a tradition of socio-cultural linguistic analysis developed in the USA throughout the century. The work of Labov in the 1960s was particularly influential for socially critical scholarship in language in education. While focusing largely on spoken language, the sociolinguistic work nevertheless informed later work on literacy, building accounts of social contexts of class and race within which children were labouring in schools, for example, Brice Heath (1983), Cook-Gumperz (1986), Cazden (1988) and Gee (1990). J. Green’s work in language and learning works most closely with notions of curriculum (for example, 1983), though without a definite political focus to the notion of the ‘social’ in operation in this work.

In Australia, as I have already mentioned, a group of Educational Linguists working in the systemic-functional tradition have made substantial interventions into writing pedagogy. Working from a linguistic theory of genre, they argue for a pedagogic politics of access to what they term ‘powerful’ forms of literacy.\(^6\) While this thesis explores aspects of this work, the point to be made here is that this movement has engaged neither curriculum theory nor feminist theory in the development of its pedagogic rationale and practice. Indeed, an important critique of the movement more generally is that it has not engaged social theory of any kind in any depth. This is despite the possibility within systemic linguistics of theorising ‘context’, drawing on Malinowski’s initial conceptualisation, in complex ways. In practice, ‘context’ is allowed to include only the most materially immediate ‘context of situation’ relevant to ‘language’ (Hasan 1973). As a consequence, both its political and its theoretical base are seriously impoverished as far as its conceptualisation and practice of literacy pedagogy is concerned.

Situating a study of literacy at the intersection of curriculum, linguistic and feminist analysis allows the possibility of engaging the complex politics of literate practices in specific locations. It opens out an opportunity to begin to develop a theory of the textual realisation and production of school knowledges and social relations in its engagement with the micropolitics of classroom action. In the contemporary macro-political climate, literacy has been taken up by governments as a major site for social and economic agenda building. Almost inevitably, the most politically attractive models for government policy implementation purposes are theoretically crude and reductionist, as the next subsection

\(^6\) The term ‘power’ is problematic, since the linguistic use differs in important ways from the way in which the term is engaged in this thesis (outlined briefly in subsection 1.1.3). The diverse uses of the term in literacy debates receive attention in Chapter 8.
will outline. As a result, it becomes more important than ever to find better ways of investigating and demonstrating the necessary complexity of literate practices, understood as central forms of social practice in a literate culture.

1.1.2: current contexts, ‘outer’ frames

... there is an urgent need ... to interrogate not simply the agenda as it now stands, or its various replacements waiting bright-eyed and restless in the wings, but the practice of agenda-setting itself, as well as what has been described as its “conditions of possibility” (Foucault 1972). Who is setting, and upsetting, the agenda? Who decides? On what basis? And whose interests are being served? How? Who are the “primary definers” of the agendas both of the present debate, the latest ‘crisis’, and of the current thrust of literacy education as expressed in policy documents and the like? What precisely is at issue, and what is at stake? What are the politics of agendas and agenda-setting, with specific reference to literacy education?

(B. Green 1986:4)

Literacy has, in the last two decades, become a central locus for investigations of the relations between education and power. It is within debates about what literacy is and should be that some of the clearest indications can currently be gained about the projected functions of state-sponsored compulsory schooling. As early as 1978, Walters, Daniell and Trachsel pointed out that

In practice, any use of the term [‘literacy’], especially in educational settings, always carries with it assumptions, again often unstated and all too often contradictory, about what counts as a proper text, how these texts may be decoded and interpreted, what variety or varieties of language may be used for interpretation, what kinds of thinking these texts may be said to represent, and finally, what sorts of pedagogy would most likely produce literate behaviours, however defined.

(Walters, Daniell and Trachsel, 1978:856)

A. Luke (1988:5) has noted, more recently, “... how a society chooses to initiate youth into a literate culture is at least in part indicative of how it constructs the value and potential of textual competence”. What count as reading, writing and learning, and to what educational and social ends these processes are directed, are matters of fundamental contestation, among scholars and theorists within the academy, in state education bodies and schools, and most recently in government policy initiatives in Britain, Australia and
elsewhere, including the Australian government's recently released language and literacy policy document, *Australia's Language* (Commonwealth of Australia 1991a). With respect to governmental interventions into the arena of literacy, as Christie (1991a:2) has noted, "a degree of official urgency" has recently begun to punctuate the discussion.

The macro-politics of literacy have often been broadly related in the past to the macro-political categories of right and left. These are most visibly realised in educational debates as polarisations between standards and equality, between traditionalism and progressivism, between applied sciences and humanities (A. Luke 1988:4). In turn, these positions are related to some fundamental binaries preoccupying western thinking generally: speech/writing, inside/outside, private/public, individual/society, nature/culture (Derrida 1976, Henriques et al. 1984).\(^7\)

In terms of current positions in Australia, however, an analysis along these lines is unsatisfactory. While it is clear that Leonie Kramer's particular version of Hirsch's (1987) "cultural literacy" resides unambiguously in the camp of the New Right, other positions are more complicated. In particular, various 'functionalisms', which purport to be on the side of equity and social justice beg scrutiny, both in terms of their apparent differences from each other, and of their compatibility with more conservative impetuses.

Two functionalist positions in particular will reward consideration here, due to the extent to which they contribute, albeit differently, to the constitution of the current climate in literacy debates in Australia. The first is the federal government's adoption, elaboration and use of the UNESCO definition of "functional literacy" in its policy for "effective literacy" (Commonwealth of Australia 1991b:34-35). The second is the project of Educational Linguistics, which also claims functionality to be its brief (Halliday 1990).

There are different theorisations of 'functionality' at issue here -- different semantic oppositions at work. Nevertheless, the notion of 'function', when brought together with the category of 'literacy', has acquired a particular set of political meanings within recent history (Levine 1982), and continues to reverberate, I would argue, within contemporary struggles over the shaping of literacy pedagogy in Australia.

What counts as 'functional', and how functional agendas translate into practical action, is tellingly variable. In the case of *Australia's Language*, the rhetoric of policy definitions translates, in the school-literacy context, into a heavy emphasis on standards testing (Commonwealth of Australia 1991a: 6-7). The slippage between functionalist rhetoric and technicist methodology is significant and arguably points the project inevitably

\(^7\) Of course, a representation of the history of literacy debates in terms of pure positions such as this is clearly a *post facto* reconstruction of what in actuality were much more complex and specific engagements and articulations.
towards conservatism (B. Green 1989). This state of affairs will almost certainly affect the status of different theoretical positions on literacy in a number of different ways, not the least of which will be government sponsorship of research.

In the case of Educational Linguistics, a functional approach to language drives a project concerned with issues of access to literacy. As this thesis will explore in some detail in Chapter 7, however, pedagogic interventions based on linguistics alone have lent themselves to reproduction of the most conservative of the official discourses and genres of schooling. In effect, the very systematicity of this pedagogy results in what has the appearance, at least, of a de facto endorsement of these discourses and the representations of the world they encode. Despite its espoused ‘left’ orientation, ‘genre’ pedagogy lines up in effect on the side of “standards” and “traditionalism” in the terms of the binaries identified by A. Luke. Indeed, this position has been made explicit by Martin and others through the extensive reference to the work of Bernstein, though this work is read in quite a particular and partial way (Martin 1991b).

Accompanying this has been a consistent oppositionalising of what is termed ‘progressivism’: those pedagogies which are known by such names as ‘whole-language’, ‘growth’ and ‘process’ approaches to literacy learning. This is not the place to rehearse the debates which have been waged in the last few years between ‘process’ and ‘genre’ apologists (see Reid 1987). The point here is that ‘progressive’ pedagogies in various guises have also been driven by imperatives for access, equity and emancipation. Binary left/right distinctions are not easy to sustain, because they assume both the unity of these categories and also the possibility of ‘purity’ in educational practice. As this thesis will show, it may be the binary logic of much of the literacy debate itself (the disdain of some of its participants for history, for professional eclecticism and for the complexities of classrooms as social sites) which will serve a conservative cause more effectively than the substance of any particular position.

During the last decade, theorists of literacy and literacy pedagogy have begun to speak of a concept of ‘critical literacy’. The term has no single, nor even a uniformly coherent meaning, as theorists draw on a wide range of work, from Derrida to Scribner and Cole. What many have in common, however, is a sense of caution around questions of literacy and functionality. Questions concerning the “value and potential” of textual competence referred to by A. Luke above are engaged within frameworks of various contemporary social and cultural theories. Developments in theorising about education in the last two

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8 This view was shared widely by participants in the Working Conference on Critical Literacy held at Griffith University June 29-July 3 1992. However, the term 'critical literacy' is of limited usefulness, since it is also the term deployed by Educational Linguists to describe their functional project (for example Martin et al. 1989). Chapters 7 and 8 looks more closely at these issues.
decades, such as debates within educational sociology and the pedagogic versions of the
'linguistic turn' in the various language and learning movements, make it possible to re-
think the relationships among literacy, schooling and social power.

In contemporary debates, this nexus is engaged by critical theorists in terms of its
politics, in several senses. The first is the issue of access to, and participation in, the
discursive practices of a culture. These issues are intimately connected, on the one hand,
to issues of identity and of individual access to power and on the other, to the wider
social processes of citizen training and nation building. The Australia's Language policy
documents make explicit connections between these twin foci of literacy training: the
Foreword, for example, refers to "the strategic importance of language and literacy skills
to Australia's national development and to the well-being of all Australians" (Commonwealth of Australia 1991a: iv). A politics of access is at base a liberal politics.
Those concerned principally with questions of access to literacy argue for what A. Luke
(1992) terms "quantitative change" in educational outcomes; that is, access to more of the
more powerful forms of literacy for more of the dispossessed. However, there are
important issues concerning the politics of access to, and participation in, literate
practices. In particular, as this thesis seeks to demonstrate, the interests of an individual
and those of a dominant social formation are not necessarily congruent, as is assumed in
documents such as Australia's Language.

Second, the politics of literacy are engaged in terms of the status of the meanings encoded
through language and engaged in particular reading/writing practices. Those concerned
with the politics of representation argue for what A. Luke terms "qualitative change" in
educational outcomes. 'Critical literacy', conceived in these terms, is concerned with
social critique of the dominant forms of school knowledge. Practices of 'ideology
critique' within an educational-sociological framework, for example, focus on the content
of school textbooks, interrogating the naturalised narratives and explanatory frameworks
of curricular texts. This work in its Australian versions (for example the various papers in
Raymond Williams's analysis of the "selective tradition", but also on American critical-
sociological work such as that of Michael Apple, and the various theorists of critical
pedagogy cited in the previous subsection, to critique the work done in mainstream
curricular practices to maintain dominant social orders.

This work has been important to a project of "emancipatory education" in A. Luke's
(1989) sense. However, there are limitations to practices of 'ideology critique' which are
important to the position being investigated in this thesis. First, a critique of structuralist
determinism can be levelled at some of this work. R. Gilbert (1989b: 67-68), for
example, reports that the structures and metanarratives of the tradition of 'ideology
critique' are too singular and complete. Oppositional readings are made of texts which leave little space for investigation of the complex social processes involved in the realisation of textual meaning. This critique may be re-articulated in the following terms. While the tradition of 'ideology critique' is informed by an explicit politics and a socially critical agenda, it is not readily answerable to the specificity of curriculum processes and the complex interplay of differences in the classroom production of curricular knowledge. An important dimension to this problem is that this work does not engage the density and specificity of texts and the possible readings that might be and are made of those texts in specific locations. Texts appear transparent, cleanly yielding up their hidden structures to the singular readings produced through the investigative methods of structuralist critics.

A substantial body of work has been done in the past few decades engaging what Walkerdine (1990:110) terms the 'language and ideology debate' (for example, Kress and Hodge [1979] Fowler et al. [1979], Kramere, Schulz and O'Barr [1984], Poynton 1985, Fairclough 1989). This work has detailed ways in which language-in-use operates on behalf of particular social interests to sustain existing power relations. Literacy, understood as textual practice, can thus never be an 'innocent' activity. School literacy involves students learning to read and write valued educational discourses – the discourses of school subjects and of curriculum processes. These discourses encode particular representations of the world and can be understood as doing particular kinds of political work. Various available forms of critique of the language of curriculum materials add to the content critique of sociologists mentioned above to point to an inherent conservatism in school-subject knowledges (Kress 1985a, 1989, Baker and Freebody 1989, Freebody 1991/unpublished paper, R. Gilbert 1984). The point to be made here is that participating in school-literate practices means receiving a particular and partial view of the world. Despite the best efforts of curriculum reformers, this view is all-too-often one which presents knowledge as static and immutable, which represents the world through the framework of a capitalist-economic determinism, and which subordinates and misrepresents the perspectives and concerns of minority groups.

To see literacy as political is to see it as implicated in the distribution of status and resources in a society. This relationship between literacy and power is complex and wide-ranging, involving issues from access and participation to the status of representations of the world in school knowledge discourses. Learning to read and write particular things in particular ways involves being schooled into becoming a particular kind of meaning-making subject. A. Luke (1988:204) points out that "to claim that literacy instruction is 'ideological' is to imply a value judgment on its role in the formation of the literate, and on the relationship of both that pedagogy and its subjects to the larger socio-cultural structures within which both exist". This move points to a notion of a literate subject as
not being merely a transparent entity, possessed of a prescribed quantity of literate ability. As well, particular kinds of literacy constitute the literate in particular ways, while in turn, literate subjects both serve and constitute the socio-cultural domain in its specificity.

Literacy, conceived as political, is a crucial category for feminist research, since feminism is centrally concerned with such issues as the politics of access, participation and representation. A study of the effects of literate practices in specific institutional sites is particularly important for research and pedagogy of the more avowedly “emancipatory” kind (Weiler 1991). What has not yet been articulated, however, is an account of literate practices which combines both the socio-political rigour and commitment of the various “emancipatory” or “critical” pedagogies with a theory of language sufficiently complex and specific to detail the processes through which literacy, articulated as a ‘gendering technology’, functions to position differently gendered subjects differently through particular forms of textual practice.

In particular, the language/power nexus needs to be re-articulated in terms of the relations between, on the one hand, the language/learning pair and on the other, the power/knowledge pair. In literate practices, the individual and the social meet and are mutually constitutive. However, there needs to be a re-examination of those twin foci of literacy as they are invoked by the Australia’s Language policy document. The interests of an individual and those of a dominant social formation are not necessarily as congruent as is assumed in this document. The “Australians” who are the subjects of the policy rhetoric are not differentiated along the lines of the major dynamics of social difference – gender, class, ethnicity – except in terms of overt barriers to access and participation. In the next subsection, I introduce the categories of discourse, subjectivity and power in order to begin a process of articulating what more and what else is at issue for different groups as an effect of accessing and participating in particular literate practices.

1.1.3: discourse and subjectivity: literacy as ‘enculturation’ and ‘embodiment’

Education is ... more contradictory than suggested by those theories of ‘reproduction’ which assume a determinate or linear relation between the economy and schooling, which underlay it as a site of productivity in its own right.

(Walker 1984b:196)

The feminist theory and politics informing this thesis seek to convey something of the relations of gender difference and gender power in operation within the classroom site, specifically in terms of the work that is done, on a day-by-day basis, in the re-production
of social forms and relations and identities – in the performance as well as the interpretation of social action. School writing, understood as a form of social practice, is investigated in terms of its implication in the production of gendered subject positions. This process is theorised in terms of a complex materiality which constitutes classroom life, where ‘embodied’ subjects – gendered, sexed, classed – negotiate what de Certeau (1984) terms “trajectories” through semiotic space. Written texts are one site where something of this process of negotiation and re-writing may be traced.

As the previous two subsections indicate, much of the work of the thesis is aligned politically with existing and current work within critical educational studies, including work that goes by the name of ‘ideology critique’. However, important differences from that position need to be articulated at this point. Much of the work retains a marxist interest, which is problematic for a study that is oriented primarily around questions of gender. This is associated with a corresponding problem with the term ‘ideology’. One problem for the thesis project has been to negotiate an alignment with work in ‘ideology critique’, while avoiding some of the problems raised by this work: on the one hand, the prioritising of class and the economic ‘base’ of social inequality; on the other hand, the foundational distinction between the material and the ideological (base and superstructure) that informs this work. The argument here is that, despite much of the important work on ideology by theorists such as Althusser and Pêcheux, which attempts to explore the relation between the material and the ideological in their work on subjectivity and the unconscious, it seems too difficult to escape much of the original marxist ‘baggage’ the term ‘ideology’ carries with it.

Perhaps these concerns represent a vain attempt to control readings, to try and prevent this thesis text from misreadings as it leaves this site of production and enters into a new phase in some (albeit heavily circumscribed) ‘public’ domain of reception. Acknowledging the metaphysical nature of this desire, the term ‘ideology’ would nevertheless seem to be one of the most slippery and least ‘controllable’ terms in the whole field of the contemporary human sciences. I finally reached a decision to relinquish the term after reading one of the latest attempts to recuperate or co-opt it for literacy studies. Working from within a tradition of formal linguistics in the USA, Gee, in a recently published (1990) volume on ‘social linguistics and literacies’, devotes the whole of his first chapter to elaborating a history and then a new definition of ‘ideology’ with which he wants to work. This attempt is interesting in its bringing together of psychological, social and linguistic theory. However, it is problematic in a number of ways, not the least of which is that its relation to still-current marxist and neo-marxist formulations (such as those discussed in A. Luke 1988:19-23) is unclear. In particular, the relation between language (and linguistics) and the material effects of social and
semiotic practices is unexplored. I read Gee’s chapter as a largely unsuccessful attempt to circumscribe possible ‘aberrant’ readings of ‘ideology’, to ‘harness’ the term for his theory of ‘Discourses’ which he elaborates in the rest of the book. In producing this reading I wish to question the continuing usefulness of the term for contemporary literacy studies, given also that it appears to be locked into macro-level analysis.

In place of ideology, literacy studies might more productively orient towards rigorous engagement with notions of discourse.9 ‘Discourse’, in Foucault’s work (for example 1972), is a term that addresses issues of power and government. Foucault was concerned with the ways in which contemporary discourses and practices governing individuals were produced. Hence he traced ‘genealogies’ of particular discourses and practices in terms of the historical conditions of their production. Foucault worked with a notion of ‘discipline’ to account for the material effects of the discourses and practices of institutions, that is, the ways in which individuals’ lives are regulated. According to Foucault (1980a:39), ‘disciplining’ occurs “at the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives”. As a summary of this kind of work, Walkerdine (1990:110) speaks of discourses as “part of the technologies and knowledges through which government is accomplished”.

The technologies and apparatuses of the social order function to produce regimes of truth. As Walkerdine (1990:109) points out, these regimes are “fictions which function in truth”. As ‘fictions’ they nevertheless have real effects. Discourses may thus be further understood as “historically constituted regimes of truth which position subjects” (Walkerdine 1990:110) within the social practices of institutions, such as schools. Walkerdine suggests that Foucault’s ‘truths’ obviate the distinction between science and ideology, and so go beyond ‘language and ideology’ debates more generally. What is also important for this discussion is that, in the use of terms such as ‘discourse’ and ‘discipline’, Foucault was also able to refuse the dichotomy between the ideological and the material in his theorisation of the production of subjects. Accordingly, in this thesis I will work with notions of ‘discourse’ and ‘discipline’ in place of ‘ideology’, in an attempt to account for what Lemke (1992/unpublished paper) terms the “ecosemiotic” production of the material subject.

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9 This is not to imply that the term ‘discourse’ is unproblematic. There are those (for example, Threadgold 1990) who would argue, as I have done in the case of ideology, that its use is limited because of the many different ways in which the term is deployed. Indeed, one such instance emerges in Chapter 7, in the critique of the Educational Linguistic work in geography. Nevertheless, I would argue, and hope to demonstrate in the thesis, that the work of Foucault and its derivatives is coherent and productive enough to offer a great deal to debates about the institutional conditions and effects of specific forms of school-literacy practice.
What has not been explored with satisfactory thoroughness in the field of literacy studies, or indeed elsewhere, has been the relation between discourse in Foucault’s formulation and language (Brown and Cousins 1980). On the one hand, as Walkerdine (1990:108) points out, it is important to keep in sight the fact that ‘discourse analysis’ in a Foucauldian sense is not simply a method of analysing texts, but a “whole theory of (post) modern forms of government”. On the other hand, however, language produces many of the most powerful technologies for the production of the regimes of truth within which individual subjects are positioned. Questions such as how language practices position subjects within regimes of truth and how individuals come to take up, more or less non-coercively, particular subject positions, and to produce themselves and the world through language need to be more thoroughly examined. In the context of literacy studies, these questions need to be engaged in order to avoid debilitating and reductionist dichotomies between the individual and the social in theories of learning and the reproduction of culture.

In this thesis, the notion of ‘discourse’ is engaged in a manner similar to Kress’s re-writing of Foucault:

... the term points to the fact that social institutions produce specific ways of writing or talking about certain areas of social life which are related to the place and nature of that institution. That is to say, in relation to certain areas of social life which are of particular significance to an institution, the institution will produce a set of statements which largely define, describe, delimit, and circumscribe what it is possible and impossible to say with respect to that area, and therefore how it is to be talked and written about.

(Kress 1985b:139)

To mobilise a discourse is to make meanings within the limits and constraints of that discourse. Becoming a subject of a discourse involves a process of subject formation according to certain discursive rules and requirements. Drawing on Foucault, Donald (1985) argues for the usefulness of the notion of “subjection/subjectification” or “subjectivity” in the context of schooling, because it avoids the dominant individual/society and society/economy binaries within which most educational issues are engaged. Donald points out that subject positions, as understood through Foucault’s work, are not co-terminous with subjectivity. Taking up this position, Walkerdine points to a need to engage with psychoanalytic methodologies, in order to go beyond what she calls a “surface reading of discourse” (1990:135). Since Donald and Walkerdine (1984b, 1988, 1990) are among the very few in the field of educational studies to address the
problem of subjectivity, their work has been of considerable significance in terms of opening out the possibility of conceiving the project of this thesis in its present form.

According to poststructuralist and psychoanalytic accounts of ‘subjectivity’, individuals are formed as social subjects in and through their insertion into a given symbolic order. In this operation, two things occur simultaneously: the world becomes intelligible, and identities are constructed, in and through the signifying possibilities of available discourses (Henriques et al. 1984:217). Subjectivity is provisionally described by Weedon (1987:32) as, on the one hand, “the conscious and unconscious thoughts and emotions of the individual, her sense of herself and her ways of understanding her relation to the world”. On the other hand, subjectivity is “most obviously the site of the consensual regulation of individuals” (113). In Donald’s (1985:215) terms, subjectivity is “not seen as an identity but as a particular imaginary ordering of the symbolic”.

According to poststructuralist accounts, subjectivity is an effect of constant struggle between competing discourses. It is multiple and fragmentary, both fragile and aggressive, constantly in a process of renewal. The relation between discourse and subjectivity in any specific site, then, involves relations of power. Weedon points to the materiality of the relationship:

Language is the place where actual and possible forms of social organisation and their likely social and political consequences are defined and contested. Yet it is also the place where our sense of ourselves, our subjectivity, is constructed ... Subjectivity is produced in a whole range of discursive practices – economic, social, and political – the meanings of which are a constant site of struggle over power.

(Weedon 1987:21)

The notion of power at work here is a dynamic, productive, relational one. Foucault writes:

What makes power hold good, what makes it accepted, is simply the fact that it doesn’t only weigh as a force that says no, but that it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. It needs to be considered as a productive network which runs through the whole social body, much more than as a negative instance whose function is repression.

(Foucault 1980b: 119)
Discourses, according to Kress (1985a) are imperialistic. They disrupt boundaries and colonise domains not 'properly' their own. Broadly, the argument is that discourses constitute the condition for intelligibility in any act of meaning production. They are, therefore, units of knowledge possibilities. For most acts of meaning, a subject struggles to achieve subjectivity through fixing the indefinite play of semiosis, even if only temporarily and provisionally. According to this position, it is possible to understand what Donald (1985:246) terms the "aggressivity" of subjectivity as a compensation for its fragility. Meaning-making subjects attempt to hold chaos and anomie at bay through the (temporary and provisional) imposition of a discursive order. The notion of discursive "investment" (Hollway 1984) can be understood in the first instance as the desire to create an order and to be able to sustain a position from the vantage point of which information is configured in manageable patterns. This process then has to map onto longer-term projects of achieving 'selfhood' according to macro-discourses\textsuperscript{10} about identity, positionality and differentiation, for example, those of gender, sex, race and class, and establishing solidary or distinctive relations with others according to these same imperatives.

Further to Kress's general point, some discourses may be understood as culturally imperialistic in the special sense that they become ubiquitous frameworks for understanding whole other socio-cultural domains. As this thesis will show, discourses of economics, particularly market versions of economics and economic rationalisms, are accorded the status of meta-discourses on social processes, subordinating all other concerns across the whole terrain of social life, as it is presented within the subject-discipline of geography in the particular curricular location of this study. The taking-up of positions with respect to this meta-discursive function of economics is shown to be gendered in significant ways.

An account of literacy which seeks to avoid the reductionisms of many current positions on literacy pedagogy must account for the two crucial dimensions of semiotic production: knowledge (re)production and self-formation. The categories of discourse and subjectivity allow an investigation of the mutual constitutiveness of both the individual and the social through literate practices. What is at issue is the specificity, as well as the multiplicity, of subject positionings through discursive practice. However, this multiplicity does not imply an innocent plurality. The thesis produces readings of student

\textsuperscript{10} This term refers to discourses which are both ubiquitous and 'fundamental', in the sense that all individuals are positioned within them in ways which constitute basic and over-arching aspects of their 'identity' and which effect a consensual regulation of their actions. The term is distinguished from 'meta-discourses'. The latter are both institutionally specific and hegemonic; that is, by speaking from one discursive-institutional site to others, they colonise other sites and hence actualise hegemonic effects in the performance and interpretation of social action.
writings in a specific curriculum site in terms of the gender power politics of subject positioning/subject production through textual practice.

Drawing on these formulations, the argument to be developed is twofold. First, the thesis situates itself (though, as I have already indicated, with some important provisos) within a tradition of curriculum critique, where what is under scrutiny is the status of the representations of the world that count as curricular knowledge: that which is to be ‘learned’. No socially-critical literacy pedagogy, whether reception- or production-focused, can ignore the politics of representation, including the ways in which the interests of dominant groups are inscribed in the discourses of knowledge. Accordingly, it is necessary to attend reflexively to the ‘what’ of curricular texts, whether it be the authorised versions of curricular knowledge inscribed in textbook and other official materials in school classrooms, or the substance of student productions in the form of those texts produced for assessment in compliance with curriculum requirements which stand as evidence of what a student has ‘learned’.

Second, the thesis seeks to generate a theory of relations between literacy and learning within the terms of this complex, where the student-subject is conceived as simultaneously being inducted into discursive regimes and also as (re)producing the self. The problem is: how to account for difference in terms other than those of the dominant individual/society split in educational discourses? On the one hand, according to humanist ‘progressive’ discourses, difference is an individual matter to be valorised in terms of such notions as ‘creativity’ and ‘originality’. According to reproduction-oriented pedagogies, on the other hand, difference can be seen as excess or even contamination. For a theory of literacy which takes into account the social production of texts and meanings, the difficulty is to find ways of attending to the ‘excess’ without resorting to essentialist categories such as the unified, rational, conscious subject of humanism.

Accordingly, the question of difference is engaged in this thesis in terms of the production of subjects through discursive practices in curriculum action. What is proposed is a way of reading student productions; not just ways of reading what students get – the materials of the curriculum – but what different students make of what they get. Questions such as what it is that students might understand that they are participating in, that is, how they construe the context they are operating in, become central. This focus on the productivity of literacy raises further questions about students’ subjective investments in the positions they take up through textual practice. A. Luke (1989) points to the need to develop a theory of learning for “emancipatory” purposes which focuses on the actual processes students undergo in the pedagogic project:
While neomarxist educational theory has developed a range of theories of knowledge transmission and, even more recently, accounts of human agency via resistance and contestation, it has failed to address the need for a theory of learning. While theories of transmission can account for the coding of a dominant ideology, any theory of cultural hegemony must also account for the cognitive processes by which the individual (non-coercively) acquires knowledge. It also follows that such a theory would be a prerequisite for any positive thesis or emancipatory education.


Luke’s focus on the cognitive is peripheral to the concerns being addressed here. However, this passage raises important issues of what might count as ‘learning’, how it might be constituted and how it might be traced. What is particularly pertinent is his (bracketed) reference to the “non-coercive” nature of much of what goes on in the name of ‘learning’. In curriculum action, envisaged in its complex everyday-ness, notions of inclination (as well as of refusal) can never be entirely absent. It is not enough to assume unproblematically that students share the more instrumental adult notions of the relation between schooling and social power, such as those of ‘success’ and ‘mastery’, or even if they did, that it would sustain them through the seemingly interminable routine of the everyday that constitutes ‘doing school’ (Mehan 1979).

Instead, what I propose in the first instance is an investigation of literacy in terms of notions of ‘enculturation’ and ‘embodiment’\textsuperscript{11} and their significance for questions of learning. By ‘enculturation’, I refer to the process of induction into authorised cultural forms and knowledges in their curriculum instantiations. This will be shown, in the context of the case study in geography, to be both an integral and essential, and also a highly problematic, component of the teaching/learning contract. I use the term ‘embodiment’ to refer to the complex ensemble of conditions and effects of any moment of semiotic production in terms of ‘self-production’. The notion of ‘embodiment’ captures something of the materiality of classroom life – its local situatedness. It allows a focus on the workings, not just of power/knowledge, but also of desire in textual production (Henriques et al. 1984). This may be provisionally understood as follows.

\textsuperscript{11} This is in no way to refuse the question of learning as resistance, critique and cultural re-writing. On the contrary, these are issues of central importance to the position being argued for in this thesis. Rather, these questions have to be deferred until a case has been articulated, through the classroom study reported in the next chapters of this thesis, for the multiplicity of what might, at any moment, be understood as ‘culture’ within a schooling context. A discussion of these matters in Chapter 8 will take the form of an elaboration of B. Green’s (1988) notion of literacy as involving three dimensions: the “operational”, the “cultural” and the “critical”.
The speaking/reading/writing subject takes up positions within knowledge discourses such that the world becomes intelligible through these accounts; simultaneously there is an investment of ‘self’ in the (temporary) fixing of the indefinite array of information in the production of that intelligibility. This fixing is neither completely pre-determined within naive or determinist accounts of curriculum as closure, nor is it arbitrary or unconstrained. Rather, selections are exercised and versions are constructed over time within a multiplicity of relational dynamics which constitute the social and discursive history of any student-subject. The crucial issue for an investigation of the politics of the relations between literacy and learning, then, is to understand how individuals are ‘interpellated’ within the different discourses of curriculum and schooling, and are constructed (and come to construct themselves) as particular kinds of subjects within these discourses and the institutions whose meanings they represent.

The thesis addresses questions of the politics of difference across a range of dimensions of curriculum practice in the classroom. Taking geography as a case study, it explores closely the question of what, specifically, is at issue for differently gendered students as they are inducted into the discourses and disciplinary practices of geography in its school-curriculum versions. It argues that questions of subjectivity in their close articulation with questions of ‘acquisition’ and reproduction must be introduced into an analytical field which has otherwise been dominated by discourses which typically privilege one or the other term of the individual/society binary, and which thereby participate in one or another form of reductionism (Henriques et al. 1984:1, 11, 87-9).

The crucial point to make in concluding this section is that these are questions which are neither being addressed, nor indeed even being posed, in the currently dominant discourses on school literacy pedagogy. This is so, even within the terms of the controversial debates over literacy which are currently being rehearsed in Australia. Hence, the thesis also works to interrogate the (gender politics of the) currently powerful discourses of literacy pedagogy, and to examine the ways in which these discourses presently constitute, and delimit what can count as, the fields of school writing and writing pedagogy.

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12 The thesis does not engage closely Althusser’s or Pêcheux’s theories of ideology and consciousness, but rather takes the notion of “interpellation” as a useful way of addressing processes of subject positioning in specific textual sites. In particular, it will be taken as a useful holding category for what in systemic linguistics is termed the interpersonal function of language.
1.2: The study: notes on method

To do feminist research is to put the social construction of gender at the centre of one’s inquiry. ... Feminist researchers see gender as a basic organising principle which profoundly shapes and/or mediates the concrete conditions of our lives.

(Lather 1991a:17)

What we want to collect data for decides what data we collect; if we collect them under the hypothesis that a different reality is possible, we will focus on the changeable, marginal, deviant aspects – anything not integrated which might suggest fermentation, resistance, protest, alternatives – all the ‘facts’ unfit to fit.

(Gebhardt, cited in Lather, 1988:576)

1.2.1: On methodological principle

The chapters in Parts I and II of the thesis are an account of curriculum practice in a Year 11 geography classroom in a Western Australian school in which I spent four months in 1989 as a participant observer. These chapters seek to construct an account of student writing as curriculum action and as a form of social practice. As an ‘account’, it takes its place in the first two parts of the thesis in deliberate contravention of some of the more entrenched conventions of thesis writing. That is, rather than the presentation of an edifice of theory followed by its ‘application’, the thesis works to ground theoretical concerns within a complex evocation of practice. I refer deliberately here to ‘practice’ at several levels – both classroom curriculum practice and research practice, and including the construction of the thesis as text. This process of enquiry refuses an absolute separation between the domains, for several important reasons.

First, the readings of the classroom and the student texts are produced from within a complex theorisation of the research relationship to the particular curriculum site being investigated. As researcher I have/had a particular kind of insider/outside relation to the classroom and its inhabitants. The readings I produce here are an evocation as much of the specificity of my institutional and theoretical history and consequent reading position as of the classroom itself as a social site. This is an open acknowledgement of the productivity of reading formations in the production of what count as research ‘data’.
Second, as indicated in Section 1.1, the structuring of the thesis in this way is an effect of the political and theoretical necessity of grounding and contextualising issues of literacy pedagogy explicitly within a framework of curriculum analysis and curriculum action. It is within this framework that the student texts are collected and read. This is not a ‘text-based’ account, in the strict sense that a theory of texts is taken as a privileged starting point for the production of truths about specific instances of textual practice. Rather, the orientation is, in general, ethnographic. That is, the notion of text is broadened from the ‘bounded’ text which typically has provided the basis of linguistic interventions into literacy pedagogy. The orientation is something more akin to the tradition of the ‘ethnography of speaking’ (Hymes 1970), where spoken texts, action texts, multiple perspectives and voices and semiotic systems other than language are engaged, in an attempt to evoke a complex sense of curriculum context within which student ‘writings’ are embedded, and which they help to constitute.

Additionally, this account is an attempt to engage the particularity of specific subject-disciplinary contexts, within a conceptualisation of literacy as ‘subject-specific’ in the sense in which I have introduced this term in Section 1.1. It is this attempt that has produced a thesis which grounds seven of its eight chapters fairly closely within geography curriculum concerns. The argument is that only with this degree of close attention can relations between textual practice and subject production be addressed in anything like the complexity of their lived materiality.

Broadly taking on some of the theoretical and methodological concerns of poststructuralist research traditions, the thesis is committed to a rigorous examination of its own production as a form of positioned practice as this is theorised within critical ethnography (Clifford and Marcus 1986, Brodkey 1987). On the one hand, in Brodkey’s (1987:71) words, the thesis text seeks to “call attention to the voice in which the story is being told”. On the other, in Gebhardt’s terms in the quotation at the head of this subsection, the “data” are produced “under the hypothesis that a different reality is possible”. Within the terms of these two positions, the study undertaken in this thesis is an investigation and a critique of school-literate practices and current literacy-pedagogic discourses from the vantage point of poststructuralist and feminist theories of discourse. The events that I record and report and the readings I produce take their place in the thesis text because they exemplify ways in which individual students are positioned and take up positions within a gender/power/knowledge dynamic in and through literate practices in the classroom.

I have sought to avoid various forms of methodological reductionism currently dominant in educational research contexts. Lather (1991a:15) calls for “a reflexive process that focuses on our too easy use of taken-for-granted forms”. Methodologically, the thesis
seeks to work as "rhetoric" (Cherryholmes 1988:126), inviting and attempting to persuade a reader to affirm or confirm the account of the necessary complexity of questions of literacy and literacy pedagogy within an acknowledgement of what Donald (1985:242) calls "a sense of the daily struggle and muddle of education". In particular, the thesis seeks to avoid the impression of a too-neat analysis of power – to avoid the impression that "the story is too pretty to be true" (Foucault 1980c:209). It seeks to work with, rather than against, Schon's notion of "zones of uncertainty" within processes of inquiry (Schon cited in Doll 1988:116). It acknowledges the need for, again in Lather's terms, "a more hesitant and partial scholarship capable of helping us to tell a better story in a world marked by the elusiveness with which it greets our efforts to know it" (Lather 1991a:15). The reading the thesis seeks to disallow is a denial of the political significance of the representations being constructed.

The text of the thesis, as a report of an investigation, does not seek or claim transparency; it does not seek to 'tell the truth' about the class in question 'as it really was'. Rather, this is quite explicitly an exercise in writing the classroom. In Brodkey's (1987:72) terms, 'I' am not the "eyewitness narrator" of the "story" of this class. Rather, I am, on one level at least, its 'producer'. It is, reflexively, a "conceptual" rather than "perceptual" narrative of a particular geography classroom (Brodkey, 1987:71, Tyler, 1986:137). Through its writing, the thesis produces its data in something of Foucault's (1980c) sense of "fabrication". In interview, Foucault produced the following formulation:

J. -A Miller: Yes, you like to accentuate the artificial character of your procedure. Your results depend on the choice of reference points, and the choice of reference points depends on the conjuncture. It's all a matter of appearances, is that what you're telling us?

Foucault: Not a delusive appearance, but a fabrication.

J. -A Miller: Right, and so it's motivated by what you want, your hopes, your ...

Foucault: Correct, and that's where the polemical or political objective comes in.13

(Foucault 1980c: 212)

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13 Foucault goes on to disclaim any close connection to politics, a matter which does not detract from the potential political effectiveness of this formulation of a method.
Of particular concern within an ethnographic research context is the necessity to interrogate the status of the representation of the subjects (and by the writer) of the research. In an effort not to produce an authoritarian, monologic account of a cultural site such as a classroom, the temptation in libertarian research practices is to privilege the supposedly authentic voice of the research subject. In Hodge and McHoul's (1992:192) terms, this involves apparently "letting the text speak for itself". One particularly problematic context in which this happens is the 'interview'. The danger lies in representing the interviewee as a stable self-present subject: the 'other', 'authentic' voice that might co-construct the kind of "dialogue" called for by Lather in her accounts of emancipatory research methodologies (1991b). A strategy for addressing this issue is to focus explicitly on how interviewees in general constitute themselves in discourse.

Of course, no text can escape problems of reductionism. To construct a text, it is necessary to select from what Schon (in Doll 1988:117) terms the "non-enumerable array of information" in any social site. To interrupt the indefinite play of semiosis is to impose limits. Limits both constrain and enable meanings, since all meanings must be made within "available codes of intelligibility" (Lather 1988). To make meaning is to impose, in however provisional a manner, an order. It is to exercise selection and to exclude, to privilege and to marginalise.¹⁴

At the level of text, the thesis operates explicitly as an exemplification of the complexities and intrications of the text/context complex which are being explored with respect to the texts of the school curriculum. It is in this sense that I referred in the Preface to the thesis itself as "part of the data". For instance, Part II, which contains detailed readings of the two student texts, exists in a complexly recursive relationship to Part I. From the point of the selection and initial readings of these student texts (themselves motivated by my developing 'sense' of the classroom culture), I revisited the entire body of data produced during my time in the classroom. The student texts, or rather, the readings I wanted to make of them, drove, in significant part, the production of what came in the 'earlier' chapters to count as 'context'. Particular features - of classroom action, of other spoken and written texts - came into prominence, while others receded. Inclusions and exclusions were exercised on the basis of their 'tellingness' for this larger purpose. Further, these contextual 'features' are not laid out as if they can 'speak for themselves'. Rather, they are subjected to particular readings and re-readings in the light of the agenda of the later chapters.

¹⁴ One feature of this study is the absence of extended dialogue with the teacher, Alan A. I had intended to build in much more closely his commentary on earlier drafts of the thesis. In what might be termed a hazard of educational research, this became impossible, due to Alan's promotion and subsequent departure for a remote country school. His voice has not intentionally, then, been marginalised.
1.2.2: The readings

The research data consist of curricular texts selected from a corpus of material collected from the Year 11 geography classroom. These texts include transcripts of spoken texts: of classroom talk, interviews with students, the geography teacher, other social studies teachers, education assessment officers in two state governments and professional geographers. Written texts include syllabus documents, textbooks and student scripts. As well, I have drawn on an extensive body of ‘field’ notes produced during my time in the classroom. The number and range of the texts selected is relatively narrow, reflecting an orientation towards depth and detail in analysis, rather than a desire to ‘survey’ broadly. The principles of the selection are various. First, I have adopted a general principle of ‘evocation’ (in Brodkey’s [1987] sense) of what was a developing sense of the curriculum and classroom ‘culture’, as I discussed briefly at the end of the previous subsection. Brice Heath’s (1983:1-14) account of her ethnographic method is also useful here. The notion of ‘culture’ is complex, ranging from the gender dynamics of classroom interactions to issues of disciplinary-curricular content and discursive orientations of the treatments of that content. Second, I approached two students, a girl and a boy, who consented to participate in closer ‘case study’ analysis. This focus entailed detailed observation and follow-up interview methods and allowed a close investigation of issues of the ‘work’ carried out in transacting the curriculum on the part of the two students. Third, in connection with the first two principles, I selected two essays from the corpus produced by these two students which raised many of the issues which emerged from my readings in a range of relevant domains: critical geographical studies, feminist critiques of science, geography curriculum studies, school geography textbooks and other curriculum documents. The three chapters of Part II address themselves to close readings of these two essays. As I have indicated, a coherence in text selection was constructed retrospectively from the point of selection of the essays for close analysis. For example, textbook material investigated in Chapter 2 was selected because it is of direct relevance to the topic of the essay.

The readings of these texts draw on a range of technologies, while adopting no single formal analytic methodology. What was required for the purpose of the investigation as I have outlined it was the development of a way of reading the texts which would both engage the specificity and density of actual texts produced by material processes in actual curriculum contexts, and also situate them within curriculum and wider social and political concerns. Informing this project was McHoul and A. Luke’s (1989) call for discourse analyses which embrace the strongest features of both traditions [that is, the Anglo-American and the continental] by being theoretically
informed and critical, engaged with specific social and political issues, while also being analytically precise and grounded in actual materials.

(McHoul and A. Luke 1989:325)

What the reading method developed in this thesis seeks to do is spell out in detail ways in which gendered positions are set up and taken up on a moment-by-moment basis by participants in textual practices.

One of the principal ways of achieving this end was through the fabrication, for the purpose of the analysis, of sets of binary pairs which suggested themselves most insistently as interpretive frames, theoretically and methodologically. These binaries are then interrogated in terms of the ways they explain the selection and structuring of substantive subject-disciplinary content, curriculum activities, and projected outcomes. Additionally, they expose homologies at different scales and in different local sites within the broad domain of geography curriculum. This is a method for close engagement with the nexus of literacy and curriculum. Of particular note are the orderings of terms within the binaries, as well as a consistent order reversal at particular points across the range of curriculum texts. These are subjected to readings as points of tension within this particular curriculum instantiation of contemporary school geography. The point of such readings is that ordering in the binary organisation of knowledge always contains the potential for privileging one term of the binary over the other. The binarised categories are elaborated in terms of the complex sets of gender/power/knowledge relations attached to them. However, the construction and examination of binaries is not intended, by itself, to set up an interpretive structure which speaks sufficiently for these sets of relations. On the contrary, much of the surrounding commentary and indeed the detailed material of the study, function to disrupt linear, “pretty” (in Foucault’s [1980c] sense) analyses of power. Binary linearities are merely initial points of structural intelligibility around which and against which the specificity of this local context can be configured.

The second principal technology engaged in the reading of these texts is, as I have already indicated, a modified version of linguistic analysis in the systemic-functional tradition. Again, however, linguistics by itself is not privileged as a producer of truths about texts, and the method of engaging the linguistic categories is not ‘formal’. As I have established, this is not a thesis ‘in’ linguistics. Much of the work in Chapters 4, 5 and 6 in particular is constructed to loosen the linguistic categories, to confront grammatical reasoning with poststructuralist categories such as polysemy, discursive multiplicity and contestation. What is at issue here is the fleeting and unfixed nature of meanings. In particular, I was concerned to develop a reading technology which could attend to the dynamics of text production, whether spoken or written. Comparative
methods of reading were useful on different scales. These include reading student texts against each other, as well as reading written texts against classroom spoken texts, textbook materials and syllabus documents. As I have indicated, I have provided brief explanations of the more technical and specific terms in a glossary at the front of the thesis document. Where terms are relatively general or deducible from the context, I have left them unglossed.

In general, this is a more directly politicised way of reading than most analysis which claims to be "linguistic" in some purer sense. It is not that linguistic technologies cannot engage political questions at all. Systemics, at least, has the capability at the level of clause analysis of working with a kind of theorisation about representation. However, it should be said, despite Threadgold's energetic defences of systemics (Threadgold/forthcoming), that the most overtly politically mobilised readings produced within the systemic-functional tradition are remarkable for the extent to which they engage other traditions, particularly poststructuralist and feminist theoretical and methodological traditions within an *a priori* foregrounding of the political. Studies by Threadgold herself, as well as Poynton (1990a, 1990b) Kress and Hodge (1979), Hodge and Kress (1988) and Kress (1885a, 1988, 1989) are important here. At points in the thesis, I have engaged in a preliminary way with linguistics as a body of theory, particularly with respect to issues of theories and politics of representation, though this is not a sustained primary focus of the thesis.

In summary, there is no simple adoption of a set of pre-existing methods here. The approach to textual analysis which I have developed might be broadly identified as poststructuralist in orientation. Part of what this means is a legitimation of an eclecticism, within a framework of feminist cultural critique. I draw on systemic-functional analytic technologies to the extent to which they are useful in engaging the density of texts. Other reading frames are engaged to locate texts within a sense both of the complex intrication of discourse and power and of the ultimate indeterminacy of meanings, and hence the productivity of reading formations. Particular attention is paid to the ways in which the binary structuring of knowledge functions to privilege and to marginalise different ways of knowing/being and different social subjects participating in the curriculum project.

1.2.3: Some preliminary points of contextualisation

The geography class of my study belonged in an old school in its original buildings in an inner-city suburb of Perth. The population of this area is relatively stable, and many students had older siblings and parents who had attended the school. The suburb has not been substantially gentrified, but the socio-economic pattern is somewhat mixed, as is often the case in smaller cities. In the main, however, the families of the students in the
class of my study were not professionally educated, and worked in a range of occupations: apart from a group of employees whose work was not readily identifiable in terms of standard skill measures, students indicated that their parents worked in trades, small industry, small business.

The two geography teachers in the school during the year of my study also taught junior secondary social studies, though both identified themselves as geographers by discipline. This meant that both had completed undergraduate degrees in geography at the University of Western Australia before completing a Diploma of Education. They were both men. As a first year offering at Year 11, geography has no prerequisites and enrolled students came from a range of subject-disciplinary orientations.

The geography class began the year with 20 students, 14 boys and 6 girls. The one other Year 11 geography class, timetabled at a different time, was similarly proportioned with 6 girls and 18 boys. These numbers are partly explicable by the balance of enrolments in the school, where the specialist curriculum offering in aeronautics consistently attracts a 60% male intake. The other reason for the imbalance seemed to be attitudes of both teaching staff and students that geography is not a ‘girls’ subject’. Frequently, geography was paired in conversation, by students and teachers alike, with human biology: while both were seen as sciences, they were distinguished from the ‘natural’ sciences as being ‘soft’ and therefore secondary. Human biology was, however, clearly seen by students as a girls’ subject, and indeed enrolments bore this out, going against the overall gender proportions of the school intake and, in the year of my study, attracting a 90% female enrolment at Year 11.

Geography was taught in a classroom which was not the permanent domain of the teacher, but rather which was used by a number of different teachers when they were teaching geography (a senior school subject available in Years 11 and 12), as well as periodically for social studies (the compulsory subject taken by all students in Years 8-10). From the dual function of the classroom as well as from its appearance, I deduced that geography counted more as a ‘social science’ than as a ‘science’ within the curriculum. In Australian secondary schools, science is taught in laboratories equipped with benches, sinks and specialist apparatus. The only items of equipment marking the space as ‘geographical’ were the maps which adorned the walls, though these maps had no function in the Year 11 course during the period of my stay there. As section 1.3 will indicate, this distinction between the ‘natural’ and the ‘social’ sciences is a politically charged one in geography, with strong implications for a study of gender. Though perhaps a minor point, it is interesting to reflect on the possible meanings and effects of the visual semiotics of the classroom in terms of this sub-disciplinary split.
The two students who consented to participate in closer case-study work, Karen and Rowan, both ‘passed’ in geography in Year 11 in 1989. They both attended class regularly, submitted their assignments and demonstrated what I will call a fair level of commitment to their function as students. To adopt a useful term from Fenstermacher (quoted in J. Green 1988), both were adepts at “studenting”. Fenstermacher’s argument is, according to Green, that “if teachers teach then students student and through studenting they may or may not learn” (17). I introduce this distinction here, not to track down at this stage a notion of the geographical ‘learning’, understood as a transparent, measurable quantity or entity, that might have taken place in both students’ heads. Rather, it is within the notion of ‘studenting’ that I want to develop an account of some striking differences between the two students’ written texts, differences which I will explore in the thesis analyses in terms of gendered subject production.

The nature of the differences may be introduced at this stage in the following terms. Despite a heavy emphasis on ‘factual’ material; despite common reading matter; despite common classroom experiences (for example an overwhelming preponderance of teacher-led, whole-class discussions of content, from which students drew their notes), and despite common assignment topics, all calling for substantial amounts of reproduction of existing material from the sources already mentioned – despite all of this, Rowan and Karen consistently produced what I read as often radically different texts. In institutional terms, in terms of achievements and outcomes, the two students appeared to be similar. What is particularly important for this study, as I have indicated earlier in this chapter, is to find ways of talking about the differences and a consideration of what appeared to be differently at issue for these two participants in the geography curriculum enterprise.

The topic of the essays produced by Karen and Rowan, which is the subject of close analysis in Part II, is the practice of ‘shifting cultivation’. The term refers to the primary method of land cultivation practised by some indigenous inhabitants of equatorial rainforests. Rather than introduce details of the essay and the circumstances of its production at this stage, these details are documented in the Overview to Part II. I refer from time to time to these essays in earlier chapters. For shorthand purposes, the essays will be referred to as the ‘shifting cultivation essays’.

1.3: Geography as a ‘test case’

Geography is a productive site for an investigation of the politics of school writing. To situate geography as a discipline as well as a school subject within its institutional history is to trace shifts in epistemic and discursive orientation which intersect in powerful ways with social power dynamics, in particular race and gender. One view of geographical knowledge is that it is inextricably concerned with the exercise of power (Foucault
1980d, Kress 1985a) in at least two senses. First, its institutional growth has been closely linked with nationalist and colonialisim imperatives, and second, the major paths of its development this century have, like anthropology and psychology, been those of scientism and particularly positivism. These disciplines have, according to Foucault (1977), been mechanisms of normalisation and regulation of populations. The next two subsections outline very schematically something of the complex dynamics of the relations between gender and dominant notions of rationality as they have been played out in specific and visible ways in the recent history of this discipline and its school-curricular versions.

1.3.1: Rationality and geography

Geography has shifted its disciplinary and curricular orientations considerably over the last century. In the English speaking world it was known last century as one of the ‘English subjects’ (Doyle 1989), together with English literature and history. Now it clings tenaciously to its present mainstream identity as a science. ‘Doing geography’ once consisted principally of learning by heart exhaustive descriptions of surface-spatial features (‘capes and bays’). ‘Doing geography’ as a discipline this century has increasingly meant participating in those versions of what Schon (cited in Doll 1988:115) terms the “Technical Rationality” characterising mainstream or modernist science. Doing school geography has meant, in part at least, submitting to the positivist and technicist curricular regime currently dominating study at senior secondary level in Australian schools (Collins 1992).

However, geography as a discipline can just as readily be characterised by its diversity. Indeed, it presents an exemplary instance of disciplinarity as a multiplicity of different discursive orientations and practices meeting and competing for dominance in particular institutional sites. These discourses are roughly aligned along what might be termed a technicism/humanism axis. In geography, these correspond to orientations towards, on the one hand, the physical, and on the other, the human or social sciences. However, this division is not confined to a concern with, on the one hand, ‘physical’ and on the other, ‘human’ geographies as sites of investigation. Rather, differences in approach concern more fundamental questions of disciplinary grounding, as the following brief comments will indicate.

The dominant tradition in Britain and Australia has been to ground the discipline within its “origins” in the “so-called natural landscape” (Gale 1985:57). The outcome of this has been that, as already indicated, physical-scientific methodologies have formed a methodological ‘base’, not just for physical-geographical investigations but also for the development of methods and concepts within human geographies (R. Gilbert 1989a).
Boardman (1985:9) employs the term “scientification” to describe the disciplinary history of geography in recent decades in terms of the “onset of the quantitative revolution and the quest for scientific rigour through spatial analysis”. This development might be understood, as I have indicated, as paralleling in significant ways the development of social psychology as a discipline, according to Foucault’s (1977) and Hacking’s (1982) accounts. A recent move in this tradition in geography is the engagement of systems analysis, which has produced a mathematical and positivist explanatory apparatus, based on abstract spatial concepts, for the interpretation of social processes (Boardman 1985, Robinson 1985, R. Gilbert 1988, 1989a, Henley 1989).

However, there have always been alternative and dissenting approaches. As an account of the multiplicity of different geographical traditions, Biddle’s (1976, 1985) discussions of “paradigms in geography” have been perhaps the best known in the English-speaking world. In Australia, Cox (1982) has investigated the substantive content of disciplinary geography and drawn conclusions regarding its “structural diversity”. At the margins of the mainstream, “radical” geographers (Robinson 1985, Huckle 1985) have challenged dominant geographical representations of the world and dominant notions of scientific rationality in geography from a number of different theoretical and political standpoints, including feminist theory.15

School geography in Australia has, on the whole, remained within quite conservative frameworks, although there is significant local diversity as well as multiplicity and competition within particular sites (Goodson 1989, Marsh 1987). The most common curriculum sequence is to begin with physical geography, then to proceed to human geographies. This sequence can be seen to mirror the point made above regarding the dominant epistemological and methodological grounding of the subject in ‘natural’ processes. Goodson (1983) warns, however, of the danger of assuming a too-close identification of geography curriculum with disciplinary structures and concerns. Rather than a ‘filtering-down’ process, Goodson posits, through a close reading of geography curriculum history in England, a significant ‘bottom-up’ influence from the schools and local educational authorities upon geography departments in English universities. Chapter 7 takes up this point in detail.

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15 Important references here are the Women and Geography Study Group of the Institute of British Geographers 1984 (hereafter referred to as WSGS), Gale 1985, and various papers in the Australian Geographical Studies special issue May 1990.
1.3.2: Gender and geography

Feminist critiques of geography point to the masculinism of the dominant traditions and practices in the discipline. These critiques belong with a body of feminist work within scientific practices more generally (for example S. Harding 1986, Grosz and Lepervanche 1988), but have, of course, some very specific concerns. Like the feminist work in the natural sciences, they begin with, but go far beyond and challenge, liberal concerns with participation within the profession. This subsection concludes with a brief account of some of the ways feminist work has challenged the masculinism of geography. As a way of beginning to consider what it might mean for girls and boys to be differently engaged within a geography curriculum, however, it is useful to start with a little basic demography.

As an emergent science, geography has evolved a strongly masculinist identity. This is of course not surprising in the light of sociological studies of scientific professions generally (Butler Kahle 1986). In the Australian context, feminist geographers have pointed out the almost total maleness of the discipline’s public image, from the occupation of the senior positions in university geography departments to the overwhelming preponderance of male contributors to the discipline’s principal journal, *Australian Geographical Studies* over the several decades of its publication. This male ‘face’ of the discipline is further reflected in university undergraduate and postgraduate enrolments around the country (Johnson 1985, Fahey 1988, Gale and Lindemann 1989, Fincher and Fahey 1990).

It is no news that those who engage in scientific-professional practices are traditionally male. As a consequence, particular kinds of masculine positions have been constructed for science workers, available generally as readings of scientific practices within the culture. The thesis will argue that geography as a discipline is masculinist in particular kinds of ways. This point takes as a beginning the male population of geographers but goes beyond issues of demography to consider issues of representation and subject production within geographical discourses. As an introduction to these matters here, let us consider the public language geographers have used to describe themselves and their discipline. Geography’s most influential paradigm this century has been what is termed “environmentalism” (R. Gilbert 1988, Young 1990). Its central concern has traditionally been (and persists in being) termed the ‘man/land’ relation.16 As is to be expected, there have been continual protestations in mainstream geographical-professional circles that the

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16 There is an important argument here regarding the relation between binary thought and hegemonic masculinism (for example Irigaray 1985, Fox Keller 1983, 1986), which will be developed through the subsequent chapters of the thesis.
term ‘man’, the primary item in the couple, is in fact generic, technical and gender-neutral (WGSG 1984, Fincher and Fahey 1990). Yet there are telling slippages. For instance, in the field of geographical education, Philip Taylor was able to write, as recently as 1985, in the General Editor’s Preface of a book produced within a widely circulated series by the Falmer Press:

Geographical education is as much about chaps as it is about maps, despite all the aphorisms to the contrary, and chaps are caught up in the moral continuum of human affairs whether they wish it or not. It is thus that geographical education must concern itself with human values, and this collection of papers reflects this with conviction and force (vii).

In the light of the readings produced in subsequent chapters of the thesis, this piece can be read as problematic, not just in terms of gender, but also of class and of race. It is arguably only a very limited few ‘humans’ who might qualify to be, or see themselves as, one of those “chaps” who are inscribed as the subjects of this particular discourse as responsible agents within “the moral continuum”. Those “chaps” are, in terms of studies such as that of the WGSG in 1984, all of those white, middle- and upper-class British men who occupy the senior positions in geography departments and educational authorities. The notion of “chaps” is ineluctably British (and colonial), raising questions of the inclusivity of its implied referents in racial terms. As far as gender is concerned, in the collection introduced by Taylor, twelve out of the thirteen contributors are men; the one woman is the second-named author in a collaborative piece.

The ‘maps and chaps’ phrase is in common currency in geographical-professional circles. What is interesting in terms of my own historical and intertextual positioning in engaging the issues in this thesis is that, until I encountered Taylor’s Preface, I had misread the generally accepted relation between the two terms. The ‘maps and chaps’ pair functions, of course, as a binary opposition, referring to the technicism/humanism ‘man/land’ and physical/human geography divisions. Taylor’s position in the Preface is a valorisation of the terms of this distinction. I had, however, initially read them as a unity, an ironic articulation of an alliance between technicism and masculinity in geography. The supposedly transparently ‘generic’ reading of ‘chaps’ had been unavailable to me.

Geography, as a particular kind of science, constructs and projects particular kinds of masculine subject positions. One image with considerable power in the Year 11 geography classroom of my study was what I will call geography’s ‘Harry Butler’ identity, after the comment made by the student, Rowan, which provides the motto for this chapter. This image was produced by Rowan from a number of sites, from film and documentary television, from textbook illustrations, and from the formal as well as the
informal language produced in class around fieldwork in general, and in particular, around the two fieldtrips which constituted the high points of Rowan’s year in geography. As the readings of the geography classroom in the following chapters will show, this image has particular effects on the ways Rowan and the other students constitute themselves as subjects of the discipline of geography in its school versions.

Feminist critiques of mainstream geographical research and pedagogy, as it is practised within universities and ‘in the field’, address different levels of concern. Many draw attention to the absence of women’s lives as a specific domain for empirical-geographical investigation (Gale 1985). Others interrogate the genderedness of some of the fundamental explanatory apparatuses of the discipline, such as the public/private spatial split in urban geographies (WGSG 1984). Others have critiqued the lack of feminist-influenced social research methods in a discipline which aims to map the cultural as well as the physical landscape (Monk and Hanson 1982, WGSG 1984). At their most radical, feminist critiques produce an interrogation of the politics of what I will call ‘geographical rationality’, within the theoretical frameworks of various poststructuralist feminisms, for example, in the Australian context, Johnson (1985, 1990). The thesis engages much of this work as it develops an account of what the students of the detailed case study literally make of the geography curriculum in their writings. This kind of inquiry has to date been largely missing from feminist work in literacy and curriculum outside the domain of the subject-discipline of English.
PART I

READING THE ‘CON-TEXTS’
OVERVIEW

Part I consists of two chapters which read the spoken and written texts of the Year 11 geography curriculum of the classroom in which the ethnographic study was carried out.

Chapter 2 produces schematic readings of the geography curriculum as it is realised first in the syllabus documents for Year 11 geography and second in the printed resource material in use in the classroom. School geography is situated in this chapter in terms of some fundamental epistemological and structural dualisms. These intersect in significant ways in the texts of the ‘enacted’ curriculum with dynamics of social difference: in particular, race and gender. These readings clearly exceed the dimensions and the discursive terms within which the curriculum texts are constructed, indicating very graphically the productivity of reading formations and intertextual framings for the making of meaning in the reading process. Readings are produced at various levels of abstraction. The purpose is to expose the multiplicity of discourses at work in the content of the Year 11 geography curriculum as well as in its pedagogy. The chapter contributes to the overall argument of the thesis by providing material towards the construction of a way of reading student writing which in turn allows a critical interrogation of currently available discourses of literacy pedagogy.

The chapter takes its place in the forward impetus of the thesis through a kind of retrospective logic. This logic works most obviously at the level of the ordering of the writing. Since the most immediate function of the chapter is to establish something of the contextual dynamics within which the two ‘shifting cultivation’ essays were produced and received, it had to be written after the three chapters in Part II. It was the readings produced of those student texts which motivated the selection of materials and points of focus for the readings of the the official (or ‘written’) curriculum produced in this chapter. At another level of abstraction, the readings of the curriculum produced here rely for their legitimation partly on a more detailed theoretical discussion which is to appear in Chapter 7 at the beginning of Part III and which has been prefigured in Chapter 1. In other words, according to the thesis’s explicit agenda of closely investigating text/context relations at multiple levels of representation, and according to a logic of doubling back, later chapters can be seen to provide contexts for the readings of the texts of the curriculum as well as for the construction of this chapter as a text. Similarly, Chapter 7 subjects sections of this chapter to a re-reading as support for its argument concerning the inherent multiplicity and instability of both disciplines and curricula.

Chapter 3 serves two main functions. First, it provides an account of the processes of production of gendered subject positions in and through the language practices of the classroom. Second, in doing so, it contributes to the building up of a complex of
contextualisation relations which provide part of the framework for the close reading of Karen’s and Rowan’s ‘shifting cultivation’ texts. The chapter addresses issues of both speech and writing, and of the social (and particularly gender) relations between the two. This investigation does not focus on the relations between talk and writing/learning in the straightforward sense of curriculum outcomes, as is the case in the ‘language and learning’ literature of ‘progressive’ educational theorists. Nor are these relations addressed in the techno-linguistic sense in terms of the mechanics of different linguistic modes and their consequences for literacy pedagogy (as, for example, in the work of Halliday 1985b).

Rather, the chapter addresses the notion of a classroom as operating a particular social and epistemological regime which is produced and traced via, among other semiotic modes, speech practices. The notion of ‘regime’ is not taken as a static and given or predetermined entity, however, but rather as a relational dynamic which is constantly re-established and re-negotiated in the moment-by-moment processes of classroom interaction. This regime is highly site-specific, as will be clear in the detailed material of the chapter. Nevertheless, through these intricate interactional processes, larger systems of differentiation and domination – of race, class, gender – are re-produced.

In terms of the larger argument of the thesis: that differently gendered students encounter the curriculum differently, and hence re-write it differently in their own productions, Chapter 3 makes a specific contribution. It suggests that, first, spoken interactions in the classroom have particular effects on writing and writers: effects on what comes to count as geographical knowledge and on what come to count as notions of the ‘self’ participating in the projects of geography in particular and of schooling more generally. Second, the chapter aggregates evidence for an argument that ‘gender’ as a dynamic of difference emerges, not as any single feature of the classroom; rather it is the effect of a complex ensemble of features.
CHAPTER 2

MAPS & CHAPS

READINGS OF THE YEAR 11 GEOGRAPHY CURRICULUM

Knowledge is determined in its forms and domains by the struggles that traverse it.

(MacDonell 1986:114)

[G]eography is a diverse subject with many fields of interest, such as urban geography and climatology, having little connection with each other. The social aims of geographical education will not be realized by all selections from the discipline, and may not be realized by any of the current dominant paradigms. The history of the discipline is traceable through competing paradigms, and educational arguments complicate the possibilities of geography course content. Whatever the merits in general terms of the various arguments, the interest here is how the curricula they have produced present particular ideas about the nature of people, society and the relations between the two.

(R. Gilbert 1984:69)
Introduction

This chapter consists of two main sections and a coda. Section 2.1 produces readings of the syllabus statement for Year 11 geography for 1989 (Secondary Education Authority of Western Australia [hereafter SEA] 1989a/draft). To start at such a point is not to set up an 'origin', nor to suggest a one-way, top-down order of determination or realisation of curriculum action in the classroom. A syllabus is already a set of selections from a culture, or rather from a number of cultures: disciplinary cultures, politico-economic cultures and 'educational' (for example, curriculum-theoretical) cultures. A syllabus points both 'outwards' to these cultures and 'inwards' towards the enacted curriculum. Any point of 'entry' to a narrative of classroom action is intelligible in terms of the series of relations, or symmetries, among these dimensions. Each dimension will be both a repetition and also a transformation of the other(s). Further, the syllabus is read as an accretion of traditional structures and practices which bear some relationship to classroom practices, though not in a determinate way. That is, though I begin with the syllabus for the principal purpose of introducing the field to readers unfamiliar with it, there is no suggestion that the relationship between syllabus and classroom realisation of curriculum is a linear or causal one. These points are worth elaborating at the beginning of the analysis, since they serve to indicate the surplus of any 'framing' (such as framing the geography case study through this reading of the syllabus) over its framing function. It immediately raises important issues of sameness and difference, generalisability and specificity. One effect of beginning with the syllabus, and subjecting it to particular kinds of readings, is that I locate the geography class of my study within a specific historical and institutional context. At the same time, however, I work to locate the syllabus document as one text among many within the context of the complex day-by-day work which goes on at the classroom site, and which forms the substance of subsequent chapters.

Section 2.2 is a series of readings of the printed resource material in use in the classroom. The readings in both sections are produced, as I indicated in Chapter 1 (subsection 1.2.2), through a close focus on a set of binary pairs which suggest themselves most insistently as interpretive frames in the context of this geography curriculum. These binaries are subjected to readings as points of tension within this particular curriculum instantiation of contemporary school geography. Particular attention is paid to the ways in which terms within the binaries are ordered, as well as to a tendency to reversal of the ordering at particular points. The ordering of the binaries is made problematic, in terms of

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1 I have used the draft version of the syllabus since it was the document actually in circulation and use in the classroom during the period of the study.
the potential for one of the terms to be privileged over the other. This is taken as a starting point for an analysis of discourse and power as they might be traced in these texts. Throughout the chapter, the focus is in part retrospective, in the sense that particular exemplars are selected for their direct relevance to the topic of ‘shifting cultivation’.

2.1 The Year 11 syllabus (see Appendix A)

[the discourse of rationales for geography teaching is itself a product of past and present conflicts generated by competition among particular social interests.

(R. Gilbert 1989a:159)

Geography is a senior secondary subject in Western Australian schools. That is, it is offered for the first time in Years 11 and 12 as a Tertiary Entrance Examination Subject option. It has no formal prerequisites except the three years of compulsory junior secondary social studies. The course ‘Rationale’ in the 1989 syllabus statement makes clear the introductory nature of the Year 11 curriculum:

The Year 11 Geography course is designed as a Unit approach to introduce students to the physical and human components of the world in which we live. Emphasis is placed on the acquisition of practical skills within the context of each unit. Within the three physical units the relevent human issues must be addressed. The syllabus has a global emphasis. However, students should have the opportunity to study examples in the field. The course consists of six optional units of equal length, of which four must be completed during the year. These units are:

I GEOMORPHIC STUDIES

II ATMOSPHERIC STUDIES

III WORLD BIOMES

IV PATTERNS OF DEVELOPMENT

V RESOURCE STUDIES

VI REGIONAL STUDIES

The document then proceeds to outline the “general aims” of the Year 11 course. These are to:
integrate the concepts of place, process and issues within a global context.

develop an understanding of global concepts.

develop mapping and practical skills.

develop fieldwork skills.

encourage a values approach to the study of process and issues.

According to the syllabus document, learning activities in the course should involve students using "a process of geographical enquiry" (2). Suggested learning activities are:

written exercises (essays, short answer, reporting)

laboratory activities (collation and analysis of fieldwork data, photograph interpretation, map construction, analysis and interpretation)

research assignments

field investigations

audio-visual interpretation

oral appraisal (interviews, guest speakers, group work)

What follows this overview of aims and principles is an extended section titled 'Structure', consisting of an outline of the six "optional units". Each unit is outlined in terms first of a shorter list of "general objectives", followed by a more extensive list of "specific objectives". The unit of most direct relevance to the concerns of this thesis, since it is the one within which the 'shifting cultivation' essays were produced, is Unit III: WORLD BIOMES. The "general objectives" for this unit are:

Describe the concepts of biome and ecosystem, and their components.

Identify the general pattern of world biomes.

Compare the characteristics and relationships within each of two biomes.

Evaluate the human impact on the two selected biomes.

Use the relevant mapping and practical skills as indicated on the matrix.
The “specific objectives” for this unit are:

Define the terms biome and ecosystem.

Illustrate the transfer of energy through an ecosystem by using the concepts of food chain, food web, ecological pyramid, and biomass.

Identify these relationships within a local ecosystem.

Identify the general pattern of world biomes.

For tropical rainforest and one other biome selected from the following list: Hot Desert, Tundra, Boreal, Savanna, Sclerophyllous:

* Define and locate the biomes.

* Describe the components of the biome (climate, soil, vegetation, fauna).

* Examine the relationships within the ecosystems.

Recognise the delicate balance and dynamic nature of the ecosystem. For the two biomes already studied:

* identify and describe the ways humans have modified the biomes.

* assess the impact of these changes on the equilibrium of the biomes.

Use the relevant mapping and practical skills as indicated on the matrix

[emphases added].

Each of the units is structured in this way, with the final objective in both the general and specific lists (use the relevant mapping and practical skills) being repeated for all of the units in the same manner as above.

The syllabus document can be understood, in its relation to ‘outside’ the classroom, as a selection from, and a mediation of, culture. It may also be read in terms of its effects ‘inside’ the classroom in generating a complex set of contextual relations which frame and shape (though they do not determine) the general divisions and sequences of activities, the individual lessons and the ‘outcomes’ in the form of specific utterances, interchanges and formal written texts which count as evidence of ‘learning geography’ in particular
classrooms. In this sense, it is an important site for reflection upon the multiple determinations and mediations of curriculum action in the classroom.

In the two subsections that follow, I work to relate the different dimensions of the syllabus to the enacted curriculum of the geography class as I understood it during my investigation: to consider, that is, the relations among selection, mediation and production. Of course, to consider the notion of ‘culture’ as singular is misleading. In these subsections, I focus briefly on two major ‘cultural’ or discursive domains framing and mediating the production and enactment of a curriculum: the domains of ‘education’ or ‘pedagogy’ (in subsection 2.1.1) and of ‘disciplines’ (in subsection 2.1.2). Each of these domains will further be seen, not as unitary, but as marked by plurality, tension, contestation and contradiction. Chapter 7 takes up these issues in a more detailed discussion of the history and politics of curriculum geography. I add briefly that this ‘against-the-grain’ reading of the syllabus statement is itself heavily contextualised. It is a reading made possible and indeed, I will argue later, politically necessary, as a result of the time spent in the classroom, in discussion with the teacher, Alan A, in interview with university academics and officers of secondary assessment authorities, as well as of the reading of other relevant texts, in particular the examination papers and official examination marking guides.

### 2.1.1 the geography syllabus as pedagogic text: the ‘skills/content’ split

The document indicates through two banner headlines on page 1 that the syllabus is divided into what it terms “two main sections”:

I MAPPING AND PRACTICAL SKILLS

II HUMANITY AND THE BIOSPHERE

The remainder of the document then outlines these two sections and the relationship between them in more detail. The two headlines signal, through print size and through being placed together as macro-organisers, that they are of the same order of significance. What is interesting, however, is they are not semantically symmetrical. The first refers to a set of activities and processes gathered together under the umbrella of ‘skills’, while the second clearly refers to the organisation of a topical discursive field. The two terms which constitute the first heading refer to undifferentiated activities to be undertaken for the purpose of the development of skills, while the terms in the second are highly differentiated, super-ordinate terms in a taxonomy of spatial relations. The two headlines are also asymmetrical in another sense. The first refers to a curriculum outcome, however
undifferentiated the goal or object is as locus for the activities. The second, in contrast, has no goal and hence no articulation of a projected curriculum outcome.

The two organising headlines seem to be setting up a double focus, a distinction between, and yet an integration of, ‘skills’ and ‘content’. On the one hand, the semantic opposition in operation here between skills and content suggests an operational opposition between ‘practice’ and ‘theory’, which will bear closer scrutiny below in terms of its effects on individual students’ constructions of the field of school geography and on their participation in the curriculum enterprise. On the other, the syllabus ‘Rationale’ states that “emphasis is placed on the acquisition of practical skills within the context of each unit” (2). At this point the explicit emphasis, rhetorically at least, is on integration. In the light of the tension between these two organising principles, there are two related points of note.

First, there is four times as much space devoted in the document to describing and detailing the ‘theoretical’ section, HUMANITY AND THE BIOSPHERE as to the ‘practical’ section, MAPPING AND PRACTICAL SKILLS. This detail consists for the most part of the lists of “general objectives” and “specific objectives” for each of the six content units. These lists are not themselves taxonomies but are heavily reliant on the taxonomic organisation of geographical knowledge. As “objectives”, they articulate pedagogic goals but, as I will indicate shortly, these are indeterminate or even contradictory, when read in the context of their relation with other sections of the syllabus document.

Second, in a reversal of the order of the headlines, the ‘theoretical’ section is detailed first, while the ‘practical’ component is presented last, right at the end of the document, in a separate skills matrix. The rhetoric of both the “general aims” and the “Rationale” stresses the contextualisation and integration of skills with content. However, despite notes within the “skills matrix” linking specific skills to content objectives, the matrix appears to be both relatively decontextualised from the course objectives (which in all but the last instance in each list are ‘knowledge’ or ‘content’ objectives) and indeed, secondary or extra to them. In this way the syllabus produces an effective emphasis on content and technical lexis (“theory”) in spite of its espoused emphasis on skill (“practice’). That is, while the ordering of the headlines sets up an expectation of a foregrounding of practical work, clearly this is not likely to be the case.²

² The 1992 syllabus is substantively the same as 1989; one of the only changes is in the framing statements concerning the integration of skills with content. Under a new subheading ‘Approaches’, the syllabus states: “Practical skills are an integral part of the course. It is important that these skills be taught within the four selected units and not in isolation” (SEA 1992a: 27). From this addition, it is reasonable to conclude that problems of a skills/content split had been noted in curriculum
Of course, a separation such as this cannot be so neatly effected in curriculum practice in the classroom. Mapping, for example, contains its own theory which students must understand, in order to practise it. Further, students are required to read and interpret maps in the process of engaging with textbook representations of content. They are required, in their reports of practical work, to relate observations to theoretical information. Nevertheless, the separation has certain effects in the projection of certain kinds of pedagogic orientations and classroom practices, where the effective emphasis appears to be on the transmission of content, with a consequent relegation to secondary status of ‘skills’ work. This situation is further determined through the official examination procedures, as I will indicate shortly. These pedagogic orientations may be provisionally termed here orientations to ‘transmission’ or what Bernstein (1971, 1977) terms “collection code” pedagogies, with associated notions of the strong classification of the ‘knowledge’ of curriculum content. This emphasis is one which effectively suppresses, or renders problematic or ‘impractical’, other practices, specifically those oriented most explicitly to learning processes.

To explore this notion a little, consider the framing of the course “objectives”. Objectives are lists of specific projected outcomes which a designated group of people is expected to achieve. These ‘objectives’ thus reward examination here in terms of the way in which they ‘interpellate’ the syllabus reader. This can be done by focusing on those specific aspects of language which organise and negotiate relations among participants in an interaction. The questions that may be asked are: what kinds of relations are being negotiated?; in particular, who is the addressee of the text?; how is the addressee being addressed?; what kinds of outcomes are being projected?

The repeated grammatical pattern of the objectives is an imperative construction, as, for example, in the first general objective: Define the terms biome and ecosystem. An ‘against the grain’ reading of these lists might query the status of the inscribed addressee of these constructions. A reading of this kind is motivated by the possible pedagogic projections (what is being implicitly proposed) which might be read from this structural feature. What is particularly noticeable is the absence of a specific macro-framing construction in declarative mood which explicitly addresses teachers (for example: Students will ... ). This is in marked contrast to the structure of the course “general aims”, where the macro-framing declarative clearly addresses the teacher:

practice. It is interesting to speculate how much difference an intervention such as this at syllabus level will make on teaching practice, when neither the content nor the assessment structure has changed.
The geography course aims to:

* integrate the concepts of place, process and issues within a global context.
* develop an understanding of global concepts.
* develop mapping and practical skills.
* develop fieldwork skills.
* encourage a values approach to the study of process and issues.

In the “objectives”, in contrast, there appears to be a discrepancy between the actual, as opposed to the putative, addressee. Who is being addressed by these imperative constructions? Who, specifically, is to define the terms biome and ecosystem? The student? Yet in practice, although the students in the class of my study were each provided with a copy of the syllabus statement, the only person who could ‘read’ the document was the teacher, in the sense that he was the only one who could situate it within a wider subject-disciplinary and pedagogic framework and transform its words into curriculum action. He was the one who, as principal source of geographical knowledge in the class, had to first define the terms, subsequently transmitting definitions to the students.3

What, then, is the possible significance of the grammatical shift here? The most obvious differences between aims and objectives concern, predictably enough, degrees of generality/specificity and abstraction/concreteness. What is interesting for this discussion is that the change in mood from declarative to imperative in the syllabus document occurs with the shift to the delineation of specific curriculum outcomes. In the “aims”, there is an explicit pedagogic orientation, towards development and integration (of concepts, understandings and skills) and encouragement (of values). The actual actions to be generated in fulfilment of these aims are, however, unclear and far removed from curriculum action. The declaratives are points of principle. These are replaced in the “objectives” section by repeated lists of commands. These are the grammatical realisations of the orientation to action and specific outcomes. In the light of this, it is important to consider more closely the implicit pedagogic shift that might be being marked here

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3 This is not to deny the special authority of the school textbook as repository of subject-disciplinary knowledge. Rather, the point is similar to that made by Luke, de Castell and Luke (1983), who see the teacher’s role as mediator and arbiter of textbooks as central to the production of school knowledge as “beyond criticism”.
through the grammar, remembering that what is at issue is not a simple determination of curriculum action but rather the discursive traces of the traditional pedagogical structures and practices which accrete at the site of the syllabus document.

Specifically, what kind of command is being realised in the imperative construction? The answer to this question is not clear from the syllabus text. One reading is that there may be an implied or elided opening construction, such as Students will ... , performing a macro-framing function for the list of “objectives” as suggested above. If this is the case, the status of the will is, as is often the case in English, ambiguous. It may refer simply to futurity, coded through the modal category of possibility. Alternatively ‘will’ can be read in terms of the alternative modal axis of obligation/inclination (modulation). It is highly likely, in the absence of an articulated framing construction, that obligation is the foregrounded reading. 4

Translated into curriculum action, the important questions are: what specific kinds of learning outcomes are being projected? Is the reader inscribed in the text being required to define (reproduce a content) or to be able to generate a definition (engage in a process; a ‘production’; demonstrate a ‘skill’)? What is the relation of one to the other of these projections? In other words, what is the relation between ‘skill’ and ‘performance’? Further, what is the relation between knowledge (discourse) production, whether it be understood as ‘skill’ or as ‘performance’, and the practical skills in the matrix at the end of the syllabus document? Significantly, in the absence of a macro-framing statement, these questions cannot be answered by the syllabus document. This appears to leave a significant space of supplementation, where actions become local rather than governed from ‘outside’.

From the reference point of other relevant documents, though, a partial answer to these questions is available. In the examination (and hence almost inevitably in the classroom), assessment in geography classes operating from this syllabus is based on ‘outcomes’ rather than ‘processes’. 5 That is, the requirements to describe, define and identify set up by the syllabus objectives are assessed on the basis of evidence in written examination papers of appropriate geographical-technical descriptions, definitions and identifications. As outcomes, these answers rely on factual recall and are replications or re-presentations of subject-disciplinary givens. In examination, in the essay section, students are most

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4 To connect with a point made briefly in Chapter 1, however, it is not possible to overlook the question of inclination when considering the realisation of curriculum in action.

5 In making this point, I am perpetuating a binary distinction which is troublesome in practice, but which serves here to indicate important inconsistencies in curriculum emphasis. The distinction is also quite strategically important in the more general context of the literacy debates with which this thesis is engaged. These questions will be raised again in Chapter 8.
commonly asked to reproduce from memory descriptions and definitions of geographical features and concepts encountered or generated in class (SEA 1988, 1989b, 1990). According to the examination markers’ notes distributed as guides for teachers, the writing is assessed in large part on the number of specific facts ‘contained within’ a text. (SEA 1989c). It is in this context that I will describe the prevailing discursive orientation of school geography as it can be read from these documents as ‘factitious’. I use Harré’s (1990:81) definition of this term as “whatever is presented as if it were a known truth”, and will return to this point in later chapters.

The ASSESSMENT STRUCTURE segment which has been added to the end of the 1992 syllabus casts further (retrospective) light on the question of the learning outcomes effectively projected by the “objectives”. In this segment, learning outcomes are divided into “lower order” and “higher order” categories, with 40-60% assessment weighting to be applied to each category. In the “lower order” category are listed define, recall, relate, list, describe. In the “higher order” category are interpret, apply, demonstrate, distinguish, compare, contrast, differentiate, analyse, compose, formulate, construct, judge, predict, evaluate, explain. (SEA 1992a). What is immediately striking about this categorisation for the present discussion is that the large majority of the unit “objectives” fall into the “lower order” category, with define, describe and identify being the most common. Although identify is not included in the list, it is fairly clearly of the same order as those listed; its component processes are something like name, list and describe. (Catling 1990, Morris 1992).

A final consideration for a reading of the syllabus in terms of a ‘skills/content’ split and the relation between them is the status of the compulsory mapping question in both the Year 11 and Year 12 examination papers. In Year 11, this question is worth 50% of the total examination mark, whereas in the final Tertiary Entrance Examination it is only worth 25%. The final outcome (in terms of assessment weighting in the Tertiary Entrance Examination) of the two principal components (‘skills’ and ‘content’) of senior secondary school geography thus relates directly to the proportion of the space taken for elaboration in the Year 11 syllabus (approximately 4:1). However, it is in an inverse relation to the order in which they are presented in the banner headlines. To the extent to which this ordering implies a foregrounding of practical work, it is misleading. What really matters at the end of the process is the reproduction of a given written ‘content’.

That this is a problem and a contradiction in terms of the rhetoric (or self-representation) of the Year 11 syllabus is only exacerbated by the fact that the mapping question calls exclusively on map-reading rather than map-producing skills. In both years, students are tested on their ability to read reproduced maps in examination conditions. There is no
mechanism for assessing map-producing skills in a range of ‘practical’ contexts, let alone other ‘practical skills’, such as skills in the field.

In summary, as read from syllabus details, examination papers and markers’ guides, the projected ‘good’ student-subject of school geography in this institutional context is one who reproduces facts rather than produces knowledge according to any process which might reasonably be understood as a “process of geographical enquiry”, as projected by the syllabus aims. According to this reading, then, there is a tension between the general aims and principles of the course as outlined on the first page of the syllabus document and the teaching-learning practices which are generated from it.

Further, the interpersonal relations literally inscribed into the lists of objectives may be read in terms of their implicit projection of a particular orientation to pedagogy. In contrast to the integrationist and developmental rhetoric of the aims, the objectives imply a reproduction- and obedience-oriented pedagogy. Objectives-based curricula tend, in Bernstein’s (1971) terms, to strong classification of educational knowledge. Arguably, they lend themselves to a proliferation of “lower order” learning outcomes, since these are the simplest to specify and to assess, a point also made by Catling (1990) with respect to assessment in the National Curriculum in Britain. Imperative grammatical constructions realising commands suggest an authority-based framing of pedagogic relations, a framing based on transmission and reproduction of subject content. The place of ‘practical-technical’ skills is profoundly ambiguous.

It is not surprising, of course, that geography teachers respond to the institutional conditions of their labour in ways that maximise their students’ chances of success in examination. Hence, in the geography class of my study, lessons were structured around the transmission of content, while ‘mapping and practical skills’ happened, apart from two field excursions, on Friday afternoons, between units, and on windy days. These are matters which will be seen in the context of the present study to produce certain gender-specific effects in terms of pedagogic orientations and curriculum outcomes, understood as gendered subject positionings within the specific subject-disciplinary discourses of Year 11 geography. Chapter 8 discusses some of these effects in a summary discussion of the classroom work of Karen and Rowan, the two students of the detailed case study.

### 2.1.1 The syllabus as subject-disciplinary text: the ‘man/land’ dualism

The previous subsection investigated the relations between the “two main sections” of the Year 11 course: I: MAPPING AND PRACTICAL SKILLS and II: HUMANITY AND THE BIOSPHERE in terms of the implications of this curriculum split for a school
geography pedagogy. This subsection re-reads the syllabus in terms of the relations between the two “components” of the second, content-based section: HUMANITY and THE BIOSPHERE, in particular focusing on the status of these relations as a representation of the structure and substantive content of geography as a subject-discipline. As in the previous subsection, this reading points up a set of tensions and possible contradictions in the document. Here, these tensions relate to a set of epistemological and methodological effects in classroom action and written texts which are investigated in later chapters.

Within the content outline in the syllabus, the two components of the section HUMANITY AND THE BIOSPHERE are given the more detailed headings of “The Earth as the Home of Humanity” and “The Human Response”. Once again, there are two related points of interest with respect to this outline. First, what is immediately apparent from the following component descriptions is that four times as much space is devoted to the first as to the second component. As was the case with the unequal weightings given the skills and content sections of the whole syllabus document, this imbalance has important consequences for a reading of the enacted geography curriculum of the classroom.

In Year 11, the year of introduction to the discipline, the major emphasis is on physical geography, as this syllabus clearly demonstrates. There are three physical units: GEOMORPHIC STUDIES, ATMOSPHERIC STUDIES and WORLD BIOMES. Additionally, two other units, RESOURCE STUDIES and REGIONAL STUDIES can contain a significant physical geographical content. Since only four units of the six must be chosen for a year’s study, it is possible to devote the year almost entirely to physical geography, as was indeed substantially the case in the classroom of my investigation. The large proportion of the material contained in the student workbooks pertained to what Robinson (1985:41) has identified as the traditional branches of physical geography: geomorphology, hydrology, climatology, meteorology, oceanography and biogeography. This emphasis in the Western Australian geography curriculum is quite strongly typical of school geography in other states and in Britain over the last twenty years at least (Marsh 1987, R. Gilbert 1984). Of interest are various recent critiques of the new National Curriculum for geography in Britain (Catling 1990, Morris 1992). Expressing the view that a renewed emphasis in physical geography in the National Curriculum is “bizarre”, Morris, a General Inspector and member of a regional geography examining panel, points out:

Even to the untrained eye, the dominance of weather and landform studies is obvious. It is worth a reminder that physical geography based on these two
elements is known as environmental determinism: human activity shaped by the environment. David Pepper (1986) notes that this approach had its origins around the fifth century BC and reached pre-eminence in the nineteenth century.

(Morris 1992:80)

This emphasis on conservative versions of physical geography is the subject of a strong critique which will emerge later in the chapter and in subsequent chapters (particularly Chapter 7, subsection 7.2.4, which contains a discussion of a South Australian example).

The second, related point of interest with respect to this outline is again that of the ordering of the components. There is a marked reversal of the order in which the two components of the section appear, that is, where the order of the banner headline is the reverse of the order in which the course outline is developed throughout the rest of the document. Under the headline, HUMANITY AND THE BIOSPHERE, the ordering of the two components is at first maintained in the brief gloss that follows:

[the course] has as its focus an examination of the contemporary world from the geographic perspective of people, environment and resources.

In the following outline of content, however, the order is reversed. The two component headings, “The Earth as the Home of Humanity” and “The Human Response” refer, respectively, to BIOSPHERE and HUMANITY. Following this, the ‘Rationale’ at the beginning of page 2 of the syllabus document begins:

The Year 11 Geography course is designed as a Unit approach to introduce students to the physical and human components of the world in which we live (emphasis added).

Leaving aside the question of the initial reversal of component orderings for a moment, there are particular effects to consider in the order in which the components appear through the bulk of the syllabus document. In the detailed course outline, there is a significant conjunction of the temporal ordering as well as the spatial prioritising of the physical component in the course outline, and the concomitant de-emphasising of human geography. Consistent with the outline, the list of the six units and their subsequent lists of “general objectives” and “specific objectives” follow the principle of beginning with the physical. What comes first also receives the bulk of space. That is, it is not the ordering in itself that is at issue. Rather, what is of note is the potential for one term of the
binary to be privileged over the other. Here, the conjunction may be understood as serving certain epistemological and methodological purposes, with important effects.

Gale (1985:57) points out that the foregrounding of physical geography is a common curriculum feature grounding geography as a discipline within its "origins" in the "so-called natural landscape", such that human geographies are not only secondary but also predicated upon the physical. The distinction between physical and human geographies in their school-curricular versions is predicated upon a foundational distinction, operating in more conservative disciplinary models, between 'man' and 'land'. That is, there is an epistemological grounding in a binary distinction of 'environment' and 'response to environment' with respect to representations of spatial processes. R. Gilbert (1984) points out that this binary has its foundations in the environmentalist discourses of the nineteenth-century reforms of geography. What has during much of geography's recent social history been known as the 'man/land' relation is a central relational dynamic of the discipline, one of its dominant "paradigms" (Biddle 1976, 1980) or "substantive concepts" (Cox 1982, Hall 1982, Marsh 1987, Hill 1989). According to Gilbert, the central notion of 'response' of the environmentalist movement is Darwinist in origin, though it exists unchanged in many curriculum formulations.

The 'man/land approach' as a geographical methodology is in an important sense merely an explicit articulation of a fundamental philosophical dualism within the discipline. Deeply entrenched in the theories and methods of 'man/land' geographical research practices are philosophical assumptions of an essential separation between the two: assumptions of the possibility of a semantic opposition of 'man' and 'land'. This view presupposes 'land', or 'nature', as both a separate and a pure concept: separate in the sense that it can sensibly exist apart from human representations of it; pure in an originary 'pre-contact' sense of an innocent existence prior to human material visitations upon it. The 'man/land' dualism, then, can be restated in terms of 'origin' and 'effect-on-origin'.

In recent times, there have been challenges to this dualism from radically different directions. First, the growing influence of positivism this century has meant an attempt to subject both physical and human processes to the same kinds of analysis. This has

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6 The process of privileging and deprivileging of terms of the binary can be marked grammatically at different points in the syllabus text. In the case of both of the two subheadings of the content outline, 'humanity' is backgrounded through two different grammatical means. First, in the case of "Earth as the Home of Humanity", Earth as Home is a remnant of an identifying relational clause, the participants of which are Earth and Home. Home of Humanity is a qualifier of the thematised Earth; Humanity is embedded inside the reference to the other participants. In the case of "The Human Response", Human is a classifier of Response in a nominal group structure. Hence, there is no possibility of agency for Humanity; potential agency lies with Response. This is a nice grammatical analogue of what R. Gilbert (1984:72) and Morris (1992:80) refer to as "environmental determinism".
resulted in what Henley (1989:166) has termed “a flattening out of reality” and to the production of the “plastic” human figure of quantitative and systems-theoretical accounts (see also R. Gilbert 1984:92-3). From quite different directions have come various critiques of scientific rationality in the latter half of this century, in particular from within feminism and poststructuralism (for example, Fox Keller [1983, 1986], Lloyd [1984], Irigaray [1985], J. Harding [1986], S. Harding [1986], Grosz [1988], Haraway [1988], Walkerdine [1988]). As far as earth studies are concerned, within the general field of environmental philosophy there have been further challenges to rationalist and reformist environmentalisms: from deep ecology, gaia hypothesis and ecofeminism – movements which Young (1990) has assembled into a loose coalition of theories he terms “post environmentalism”. In contemporary geography, too, more sophisticated models are currently being engaged, involving an articulation of the complex interaction of physical and social processes (Johnson 1990, Fincher and Fahey 1990).

School geography, on the other hand, in the context of this study, as well as in other approaches to geography to be documented in Chapter 7, can be understood as operating very clearly within the terms of this dualism. The critique mounted in subsequent chapters focuses, not so much on the ordering of components in the HUMANITY AND THE BIOSPHERE complex, but rather on the problem of the binary itself. Chapter 8 reviews the relations among the series of binaries which are operating around the geography curriculum as it is realised in these official texts. At this point, it is sufficient to suggest that again the syllabus’s characteristic of re-ordering and re-prioritising one or the other of the terms of the binary marks it as a site of ambivalence, tension and inconsistency with regard to the fundamental epistemological and methodological issues raised here.

This established, it is reasonable to draw together some preliminary points of curriculum critique from the starting point of readings of the components of the curriculum as specified in the syllabus document. First, the emphasis on physical geography serves to establish the primacy of physical-scientific methodologies as a methodological “base” (Gale 1985:57), upon which the later curriculum moves into human geographies (mostly in Year 12) are built. This establishes a particular predisposition to positivist, empiricist and technicist research methods and discourses for the study of geography which, it will later be argued, actually defer and marginalise, if not effectively suppress, other, non-binaristic ways of engaging relations among social and physical processes. There are

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7 The problem here is to find the means to displace binary logic, since the discourses of western knowledge systems are structured around such logic. Feminist theorists of science have attempted to demonstrate non-binaristic research methodologies; Fox Keller’s (1983) account of the work of Barbara McClintock is an important example. From another direction, Lemke (1992/unpublished paper) has begun to explore a notion of ‘eco-social semiotics’, where semiotic categories are
important critiques of this orientation. Henley (1989), for example, critiques the grounding of human and social geographies in physical methodologies in terms the problems of using so-called “natural” models for social processes. The effects of physical scientism in geography are, according to Henley, “to abdicate any notions of political and social responsibility” in much geographical research (165). R. Gilbert (1989a:154) is similarly critical of what he terms the “abstracted determinism” characterising human geographies, which “emphasizes how human activity is determined by the tyranny of space”.

The curriculum structure might, however, be read in terms of another ordering principle from the one I have outlined above. It is possible to posit a linear, developmental, or perhaps ‘building-block’ logic in operation, whereby the Year 12 curriculum should be understood as being more significant and more complex and advanced than the Year 11. R. Gilbert (1988:14) refers to human geography in the school curriculum as a “brief culmination”. Leaving aside the allusion to brevity, the ‘human’ may be seen, according to a logic of culmination, to supercede the ‘physical’. The argument made in this thesis, however, is that this logic is not neutral, but rather has specific disciplinary effects which position differently gendered students differently as subjects of the geography curriculum. These effects emerge in the class case study in the readings produced of textbooks, spoken interactions in the classroom and student writings in the next section of this chapter and in subsequent chapters. One particular manifestation appears in the classroom ‘resources’ discussion text in Chapter 3 (section 3.2), where Karen is positioned, problematically, as being “further down the track” than the rest of the class. Here, linear curriculum logic functions to defer and suppress the ‘human’ and biophilosophical concerns of a female student in favour of a more rigidly instrumental, economics-driven theory of resource development.

As a final point, it should be noted that physical geography does not have to be conservative. Contemporary physical geographers are increasingly directing research in the area of environmental planning, engaging complex issues such as the impact of economic and social structures on local management and environmental degradation. I would suggest here, however, that school versions of physical geography, strongly classified and oriented to the reproduction of stable features, provide a very conservative basis for a discipline whose contemporary boundaries are so continuously and strenuously being contested (Australian Geographical Studies special issue May 1990; WGSG 1984).

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elaborated to explore material processes in a framework which theorises social formations in thermodynamic terms such as dynamic open systems.
2.2 Reading the textbooks

In this second half of the chapter, I select short passages from the published and distributed curriculum materials which the students encountered throughout the year: textbooks, photocopies of textbook extracts and collated class notes. The thesis's study of student writing in geography was particularly concerned to address relationships between what students wrote and the 'official' versions of their topics as produced in the reading matter. That is, these published versions were considered a particularly important dimension of the discursive training received by students, and therefore a particularly powerful context within which student texts should be read, according to the thesis's agenda of considering what might be at stake for different students in the process of 're-producing' geographical knowledge through writing. What I am concerned to articulate is a politics of geographical representations of the world as they appear in these materials. As well, I seek to indicate possible principles that the students exercised in their selections from these materials.

Throughout the year, a variety of textbooks was used in the class, though two books were used extensively: Chapman and Codrington (1985) and Robinson and Warburton (1986). Greater use was made, however, of photocopied notes which were distributed to the students. These notes were either taken from other textbooks, brought by transferring teachers from other schools, or produced especially for the Year 11 course by one of the teachers in the school, either Alan A or one of his colleagues. Since the bulk of the curriculum content in this class throughout the year belonged within the frame of physical geography, much of the reading matter consisted of technical descriptions, classifications and explanations of bio-physical phenomena and processes. This reading matter formed a large part of the information base used by students in writing assignments for assessment during the year. That is, there was little extra library research required of students, even though students did use the library, particularly in later assignments.

The selections from printed curriculum material which appear in this section are explicitly 'interested'. That is, there is no attempt at 'objectivity' here, in the sense of the rhetorical effect of letting the data as objects 'speak for themselves'. There is no neutral 'survey'. Rather, questions of gender and literacy, as they impinge on issues of disciplinarity and curriculum, have produced principles of selection from the reading materials. I have ordered the following chapter sub-sections chronologically, in terms of the stage in the year in which students encountered the material in question. The student productions considered in detail in later chapters – the 'shifting cultivation' texts as well as the spoken texts investigated in Chapter 3 – were all produced towards the end of the year. The ordering of these readings is thus in part intended to trace something of the subject-
disciplinary history as these students encountered it; to map something of where they were ‘coming from’ in disciplinary-discursive terms.

The readings produced here attend to multiple dimensions and layerings of coding in geographical representations of the world. The materials are subjected to readings at different levels of abstraction, in terms of genre, lexico-grammar and discourse (understood in the sense of Kress’s re-writing of Foucault, discussed in Chapter 1). In particular my concern is to challenge the myth of the neutrality of physical description in geography.

2.2.1 ‘Fact/value: re-visiting the ‘man/land’ dualism

Most of the geography textbooks in use in the class begin with physical-geographical topics and proceed to versions of human geographies, a structuring which is symmetrical with the organisation of the Year 11 geography syllabus itself. A wider survey of introductory and general geography texts in the school library and elsewhere revealed this to be a relatively consistent generic feature. This accords closely with R. Gilbert’s (1984) extensive survey of British school geography textbooks, where the predating of human geography on a physical geographical base and an accompanying de-emphasising of the human were two of the most marked features. This general organisational logic is a pedagogic logic as much as a disciplinary logic. However, like the syllabus itself, its effects are to suggest the foundational existence of a ‘natural’ landscape which is essentially separate from human interventions. This dualistic orientation to the human/land relation is in contrast with generally more complex models available in contemporary geography (Johnson 1990). Further, this separation has the effect of backgrounding the ‘human’ in school geography and separating it from curricular representations of the discipline’s ‘true foundations’ and primary concerns. Of particular note is that it emphasises a persistent and ubiquitous ‘fact/value’ split on which much of the ‘rationality’ of school geography is predicated, from the detailed structuring and sequencing of units of work, textbook readings and activities in the classroom, right through to the overt binary structuring set up in the syllabus document. In what follows,

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8 There are, however, some notable exceptions, such as the two volumes of New Wave Geography (Stowell and Bentley 1988), textbooks in use in schools in Victoria which belong in the tradition of “humanistic geography”. This term refers to a movement in geography which asserts the concept of the environment as “the creation of the person experiencing it” (Robinson 1985:39). The curriculum emphasis is on “personal geographies”, with a concern for the local area and students’ own experiences. Humanistic geography belongs in the tradition of ‘progressive’ pedagogies. It does not have wide influence in school geography in Australia, though it bears close resemblance to some of the social studies material produced in the 1970s. Though space does not allow a detailed study here, what is interesting about humanistic geography theoretically is that it lies outside the dominant ‘man/land’ perspectives in terms of the refusing the essential binary distinction. One visible effect of this is the strikingly different generic structure of the New Wave Geography texts.
I consider some of the effects of the structuring of the textbooks and notes along these lines.

The geography textbooks in use in the Year 11 course exhibit one consistent generic feature, which in an important sense can be mapped directly onto this overall structural organisation of the curriculum. I refer to a repeated and consistent schematic-structural feature of the organisation of ‘the topic’, a feature I will call the ‘fact/impact’ structure. Generally speaking, textbooks are structured into chapters which treat separate geographical topics. Each chapter is typically further subdivided into several sections, each usually headed with a technical term; these sections are often sub-categories within the different taxonomies that structure technical-geographical discourse (see Wignell, Martin and Eggins 1987:27-34, and Chapter 7 for a detailed reading of this work). Following taxonomic logic, the sections are typically further subdivided into branches and sub-classifications.

Consistently, however, the last section in a chapter is concerned with what is still frequently flagged as “Man’s Impact” in many of the textbooks available in school social studies department resource collections, but which in later publications is at least rewritten as “Human Impact”. In these sections, there is a general departure from both the taxonomic logic and the technical lexis characteristic of the previous sections. This move is consistent also with a ‘fact/value’ split. The descriptions and classifications of biophysical phenomena and processes are represented as ‘fact’, while the ‘impact’ sections consider matters of ‘value’. These are typically kept strictly apart in text-structural terms, either as codas at the ends of chapters or as a separate chapter at the end of a series of chapters or a section of a book. The structural framing is further underlined by shifts in register, and what might be termed ‘genre’ within Martin’s (in press) recently developed notion of ‘macrogenres’. Within the ‘fact’ sections, the texts typically follow schematic-structural patterns of reports, descriptions and explanations; the ‘impact’ segments, on the other hand, are more clearly characterised by features of exposition, in the terms of the genre typology developed by Martin and Rothery (1980, 1981). The ‘impact’ segments, furthermore, are characterised by predictable discursive shifts from physical-technical discourses to discourses such as economics, and, more rarely in the books surveyed, social theory.²

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9 Martin has pointed out that longer and more elaborated texts often participate in more than one genre. Like stages in a genre understood in schematic-structural terms, ‘macro-genres’ can be identified as having structures consisting of particular sequences of genres.

10 This is why, as a point of interest, there is a minor generic overlap between these object texts and the texts of the analytic chapters of this thesis.
This characterisation of the ‘fact/impact’ split applies to all of the textbook material used in the class. However, there are differences among textbooks, where some exemplify the distinction more crudely than others. These differences have marked effects in the representations of geographical processes. These produce, in turn, important ways of reading differences in student writings. Here I will focus on the two main textbooks in use in the class, beginning with Robinson and Warburton (1986).

‘Running Water’ was a physical-geographical piece used in the GEOMORPHOLOGY unit of the curriculum. The chapter has the following structure (there are several further subclassifications within each of the sections outlined here, which are not necessary for present purposes):

<table>
<thead>
<tr>
<th>Terminology: [a list of 64 technical terms] 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CHANNELIZED RUNOFF:</td>
</tr>
<tr>
<td>(a) Drainage networks</td>
</tr>
<tr>
<td>(b) Parameter of channel form</td>
</tr>
<tr>
<td>(c) Relationships</td>
</tr>
<tr>
<td>2 FLUVIAL (RIVER) PROCESSES</td>
</tr>
<tr>
<td>(a) Erosion by a river</td>
</tr>
<tr>
<td>(b) Transportation by a river</td>
</tr>
<tr>
<td>(c) Deposition by a river</td>
</tr>
<tr>
<td>3 PATTERNS RESULTING FROM EROSIONAL PROCESSES</td>
</tr>
<tr>
<td>(a) feature produced by erosion</td>
</tr>
<tr>
<td>4 PATTERNS RESULTING FROM DEPOSITIONAL PROCESSES</td>
</tr>
<tr>
<td>5 RIVERS AND THEIR IMPORTANCE TO MAN</td>
</tr>
<tr>
<td>6 MAN’S IMPACT ON RIVERS</td>
</tr>
</tbody>
</table>

(adapted from Robinson and Warburton 1986: 104-118)

In similar manner to this structure, the final sections of the other chapters in this textbook include ‘Man’s Impact on the Water Cycle’, ‘Coasts and Man’, ‘Vulcanism and Man’, ‘Weather and Man’, ‘Effects of Man’ (on vegetation), ‘Impact of Man’ (on the

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11 The chapter begins by listing all of the technical terms which will be introduced in the chapter. This is a common generic feature of geography textbooks, which I discuss in subsection 2.2.2 of this chapter and also in Chapter 7, in the context of reviewing the linguistic work of Wignell, Martin and Eggins (1987).
composition of the atmosphere), and simply ‘Man’ (changing soil composition) and ‘Man’ (affecting weathering patterns).

Lest this example be considered idiosyncratic to the organisation of this particular text, an otherwise altogether more sophisticated and polished publication (Chapman and Codrington 1985) produces this variation, where whole chapters address the topic sub-units, and the topic is clustered into groups of three chapters. The following example is taken from the beginning of the book. Again, there are several further subclassifications within each of the sections outlined here:

<table>
<thead>
<tr>
<th>Chapter 1: THE WATER CYCLE IN THE ATMOSPHERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Water in the world</td>
</tr>
<tr>
<td>1.2 Water vapour in the air</td>
</tr>
<tr>
<td>1.3 Evaporation</td>
</tr>
<tr>
<td>1.4 Clouds, dew and fog</td>
</tr>
<tr>
<td>1.5 Precipitation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 2: THE WATER CYCLE ON THE LAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Introduction</td>
</tr>
<tr>
<td>2.2 The water cycle and the biosphere</td>
</tr>
<tr>
<td>2.3 Groundwater</td>
</tr>
<tr>
<td>2.4 Storage of water on the land surface</td>
</tr>
<tr>
<td>2.5 Water budget</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 3: HUMAN IMPACT ON THE WATER CYCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Introduction</td>
</tr>
<tr>
<td>3.2 Human modification of the water cycle</td>
</tr>
<tr>
<td>3.3 The Burdekin delta – a case study</td>
</tr>
</tbody>
</table>

(adapted from Chapman and Codrington 1985: 1-47)

Under the title Understanding our Earth, the Chapman and Codrington text orders its subject matter into the following sub-disciplinary groupings: hydrology, atmospheric studies, meteorology, climatology, geomorphology, bio-geography, ecosystems, maps, and field studies. Within each of the physical geography topics, humans are presented in coda form, in terms of ‘impact’. A variation on the ‘fact/impact’ structure is the larger organisation of the text into chapters. The text displays not only the ‘fact/impact’ structure within each cluster of chapters comprising a topic, but also the characteristic shift in textbooks, from early to later chapters from weather and landform studies to the human/environment relation of bio-physical geography, as part of a linear movement
from the physical to the human, and hence from ‘fact’ to ‘impact’, as the following example from the end of the book indicates:

Chapter 13: THE ECOSYSTEM
13.1 Energy and chemical elements in the biosphere
13.2 Ecosystem concept
13.3 Structure of ecosystems
13.4 Ecosystem functioning

Chapter 14: HUMAN IMPACT ON THE ECOSYSTEM
14.1 Ecosystem control by humans
14.2 Energy and ecosystems
14.3 Human impact on nutrient cycles
14.4 Human impact on the earth’s grasslands
14.5 Human impact on the tropical rainforests

Chapter 15: HUMAN IMPACT ON ECOSYSTEMS: SOME CASE STUDIES
15.1 The Chimbu
15.2 Forest management of the far south coast of New South Wales
15.3 The broads of Norfolk and Suffolk, England
15.4 Botany Bay
15.5 Pollution in Bangkok, Thailand

(adapted from Chapman and Codrington 1985: 232-303)

Apart from these two major textbooks, there is a proliferation of examples from the printed material handed out in class. Overall, there is a striking uniformity in structure, even if not in approach and politico-discursive orientation to the human/land relation. The above examples are highly ‘factitious’ accounts. They may be read in terms of the way they organise geographical information through taxonomies, and organise texts through definitions, descriptions, classifications and explanations of spatial phenomena and physical processes (Wignell, Martin and Eggins 1987).

There are, however, productive ways of reading these texts other than in terms of linguistic-structural genre typologies. One reading questions the possible effects of the clear-cut divisions between ‘fact’ and ‘impact’ segments of texts, as well as the order in which these segments invariably occur. This reading would recast the notions of ‘facticity’ as a linguistic act which takes place against a landscape background which is
silently taken for granted. The representation of the landscape is taken as a given, as standing for the landscape itself. Central here is the notion of a pure nature, always-already untouched, unwritten. It is this purity which Derrida (1976) situates as "logocentrism": the assumption of the unmediated presence of the truth of nature. A slightly differently slanted reading would attend to these generic uniformities in terms of the repetitive appearance of what might be understood as kinds of linear narrative, or even Ur-narratives within the discipline, paralleling the various 'before-and-after' myths that have survived in the texts of western history.

In particular, within this generic structure, what in geography is termed the 'natural landscape' is always presented first, in its 'edenic', 'authentic' or 'pre-contact' form. Humans are not part of this landscape; only afterwards are they represented in terms of their visitations – corruptions as well as enhancements – upon it. However, this landscape can be retrieved here and now by empirical methods. The primary tools are those of the physical sciences. Through these tools, a fantasy is constructed, whereby the reader can, and is encouraged to, look through the cluttered and hazy landscapes of late twentieth-century capitalism to the 'real' landscapes of a physical science unsullied and uncomplicated by human mediations. The "transparency" myth of scientific language works to create the illusion of direct access to the pure landscape. Montgomery (1989:44) writes of the rhetoric of scientific language in terms of its self-representation as a "serene sea of epic denotation". The landscape of physical geography is unmediated by human product(ion)s, either material or semiotic. Particular Australian versions of the 'authentic' landscape of physical geography are inflected with popular discourses of the land as "terra nullius". These representations of the land produce subject positions with respect to the land which have particular resonances in constructions of Australian masculinity (Schaffer 1988).12

The 'after' segment of the 'fact/impact' narrative is commonly clearly marked off from the 'before' landscape, preserving the status of the former as the scientifically 'real' landscape. One of the effects of this separation is the ascription of a powerful, even primary, though rarely explicitly acknowledged, explanatory function to particular discourses. In particular, the shift from 'before' to 'after' is marked by a shift from (physical) science to economics, most notably capitalist economics, which takes on the status of a meta-discourse on social processes. While there is rarely, in these chapters, an analysis of causes or reasons for particular levels of "impact" upon the natural landscape, effects are conceived in terms of the economic cost of land regeneration. For example:

12 Chapter 3 discusses an example of this at work in the classroom, while Chapter 7 investigates various critiques of this rhetoric for its effects upon a school geography literacy pedagogy.
Mistreatment of rivers by man has at times created problems necessitating remedies which can be very costly.

(Robinson and Warburton 1986: 115)

Man has learnt that changes to coastlines (planned environmental modification) may lead to unplanned modifications with expensive consequences. It is essential to understand the working of coastal processes and the patterns they produce, and the complex linkages which exist in the coastal systems if man is to avoid future economic and environmental disasters.

(Robinson and Warburton 1986: 131)

There is a noted absence of other discourses, particularly those which could engage with social and political issues – issues of conflict, power or culpability. Chapman and Codrington provide some exceptions to this at points in their book. In general, though, this state of affairs again accords closely with R. Gilbert’s (1984) analysis of British school geography textbooks of a decade ago.

In other words, the ‘fact/impact’ structure maps in multiple ways onto the ‘fact/value’ dualism. In these examples it can be seen that ‘value’ resonates, not with philosophical considerations of intrinsic value but with a particular commodification of the land and its constitution and representation in terms of its instrumental value. What is crucial here is that, in turn, the particular meanings assigned to issues of ‘value’ in these geographical texts have some specific and significant effects with respect to the different ways girls and boys take up subject positions through the dynamics of speech and writing in the classroom.

2.2.2 metaphoricity in geographical discourses

The previous subsection investigated questions of genre in terms of strongly classified divisions between physical and human geographies and between the status and treatment of ‘fact’ and ‘value’ in the structuring of curriculum materials. In this subsection, I consider further the relations among these two dividing principles. Here, though, attention is focused upon the lexicogrammatical organisation of the texts – in particular, upon the representation of processes and actors within the transitivity structures and their sequencing as activity sequences within texts. A schematic reading is made of various textbook materials in terms of the distribution of verb ‘voice’, of thematic structures, and of the presence and function of grammatical metaphor.
To begin, I return to the ‘Running Water’ chapter, outlined in the previous subsection. The second section of this chapter is an account of a river’s “journey” from its “source” to its “mouth” (Robinson and Warburton 1986:105). This account works as a kind of narrative, winding its way through (or alternatively, interrupted by) definitions of technical terms. There are, as already mentioned, sixty-four technical terms defined in this chapter. They appear in a list at the beginning of the chapter and consist entirely of nominal group constituents. Verbs are rarely technicalised in scientific discourse (Halliday 1988). As indicated in the previous subsection, humans are absent from the account at this stage in the chapter and the focus is on physical (in this case, fluvial) processes. The river, in other words, is unchallenged in its position as ‘hero’ in the journey narrative. Realising this part for the river in the narrative is an almost exclusive emphasis on active-voice verbal constructions involving the river as actor. Consistent use of active-voice constructions ensures that the river is thematic (since the actor is an obligatory participant in active-voice constructions) and that therefore its agency is uncontested. Material processes predominate in the text, though there is an interesting group of relational processes interspersed among them. The verbs are all either non-technical or exist both within vernacular and geographical language. Here, I have extracted the verbs used in the account to describe the river’s progress and presented them in order of their appearance in the text. The lists are to be read vertically. Along its “pathway” the river:

- works
- gains
- carries
- has capacity
- bears
- has ability
- uses
- has available
- develops
- pushes

- loses
- roils,
- occupies
- divides
- has competence
- is enabled
- releases
- transports
- toys

- acts as
- supports
- adjusts
- deposits
- tends
- flattens
- acts as

(excerpted from Robinson and Warburton 1986:107-8)

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13 A mythical reading of the river text might see the river as father, unchallenged in his natural autonomy until the end of the text. The challenger is Man and the challenge (“Man’s Impact”) might be read as a protean patriarchal oedipal battle. It would be interesting to produce a more sustained reading of school textbook representations of physical processes in geography in these terms.
These verbs frequently occur during the explanation of a ‘process’ (in the physical-geographical sense) culminating in a technical term, such as, in this section of the chapter, alluvium, oxbow lake, or braided stream. The explanatory procedure is:

X happens (group of non-technical verbs) and it is called Y (technical term consisting of nominal group constituents, marked orthographically on first appearance, typically bolded, underlined or italicised).

The verbs in this list work at a variety of levels of abstraction, as well as degrees of metaphoricity. There are two features of interest to the present discussion. The first is the ascription, through ‘personifying’ metaphors, of agency (potency?) to the river. This personification adds to and amplifies the effects of the grammatical features outlined above. Particularly notable is the metaphor of work, which initiates the sequence. Work acts as a macro-metaphor, in that it is ‘thematic’ (first in the list), and hence subsumes and reinflects the otherwise less marked processes such as carrying, bearing, releasing, depositing, pushing, supporting. These processes are also metaphorical, but some are more naturalised and transparent in everyday language. The term work is a familiar one in physical geography, an example of the discipline’s grounding in the physical sciences to the extent of appropriating its terminology. Of course, even in physics work is metaphorical, but it has been naturalised through its long use in and centrality to the discipline. What is of interest in the term work is its connection to other disciplinary discourses which have significant effects on dominant representations of the world in geography. In particular, work has economic connotations, pushing geography in the direction of what Foucault (1970) terms discourses of labour and which he distinguishes from discourses of life and discourses of language as three “fundamental modes of knowledge”. The thesis presents a critique of the predominance of economics-based explanations of physical and social processes in geography; however, the extent of the imbrication of principles of production and exchange in the structure of western knowledges requires further investigation.

The second point of interest is the group of relational processes dotted through the text. The basic metaphoric category invoked in this group is that of “ability”. Capacities, competences and abilities are attributed to the river, while material is represented as being “available” to it for particular purposes. These processes mark an intensification of the

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14 The term ‘agency’ has a technical meaning within linguistics (for example Halliday 1985a). However, its use is much wider, more complex and more politically significant than this. Here, I am working towards a notion of agency which allows questions to be asked concerning causality, responsibility and consequence.
personifying effect in the text, and are more clearly metaphorical, though interestingly, these are also metaphors central to physics.

This reading of this text is an against-the-grain reading, one which looks behind the 'proper' features of the text which identify it as geographical-technical writing. That is, it would be quite possible to see in this text only the features of technicalisation outlined above. However, this reading allows further questions to be asked with respect to the status of representations across the range of texts encountered by students in geography.

Like the generic structure of textbooks discussed in the previous subsection, the use of narrative and of personification is a recurrent feature of school textbook geography. Reasons for its presence can be speculated upon. Perhaps, for example, there are in operation here the effects of some of the psychological readability criteria which have had incalculable effects on educational publishing over the last two decades (de Castell and Luke 1989). Similarly, developmentalist accounts within psychology (for example, Egan 1979) have pointed to relations between genre and stages of educational development. It may be that active-voice, narrative constructions have been considered more accessible for particular readerships than other constructions. Kress (1985a:26-31), for example, in his brief comparison of a history and a geography text, has indicated possible relations between verb voice and discursive 'difficulty'. It is also possible that the historical reliance on Bloom's (1956) taxonomy of educational objectives for the construction of geography curricula (Robinson 1985) has led to conceptual staging in the representations of geographical processes which may be marked through the grammar in this way.  

Finally, the ubiquity of narratives in the reading matter produced for and consumed by children in the early years of schooling serves to produce rather than merely reflect criteria of complexity and difficulty in later reading matter.

What must be pointed out, however, are some of the important discursive effects of this mode of representation, effects which have been noted in the few critiques of geographical discourses available (R. Gilbert 1984, 1989a, Kress 1985a, 1989). The ascription of agency carries with it the possibility of ascription of responsibility. As far as so-called natural processes such as the passage of a river are concerned, this ascription might at first be assumed to be relatively neutral and benign. That is, considered purely in terms of representations of physical geography, questions of agency might be so naturalised as to appear invisible. Transposed subsequently into the realm of human geography, however, these questions have important consequences for notions of human agency. There are, as the following example demonstrates, significant reversals in

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15 Chapter 7 takes up some of the consequences of Bloom's taxonomy for geography curriculum.
distribution of verb voice which function to position different categories of participants significantly differently.

Typically, in active-voice constructions involving material processes (the predominant process choice in these kinds of texts), it is the subject of a clause which is attributed with agency and responsibility for processes. This produces certain rhetorical effects. In a discussion of school social geography textbooks, R. Gilbert has critiqued the widespread practice of personifying inanimate objects. This personification is achieved through active-voice constructions in material and relational processes. Gilbert gives as examples: “Towns have problems, industries move and grow and regions prosper” (R. Gilbert 1984:91). Social processes (in the geographical sense) are explained in terms of “natural forces”, in a direct transfer from accounts of ‘natural’ physical processes, such as the fluvial processes outlined above. This feature of social geographical texts co-occurs with sanitised accounts of spatial histories as being being free of conflict and power. Terms like “labour”, for example, are substituted for “workers” in passive-voice and nominalised constructions which allow a representation of natural forces acting upon humanity. Positivist natural-scientific and systems-theoretical explanations of spatial phenomena lead to what Henley (1989:166) terms a “flattening out of reality” where there can be “no human interpretation of power and justice”. This flattening is an effect of what R. Gilbert (1989a:154) terms “abstracted determinism”, a philosophical position prevalent in the textbooks of his study, derived in particular from environmental and economic determinisms.

The “dehumanising” effect identified by R. Gilbert16 as the counterpart to the personifying of inanimate objects is realised grammatically through passive-voice constructions and grammatical metaphor. While inanimate and non-human objects are commonly both actor and theme, humans are rarely actors, though they may be theme in passive constructions. Gilbert’s concern in his examples is with the situation of subjugated groups in history, where humans are represented as passive, acted-upon and powerless. Economic criteria are invoked by textbook writers to render historical processes natural and inevitable. One of his examples is the sentence “Fewer settlements are needed”, in a topic dealing with changing settlement patterns. The deletion of agent in the clause ensures that the statement is free of any complicating social factors. To intervene in a reading of this text to ask “by whom?” is to interrupt a naturalised representational process in scientific texts. Questions of ‘necessity’ are presented as facts.

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16 Here, despite the usefulness of Gilbert’s critique, the humanism of his position is somewhat problematic. The human subject constructed in his account is not an acceptable alternative to the technicist ‘naturalisation’ of human processes.
Criteria for efficient spatial distribution are given the force, through passive language, of "a natural position devoid of conflicting interest" (R. Gilbert 1989a:155).

Issues of agency are, however, even more complicated than Gilbert has indicated. Deleting people or rendering them victims are not the only functions of passive constructions. There are also important issues concerning attribution of causal agency and social and environmental responsibility to consider. One of the potential consequences of the passive voice is to code actor/agent as a prepositional phrase, a structure most commonly used to realise circumstantial elements in the clause. Circumstantial elements are grammatically optional and it is this structural feature of passive clauses which renders actor/agent liable to deletion in the so-called agentless passive construction. Active-voice constructions are necessary in order to render the actor an obligatory structural participant. That is, the actor has also to be in theme position. Agent-deleted passives are thus a useful way of eliding questions of agency and responsibility. In the specific case of this study, given the curriculum emphasis on physical and bio-geography, the issues predominantly concern the 'man/land' relation. While the next subsection demonstrates that there are important issues regarding the representation of specific human groups in these texts, here I will focus on the environmental issues.

As an example, of a text in use in the class during my study, I take a section of Chapter 3 of Chapman and Codrington (titled 'Human impact on the water cycle'). This segment of the chapter discusses the case study of the Burdekin delta in North Queensland. Although the text explicitly refers to environmental problems in the delta area, questions of responsibility for the problems are difficult even to ask of the text. There is a high frequency of material process clauses in the active voice but the participants, which are both actor and theme, are non-human and often non-animate. This produces an account of the problem of land degradation in terms of forces of nature.

According to this text, then, it is the rainfall which produces floods, it is the sugar cane which uses all the water; it is the river which scour the bed and banks with the sediment it is transporting; it is the delta which stops building itself; it is the sea which seeps, intrudes and replaces; it is salt which enters the fresh water aquifer; it is the level of water which will increase the waterfowl and insect populations. The effect of these aggregated active-voice constructions, placing non-animate actors in theme position, is that human agency and hence responsibility for the disaster are disguised and deflected by ascribing agency to the physical and introduced inanimate material features of the Burdekin delta landscape. That is, the features in the landscape act autonomously in transitive structures which exclude prior causal human activity. Moreover, metaphorised processes, such as "seep" and "intrude", impart a vague sense of malevolent intent to the natural features.
Even the definitions of technical terms participate in the attribution of explicit agency to natural forces, such as this definition presented separately from the verbal account:

<table>
<thead>
<tr>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea water intrusion: the process occurring when salt water from under the sea seeps in and replaces fresh groundwater in the phreatic zone</td>
</tr>
</tbody>
</table>

(Chapman and Codrington 1985:43)

This feature of the organisation of the text as text make it even more difficult to pose questions relating to the identity of those responsible for the problems.

Mapping onto this representation of the natural landscape are particular ways of referring to human activity which further achieve the effect of deflecting human responsibility. Consider the two following fragments from the chapter:

An estimated 450t of nitrogen and 0.5t of organochlorine insecticides *would be carried* into the mangrove and bay areas each year after full *irrigation development*. (46)

However, the *agricultural activities have produced* several significant changes in the stores and flows of the water cycle. (43)

[emphases added]

Here, human responsibility for events is successfully deflected, first by an agent-deleted passive construction: *would be carried*. In any case, the deleted agent in this case is not human but one of the villains already mentioned – *water*. The second structure is a nominalised process: *irrigation development*. Here the disguising of agency is carried a step further through grammatical metaphor. There can be no participant/actor if there is no process. In conjunction with this is the normally positive valuing of the notion of ‘development’, rendering the attribution of blame to anything, much less to humans, even more difficult. The third structure is a further active-voice construction: *agricultural activities have produced*. This time, rather than ascribing causal agency for events to natural features of the landscape, the participant is a nominalised process, an abstraction: *agricultural activities*. Here, it appears that the activities themselves are to blame, and there is no apparent way of retrieving from the language in the text the actual human actors in the process.

It is surely also significant that there is no mention in this ‘case study’ of the effects of the Burdekin Delta problems on the Great Barrier Reef. Even the map of the area used to introduce the section omits the Reef. The absence of an account of the crucial cause-and-
effect relations in operation in this larger site, and the focus on the localised market-economy concerns of the sugar-cane industry lend themselves to a trenchant critique of the market orientation of many of the ‘environmental-relational’ segments of the textbook treatments of these matters.

2.2.3 race and gender in geography: politics of representation

In this third subsection, I introduce for the first time the topic of ‘shifting cultivation’, a case study in ecosystem modification undertaken by the class within the unit WORLD BIOMES. This unit is one of the last two study units for the year, in which humans became the object of study for the first time. In what follows, I consider the question of representation of human groups. Taking race and gender as two powerful dynamics of difference, a reading of the textbooks and distributed class notes on the topic of ‘shifting cultivation’ motivated the following selections. The method for presenting these selections in two focus points varies from text to text, for space-economy reasons. Extracts are chosen to reveal the representational work the texts are performing at its most obvious. The extracts from the first-named text in both focus points (text [a]) are culled from among quite lengthy descriptions of technical matters, which are not at issue here. Accordingly, I have merely presented lists of terms referring directly to the people and their practices. It should also be noted that the text (a) is placed first in both lists because it functioned as the primary reference text, the official version, for the topic of ‘shifting cultivation’ for this class. I have included the whole of this text in Appendix B.

Focus 1: representations of people practising shifting cultivation

A survey of three sets of distributed class notes revealed that people who practised shifting cultivation were represented in radically different ways:

| text (a) | low levels of technology |
| subsistence economy |
| lack of infrastructure |
| lack of capital |
| simple tribal groups |
| primitive implements |

(unpublished class notes)

| text (b) | [Shifting cultivation] refers to the practice of temporary cultivation of plots of land. The land is cultivated for a short period and then abandoned. The peoples of these areas do not |
have the knowledge or the means to apply artificial fertilizer or refined methods of soil conservation...

primitive technologies...

[Growing copra] requires little labour or skill in cultivation, maintenance and processing ...

Since Europeans came to the island [Papua-New Guinea] the native peoples have become interested in a higher standard of living ...

The change to a system which depends on the production of surpluses for sale and on working for wages has proved difficult for the native ... He finds it hard to adjust ...

(class notes, reference unknown)

text(c) At its best swidden agriculture [shifting cultivation] is perfectly coordinated with the natural processes of the ecosystem.

Shifting cultivation in the Chimbu district is an efficient system, well adapted to the physical environment.

From the point of view of the Chimbu, planting mixed crops gives significantly higher yields than planting pure stands.

Most shifting cultivators have priorities other than maximising agricultural production. Despite this ... shifting cultivation is extremely efficient in terms of energy outputs compared with energy inputs.

In the Chimbu, some complex techniques of ecosystem management are practised.

(Chapman and Codrington 1985:265-271)

The differences between the first two texts and the third are striking. Text (c) produces a complex account of shifting cultivation in terms of coordination, balance, efficiency, adaptability and complexity, combined with an effort to represent alternative points of view from the dominant eurocentric view of culture. Texts (a) and (b), on the other hand, are troublesome. Questions of lexis: naming (the native) and attitudinal lexis (primitive, abandoned) are perhaps too obvious to require further elaboration. At a more general level
in these two texts, the people practising shifting cultivation are consistently represented in terms of lack – of infrastructure, of capital, of technology, of means, of knowledge, of skill, of adaptability. Measured against that lack is their desire for a higher standard of living. The texts present an unquestioned logic of progress and a linear, singular view of history. Neither text alludes at any point to the race-political or the environmental issues surrounding the topic, such as colonisation, rainforest destruction and species depletion. Explanatory frames invoke R. Gilbert’s (1989a) notion of “abstracted determinism”, for example in:

The change to a system which depends on the production of surpluses for sale and on working for wages has proved difficult for the native.

Here the native is relegated to the end of a clause complex which functions as an explanation of fundamental socio-economic change. “He” is a non-inherent participant, almost a circumstantial element in an account which thematises change, but where the change is to a system, not to people. In order for the system to work, people must produce surpluses, sell them and work for wages. However, none of these actor-functions is available from the textual account. Rather, nominalisations and abstractions abound: Change, system, production, surpluses, sale, working, wages. Dependency relations are set up among categories in the system. This is a systems-theoretical account which straddles the discursive orientations both of particular kinds of economics and of positivistic geography. The high degree of abstraction, leading to the “flattening” effect referred to by Henley (1989:166) combines with the simplistic account of historical and social change and the overtly patronising and derogatory lexis.18

Focus 2: gendered representations

Men do most of the heavy work of clearing and preparing the plots; women and children tend the crops... .

Shortage of men to clear forests due to labour being diverted to outside areas eg mines, factories, urban areas. This leaves only [sic] old people, women and children to do the cultivating, and

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17 If the text is rewritten as follows: ... working for wages has proved difficult, for the one who is involved is a native, the native can more readily be construed as a cause of failure, rather than merely a circumstance of change! This is a plausible reading in the light of Freebody’s (1991/unpublished paper:14) comments regarding the tendency in textbooks to blame the victim in accounts such as this.

18 One of the other ways in which these texts can be seen to present a deterministic account of the topic is in the use of what is termed the “ethnographic present” (Brodkey 1987). This point is explained and explored in Chapter 4 in a reading of Rowan’s ‘shifting cultivation’ text.
they tend to keep using the same plots for longer than desirable because they cannot clear new plots adequately...

**text (b)** When men first learned to grow crops, their main purpose was to feed themselves and their families...

Truly individual possessions are only those which result from a man’s own labour, such as crops and various kinds of trees. The latter remain the property of a man or his heirs for their productive lives.

**text c)** The swiddener cuts down the trees or woody plants on his or her chosen plot, and when they have dried in the sun, sets fire to them. She (as most of the work is done by the women) then plants the crops in the ashes.

Again, the differences are striking. In text (c), Chapman and Codrington say little enough about the status of the women’s work, but it is sufficient to interrogate the accounts in the other two texts, for example the use of the term *tend* in text (a) to refer to women’s agricultural work. With its associations of nurture, the term relegates the women’s activities to something less than work, certainly less than the *most of the heavy work* that is carried out by the men. Indeed, *tend* contains notions of minding, simply standing by while the crops grow themselves. That this is constant and backbreaking work is information which is unavailable from this text.

The ubiquitous use of ‘generic’ *man* in these texts shows telling slippages in these extracts. For example, *man* becomes *men*, in text (b), but it is unclear according to a ‘generic’ argument whether women are *men or their families*. When women’s deficiencies are at issue, of course, differentiation is very explicit. Hence in text (a) the *shortage of men* leads to *old people, women and children* being the *only* ones left. Once again this is an overly abstracted and deterministic account:

> Shortage of men to clear forests due to labour being diverted to outside areas eg mines, factories, urban areas.

Here *labour* is represented like a feature of the landscape, a natural resource which has been subjected to a natural force: *diverted*, in a non-agentive manner, to other places. The workings of multinational capitalism are thus obscured. However, in this extract there are contradictory imperatives, where issues of gender intersect with those of race in the account of history and change. What is thematised here is the *shortage* of a desired category (*men*). Their presence in modern settings – mines, factories and urban areas –
contrasts with the left-behind status of the women, old people and children, whose practices are primitive and conservative. Although the text does not provide this directly, it is possible to read a modern/primitive split along gender and age lines, which affords men some possibility of knowledge and of agency over their own destiny which is denied the other groups. In this sense the ‘ideal’ indigenous other is not a man!

Freebody (1991/unpublished paper: 5) has suggested that school textbooks be interrogated for the ways in which they “present the fundamental explanatory parameters ... to be applied to a phenomenon”. His critique of secondary school social studies textbooks identifies “synoptic, correlational terms” in which textbooks characterise phenomena. Taking his example of textbook accounts of ‘Less Developed Countries’, Freebody explains his point:

... lists of social, cultural, political, and economic characteristics are presented that are stated as ‘going with’ a country’s ‘being poor’. The student-reader’s (and for that matter the teacher’s) intellectual resources are drawn to the task of assimilating this multiplicity of features, importantly, in isolation and without any coherent interconnecting argument. The account is clearly synchronic – the LDC is viewed as a complex ‘thing’ in space, without history.

(Freebody 1991/unpublished paper:6)

Together with the absence of history and explanation, there is commonly a density of descriptive detail, producing the effects of a political and intellectual sanitisation of issues in the texts. Freebody concludes that these accounts “function to de-historicise, de-agentise, and politically neutralise the portrayal of the phenomenon of inequality”. In the context of these geography texts, it would seem that at the very least there is a case to be made for interrogating the particular representations and attributions of history, causality and effect that are in operation.

It might bear repeating, in conclusion to this section, that the point of this study is not primarily to apply a political ‘geiger counter’ to the official discourses of school-subject geography, although that is an important and continually necessary enterprise. The existence of openly eurocentric and masculinist work being done within the textbooks of geography does form one important dimension to the complex narrative of the classroom I am constructing here, and certainly deserves to have been spotlighted in a separate frame for an instant. There is a great deal more that could be said about the textbook material in use in this class, but the point of crucial concern for this study is rather how it functions as a discursive and intertextual environment within which students learn what it means to
do geography. What is of primary interest for this thesis project is what student-subjects do with the discursive material at hand, in the moment-by-moment processes of negotiating a path for themselves within the life of the classroom. These texts appear to be describing different worlds. Indeed, the case studies of Rowan and Karen in the next chapters show that they did not read the same world from these texts and hence did not construct the same field in their essays. In many important respects they produced different geographies.

Coda: Re-reading the binaries

This coda functions in part as a conclusion to the chapter and in part as a further reflection upon some of the complex inter-relationships among, as well as the political consequences of, the principal binary pairs investigated in the chapter. Within globalising physical/human and ‘man/land’ dualisms, commonsense reading practice would have it that it is only the ‘human’ or ‘man’ who is subject to a politics of representation, whereas ‘land’ is transparent and immanent. This might be further read in terms of a ‘fact/value’ split, which maps onto the above pairs in interesting ways. The ordering of the pairs is one place to investigate this. In their characteristic formulation, the ‘physical/human’ pair identified in the syllabus document maps symmetrically onto that of ‘fact/value’. In the ‘man/land’ pair, on the other hand, the human item is prioritised. The ‘physical/human’ pair signals the temporal and epistemological priority assigned physical geography in curriculum and textbook versions of the discipline, which in turn underpins the discipline’s grounding in the physical landscape and privileging of physical-scientific methodologies.

The ‘man/land’ pair, on the other hand, seems to be working in a different order of signification. According to one reading, the ‘man’ is not co-terminous with the ‘human’ of human geography. Whereas ‘human’ refers to the constitution of a domain of geographical research, ‘man’ is the producer, the white male knowing Subject of geographical knowledge about the world. ‘Land’ is the feminised object of his gaze. ‘Man’ lines up along this axis, then, with ‘fact’ rather than ‘value’, in a particular geographical version of the myth of scientific detachment and objectivity. ‘Land’ is assigned value as commodity by Economic Man.

A vital question then arises: on which side of this ‘man/land’ dualism do indigenous peoples go? One method of investigating this is through grammatical structures, especially thematic structures, active/passive voice distribution and grammatical metaphor. While natural processes, inanimate objects and abstractions took thematic position and hence actor function in textbook representations, humans were often relegated to structurally deletable participant roles in passive constructions. This feature
performed at last two different kinds of discursive work: on the one hand, some human
groups were simply effaced, or assigned victim status, but on the other, powerful human
groups were reprieved from taking causal responsibility for social and environmental
problems. Grammatical patterns might thus be a productive place to investigate the
distribution of agentive power, and might well indicate which side of the binary such
groups are assigned. This indeed might turn out to be a place for investigating the
ambiguous relations to racial difference and the consequent relations to the physical
environment which occur in the curriculum (Catling 1990). For the purposes of this study
however, this question will be investigated in the context of what students wrote in
geography.

Finally, with respect to the first binaries engaged in this chapter: those of skills/content
and process/product, I would make one brief point. Like the other binaries identified in
this account of the curriculum materials, these are productive in terms of understanding
issues of gendering in the classroom. Just as differently gendered students constructed
radically different discursive fields from a relatively small and closed set of textual
materials, so also they oriented themselves differently along the skills/content axis.
Chapter 3 and the three chapters of Part II investigate these processes at work, while
Chapter 8 returns to re-assemble a list of all of the binary pairs invoked throughout the
analytic chapters in the process of constructing a theory of gender and literacy in the
curriculum.
CHAPTER 3

READING THE CLASSROOM

AN OVERVIEW OF CLASSROOM LANGUAGE DYNAMICS

‘Ten safety rules concerning snorkelling’ (excerpt):

* Always have a buddy

* Always swim close to your buddy. If he leaves the water you leave and vice versa.

* Check and adjust your gear before entering the water.

* Don’t go too far from your boat (preferably manned!). Stay close to the boat always.

* Make sure you and your buddy know and understand ‘dive talk’.

(notes from Abrolhos Islands Field Trip Report
by Karen, September 1989)
Introduction

This chapter consists of two sections. Section 3.1 is an overview of the classroom language dynamics, focusing on the production of gender difference. This overview consists of selections from ‘field’ notes collected over a four month period. It is necessarily an impressionistic account. Indeed, the intention in my study was not to map the gender dynamics of the classroom ‘thickly’, in Geertz’s (1975) sense, since a great deal of valuable research within feminist sociological and ethnographic frameworks is already in place (for example, Stanworth 1981, Wolpe 1988). It made little sense to duplicate this work, but rather to draw on it, together with my own particular accumulation of ‘teacher knowledge’, as rich intertextual reference points for the construction of a reading of this classroom in macro-social terms. This first section of the chapter is mainly concerned to establish that certain gender-significant features exist as an integral part of the social fabric of the classroom.

The second section is a close reading of a transcript of a spoken classroom text. It seeks to establish an account of how student-subjects take up positions and are positioned differently, specifically along gender lines, in ‘talking geography’. The text is a segment of a whole-class discussion of the topic of ‘resources’, chosen in part because of its direct connection to issues raised in the ‘shifting cultivation’ texts. The aim of this reading is to demonstrate the productivity of speech in the construction of social (and specifically gender) difference. It contributes to an investigation of ways in which the discursive regimes of a classroom have effects on individual subjects in terms of self-production over time.

3.1: ‘Dive talk’: an overview

3.1.1 Speech/silence

Karen: Girls write notes and giggle all the time and guys just yell.

(Transcript of interview)

There is by now a vast feminist literature on gender in schools. Yet despite what has been established through this work, there has been, it often seems, little change in the gender relations which are a central dimension of the social conditions under which students labour to learn. It is the persistence of certain forms of gender domination that makes it essential in this account to rehearse, within the context of this specific site, some of the more obvious gendering practices. The materiality of the day-to-day life of the co-educational classroom is a critical dimension of any attempt to document relations between gender and literacy/learning in schools.
The aim in this account is to plot the particular conditions within which specific processes and effects of 'gendering' are produced as instances of struggle. Two recurrent motifs suggest themselves as central, related features of the gender regime of this classroom – motifs of control and of solidarity. In this subsection, boys are shown as relatively free inhabitants of the 'public' space of the geography classroom, producing themselves as particular kinds of masculine subjects within the social/academic language of the site. Through various tactics, boys controlled the physical and spoken discursive space and, in doing so, constructed solidary relations with each other and with the teacher, Alan A, which functioned to 'other' the girls in the class in a number of ways. Together, these processes produced a tangibly masculinist cultural dynamic in the classroom.

It will probably surprise no one that the most lasting impression I have of this classroom is of boys' voices. This impression accords with much of the research into interactional dynamics in co-educational classrooms (Stanworth 1981, 1984, Kelly 1987, Wolpe 1988). The sense was of male voices physically 'swamping' girls. The boys were a generally very sociable group and chatted (outside the procedures of the 'formal' lesson) constantly across quite large spaces, to each other and to Alan A, with whom they had an easy and informal relationship. Their voices were often loud, the physiological differences combining with the classroom spatial arrangements and their apparent sense of freedom to produce their voices in ways which asserted their presence fairly effectively. Their larger numbers magnified the effect. The teacher's voice amplified the lower registers, while there was a marked absence of girls' voices, despite their physical presence in the room.

Many of the 'formal' lessons consisted of whole-class discussion, which were dominated by boys. Boys most typically addressed Alan A directly, but occasionally they also addressed each other when an issue became contested. They rarely spoke to girls in these discussions and, when they did, it was to challenge the status of girls' knowledge and of their claims to know. This process is exemplified in the 'resources' discussion text in Section 2 of this chapter.

There was a powerful male physicality in the room. Boys 'swamped' girls in visible ways as well, through their numbers, the massing of their bodies in clusters around the room, their occupation of most of the space. Indeed, there was a strong sense of centre and periphery in the distribution of bodies in the space. Girls sat together in the front left-hand corner and seldom left this space. Individual boys and groups of boys, on the other hand, moved regularly around the classroom space, visiting each other. Rowan in particular, as the most mobile student, made regular visits from his group of three boys (arguably the dominant group in the class) to another group of three in the opposite corner of the classroom. Rowan also included Alan A in his visits and in the 'social' talk
engaged in by many of the boys for much of the time. Neither Rowan nor any other boy approached the girls’ corner in their movements around the room.

Rowan’s work in the class was often to be primary producer of social cohesiveness and solidarity across boys’ subgroups and with Alan A. It was his sociability and interactive skill with boys which, as much as any other single feature of the class, effected a social exclusion of the girls. Since Rowan and his two neighbours, Andrew and John, were also the most regular contributors to teacher-initiated whole-class discussion, they also effectively constrained girls’ verbal participation within the academic language practices of the classroom. This happened through particular kinds of interactive strategies, some of which are discussed in the ‘resources’ discussion text in section 3.2 below. A brief example from a transcript of a class revision session will indicate how Rowan contributed to the construction of a particular social climate in the classroom.

Alan A [summing up a previous discussion]: So there are seven results of weathering processes which you will need to be able to identify. OK?

Rowan: Yessssssst!

John: Yessssssst! [laughs]

Alan A: Good. Thanks. OK. Now, what about transportation?

Rowan. There’s solution.

Alan A: Solution, yes. And?

Rowan: Suspension.

Alan A: Suspension, right. Suspension is where particles can be transported in the stream, or also by waves. There’s transportation by traction, which is pushing the particles along. Are all these names ringing a bell? And saltation, where the particles do little leaps and bounds as they go along.

Rowan: Extreme pain [general laughter].

Rowan produced a ready mixture of formal and informal language accompanied by expansive arm and body movements. He interacted directly with Alan A, finishing his sentences, coughing loudly, and commenting in ways calculated to amuse and entertain the other boys. In doing so, he also managed to perform the part of the involved and
productive student, and all of his productions remained well within the bounds of
politeness and friendliness.

In the meantime, the girls, as the already compliant subjects of schooling, were seen but
rarely heard. In the whole of the ninety-minute length of the tape from which the above
transcript was produced, for example, there were almost only boys' voices. Most of the
time it was as if this was a single-sex classroom. The only exception to this was a brief
question-and-answer session half-way through the lesson, where Mandy was directly
asked a question and replied almost inaudibly. This incident is also worth presenting here
for its graphic demonstration of what I have termed the 'swamping' of girls by boys'
voices in the room. The class is discussing the greenhouse effect.

Matthew: All the heat can get in but can't get out, that's the whole
principle of it.

Alan A: Why is that, Mandy? How come more heat gets in than gets out?

Mandy: [unclear]

Alan A: What causes the heat to concentrate ... ?

Michael: Well, I ...

Alan A: Andrew, what happens?

Andrew: Um, when the heat comes into the shade house or greenhouse or
whatever, it comes in um long wave radiation. And when it um reflects off
the surface it turns into short wave radiation. And it can't get out.

Michael: It's short wave ...

Rowan: 'Ray!!!!!!!

Mandy: [Unclear]

Alan A: So is Andrew saying it's the difference in the wave length of the
radiation which can be transmitted in -- in short wave form through glass but
-- but is not transmitted through glass in long wave form?

In classroom contexts where there is a significant number of males, there is
characteristically a considerable pressure on girls to take up the feminised position of
listener. The obvious tactic for surviving in a male-majority classroom is to remain silent,
not to compete, and to pursue other avenues for making sense of the curriculum as it is
being enacted. In the front left-hand corner where the girls sat, there was a space which was often identified in terms of ‘girls’ silence’. The identification of the girls as a collective entity is a familiar feature in co-educational classrooms (Stanworth 1981). Alan A addressed the collectivity from time to time, as for example in: what do the girls have to say? When directly asked for a contribution, all of the girls appeared ready to speak, and even to continue to participate verbally after the initial request. However, in almost all public interactions, each girl appeared to ‘choose’ not to volunteer. When writing and reading tasks were assigned, the impression of continuing girls’ silence was maintained, even though they did talk amongst each other and engage Alan A in dialogue. This dialogue was usually initiated by the formal mechanism of hand-raising. From the back of the room, the only audible sound was the teacher’s voice.

Karen’s work in the classroom was typical of the girls’ usual approach to ‘public’ speech situations. Most of the time, Karen participated in class discussion only when directly called on. She regularly took steps to downplay, or even refuse, possible ascriptions of authority in front of the class. This went, on occasions, almost as far as a refusal of a ‘knower’ position. In several instances in whole-class lessons, she chose to read out an answer to a question from her notes when called upon for a response, even though she was in a position to be able to extemporise a response more directly, as several boys had already done. That is, she knew an appropriate answer as well as, if not better than, they did. In addition, though a fluent reader (something I ascertained during interview), she delivered the required information from her notes to the class in a kind of caricature of a barely competent reader, hesitating and stumbling slightly. This appeared to be a performance simultaneously of compliance and refusal, where the refusal was a refusal of speech. It appeared that to ‘speak’ unprompted – to articulate meanings ‘from her head’ – might have signified one or both of two things: a public position of authority, and a position of engagement with and endorsement of the dominant discursive orientation of the language of classroom discussion.¹ On occasions such as this, the subjective investments in speaking and not speaking are clearly complex.

Questions of both control and solidarity were most evident when girls and boys interacted verbally. Since this did not happen spontaneously in the class, the occasions of structured, small-group discussion initiated by Alan A were the best opportunities to investigate the interactional dynamics. In small-group discussion, girls were ‘distributed’ singly into groups of three or four boys. One of the reasons given by Alan A for this strategy was the generally high level of organisational competence of these particular

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¹ This is a reading of Karen’s position made possible by the close reading of whole-class work over time. Again, the ‘resources’ discussion text provides a useful instance of this point.
girls, such that their presence was intended to increase work efficiency during group sessions – in other words, to police the groups’ proceedings. An effect of this was of course that girls always constituted a minority (usually of one) in small discussion groups. What happened in these more informal settings, in general, was that power and control mechanisms worked even more overtly and there were at times quite high levels of hostility.

The following two brief incidents from a tape recording of one group discussion indicate something of the dynamics of control and of solidarity along gender lines. Michael, Gerard and Mandy are discussing climate controls. Mandy, a successful student, is attempting a much more active role in the group than she typically did in whole-class discussion:

_Climate controls discussion: excerpt 1_

**Michael:** Hey. Wait. Wait! What’s the climate control for Melbourne? Let’s work that out first.

**Gerard:** Yeah.

**Michael:** What do you ... ?

**Mandy:** How can you do that if you don’t even know what the effects are? There’s the effects there. That little bit.

**Michael:** You think you got ... so ... I’d just be quiet if I was you.

**Andrew:** [from adjacent group, ‘stirring’ Michael; unclear]

**Michael:** [loudly] Pardon? Mmmm ... Mmmm ... [All read]

_Climate controls discussion: excerpt 2_

**Mandy:** Why don’t you just read it? If you just read it from there?

**Gerard:** Leave the kid alone.

What is interesting about each interaction is that Mandy’s efforts to control and direct the discussion are directed at intellectual procedure. She tries in both cases to draw the boys’ attention to the printed reference material they have been supplied with in order to accomplish the task. In both cases, however, the boys, Michael and Gerard, respond in terms of control of bodies. In the first case, Michael’s answer to Mandy’s attempted
intervention in the discussion is to silence her. In the second, Gerard translates her effort to direct Michael to the reading as an attack on his person.\footnote{It is worth noting here that the belittling term `kid' may also have the effect of raising Mandy's status with respect to Michael, though Gerard retains highest status as controller of action. This may be a case of Gerard `using' Mandy for his own purposes: woman invoked as `nag' to produce solidary relations within a clear hierarchy.}

These two excerpts indicate a kind of social cohesiveness among the boys which not only excludes Mandy but which operates as a form of control and of resistance to her attempts to control. Gerard's \textit{Yeah} in response to Michael's first move, in the first excerpt, indicates general solidarity. More precisely, in retrospect, it helps Michael to construct the position from which he can control Mandy's behaviour. Andrew's response from the adjacent group indicates that, in some senses, Michael's move functions as a public exercising of power, with Gerard acting as his lieutenant. In the light of this, it is also interesting to note that it is Mandy's suggested strategy which, by default, wins out in excerpt 1. It appears that, after she has been successfully and publicly `disciplined', her ideas can be safely appropriated.

The inclusion of these episodes is not intended to imply that these were the only kinds of interactions between boys and girls in small group discussion. Nor is it accurate to imply that boys did not compete amongst each other for the right to direct proceedings. Transcripts of tape recorded discussions of several different groups indicate that a significant portion of time was devoted to general jockeying for position concerning questions of procedure. Specifically gender-based challenges to student authority in terms of knowing, such as the above, however, occurred as a regular feature. In general, it seemed that the presence of a girl in a small group situation emphasised a masculine solidarity across or among the groups, to compensate for the disruption to their accustomed interactive patterns. Predicated upon the construction of an `other', this solidarity was often more effective than the temporary alignment among members of a group that had been intended by the teacher.

With respect to the boys' talk, several points should be noted which are central to the case being made in this chapter concerning the productivity of talk in the `gendering' of the classroom. The first is that, as I attended closely to the boys' conversation over time, the distinction between social and academic language, and between `private' and `public' behaviour, began to blur. The boys' conversation covered a range of topics, varyingly task-related. At different times, groups of boys talked of such things as \textit{diving}, arguably related to curriculum matters, from physics to fieldwork; \textit{surfing} and \textit{cycling}, which might include elements of geographical language (for example, technicalised references to local geographical features); \textit{the field trip to the Abrolhos Islands}, invoked as `on task' in
discussion with Alan A, but often used to engage in talk of escapades and titillating secrets.

In this talk, the official language of the geography curriculum appeared to pass relatively readily into the social or everyday language of the boys. Their apparently much freer occupation of the (sub)urban outdoors gave them a different relationship of knowing with respect to their local environment than that publicly demonstrated by the girls. This 'public' knowledge consisted of familiarity with the names, locations and physical characteristics of local features, especially along the coastal and riverbank landscapes. The relationship could often be characterised as primarily a 'user' relationship. The landscape was a 'resource' for boys' leisure and social activities. This aspect of the boys' talk was combined with the quite regular practice of drawing on the discourses of other curriculum areas, notably the physical sciences. In doing this, several of the boys regularly succeeded in 'pushing' the particular topic under discussion in the direction of science, producing the effect of 'scientification' of the geographical elements of the talk.

The second point of note with respect to the boys' talk concerns the manner in which they talked. The previous familiarity many of them appeared to have with either scientific or technical discourses allowed them readily to take up positions as 'knowers' with respect to specific techno-geographical matters under discussion. This gave many boys the appearance of a certain control of the discursive domain of geography in their spoken language. Boys regularly took up positions of authority as information providers, with each other and with the teacher. Interestingly, the positions they took up, particularly in conversation with the teacher, often had the appearance of performances, staged for the benefit of the teacher and each other. Their utterances typically took the form of flat pronouncements, which functioned rhetorically as fiat. These performances did not have the appearance of being produced in an engagement in overt competition at the level of fact or knowledge. Rather, they had the strong appearance of functioning as display.

One form of grammatical realisation of this effect which was striking because of the regularity of its use by boys in a range of different speech situations, was the minor clause. There are two examples in the 'resources' discussion text, which is

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3 There is no assumption made here about what individual girls might actually have known; rather, the point concerns the public performance of knowledge and of knowing. The question of ways available to girls in the class for engaging with these issues comes up in the discussion of writing.

4 Minor clauses consist commonly simply of nominal groups and do not participate in either the transitivity structures or the mood structures of major clauses. As a result, they do not contain any possibility for negotiation. Thus there is no position for the listener other than tacit assent. Poynton (1990a:149-150) points out that there is a cline of negotiability in clause-level interactions. The minor clause is at one extreme end of the cline, offering even less scope for negotiation than declaratives in major clauses. These minor clauses need to be distinguished analytically from the elliptical constructions commonly produced by students in teacher-student
explored in more detail in section 3.2 below. The first example, from Andrew, occurs in turn 5:

1 Andrew: You have to say what a resource is. You have to say it's useful; it's a natural product.

2 Karen: What's natural?

3 Andrew: That comes from the earth.

4 Karen: But you have to tie everything together. To see how each one relates to the other, how they affect the product and um, the uses we get from the product.

5 Andrew: 'Useful commodities!'

6 Alan A: Oh right, that's good. Useful commodities. That sounds good. Are you happy with that?

The second example, from Rowan, is at turn 16.

15 Alan A: Right we're getting somewhere. I think we've missed a bit of what Karen was saying a little while ago. She said something about use. What about use?

16 Rowan. 'Human consumption'. Human use.

These are two quite typical examples of what was a regular feature of the speech of many of the boys in the class apart from these two. The 'scare quotes' in my transcript and, in Andrew's case, the exclamation mark, are attempts to indicate the flourish with which each clause was produced. The effect of Andrew's mode of presentation in particular is that of the pronunciation of a name which represents a truth and which, since it does not originate with Andrew, does not have to be negotiated. Rather, Andrew was able, through this grammatical choice, to invoke, pronounce and perform, expert knowledge, leaving his co-participants in the discussion the choice of either tacit or explicit acknowledgement and assent. In this sense, it is interesting to consider the explicit evaluation he received from Alan A in response, at turn 6.

This subsection could be summarised in the following terms: the boys in the class talked a version of geography while the girls were (or were rendered) silent. Boys used talk to
construct subject positions which incorporated the technical lexis of a science of spatial relations. In doing so, they produced and performed versions of themselves and each other as masculine identities who knew particular things in particular (and often exclusionary) ways. While boys worked at this, girls simply 'worked' – as quiet and apparently compliant subjects of pedagogy. What remains to be investigated is how this spoken language regime functioned to position girls as feminine and feminised subjects and the particular effects on the girls in terms of tactics that remained available for them to negotiate semiotic space within the geography curriculum and the classroom.

As a coda, it is worth remembering at this point that classrooms, as social sites, are located at the intersection of multiple dynamics of difference. The focus on the geography classroom through the single lens of gender is not intended to overlook the ways in which other difference dynamics are re-produced in and through spoken language interactions. One story which cannot properly be told here concerns one member of the class who has not been included in the account so far. Alfonso, a boy recently arrived from Nicaragua, no doubt read the dominant social and linguistic regimes of this classroom in terms not of gender but of ethnic difference. Alfonso, like the girls, remained silent throughout most lessons. Unlike the girls, though, he sat alone.

3.1.2 Speech/writing  

Alison: So what do you think that you have been like as a geography student?

Karen: I don’t know – pretty quiet. I don’t say much. I think I am the type of person who writes it down, I am not a confident type of person probably. I think I prepare to write ... in my own way and in my own time. I listen to the discussion that goes on and I don’t put in much but it all goes in. I mean sometimes I say something and put in a bit but it’s not often. I am pretty quiet.

(Transcript of interview)

The opposition of speech and silence through which I read the classroom in the last subsection suggests a regime of masculine domination, albeit an apparently relatively

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5 I use these terms at this point in their commonplace or everyday sense, as a framework for developing a case concerning the materiality of gendering practices in the classroom. I am not engaging with Derrida's (1976) work on the speech/writing binary here, although it should be noted that there is a whole other argument which could be developed, taking up Derrida's discussion of the metaphysics of presence in terms of speech and writing and reading it against the dynamics being exposed here. Of interest is that Derrida places notions of (W)riting on the unvalorised side of a binary, along with masculine/feminine. Threadgold's (1988) discussion of this is also useful.
benign and friendly one – a regime which reads the girls’ customary non-participation in spoken interaction in terms of absence, lack and ‘acted-upon-ness’. However, the situation is by no means as simple as the speech/silence opposition might suggest. ‘Speech’ can be further set into a provisional opposition with ‘writing’, though not in terms of linguistic distinctions between the two modes. Rather, the distinction is made at the level of classroom practice, where it can be seen to be operating quite literally and obviously within the classroom in the first instance in terms of the quantities of written material produced. Within this latter opposition there are clearly gender-differentiated positions available within the classroom which do not so obviously work to render the girls deficient, or as passive objects of an oppressive gender order. While this, as a major part of the thesis’s argument, remains to be investigated in detail in Part II, the following general points can be noted.

As a phenomenon to be observed very generally in this class, it could be said that while boys talked, girls wrote. In terms of quantity, each of the girls consistently wrote more than any of the boys on individual assignments. All of the girls kept more complete and more organised records of their written work than any boy. Karen’s work folder, for example, contained three times as much written work as Rowan’s. Notes and assignments were filed in chronological order and dated. The question of the ‘quality’ of the written work is a very complex one, since it relies so closely on the disciplinary-discursive and curricular regime within which the texts are being received. It is this question which I raised in Chapter 1, quoting Walters, Daniell and Trachsel (1978) regarding the often implicit assumptions regarding what constitutes a “proper text” in particular contexts. The three chapters of Part II investigate these matters. All that can be said here on the matter of quality is that girls all wrote more conventionally and ‘properly’ in terms of spelling, syntax, generic structure and physical presentation.

Girls appeared to make choices to write rather than to speak. This was quite marked within the classroom on a day-to-day basis, partly because of the girls’ visibility as the ‘other’ of the cultural norm of the classroom, partly because of the girls’ silence surrounding their workplace in the corner. It was certainly not the case that girls were unable to speak fluently on a range of geographical topics – as fluently, in fact, as any of the boys. Karen, for example, proved in interview to be very articulate, both in ‘talking geography’ and in outlining how she saw her position in class. She articulated the view that silence in class was a decision, a conscious choice for which she had good reasons. The question here is not so much whether this view is one which was adequate to my understandings as researcher concerning the production of gendered subject positions in classroom interaction. Rather, what is of interest is that Karen’s self-understanding produced her position partly in terms of personal attributes (see, for example, the
transcript from the interview with which I began this subsection) but partly also in terms of choice and control with respect to speaking and writing as actions.

The boys' 'not-writing', though often evident to an observer's eye during the normal course of classroom lessons, was less obviously attributable to something as conscious or as controlled as 'choice'. As the term I have adopted indicates, I understood the situation in terms of something 'not-done' rather than something purposefully done. Talk, then, might be understood as operating in part as a way of 'not-writing', as an avoidance of ungenial or difficult formal activity. Nowhere was this more striking than at the beginnings of lessons, where there would often be a discussion of a written assignment. At these points, questions and requests for clarification were invited by Alan A, and on-going explanations and paraphrases of the assignment's purpose were provided: what this assignment is really asking you to do ... or what this assignment really hinges around .... On these occasions, all of the girls typically listened without asking questions and wrote detailed notes. Boys were happy to engage in talk, even to prolong these sessions. On only one occasion, however, did I see a boy write notes from these discussions without being directly instructed to do so. Since this occasion was the last lesson of the year, preceding the geography examination by three days, this was fairly clearly an extraordinary instance.

The generally different relationship of boys and girls to writing clearly raises important questions, most immediately about the different functions students might be understanding writing to perform, and about the relation of this to gender(ing) practices in school. In the remainder of this section, as a way of framing and contextualising this discussion, I outline some of the different discourses on the relation between writing and gender which were mobilised by teachers and students in the school.

In discussions with geography and social studies teachers,6 I encountered ways of understanding the gender/writing relation which were not only different from each other but often largely incommensurable or even contradictory. Perhaps the commonest were produced in the terms of discourses of developmental psychology. That is, boys' generally poorer performance in writing was understood as an issue of maturation. This formulation appeared to have two contributing factors: a direct equation of development with writing abilities, and an indirect linking of development with matters of discipline, control and responsibility for the self. An early comment by a senior colleague of Alan A's was that the poor old boys miss out all along the line. His point was to indicate that

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6 The teachers of geography and social studies shared one staffroom, and I was offered accommodation there as well. Discussions with these teachers were regular and informal, ranging from a direct focus on the research to more exploratory questions regarding gender, geography, curriculum, pedagogy and schooling. The discussion here is a synthesis from 'field' notes from the latter category.
girls were succeeding at this school in all subjects in senior classes much more consistently than boys, who were seen as simply not ‘ready’ for many of the demands schooling made on them.

It was interesting to note the absence of one of the commonest folktales of relative achievements between boys and girls: that a few ‘brilliant’ boys will always outstrip the ‘consistent’, ‘competent’ or ‘hardworking’ girls (Walkerdine 1985, 1990). Rather, perceptions of the girls’ superior overall school performance appeared to be recuperated for a more global, if implicit, patriarchal cause by means of the discourse of developmentalism.

A second set of discourses about boys and writing proffered from time to time by Alan A and other teachers might be located in terms of the passing, in recent times, of feminist knowledge into ‘commonsense’. A number of teachers made reference to ‘gender socialisation’ of boys and girls, and to the functions of the home, the school, the peer-group and the entertainment media in the construction of gender ‘roles’. These are references to knowledges, initially produced through feminist research in the sixties and seventies, yet there is no direct reference to this as explicitly feminist work. Rather, like developmental psychology, the feminist discourses are transformed and incorporated into particular versions of ‘teacher knowledge’.

A third and very powerful set of discourses mobilised around the relations between gender and writing are what I will term more-or-less essentialist gender-identity discourses. It was commonly accepted by the teachers with whom I spoke that boys, like the ‘lads’ in Willis’s (1977) study, were not likely to identify masculinity with writing. The boys in this class were described by Alan A in an early conversation as, on the one hand, a pretty macho bunch of fellows, and as not particularly intellectual. On the other hand, he was quite explicit in his belief that boys used talk in the class to establish their identity in a number of important ways. What stood out for him about the boys’ talk was a strong sense of its stability as an abiding classroom feature, its ‘naturalness’ and ease for most, if not all, of the boys. That is, it seemed possible for boys simply to say whatever they wanted whenever they wanted for most of the time. Alan A saw this as not inconsistent with macho-ness, in an interesting interruption to the ‘strong-silent’ stereotype often invoked in conjunction with this category. This may be a function of the overlap of discourse of gender and of maturation. Chatter may be appropriate for macho boys as distinct from macho men. Alan A identified on behalf of the boys certain freedoms, specifically in terms of the establishment of positions as senior students at the beginning of the post-compulsory phase of their schooling. In an interview, for example, he said:
Alan A: Most of these lads wouldn’t have been here in the past. They would have been out earning their own living. You have to give them a sense they’re in control, you know, able to make their own decisions in class. And show them it’s different – they’re more adult. So the atmosphere is less formal most of the time.

There did not appear to be a deliberate exclusion of the girls from these considerations. Rather, it was only in the case of the boys that the question of freedom arose, since the girls were not a part of the mainstream social fabric of the class and were, as I have indicated, quiet and relatively immobile for most of the time. However, in terms of explicit reference to gender identity, Alan A saw the quantity and nature of the talk in the classroom as well as the absence of detail and elaboration in written texts more generally and repeatedly in terms of the boys will be boys or boys are like that.

It is quite possible that the particular constructions of masculinity here – the attributions of both macho and non-intellectual qualities – have in part a class basis. As I have indicated in Chapter 1, most of the students of this school come from non-professional backgrounds. This does not mean, of course, that behaviours and identities can simply be determined from sociological ‘facts’. Of particular importance in the construction of a class/gender identity for students are teachers’ understandings and representations about the nature of the student population. The teachers’ positionings of students in social class terms are mobilisations of particular discourses and combinations of discourses available for the construction of ‘teacher knowledge’ about students. It is also significant in this context to consider the gender and class identities and investments of the social studies teachers themselves. There was only one woman among a staff of eight sharing the social studies staffroom. Although I did not assemble detailed information concerning the class identifications of the teachers, the impression I gained was of very familiar teacher class positions: positions taken up by people moving very recently from a clear working class identity into a particular teacher version of middle class (‘petty bourgeois’) identity.

Complicating the issue still further, in the specific case of geography, are oppositional discourses of country and city which articulate with class and gender in powerful ways, and particularly in the production of certain versions of Australian masculinity. The generally negative relations between masculinity and writing identified by the social studies teachers meant that ‘writing’ was feminised in an opposition with masculine ‘doing’. For many boys, ‘doing’ geography meant being ‘in the field’. I have mentioned Rowan’s characterisation of geography as a ‘Harry Butler’ subject. The chief attribute for being a successful geographer according to Rowan was being physically fit. Geography appeared to be a form of physical education, a training of the body. For
Rowan, of all the activities he associated with doing school geography, writing came last and was the least important. The initial list he produced during interview read as follows:

field work

learning how to read maps

obeying instructions

participation (in class discussion)

paying attention

reading textbooks and class notes

Writing did not appear at all on Rowan’s initial list, which I had written down from his spoken account. When asked about this, he was dismissive: Writing comes last on that list. If that. Written assignments functioned, he told me, primarily as assessment instruments, as some sort of scale. They proved to teachers that students had done their work and that they knew their stuff. His words indicated that he understood writing as an exchange that had more to do with ‘doing school’ than ‘doing geography’.

In the light of this, it is significant that Rowan divided school curriculum subjects up along binary lines in terms of their being either practical or theoretical. This division does not map readily onto a more orthodox curriculum split along the lines of sciences/humanities, which has traditionally been the primary site for analysis of the gendering of the curriculum (Thomas 1990). Nevertheless, in its own terms, it is a gendered split. Its exclusions of the feminine from the practical operate markedly in terms of Rowan’s own investments in a particular kind of masculinity, associated with physical work. However, there is no corresponding positive identification of the feminine with the theoretical. Rowan had this to say in interview:

Alison: Could women be geographers?

Rowan: If they don’t mind roughing it and getting a bit dirty and stuff. And girls mightn’t like that. I’d say many women – probably, you know, be in the flowers, flowers and the animal aspect of it, but I’d say the males would get more involved in the field studies and stuff.

Alison: Why?

Rowan: I don’t know, probably cause that’s just, well, the way it is that, um, that’s the thing that men do.
In general, in talk with boys, I identified a masculine valorising of the outdoors, with associated Australian myths about the outback. In the first instance, this connected with the boys’ most common topics of informal conversation concerning what might be termed their ‘local knowledge’, as I indicated in the previous subsection. What counted as knowledge of the (sub)urban environment was both technical and instrumental.

Further, the fact that Alan A was from a remote wheatbelt community and identified in various clear ways as ‘country’ was clearly significant along gender lines, in terms of boys’ constructions of geography and of their own relations to it. Indeed, it was difficult to see how the positions Alan A took up socially and academically within classroom talk could have been available to any woman teacher. I have briefly mentioned in Chapter 2 the particular inflections of Australian masculinity which are identified with the ‘empty continent’. Though the notion of ‘country’ implies cultivated regions of land, the boundaries blur in more remote areas. Alan A’s positioning of himself as from ‘outback’, and his mode of spoken interaction, while never explicitly or intentionally excluding the girls, served to reinforce those versions of masculine ‘geographerhood’ which were readily intelligible to, and appropriated by, boys like Rowan from other cultural texts, most notably documentary television. Geographerhood was thus a brotherhood into which girls appeared to be allowed, in the sense that no one had any intention of excluding them. Nevertheless, to speak of a community of geographers as a ‘sisterhood’ would, at all times, have been a nonsense.

In conclusion to this subsection, I would point out that, although the circulating discourses around gender and writing were in significant theoretical and political conflict with each other, they had in common a primary concern for the differential achievements of boys and girls in school. In discussion with teachers, however, there was a significantly greater portion of the time devoted to talking about boys than about girls. When made explicit, this was justified according to dominant school discourses of competences and outcomes. Girls did not on the whole need to be talked about because they were not apparently a problem; they appeared to be doing ok. They won the school prizes, after all, even in geography (though not, it must be noted, in physics and aeronautics).

At this point, the different relation of the girls in this class to writing must be relegated to the status of a coda. These questions are properly the concern of the three chapters in Part II. As a preface to these investigations, I include a brief excerpt from an interview with Karen. Karen consistently spoke of writing in very different ways from Rowan. She quite explicitly referred to writing as a tool for her learning.
Karen: You are writing it for yourself really. ... Just - not until you put in it the right words so that you can understand it. You just got to get it all in order - you can really fix it up and get it straight. Remember it properly. It's there to see so you can't forget it. ... In our assignments I put it down so that I could understand it better, in the words that I would understand and interpret it.

In this account, writing/learning are represented as in some sense 'personal'. That is, there is no clear opposition between 'performance' and 'understanding'. Further, Karen does not appear to be operating a distinction between between writing and 'doing', since, as she says, it is by writing that she comes to know and understand. This notion of the function of school writing contrasts in interesting ways with Rowan's understanding of the 'public', 'demonstration'-oriented nature of the exercise. This contrast may be seen in terms of an inside/outside split in discourses around the functions of schooling which beg further investigation for their gender significance. In Part II, through a close reading of what Karen and Rowan wrote, these matters are investigated further.

3.2: Talking geography: Speaking positions, discursive hegemony and the struggle for subjectivity

[Disciplining occurs] at the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives.

(Foucault 1980: 39).

In this section, the focus shifts in two ways. First, by selecting a transcript from a class discussion which occurred towards the end of my study, and subjecting it to a close reading, I focus on more 'micro-logical' dimensions of classroom interaction. The questions that can be addressed are: what are the processes by which individuals are positioned through spoken interactions within the classroom?; how is gendering happening?; how can the struggle to achieve subjectivity be represented? The second shift of focus is to the actual discursive field being engaged, a closer engagement of the

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7 Rowan's characterisation of the function of writing bears an interesting relation to notions of 'display' and performance which I have adopted in exploring the functions of talk in the classroom for Rowan and other boys.
productivity of the speech practices in a specific site. The questions that can be thus addressed are: in what ways does the production of geographical meanings in classroom talk impinge on the positioning of students within larger difference dynamics such as gender?; in what ways, conversely, does gender impinge on the production of particular kinds of geographical meanings?

The following text is a segment from a class discussion which was intended as preparation for a new unit of work, titled RESOURCE STUDIES, the last of four units undertaken during the year. The discussion functioned also as a means of revision of previous work. Information was elicited from students in question-and-answer form and put to work in the generation of a definition of ‘resources’. One important reason for selecting this particular spoken text was that it evidences a struggle for discursive space in a much more overt way than was usually the case in this classroom, as I indicated in section 3.1. The text is striking in terms of its very public, though substantially unacknowledged, staging of differences.

'Resources population and pollution' discussion

1 Andrew: You have to say what a resource is. You have to say it’s useful; it’s a natural product.

2 Karen: What’s natural?

3 Andrew: That comes from the earth.

4 Karen: But you have to tie everything together. To see how each one relates to the other, how they affect the product and um, the uses we get from the product.

5 Andrew: ‘Useful commodities!’

6 Alan A: Oh right, that’s good. Useful commodities. That sounds good. Are you happy with that?

7 Karen: Being natural....

8 Alan A: Yes, both natural and ...

9 Andrew: Man-made.

10 Karen: Artificial.

11 Alan A: Do you mind if we say human? That means made by all people.
Andrew: They might be things or, you know ... concepts.

Alan A: Things or ideas. Or techniques. They might be a way of doing something.

Andrew: You should put in an example there. Like, you know, eg ... like iron or ideas ... eg technology.

Alan A: Right, we're getting somewhere. I think we've missed a bit of what Karen was saying a little while ago. She said something about use. What about use?

Rowan. 'Human consumption'. Human use.

Alan A: Use for what though?

Andrew: For a more technological society.

Alan A: To maintain our living standard? Is that a way of putting it? What did you say Karen? How did you put it?

Karen: To maintain a balance and ...

Alan A: Yes ... I think you're a bit further down the track than we are at this point ...

Karen: Like the natural things and the human things tie in together, like to benefit ... depending on how we treat them.

Alan A: (writing on board): They can be combined to produce goods and services. As Andrew says, we haven't really gone into what is renewable or non-renewable, but perhaps that isn't really necessary at this point of the definition.

3.2.1 Discourse and difference

The 'resources' text provides a graphic example of difference in the positions the three main participants take up and promote within the discussion. This first reading of the text focuses on the notion of difference broadly in terms of the general discursive orientation of the three speakers. It locates the text in a preliminary way in relation to the multiplicity of possible discursive domains within geography as a discipline in its contemporary configurations. The different turns in the dialogue are situated in terms of their relation to these major discursive domains which, in each case, represent the topic of 'resources' in radically different ways. Successive readings will document in more detail the ways in
which the participants are positioned in terms of the status of their particular discursive orientation, and hence the ways in which knowledge and power intersect at the point of articulation in specific utterances.

In general terms, Karen and Andrew appear, through substantial portions of this text, to be pursuing quite different discursive directions. Andrew constructs an account of the topic of ‘resources’ largely in terms of a capitalist geographical enterprise, producing quite early on (in turn 5) the formulaic “useful commodities” as a kind of summary/appropriation/ transformation of Karen’s extended attempt at explanation in turn 4. Karen, on the other hand, attempts to make sense of the notion of ‘resource’ in terms of a more wholistic discourse, which might be generally termed ‘bio-philosophical’. She pursues themes of balance and interrelationship throughout the text, beginning with her But you have to tie everything together in turn 4.

In more detail, Andrew goes on to construe resources as commodities, in terms of their uses for a more technological society (turn 18). He elaborates his notion of commodity to include material and mental goods – they might be things or, you know ... concepts (turn 12). In his provision of examples (turn 14), Andrew makes it clear that both ‘exterior’ and ‘interior’ commodities (iron or ideas) count as technological in this construction. Resources as commodities are by definition available for human ‘use’ in a one-directional sense.

Karen, in contrast, ties her notion of ‘use’ to her theme of balance. Thus, ‘use’ is linked to ‘effect’:

4 Karen: But you have to tie everything together. To see how each one relates to the other, how they affect the product and um, the uses we get from the product.

This view sees the natural things and the human things in a dynamic relationship which is not necessarily oppositional; mutual benefit is possible, depending on how we treat them (turn 22, my emphasis).

It is possible to read the text as a type of Harold Pinter-esque play text – a presentation of two parallel monologues, Andrew’s and Karen’s – articulated from within a very differently construed discursive space, indicating two non-intersecting sets of concerns and understandings about the way things are. These monologues are apparently directed to each other. However, in the very particular speaking situation of the school classroom, it is arguably the teacher who is principally being addressed and, by extension, the class as a whole. Further, as student speech might be understood as comprising elements of both display and exploration, the monologues might be read as in part directed to the self, particularly in Karen’s case, as I will argue below. This reading is a quite dramatic
representation (as indeed can Pinter’s texts be) of gender differences in social interactions in terms of relentless trajectories of non-corrrespondence. In some senses, it is an instance of what, in more macro-social dimensions in the classroom is an almost complete separation of boys from girls in intellectual as well as substantially in social-relational terms (Stanworth 1981).

This discursive ‘separateness’ is realised and may be traced in part through the strikingly non-corresponding grammatical forms being mobilised in the case of each participant in this interaction. Karen, for example, in turn 20, is clearly producing a continuation of her strand of argument begun in turn 4, after an invitation from Alan A. She continues the grammatical pattern of hypotactically linked infinitive clause structures across a gap of 15 turns. There is an overall you have to ... in order to relationship in the argument she develops. Compare turn 4 with turn 20:

4    Karen: But you have to tie everything together. To see how each one relates to the other, how they affect the product and um, the uses we get from the product.

20   Karen: To maintain a balance and ...

Karen does not appear to be participating directly in the joint construction of the singular, instrumental, economics-driven definition of resources which has been proceeding between turns 5 and 19. Indeed, apart from an initial direct confrontation in turn 4 (marked grammatically by a repetition of the structure of Andrew’s opening move in turn 1):

1    Andrew: You have to ...

4    Karen: But you have to ...

the impression overall is that she is not paying Andrew’s, Rowan’s and Alan A’s dialogue very much attention at all. Her Being natural... of turn 7 is taken up by Alan A within the discussion of commodities. However, it is reasonable to connect Karen’s Being natural... discursively to the account she is generating of the dynamic interdependency of natural things and human things, which finally is articulated in turn 22, rather than to the process of aggregation/commodification which is proceeding through the both ... and logic of Alan A’s prompting move in turn 8. It is around the term ‘natural’ that much of the discursive difference is articulated in the text, as indicated most clearly in the four opening turns:

1    Andrew: You have to say what a resource is. You have to say it’s useful; it’s a natural product.
Karen: What’s natural?

Andrew: That comes from the earth.

Karen: But you have to tie everything together ...

I return to this passage in subsection 3.2.3 in a discussion of the linguistic mechanisms being deployed here in situating the participants in interpersonal terms within the discussion. Here, it is sufficient to indicate that there is a struggle going on over terms. At this point, it is clear that a reading of the text in terms of the simple pursuit of parallel-but-different directions is not the whole story. Into this account must be reckoned the part of power – in particular, though not entirely, the role of the teacher in determining the status of particular utterances in the production of what will count as the official version of the field being constructed for the students.

3.2.2 moves and countermoves

Andrew

The capitalist/economic discourse mobilised by Andrew and Rowan (who took a greater part at a later point) was, through successive turns, to become the single authorised representation of this topic. That is, the discussion proceeded towards resolution and closure in one topical direction. It is consistently Andrew’s contributions which are picked up and carried forward by Alan A – in turns 6, 9-11, 12, 15 and 18. It is typically in response to Andrew’s directions that Alan A produces the sequence of notes on the blackboard which built up the definition. Additionally, Andrew received explicit approbation in turn 6: Oh right, that’s good. Useful commodities? That sounds good and turn 15: Right, we’re getting somewhere. Finally, it was Andrew’s and Rowan’s version that Alan A endorsed, adapted and elaborated into a more coherent version of an economics-driven definition of the ‘resources’ concept.

This process of adaptation, when read closely, can be seen as a pushing towards joint construction of a single, unified version of the topic. At turn 13, Alan A converted Andrew’s things or ... you know ... concepts into Things or ideas. Or techniques. The term ideas is a more appropriate one than concepts since it enters more readily into a semantic opposition with things and is thus more available for conceptual work within the discourse of economics. That is, it is the standard pairing (together with a concept of ‘invisibles’ as commodities) mobilised within the discourse of school textbook economics. The next move is a development of ideas in terms of techniques ... a way of doing something. In this move, Alan A is endorsing and appropriating the construction of a discourse of ‘use’ which Andrew has begun. In this discourse, ideas are
commodities to be turned into technologies in the service of human interests within a capitalist logic of development. Andrew tries to summarise this process in turn 18, where his response to Alan A’s question has a distinct falling tone, suggesting finality: For a more technological society. However, Alan A pushes further in turn 19 by rearticulating Andrew’s statement as a question: To maintain our living standard? Is that a way of putting it? Though Alan A is in one sense prompting Andrew here, it is significant that his work in fact contributes to a discursively coherent and more-or-less unitary account of the concept of resources within an economics discourse. That is, ‘progress’ is to be assessed in terms of living standard – individual consumption. Resources, then, according to Alan A’s last intervention in this sequence (turn 23), can finally be defined in terms of goods and services, and the sequence concluded.

Karen

The cooperation between Andrew and Alan A in the previous account can be read in terms of the construction and maintenance of a masculine solidarity in the class, which has distinct pedagogic value. However, it can also be read as a kind of collusion which works to de-legitimise other possible ways of engaging the topic of ‘resources’. Karen’s voice, in contrast, was a lone voice in the discussion. Her attempt to discuss ‘resources’ in terms of the relationship between humans and the physical environment was not able to get off the ground. This is striking in the light of the reading of the syllabus in Chapter 2, where the ‘man/land’ relation is presented as a dominant binary in geography generally, and in this curricular context in particular. At particular points, Karen’s utterances are blocked or diverted in the process of producing the singular, official version of the new topic. I will focus here on three of Alan A’s moves, in turn 6, turns 19-21 and turn 23.

First, in turn 6, Alan A’s obvious endorsement of Andrew’s pronouncement of ‘useful commodities!’ is particularly marked since it is his first interjection in what has, until then, been a dialogue between Andrew and Karen. His choice to reward the flat pronunciation of the techno-economic term by Andrew clearly overlooks the content as well as the fact of Karen’s extended contribution in turn 4. Karen’s language is much more elaborated than Andrew’s. It is largely exploratory and reads as a struggle to relate some general principles of cause-and-effect relations in an environmental-relational discourse to the specific topic of resources being constructed. It is also, despite the exploratory nature, the language of argument, in the sense of making a case, in contrast to Andrew’s assertion of a technical term which stands for a proposition. By repeating

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8 These points need to be considered more generally within the context of Alan A’s work in the class as an extremely skilled teacher-practitioner.
might imply: *I would put it in different terms.* In the light of this reading, it is noteworthy that Alan A begins his response in turn 21 with *Yes* – a form of accepting evaluation (a “third part” in the initiation-response-evaluation sequence of classroom spoken interactions identified by Sinclair and Coulthard 1975). This immediately re-establishes Alan A’s pedagogic position as ‘the one who knows’ in the discussion. However, his next move situates the apparently affirmative evaluation within a general refusal of her position:

21  **Alan A:** Yes ... I think you’re a bit further down the track than we are at this point ...

By indicating that Karen’s concerns belong elsewhere, he attempts to block further engagement with the issue of environmental balance. To do this, he invokes a linear logic which consists of ‘balance’ being a later, and possibly higher-order issue than the present one. Karen is *further down the track* than the rest of the class. This appears to be a curriculum logic – one where ‘facts’ precede issues of ‘value’. In this case, there is a clear paralleling of the fact/value logic of the syllabus documents and of the textbook materials which were investigated in Chapter 2. What is clear from this close reading of the discussion, however, is that the ‘facts’ being assembled here in the process of generating a definition of ‘resources’ – ‘facts’ which ‘logically’ precede ‘values’-driven concerns about environmental balance and human responsibility – are themselves produced from particular discursive positions. It is market economics doing service as ‘fact’ against which Karen’s position is read, de-authorised and deferred, as ‘value’. The fact that environmental relations are a possibly higher-order concern is overridden at this point by their secondary position in a curriculum priority argument. Deferring is, of course, a classic pedagogic strategy, one which simultaneously allows an acknowledgement of individual contributions and fulfils the teacher’s responsibility to produce unity and coherence.

The third and final move I want to investigate is in turn 23, after Karen has refused to accept this attempt to silence her concerns. In this turn, Alan A moves to close this section of the discussion by appropriating her speaking position for his own. He does this by rewriting her formulation of a bio-philosophical principle (in turn 22) into techno-economics discourse, in order to complete the sequence he has been constructing with the two boys. It is worth placing these two turns together, in order to plot the process at work.
Andrew’s *Useful commodities* and amplifying approval – *Oh right, that’s good … That sounds good* – Alan A successfully directs the discussion from the board, away from a concern with environmental relations and towards a framing of the definitions within capitalist industrial economics.

The second move I want to consider occurs at turns 19-21. Alan A does turn back to Karen in turn 15, and again in turn 19 but he does so in ways which, to say the least, divert the discussion from the direction she has tried to take it. The move to include her at these points appears to be pedagogically motivated, operating out of a teacher’s intention to acknowledge individual student contributions at the same time as to attend to the responsibility of constructing accurate and adequate versions of topics for students to copy and use. In fact, he has to address Karen twice because the first space he has created for her to speak is appropriated in turns 16-18 by Rowan and Andrew. Alan A’s tactic for including Karen at these points is to allude to her reference to the term ‘use’. However, he makes no explicit mention in either turn 15 or 19 of the points concerning balance and relationship which Karen is attempting to explore in some detail in turn 4. Rather, he attempts to enlist Karen in the service of the particular version of resource as commodity being constructed by himself, Andrew and Rowan. The notion of use that has been jointly set up by Andrew, Rowan and Alan A by turn 19 is very different from the one Karen has attempted to establish in turn 4, so that the open question Alan A directs to her at this point: *What did you say, Karen?* is quickly re-articulated as: *How did you put it?* – where *it* might refer to ‘use’ in answer to his question *use for what?* (turn 17), as well as to the matter in general. This restatement might be argued to contain an implicit acknowledgement of difference. It is one of the points where Alan A’s work as a teacher, in attempting to incorporate Karen’s contribution into a single, coherent jointly constructed whole, is very apparent.

Karen’s words in turn 20: *To maintain a balance and …* are the beginnings of a response. Interestingly, they can be read as a response to the first as well as to the second question. In response to the first more general question, she continues with what she has begun in turn 4, as already indicated on above. But her response is also couched as a repetition of Alan A’s construction of the previous turn:

19      Alan A:  To maintain our living standard? Is that a way of putting it? What did you say Karen? How did you put it?

20      Karen: To maintain a balance and …

This repetition, both an echo and a transformation of Alan A’s initiation, might even be read as a contestation or a correction of Alan A’s account. In this sense her response
Karen: Like the natural things and the human things tie in together, like to benefit
... depending on how we treat them.

Alan A: (writing on board): They can be combined to produce goods and services.

In this move, tie in is translated as be combined while to benefit becomes to produce
goods and services. As with Andrew in turns 13 and 19, Alan A appears to be prompting
Karen, ‘putting words into her mouth’. In this case, though, there is a clear sense of
discursive non-correspondence in the translation. Indeed, the omission of Karen’s last
clause – depending on how we treat them – is the final writing out of her concern with
mutuality and responsibility. Closure is thus provisionally achieved in the discussion at
this point in the apparent incorporation of Karen’s position into the dominant one.

These three moves, to the extent to which they are consciously produced, are clearly
motivated by Alan A’s reading of the curriculum context in Year 11 geography. His
interventions at the level of discourse are particularly focused at this point in the year.
Facing an examination in several weeks, these students must be properly ‘disciplined’
into ‘appropriate’ ways of engaging the syllabus topics. Clearly, Alan A is charged with
a pedagogic responsibility to induct the students into the authorised versions of the
disciplinary domain in its curriculum version as they are inscribed in syllabus documents
and curriculum statements and examination papers.

The against-the-grain reading I have produced here, however, construes his very skill
and conscientiousness as a teacher-practitioner in terms of his participation in the
construction and maintenance of a gender regime – a complex set of systems, one
powerful dimension of which is the subject-disciplinary regime which privileges one
particular representation of a disciplinary domain over another and simultaneously
genders it. In this process, Alan A is not an independent actor or author of this regime;
rather, as a “dispenser” of institutional power (Foucault (1980b), he speaks for and is
spoken by the larger systems in operation here.

3.2.3 Power and resistance: the struggle for subjectivity

While the previous subsection focused on the positioning of students with respect to the
representation of a field, this subsection attends to the mechanisms through which
students are positioned with respect to each other. In the previous subsection, individuals
were shown as taking up positions – and simultaneously being positioned by others – in
ways which impinged upon their strategies for making sense of a particular discursive
field: the geographical topic of resources. This in turn produced effects in terms of the
different participants’ orientations to geography as a science of spatial relations.
Differences in orientation are identifiable in the spoken language of this classroom text; so is the ‘official’ curriculum line, in terms of a technicist orientation and a concomitant marginalising and de-authorising of the the ‘bio-philosophical’ discourse Karen is attempting to mobilise.

This subsection focuses on the more explicitly interpersonal elements of the positioning process. The argument being developed here is that gendering occurs, not as a result of any single feature, but rather as the effect of a complex ensemble of discursive and material features. Of particular concern are the effects of the interactive dynamic on ‘self production’ – the discursive production of self in and through the taking up of positions in discursive/social practices. The linguistic frame of the ‘interpersonal’ is one reading formation which offers a way of rendering positioning processes visible. In this text, there are various conversational strategies being adopted which work productively to produce Karen’s way of knowing/being\(^9\) as marginal to the dominant masculinist cultural regime.

One of the most immediately obvious features of the text in interpersonal terms is the way in which Andrew takes up the position as (what in the exchange structure approach to conversation analysis is known as) the “primary knower” or “k1” role (Berry 1981). Martin’s (in press) formulation of this term is useful here: the “primary knower” is “the person who authoritatively controls the information being exchanged”. Andrew is afforded the k1 position quite readily, it seems, by Alan A. In turn 23, Alan A refers to Andrew as knower: As Andrew says: ... . In turns 6 and 19, Alan A asks Andrew for confirmation of wording: Are you happy with that? Is that a way of putting it?

Andrew’s moves function characteristicly as directives for Alan as synthesiser and judge of the discussion, through the combination of modulation with direct address: You have to say; You have to say (turn 1); You should put (turn 14). As a part of his taking up of the k1 position, Andrew consistently addresses Alan A directly as you. The opening you of turn 1 might be argued to be functioning in more general terms here: that is, in the sense of it has to be said (in order to generate an adequate definition). Nevertheless, by turn 14, Andrew is directly instructing Alan A: You should put. The cumulative effect of the repetition of the thematised you is one of the speaker having control of the dialogue and positioning Alan A as recorder of his words.

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\(^9\) In systemic linguistics there is a separation between the ‘ideational’ (knowing) and the ‘interpersonal’ (being) metafunctions of language. To take the notion of ‘self production’ through participation in discursive practice seriously, however, it is necessary to interrogate this distinction. As a striking example, at turn 21, Alan A points explicitly to an identification of Karen with the discourse she wants to mobilise.
Karen makes one attempt early in the interchange to challenge Andrew’s position directly, by repeating his You have to structure (in turn 4). In this case, however, the already complicated picture of the relation between the direct address you and the more general you is further complicated by a slippage in the levels of abstraction of her injunction. That is, on the one hand, it is possible to read her But you have to tie everything together as a mirroring of Andrew’s opening move in one of its possible configurations, that of general injunction:

   everything has to be tied together [in order to generate an adequate definition].

On the other hand, it is quite reasonable, from the reference point of Karen’s discursive practices in the class more generally, to read her move as a more global philosophical point about responsible human action in the world:

   everything has to be tied together [in order to maintain a balance].

This reading produces turn 4 as a first statement in modulated form of an environmental imperative which is re-articulated in declarative mood in turn 22 as a point of philosophical principle:

   Like the natural things and the human things tie in together.

According to this reading, Karen’s you refers less to the teacher/recorder in the formulation of a specific instruction; rather, its referent moves outward as a form of injunction, beginning with the participants in the class discussion and including actors in environmental debates more generally, and by inference, humanity itself.

As a challenge to Andrew’s position, then, this is rather a complex and diffuse one, since the addressee of the injunction You have to is not identical in each case. In addition, Andrew’s early moves in this discussion have already indicated that, in taking up the k1 position, his interests do not lie either in having it usurped, or even in acknowledging the possibility of Karen occupying this position. In turn 3, he performs a very telling move in response to Karen’s question: What’s natural? By answering That comes from the earth, he indicates that he reads the question, not as a challenge to the premises on which he has based his first assertions, but rather as a request for information, which he supplies, and is authorised to supply as k1.10 This effectively de-authorises Karen’s position, as far as the next moves in the dialogue are concerned, so that her you have to move in turn 4 is produced from the position of a recipient of ‘information’ supplied by

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10 This is regarded as a classic gendered conversation strategy (Maltz and Borker 1982).
Andrew, which she has apparently requested. Hence, her move is prefaced by an initial *But* and reads as a struggle against an already stacked discursive deck.

The first person plural pronoun *we* codes interesting relations of inclusion and exclusion at certain points in the text (Wright 1991). In turn 15, Alan A refers to *we* in opposition to *Karen*, who is also referred to as *she*:

15   **Alan A:** Right we’re getting somewhere. I think we’ve missed a bit of what Karen was saying a little while ago. She said something about use. What about use?

The first *we* in this turn might arguably consist of Andrew and Alan A as partners in a dialogue: *you and I*, since it follows the highly directive *You should* move in turn 14 which marks Andrew at his most authoritative. According to this reading, *we* are linked together (in the functions *we* are performing) and separate from the rest of the class (who would arguably be addressed at this point as *you*) and from Karen in particular, who is referred to in the third person (*she*). This is a further separation and distancing. According to this reading, Alan A is complicit in maintaining the solidary relationship Andrew is attempting to construct. Perhaps a more plausible reading of this first *we* is that Alan A includes himself in the whole class group which is ostensibly engaging in a joint generation of definitions (*we all*). In this reading, it is less clear that this is an exclusive *we* (referring, for example, to *we the rest of the class apart from Karen*), since there are few grammatical choices available to Alan A for marking Karen within the group. Nevertheless, there are cumulative effects of the repeated use of *we* in the text. The second *we* of turn 15: *we’ve missed a bit of what Karen was saying* is more clearly a *we* inclusive of the class but excluding Karen. Curiously, it is the pedagogical move to bring Karen back into the discussion that produces the most explicit articulation of her distance.

What is set up by these two uses of *we* is a mechanism whereby Alan A can distance himself and the rest of the class from Karen and from her contributions to the discussion in turn 21:

21   **Alan A:** Yes ... I think you’re a bit further down the track than we are at this point ...

In addressing Karen directly as *you*, Alan A makes explicit the opposition of *you* to *we*. Her position, though possibly more advanced, is thus not *our* present concern. The other function of the *you* here is to identify Karen with her utterance, hence marginalising her as well as what she has been saying. It appears from Alan A’s words in turn 21 that he sees the curriculum in terms of a unitary and coherent linear progression. However, the readings of the curriculum framework produced in Chapter 2 would indicate that the
conditions under which he is working as a teacher do not allow him the space to preserve or even to acknowledge difference in a context such as this, or at least, only at great risk. Karen must be disciplined.

Karen persists in the face of extreme difficulty in this situation to produce an intelligible utterance and her lack of success is not for want of trying. From the marks of the struggle which are evident in this text, it is no wonder that she has not, in general, participated in ‘public’ speech occasions in class. Indeed, there appears to be little benefit accruing to her as a result of having made an exception in this case. In the light of this, it is worthwhile reflecting briefly on the investments Karen might have had in subjecting herself, on this occasion, within the dominant social/discursive regime.

In the first instance, the examination was imminent. Karen’s investments, as a ‘good’ subject of pedagogy, appeared to lie in doing as well as possible in geography. These investments might have made her decision to participate override other considerations such as her concern to construct and project herself within the class as an appropriately feminine subject. Another way of reading Karen’s changed strategy is made possible by relating the particular points she is pursuing in this discussion directly to the corpus of her written work throughout the year. It seems clear from this corpus that Karen has pursued and engaged several themes within her writing which, when taken together, may be read as an attempt to produce a macro-theory of spatial relations (see Chapter 6, section 6.4 for an elaboration of this). At this particular point in the year, she may be in a position to test this theory in the light of new information in the new topic, as well as being particularly concerned to make sense of her year’s experience as a whole.

At the end of a year’s work, students may be understood as being able to locate themselves to a certain extent within a discursive domain, and to perform this location, more or less consciously, in new situations. A performance of this kind involves both deduction and induction: both the retrieval of specific pieces of information and the relating of these to new information, and the prediction and reproduction of particular themes, metaphors and preoccupations of the discipline as strategies for making sense of new information. This is one way of understanding what all participants in the discussion in the text above, including the teacher, are engaging in, with various degrees of coherence and self-consciousness. As a final point, it might be fair to comment that both Andrew and Karen have investments in being ‘good’ subjects of schooling. However, the differences in what the term ‘good’ might mean in each case are telling. Karen’s work in this discussion and elsewhere indicates that what she believes the ‘good’ subject should be doing is twofold: on the one hand ‘working’: getting in there (from interview), and on the other hand, ‘understanding’: (In our assignments I put it down so that I could understand it better, in the words that I would understand and interpret it). In complying
with this latter brief, Karen pursues particular paths of enquiry which lead to her ‘getting it wrong’ in this instance, according to one, if not the only, reading of the situation.

In contrast, one reading of Andrew’s work in the ‘resources’ text might see an investment in being ‘good’ in the sense of displaying knowledge, or perhaps, ‘know-how’. This reading produces Andrew as explicitly working for affirmation and acknowledgement. More than this, however, his assumption of the k1 position offers the possibility of his signalling a challenge: I’m as good as you are, if not ... .

**Conclusion**

This chapter has demonstrated the work that goes on in the moment-by-moment process of transacting the curriculum. In this process, gendered subject positions are set up and taken up which signify powerfully around the binaries of speech/silence and speech/writing. The suggestion here is that to speak in this classroom is a stressful and less than rewarding experience for girls; the analysis of the ‘resources’ discussion indicates the difficulty that Karen faces in presenting her version of the topic in the fact of what is in effect a wall of masculine opposition. Karen’s orientation to writing can be understood, at least in part, as a retreat into a semiotic space where her concerns will not be so immediately subjected to practices of marginalisation and deferral. This formulation of the gender regime of the classroom has important implications for literacy pedagogy, in particular, for the prevalent inside/outside and public/private binaries currently characterising the debates. Chapter 8 returns to consider these points in more detail.
PART II
READING THE ‘TEXTS’
OVERVIEW

The three chapters in Part II are concerned with two essays on the topic of ‘shifting cultivation’. Chapter 4 is a reading of the essay produced by Rowan in response to this question, while Chapter 5 is a reading of the essay written by Karen. Chapter 6 is a discussion of the principal differences between the two essays in terms of their significance for questions of gender and literacy in the geography curriculum. The primary purpose in placing these two essays side by side was to begin to find a way of locating and exploring the differences between them. I will work with a notion of ‘writing’ in both its nominal and verbal sense. That is, ‘writings’ will mean both of the existence, identity and function of particular student texts – ‘pieces’ of writing – and also a dynamic notion of ‘textual practice’. These chapters will explore the importance of the relations between these two notions for the development of an understanding of the complex politics of subject production in literate practices.

Some specific contextual information with respect to the production of the two essays is necessary here. The essays were produced within the unit of study entitled ‘World Biomes’. The essay question, one of the last for the year, was handed out on a typed sheet headed “YEAR 11 GEOGRAPHY: UNIT 10 - AGRICULTURE”. A further heading read “AGRICULTURE ESSAY”, beneath which was this question:

Discuss the characteristics of shifting cultivation as an agricultural land use system. Use examples and diagrams to illustrate your answer. Refer to the impact of modern technology on this agricultural system.

‘Shifting cultivation’ was a case study example of the geographical topic of ecosystem modification. This topic took approximately three weeks (fifteen hours) of class time. The essay was largely written from photocopied class notes and information generated by whole-class, teacher-led discussion. It was written partly in class, but completed at home over a one-week period.

Three particular sets of class notes were extensively used by all students in writing the essay. Extracts from each of these have been produced in Chapter 2, section 2.2.3. As already indicated, text (a) was regarded as the ‘authorised’ version of the topic (see Appendix B). Referenced merely as “unpublished class notes”, they were notes written

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1 The term ‘unit’ was used in this class to apply to different levels of organisation of the curriculum. Here I am referring to the term as it applies to the four major units of work which had to be selected from the six available in the syllabus (outlined in Chapter 2). In the next sentence the term denotes a smaller segment of the ‘World Biomes’ unit.
by another geography teacher within the school a few years before. They contained all of
the essential facts pertaining to the topic to fulfil the directives of the syllabus. Additionally, they were the authority to which the students could refer in case of
conflicting versions of aspects of the topic. The other two sets of notes were photocopied
from textbooks, and provided something of a tangential approach to the topic as outlined
in the class notes. That is, they were located within books which developed their
treatments of geographical themes with a degree of detail, reference to other sections of
the text and to the concerns of the whole text. These interfaced or overlapped with the
‘official’ version, but which were not identical with it. The most notable supplement
these notes provided was in the detailing of case study examples.

As I have indicated in the discussion of method in Chapter 1, these readings do not
constitute a ‘linguistic’ analysis in the formal sense. Equally clearly, these are also not
‘official’ readings in the sense that they do not bear much resemblance to the way in
which each text was received and responded to within the context of its production in
class. Further, these readings have not been produced in terms of any of either writer’s
possible intentions in writing the essays; nor even are they readings which would have
been available to them at the point at which they were produced.

Rather, the initial point must be made here that these readings are already selected from a
hypothetical repertoire of readings available for these texts, a selection based upon
concerns about the relations between textual practice and (gendered) subject production
signalled in Chapter 1. These readings derive from readings of Karen’s and Rowan’s
whole textual production in geography and other subjects, along with readings of other
students’ essays, of the textbooks and class notes as outlined in Chapter 2, of field data
concerned with classroom dynamics and of the discursive work performed by both
students in the classroom and in interview, as reported in Chapter 3. These readings
produce these two texts in ways that make them available for particular strategic ends, to
be considered in Chapter 8.

In terms of structure, Chapters 4 and 5 parallel each other in general outline. In the first
section of each chapter, the essays will be considered in terms of their status as instances
of geographical literacy and learning, with a particular focus on technicality. The next
sections of both chapters consider issues of the particular discursive orientations of each
of the essays, with reference to the spoken and textbook materials examined in earlier
chapters, as well as to orientations within the discipline and the curriculum in other sites.
The focus in these sections is on what the essays produce which is congruent with, as
well as what is other and more than the ‘official’ versions of the topic of shifting
cultivation in this class.
Chapter 6 draws more explicit comparisons between the two essays and makes more explicit the argument concerning the relationship between textual practice and gendered subject production within this curricular site. The focus is in part retrospective, where the specifics of these relations, as read from these texts in Chapters 4 and 5, are engaged in ways that make them available for commentary on questions of the politics of literacy and literacy pedagogy. In particular, the chapter mounts an argument that Karen’s text is doing fundamentally different discursive work from Rowan’s. In investigating this difference, it is clear that the notion of the ‘gender regime’, as it was introduced last chapter, is not simply a matter of silencing and subordination. Karen’s text is more elaborated linguistically than Rowan’s. She has not been prevented from achieving some particular ends in her representation of the world, even though in terms of the official line in this curricular instantiation of the discipline, she is in important ways ‘wrong’.

Finally, there is far more that could be said about these texts than can be properly investigated here. Despite the space available within a doctoral thesis (and indeed, despite the formal mandate of doctoral research) for analytic thoroughness, issues of intertextuality and difference may proliferate indefinitely. The project is not, therefore, one that aims for ‘completion’. The question being asked is not ‘how much difference?’, or even just ‘what kind of difference?’ – in and for itself. Rather, the question is ‘what is at stake in the textual production of difference?’
CHAPTER 4

‘SHIFTING CULTIVATION ESSAY’:

ROWAN

Just 250 kilometers north of Australia lies the territory of Papua-New Guinea, the second largest island in the world. Although much of the island has been closely linked with Australia for many years, a visit there would reveal what seems to be a completely different world. The people have dark skins; their languages, clothes, houses, food and customs are very different from those of people in Australia. Most of them live in small villages.

[class notes, reference unknown]
Introduction

This chapter is a reading of Rowan’s ‘shifting cultivation’ essay, which is reproduced below. The chapter consists of three main sections. Section 4.1 considers the status of Rowan’s text as an instance of geographical writing, taking into particular account issues of *technicality* and *facticity*. Sections 4.2 and 4.3 are readings of the text in terms of its discursive orientations, with respect to available discourses within geography as a discipline and as a school subject. Section 4.2 reads the text in terms of traces of two discourses central to a critique being developed in the thesis with regard to the politics of representation in school geography and the positioning of subjects within systems of representation. The two discourses are those of economics and what I have termed ‘exoticism’ in the representation of cultures in tropical and ‘third world’ locations. Section 4.3 considers grammatical mechanisms for the construction of positions for the writer in the text, as well as the inscribed reader and the object domain – the tropical rainforests where shifting cultivation practices are pursued. The aim in this section is to begin to map relations between discourse and subjectivity in terms of the textual realisation of particular discursive effects.

*Shifting Cultivation Essay* ¹

Shifting cultivation is a large economical part of many countries. The reason for this is because of the huge range of crops which can be grown all year round. Not only is it *subsidiary* but extra crops can be grown for a small profit.

There are up to 40 or 50 different crops which are *grown* but usually only 2 or 3 major ones *grow* by each tribe but this may vary from place to place. The most *common* plants which are grown are tuberous plants due to their easy maintenance, slight nutrient usage, relatively high *yields* and their easy to harvest. Some examples of these crops are yams and sweet *potatoes*.

Once a tribe has *already* used a section of land which is no longer usable they move onto a new section of land. Before they can use the land they must first clear the area. This is done by the men with a *tukunece* [technique] called slash and burn. They first clear away all the under growth such as vines and

¹ Rowan’s text contains a number of errors of different kinds. For the purpose of clarity, I have indicated the obvious spelling errors by italicising them in this reproduction. In subsequent repetitions, I will produce these words in conventional spelling except where the error itself is the point of focus.
creepers, this is done by cutting them down with axes. Stone axes were originally used but now they use steel ones.

Once this has been done they are left to dry before the trees are lopped.

Clearing the trees is the next stage. They start from the base of the hill and work upwards. Instead of cutting the trees write through the "NOTCH" the trees, the reason for this is to save time. Because when they get to the top of the hill the cut the first and second top rows right through so when they fall they create a domino effect and knock down the lower trees. They then get the trees into a big pit and burn them. Once the trees are all burnt the ashes are spread over the area to create a kind of fertilizer.

Some of the smaller trees are lopped at about 2m high so they can be used as a treelis for yam vines. Any other logs which aren't burnt right thru are placed on the slopes at regular intervals to stop the erosion of the soil. Once rain and crops have driven out all the nutrients in this area they move onto a new plot.

In the areas where the man/land ratio is low there needs to be a lot of land used to get little crops back, or just enough to support the tribe.

These places are amazingly enough cleared with the most basic tools. The three most common tools are the stone axe, the digging stick and the dibble stick.

The stone axe is used to clear the vines and to notch the trees. The digging stick is about 1m long with a large spade and made out of a stick. The dibble stick is just like a speare used to loosen the soil.

The reason it is called shifting cultivation is because the cultivators are always on the move. They one stay in one area for 6-12 months or until the nutrients get all washed out.

Although their are many crops grown they also meet to hunt for meat and fish also this is done because their may not be enough vegetables to go round.

Even though the cultivators may live in one area for up to 2 years they still never make a permanent house because of the waste of time and labour.
Because of the natives growing their own crops and hunting their own food having their own animals such as a herd of cows would be very uneconomical because they need to be [unclear] and upkept and feed and they would destroy to many crops.

As you can see the people wo do use shifting cultivation are being changed by technology and machinery. In a way its god but also its bad and all of the aspects have to looked at before the natives really destroy the forests they live in.

4.1: ‘Shifting Cultivation Essay’: a geographical text

Rowan’s text is quite recognisable as an instance of school-geographical writing in a general sense. In addition to this, it is possible to locate more specifically many of the features of the text in terms of textbook materials and class-based discussions such as those outlined in Chapters 2 and 3. In this section, I will focus, not on questions of ‘content’ in terms of the selectivity of Rowan’s account of the topic of ‘shifting cultivation’, but rather on the text’s status as geographical writing as a particular “genre of discourse” (Frow 1986). This account will first consider issues of technicality with respect to lexis and the construction of logical relations in explanation. Second, it will consider, in a preliminary way, issues of genre as a structuring principle locating the essay intertextually within geographical textual practices.

4.1.1: Technicality and facticity

There is in geographical discourses in general a strong tendency to technicalisation. A specifically linguistic definition of technicalisation is provided by Wignell, Martin and Eggnis (1987) as the production of terms or expressions with a field-specific meaning which are mostly nominal group constituents. Technicality in geographical texts is the result of a linguistic process of technicalisation. The tendency to technicality aligns geography with other discourses which lay claim to status as sciences. Technicality may be defined as a strict separation of specialised language from the everyday. It is through this separation that dominant versions of scientific rationality are produced. (Lemke 1988, Martin et al. 1989).²

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² Latour’s (1987) work on “technoscience” is also pertinent here. In terms of actual activities in the world of technoscience, Latour traces the ways in which this dominance is achieved through networks of scientists. He documents the asymmetrical relation set up between inside and outside the networks in terms of what can count as rational.
In school geography, the process of technicalisation often involves linguistically quite simple processes of relexicalisation. Most often these are one-to-one translations of concepts and terms from the everyday visible world and everyday language into technical language, resulting in what I will term the ‘this-is-that’ pedagogical function of geography textbooks. Rowan’s text is readily identifiable, according to this reading formation, as an instance of a (school) techno-geographical discourse. Its technicality is identifiable in the first instance in its deployment of an appropriate technical lexicon to describe and explain the features of shifting cultivation as a land use system.3

Technicality and facticity are related features of science discourses. Technical language has evolved to produce specific information authoritatively as ‘fact’. In this sense, the whole of Rowan’s text can be considered highly ‘factual’ or ‘factitious’, in several senses of the term. A crude and obvious method of measuring facticity is simply to count what might be accorded the status of ‘facts’, understood in Harré’s (1990:81) sense of “whatever is presented as if it were a known truth”. ‘Facts’ in this sense might be understood as discrete units of information, usually coded with a technical term. Despite its crudity, this is an important method to consider here because it is precisely the way in which geographical writing is read and assessed within the final year secondary examination procedures in geography in Western Australia. For example:

One mark for a correct identification of land use, and 3 marks for the description of the physical and cultural landscape. At least 2 elements of each need to be described for full marks.

(Secondary Education Authority 1989c:3)

According to this reading formation, Rowan’s text can be understood as ‘containing’ numbers of facts. A related point is that it ‘contains’ little else, in the sense of interpretation, judgement or argument, while the ‘facts’ are connected substantially through a sequential logic, a feature of the text’s predominant orientation to shifting cultivation as a procedure.

The text’s facticity, then, may be described in terms of a textual ‘transparency’. One effect of a text organised around a ‘this-is-that’ (Shifting cultivation is ...) structure of technical writing is that the ‘facts’ appear to speak for themselves, and there is little or no evidence of the writer in the text. In systemic linguistic terminology, the text does not deploy any of the resources of the ‘interpersonal’ function of the grammar beyond the

3 This point is not intended to imply that lexis is the only salient feature of technical language. Subsection 4.1.2 returns to this issue in a discussion of the text’s organisation of logical relations.
obligatory mood structure of a clause. ‘Facts’ are presented in sequence in present-tense declarative mood with little or no modality or qualification. In particular, the extensive categorical use of the verb to be in present tense, performing primarily definitional and descriptive functions, allows little space for negotiation of meaning. The only exception to this general grammatical tendency is the last paragraph of the essay, which receives a detailed reading in section 4.3 below.

Technicality resides, as I have already indicated, within nominal groups. Accordingly, the verbal groups are mostly simple and relatively non-technical: grow, use, clear, harvest, lop, notch. Technical terms are quite specific; in the case of Rowan’s text, they are also quite simple, in the sense that they are nominal groups with typically few constituents. This simplicity is, in part, to be expected from the particular processes of relexicalisation which I have identified as characterising much school-geographical language, at least at this level. A great deal of the language of textbooks and student notes consists of definitions. Rowan’s view, expressed in interview, was that definition’s about all it’s about, really.

Importantly, the relative simplicity of nominal groups is also consistent with an approach to geography curriculum which focuses in the first instance on the development of single concepts as discrete entities. This might be termed a ‘bottom-up’ approach to the construction of geographical knowledge. According to this approach, issues of relationship, in any of the several senses of that term available within geographical discourses, are a second- (higher-) order concern, to be engaged after the assemblage of a sufficient number of relevant ‘facts’. Chapter 3 has already considered the case of Karen’s attempt to introduce more complex issues of relationship at a point where Alan A judges it inappropriate for the early stages of the topic of ‘resources’. This discussion raised the issue of what counted as ‘fact’ and what was to be deferred as a question of ‘interpretation’ or ‘value’.

The technicality/facticity in Rowan’s text proceeds in large part through the simple labelling of objects: yam vines, dibble sticks. Additionally, the text engages in one-to-one relexicalisation as definition/classification within a taxonomy: yams and sweet potatoes = tuberous plants; and definition in the form of labelling geographical processes: a technique called slash and burn, followed by explanation in the form of an activity sequence. Further to these field-specific terms, school geography typically mobilises a large vocabulary of more-or-less commonly available terms to describe physical and cultural landscapes (for example, names of plants, tools and agricultural processes). These may be described as being of a certain (variable) order of technicality. Some, such as yields, mobilise specific aspects of meaning in accordance with the specific field under consideration, while others, such as nutrients and erosion have passed at a certain point
in history from technical into everyday language, and are used with a greater or lesser degree of technical accuracy in different contexts.

4.1.2: ‘Enculturation’ and ‘interim literacies’

In general, as readily as Rowan’s text is identifiable as an instance of school-geographical writing, it is by no means an flawless one. However, I am not so much interested in the errors and inaccuracies of surface features of written language that are obvious in Rowan’s productions (what B. Green [1988] calls the “operational” dimension of literacy). Rather, what is of interest to a discussion of literacy in terms of ‘enculturation’ is those points in the text where there are what I might term slippages, places where ‘proper’, ‘disciplined’ text mixes with what could be termed ‘pre-disciplinary’ writing. The notion of ‘pre-disciplinary’ does not involve a romantic claim for a kind of ‘free’ or unbridled creativity in writing before the shackles of disciplinarity stifle the development of the ‘natural’ child. Rather, the point is that there are particular discursive formations available to students, which they learn in a more-or-less informal manner, and which they learn to rewrite in particular ways within formal disciplinary discourses.

This process of re-writing is not a straightforward or linear one. There are several instances in this text which can usefully be read as evidence of what might be termed an interim state of techno-geographical literacy. I use this term to focus on literacy as a process of ‘becoming’ rather than ‘being’. Within a conceptualisation of textuality as plural, and of school literacy as subject-specific, becoming literate with respect to the particular discursive and generic orientations and practices of particular subject-disciplines will mean, in the first instance, a process of induction. This is a process which will take place over time and can often be marked in a student text through readings of its ‘improprieties’.

Rowan’s text can be read, through aspects of its grammatical structure, in terms of its interim status as an instance of a particular kind of geographical literacy. One place to focus on this is the text’s organisation of logical relations. In general, the technical functions of grammatical metaphor, so common in scientific writing, appear to be largely unavailable to Rowan as a geographical writer. Processes are on the whole realised congruently in the text, in a combination of active and passive-voice constructions, while logical relations are realised through conjunctions, predominantly of time and sequence. Causality is realised through paratactic clause complexes linked by because. The mechanisms for mobilising an explanation in the text are most commonly a simple because, which occurs six times and, more complexly, The reason for this is because, which occurs three times. These features mark the text as a relatively unsophisticated
instance of technical writing, in comparison with the examples considered in the textbook material in Chapter 2.

The text is not consistent in its organisation of logical relations, however. Through the points of inconsistency and slippage, marked through shifts in grammatical patterning, the process of 're-writing' may be traced in useful ways. These shifts often also realise shifts in discursive orientation, a politically significant point I will return to in the next section. One of the most visible of these shifts occurs in paragraph 2:

The most common plants which are grown are tuberous plants due to their
easy maintenance, slight nutrient usage, relatively high yields and their easy
to harvest.

Here, instead of cause or reason being treated congruently though conjunction, the explanation consists of a list of nominalisations, set in motion by the due to. Because of the nominalised structure, the first three items in the list closely resemble 'official' explanatory writing. In fact, they appear to be inserted into the otherwise less complexly embedded logical structures which characterise the organisation of the whole text. The fourth and final item in the list, however, is a grammatically inappropriate structure within this pattern. It is not a nominalisation but appears to be a complete attributive relational clause consisting of carrier/process (thei/r), and attribute (easy to harvest). The their [they're] in their easy to harvest echoes homonymically the ther [their] of ther easy maintenance (and might more appropriately be re-written either as they're easy or their ease). This fourth item is an attempt to complete a parallel construction appropriate to list production. However, it appears to be based on a misreading of the grammatical function of the first ther [their] which generates the first three items, and is hence an inappropriate parallel construction.

More importantly, though, the fourth item is a clausal rather than nominalised form of explanation, probably generated by an absent and implied because. This final item in the list can therefore be read as a reversion to type, or to the prevailing mode of explanation in the text. One clear reason for such a marked shift in syntax here is that Rowan has 'lifted' the first three nominalised items in the list directly from printed source material without the necessary transformation of either the borrowed text or the base text into which it is introduced.4

Another important instance where Rowan's prose deviates from its characteristic syntactic and lexical patterning is the first sentence of the essay. Here again, the deviation

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can productively be read in terms of an ‘interim’ stage in a process of becoming literate in the specific ways in which geography constructs meanings and texts. In this case, the inconsistency does not arise from ‘lifting’ text from source material. Rather, it is probably partly a result of the complex function of the first sentence as beginning and frame for the whole essay, as well as an incomplete knowledge and control of what constitutes an appropriate beginning in a geographical text.

What makes the first sentence different from the rest of the essay is its markedly greater length and complexity. This is not a grammatical complexity, since the sentence consists of a single clause generated from the verb to be ... . Rather, the complexity is lexical, and located in the nominal group which forms the attribute of the relational process: Shifting cultivation is a large economical part of many countries [my emphasis].

At first glance, this clause exhibits a typical characteristic of discourses of school geography: that of the identifying relational clause functioning as definition/technicalisation: Shifting cultivation is ... . However, the clause does not appear to perform that definitional function, at least not in the conventional manner of school geography textbooks, which often are the students’ only models for constructing their own texts. Compare Rowan’s construction with the following definition produced by Karen in the first paragraph of her essay:

Shifting Cultivation is an agricultural land use system used in areas with low-level technology along the tropical locations of the world.

or of a definition typical of a geography textbook:

A ‘swidden’ is a field which has been cleared for burning for shifting cultivation.

(Chapman and Codrington 1985:266)

Karen’s definition contains fairly precise information about what shifting cultivation is, and where and under what conditions it might be found. Chapman and Codrington define their term in terms of the specific condition and function of a more generalised category. Both fulfil reasonably well the ‘this-is-that’ function of geographical definitions. One way of reading Rowan’s first sentence is that it bears a syntactic resemblance to a conventional feature of geographical writing but it does not perform the appropriate semantic function. Here, notions of approximation and mimicry (Bartholomae 1988) become important terms for an investigation of ‘interim literacies’.
One other feature of Karen's definition will bear a brief focus here, as a point of comparison with Rowan's first sentence. Karen's definition conforms to a primary "thematic" feature of geographical texts in general: a foregrounding of location. Here, I am not using the term 'theme' in the first instance in its linguistic sense. Rather, I am referring to Cox's (1982) use of the term, in his analysis of geographical writing, as something like an organising feature at the level of both content and structure. Cox has produced a quantitative content analysis (principal components analysis) of geographical journal articles. According to this analysis (revisited briefly in Chapter 7), location as a theme and concept in geography is primary, both in terms of the frequency with which it appears in geographical texts, and also in terms of its typical position within a text, in a prior position with respect to the appearance of other major 'themes'. Indeed, it often comes first in a text, functioning precisely as 'orientation'.\textsuperscript{5} Interestingly, there are points of overlap with text-linguistic concerns here. Perhaps the most obvious point is that the primary 'theme' of location is indeed, being primary, necessarily thematic, in the linguistic sense. This in turn points to the further relation with generic-structural considerations. In all four of the printed sets of class notes distributed to all of the students in the class for this unit of work, location was either the first or the second of the subsections into which the topic was divided. Although I have not elaborated this point in the thesis, there appears to be the possibility, arising from Cox's work, of developing a description of genres of geographical writing. This has interesting implications for a literacy pedagogy which is specific to the subject-discipline of geography. To return to Rowan's first sentence, it should be noted here that the sentence does make some attempt at situating the practice of shifting cultivation spatially, in the world. This, of course, is not very specific: many countries does not perform a locational function in any direct way, and might be considered in a sense as 'bad geography'.

I will argue in the next section, however, that there are other functions performed by the generality of this initial (and only) indication of place in the text. In particular, the sentence functions to situate or 'orient' the topic of shifting cultivation discursively within the multiplicity of discourses which constitute geography as a discipline. This discursive orientation is the topic of the next section (4.2).

I would argue, in conclusion to this subsection, that the notion of 'enculturation' is a useful one, in that it allows a student text to be situated in terms of its status as an instance of geographical writing. 'Enculturation' connects the text and its writer in a process of being positioned within a discursive community, without resorting to

\textsuperscript{5} Similarly, Hall (1982), in a useful appraisal of the various analyses of the discipline of geography available at the time, refers to location, together with space, place and landscape as "key concepts" in the thematic structuring of the discipline.
essentialist categories of authorship and authenticity. That is, the writer of the text can be understood as a subject of a discursive community. The identity ascribed this text as an instance of geographical writing has effects in terms of the ‘identity’ (as a more or less ‘good’ subject of geography) ascribed its writer in the process of assessment. Rowan is judged by his text. This subsection has suggested ways in which Rowan’s ‘membership’ of a (mythical?) community of geographers can be judged through grammatical, lexical, and (in a rudimentary way) generic patterns. The next sections, moving into a more explicitly politicised arena, will open out the question of ‘enculturation’, raising questions concerning the particular kind of subject position taken up by the narrator in Rowan’s text.

4.2: Economics and exoticism

Rowan’s essay can productively be read at two levels of representation. The first level, which was introduced in subsection 4.1.1, is the level of what seems, on the text’s own self-representation, to be merely a transparent presentation of what is (what I might call the ‘immanence’ of geographical text). The second level is that of what is obviously a representation, read from a particular critical vantage point.6

Rowan’s text, oriented as it is to facticity, may, in terms of this second level, also productively be read as doing other, or extra, work than purely techno-geographical work. In this section, I focus on broader issues of the discursive organisation of the textual field. There is no claim here that Rowan the writer is doing this work in the text reflexively. Rather, my purpose is to read the text in terms of a particular series of effects. This section is organised around two principal motifs which suggest themselves as productive points from which to read the work being performed by the text. The first of these I will term simply ‘economics’ and the second, ‘exoticism’.

4.2.1: Economics

I begin this reading of the text by arguing that the term economical in the first sentence is significant in terms of discursive orientation to the topic of shifting cultivation. The sentence might accordingly be read as follows:

Shifting cultivation is a large economical part of many countries. [my emphasis]

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6 Indeed, a closer exploration of this point would need to engage with further levels within levels of representation, since Rowan’s text is already a selection from a range of discursively differently oriented versions of school geography in the class textbooks and in class discussion. School geography is a particular representation of ‘real’ geography, any moment of which is itself a particular, interested representation of a representation. And so on.
One reading of this sentence is that *economical* appears to function as a classifier of *part of many countries*. ‘Shifting cultivation’, then, is first introduced as an economic system, rather than, for example, an agricultural system, a cultural system, or an efficient form of ecosystem management, just to name three modes of representing the topic available within the official class reading material. Of particular note here is the selection of *economical* over *agricultural*, which is particularly marked, considering the heavy emphasis on *agricultural* in the essay task as it was presented:

Discuss the characteristics of shifting cultivation as an agricultural land use system. Use examples and diagrams to illustrate your answer. Refer to the impact of modern technology on this agricultural system.

Additionally, as I have indicated in the Overview of Part II, the essay sheet was headed *AGRICULTURE*, as was the topic: *AGRICULTURE ESSAY*. In the light of this, compare Rowan’s opening sentence with Karen’s:

Land may be used for *agriculture* in many different ways [my emphasis].

The presence of *economical* in Rowan’s text appears thus to be a marked substitution of the classifier *agricultural*. It is this substitution effect which reads the *-al* suffix as a discursively inappropriate variant on the classifier *economic* rather than as the more standard epithet, *economical*. I return to this point and to the possibility of other readings shortly.

Clearly, *economic* and *agricultural* are not mutually exclusive classifiers; for example, shifting cultivation might appropriately be engaged in an essay of this kind in terms of *agricultural economy*. But this term also signifies a selection from a range of quite different orientations to the topic, as will be seen in the reading of Karen’s text in the next chapter. In particular, the selective focus on economics suggests a particular, eurocentric spatial/cultural viewpoint with respect to the practices of shifting cultivation and to the people who practise it. Further, the notion of selectivity itself raises questions of the degree to which writer interests and investments in particular discursive choices may be investigated, in terms of the work the text can be understood as performing. To explore this, I consider briefly two levels at which the first sentence functions as an organiser for sections of the text. I draw here on Martin’s (in press) notions of “hypertheme” and “macrotheme”.

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7 At the level of text semantics, ‘hypertheme’ functions as advance organiser for paragraph-level development, while ‘macrotheme’ performs this function for whole texts. The notion of ‘theme’ used here transfers the organisation of information at clause level to the level of the text. Hence, both hypertheme and macrotheme occur at the beginning of the text/segment they are organising.
When Rowan’s first sentence is considered in terms of a hyperthematic function within the first paragraph, it can be shown to predict and organise the structure of the paragraph fairly tightly. The early introduction of economic considerations allows the rest of the paragraph to be read as being organised in part around the opposition of *subsistence* and *profit* (a cash economy). This is not a neutral opposition, but rather one where subsistence appears to be subordinated to the possibilities offered by a cash economy. This sense can be traced through the opposition of the negative valuing (*not only*) of subsistence agriculture and the modality of possibility introduced with cash cropping: *extra crops can be grown* [my emphases]. Of course, this valuation is hardly surprising given the most readily available value weighting of the term *subsistence*. The official versions of the topic contained extracts such as this one, reproduced in Chapter 2, for example:

*Since Europeans came to the island [Papua-New Guinea] the native peoples have become interested in a higher standard of living ... .*

[class notes, reference unknown]

Indeed, what would be striking is if a student-writer were *not* incorporated into a discourse of devaluation of a land use (economic?) system so described. According to the above reading, Rowan’s essay indicates that people who practise shifting cultivation need in this account not be ‘confined’ to their traditional sub-existence, but might at this point in their history take the opportunity to develop a different kind of economic structure, one more closely aligned to western capitalist economies.

Considered in terms of macrothematic function for the whole text, the first sentence generates interesting readings of the text, though it is less ‘watertight’ as an advance organiser. One indication of this is that economic concerns surface on only one other occasion. The term *uneconomical* appears in the second last paragraph, where the possibility of keeping animals is considered *uneconomical* because of labour costs: *they need to be [unclear] and upkept and fed; and damage costs: they would destroy too many crops*. This follows a paragraph which discusses the *waste of time and labour* which building permanent houses represents to people who practise shifting cultivation, given that they shift land approximately every two years.

This use of the term *uneconomical* appears to be more closely aligned to everyday uses than to economics as a discipline or as a meta-discourse in use within the discipline of geography. That is, *[un]*economical appears fairly clearly to function as an epithet here, referring to the degree to which a practice is worth pursuing within the terms of the local conditions and relations of production and exchange. On the other hand, the first
sentence of the essay is, I would argue, located more formally within the discourse of economics, where economic[al] refers to the relations of production and exchange themselves. The history of the term economy, however, is an interesting point from which to reflect on possible multiple functions of the term in Rowan’s discursive universe. Until very recently, the term economy bore the meaning of economising. The economy as a term referring to an “aggregated economic structure” (Emmison and McHoul 1987:103) does not appear in popular English until the nineteen sixties.8

Re-reading the first sentence of Rowan’s text in the light of this, it is possible to argue that there is no absolute discursive distinction between the technical and the domestic uses of the term in the text. Rather, uneconomical may be a point of slippage between two quite different discourse universes. As far as the discourses of either economics or geography are concerned, a large economical part is clearly not a ‘proper’ configuration. A more officially acceptable, albeit highly selective, version within the social sciences generally might be something like:

Shifting cultivation is an economic system which is widely practised in many different countries of the world.

Economics (of some kind) can be read as providing a macro-framework for the whole essay, however. Following a reading of the technical sense of the term economic[al] through to the end of the text, a particular reading of the last paragraph is possible. The paragraph reads:

As you can see the people who do use shifting cultivation are being changed by technology and machinery. In a way its good but also its bad and all of the aspects have to be looked at before the natives really destroy the forests they live in.

If the first clause of the essay, functioning as ‘macrotheme’, can be placed against this last paragraph as ‘macronew’9, the changes mentioned in this last paragraph can be understood as being economics-driven. This point is, however, not elaborated in the essay itself, even though it is elaborated over and over again in the reading matter Rowan read and referred to in writing the essay. Further, economics as an interpretive frame in geography was constantly privileged in class discussions such as the ‘resources’

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8 The term derives from the Greek oikos, meaning household. Citing Singer (1958), Emmison and McHoul trace the etymology of ‘the economy’ as an aggregate structure to Keynes. They also note the first popular public use of the term in a cartoon in Punch in 1963.

9 This term is the text-semantic equivalent of the ‘new’ feature of clause-level utterances. The macronew comes at the end of a text and is an aggregate statement of what has been established in the text.
discussion explored in Chapter 3. In particular, in this paragraph, the issue of the relation between subsistence and commercial agriculture which occurs in the first paragraph re-emerges. However, whereas in the first paragraph the valuation of cash economy is implicit but quite strong, here the move is to explicitness but prevarication: *In a way its good but also its bad.* This is the first indication of possible ambiguities and conflicts of interests in the topic, and is followed by the only statement concerning land degradation (the last sentence in the essay).

There is, however, another possible reading of the first sentence of the essay, based on the possibility of the term *economical* carrying at least some of its nineteenth-century sense as an epithet referring to economising. That is, as epithet, *economical* is subject to degree; something can be more or less economical. There is a strong likelihood of this use of the term being readily at hand for Rowan, in that it is likely to be in circulation in a contemporary Australian domestic situation, where a considerable part of the training of household members occurs around the regulation of domestic consumption (Walkerdine 1988). Television advertisements are an important site where this sense of the term is likely to be in currency, for example in advertisements for car fuel consumption. A reading of the first *economical* as epithet affords the first sentence of the text the macrothematic function of predicting and framing the issue of land degradation which appears explicitly in the last paragraph. In this sense, shifting cultivation might be judged to be *economical* in the sense of being a worthwhile practice in terms of land conservation. For example, forests are not destroyed or wasted in this practice.

The point here is not which of these two readings is the correct one. There are strong arguments deriving from poststructuralist notions of heteroglossia (Bakhtin 1981, Kristeva 1984), polysemy (Barthes 1974) and multiple subjectivity (Henriques et al. 1984) to defend the production and maintenance of multiple readings of a single text in terms of multiple discourses and multiple writer/subject positions. A reading technology based on these notions looks for sites of multiplicity and for the traces of multiple discursive positionings in the text. In particular, texts which are ‘improper’ in some sense, such as the ‘interim’ texts of neophytes in subject-disciplinary discourses, may productively be read *for,* rather than against, the instances of discursive slippage and the conflation of categories, since it is here that traces of what is at issue subjectively in the (re)writing process may be located.

There are of course more and less persuasive readings of texts, produced from particular vantage points and for particular strategic purposes. In the light of this, I would argue that the second reading of *economical* as epithet is not a persuasive one. This is in part because of the structural substitution of or juxtaposition against *agricultural,* lending *economical* a more obvious function as classifier than epithet. This ‘obviousness’ is also
produced from within the context of months of ‘field’ study in the classroom, where a particular market-oriented version of economics operated as a meta-discourse for a broad range of geographical topics, invoked over and again within discussions and in reading material. This is not to suggest that Rowan necessarily had a conscious understanding of the meta-discursive status of economics in geography. The point is rather that economics was very readily available to him from the classroom work, while economising in its domestic sense was not invoked as an explanatory framework by teacher or textbook, to my knowledge.

If economics is afforded a macro-organising function for the essay, the way is clear to interrogate the particular social vantage point from which the practices of shifting cultivation, and the changes to these practices, are being construed. Economics is discursively linked with change in the last two paragraphs of the essay. However, apart from the opening sentence of this last paragraph, which reads:

As you can see the people who do use shifting cultivation are being changed by technology and machinery.

there is only one other mention of change in the essay. This occasion is the last sentence of the second paragraph: Stone axes were originally used but now they use steel ones. Here, the particular change being referred to appears to be presented as part of the technical description of the procedure of slash and burn farming. It is thus subordinated to, and effectively incorporated into, its prevailing present-tense temporal logic. That is to say, change is little other than a slight variation in a chain of temporal cause-and-effect relations proper to the reporting of a procedure. What is clear is that there is no analysis in the last paragraph or indeed anywhere else in the essay of either the causes or the possible environmental and social effects of such change, so that the evaluation of the last paragraph: In a way its good but also its bad cannot be predicted by this or any other section. In the next subsection, I discuss the contradictory ways in which history is represented in the text, in a discussion of the grammar of agency. Here, I will merely point out that issues of history and change are relegated to the briefest of mentions in the last paragraph, while the rest of the text performs very different functions.

In between the first and last paragraphs of the essay, there is a simple and fairly straightforward description of the techniques and processes of shifting cultivation, with particular emphasis given to the tools of cultivation. This description does not appear to do any work in developing the topic of technologico-economic change and its effects. This is significant in the light of the selections it represents from the available reading matter. For example, Chapman and Codrington provide an extensive account of the introduction of steel axes to the Chimbu people of Papua-New Guinea. The axe is
'embedded' in a detailed discussion of the cultural relation of the people to material objects. In the same ten pages of text, there is a detailed analysis of the cultural, and environmental, as well as the specifically economic, effects of the introduction of commercial agriculture to regions practising shifting cultivation. Chapman and Codrington even articulate a theory of history and change with respect to the Chimbu, in an account of the topic which is unusual among geography textbooks in that it avoids the more extreme kinds of ethnocentrism and reductionism I noted in some of the other material available to the students. Rowan would almost certainly have gained his information about the introduction of steel axes from this source, so his selection of the single item of the axe from the general discussion is telling, in terms of the general foregrounding in the text of concrete items and technologies and the backgrounding of potentially more overtly politicised issues.\(^\text{10}\)

4.2.2: Exoticism

The second motif, that of 'exoticism', functions together with the particular kind of economic focus to orient\(^\text{11}\) the text discursively. Indeed, I will argue here that the link begins to be constructed right from the first sentence:

Shifting cultivation is a large economical part of many countries.

The text gestures at a location for shifting cultivation practices in global terms (many countries). However, it is possible to infer from this 'orientation' that the many countries are elsewhere. They do not appear to include 'our' country. This reading cannot be 'proven' linguistically, within the parameters of the sentence itself, though there are persuasive inter- and intra-textual supports for such a reading. First and most obviously, if a reader knows the geographical 'fact' that shifting cultivation has not been practised by Australian indigenous peoples, they know they must locate the many countries offshore. Even if a reader did not yet know this, the lack of specific mention of Australia might be sufficient to produce this reading, since it seems unlikely that the writer's home nation would be simply subsumed, unnamed, within a generalised many countries.

\(^{10}\) See Chapter 6, section 6.1 for a discussion of some of the relationships among the nominal items in Rowan's text, and particular figure 6.1.

\(^{11}\) This term, as naturalised in geography as it is in everyday language, nevertheless would reward investigation in terms of remaining traces of its discursive history. I have argued elsewhere (Lee and B. Green 1990:248) that there is a striking sense in which geographers produce the world through their discourse as an exotic object. Here, though the term 'orientation' would not bear up to rigorous cartographic scrutiny in terms of the location of shifting cultivation practices, there is a sense in which the spatial and discursive 'orientation' of the topic in Rowan's text functions generically to produce and position its subject as 'other'.
Intra-textually, it is useful to read the first sentence retrospectively in the light of the
text’s prevailing form of representation of the people who practise shifting cultivation. In
the second paragraph, these people make their first appearance as a tribe. This tribe can
refer to all shifting cultivators, all tribes, since they are undifferentiated with respect to
cultural and national identity and since, of course, they are not located specifically
geographically. Here the ‘bad geography’ of the first sentence, which I discussed in
subsection 4.1.2, performs the discursive function of allowing the construction of a
generalised and generic ‘other’ within the text. These ‘others’ are quite explicitly ‘them’
and not ‘us’, a pattern realised through a repeated reference to the third person plural
pronoun. For instance, they occurs five times in the five (original handwritten) lines of
the third paragraph, transcribed here:

Once a tribe has already used a section of land which is no longer usable they
move onto a new section of land. Before they can use the land they must
first clear the area. This is done by the men with a technique called slash and
burn. They first clear away all the under growth such as vines and creepers,
this is done by cutting them down with axes. Stone axes were originally used
but now they use steel ones [my emphasis].

These features allow the text to be read in terms of the construction, gradually becoming
more explicit, of an ‘us/them’, or subject/object opposition. This is an asymmetrical
opposition which has several different effects. First, the generalised identity of a ‘them’
which is repeatedly explicitly invoked, is contrasted to an ‘us’ or even a ‘me’ which is
absent in terms of the text’s referential economy. This effacement of the writer is a
feature producing the text’s ‘transparency’ or ‘facticity’ which identifies it as a type of
‘scientific’ writing. Second, the beginning and the end of the text are readable in terms of
what I will term an unexamined hierarchic valuing of one culture over another. I have
already mentioned that a cash economy appears to be privileged over subsistence
agriculture in the first paragraph. In the last paragraph, where change is introduced for
the first time, they are represented in terms of not really knowing what they are doing.12
Third, the remaining paragraphs are organised in large part as a description of the
techniques and appurtenances of shifting cultivation practices. Framed as they are by the
first and the last paragraphs, the middle paragraphs produce the “cultivators” as exotics.

This apparently untheorised oppositionality in Rowan’s text is hardly surprising, given
the contexts in which it is situated: the available reading material on the topic of this
particular assignment; this particular curriculum as I have read it in Chapter 2; the

12 In section 4.3, I examine in some detail issues of representation and of writer positioning with
respect to the ‘other’, through attending to the grammatical constructions at play in this paragraph.
empiricist and technicist orientations of school-subject geography more generally as I have outlined in Chapter 1. However, the political implications are considerable. The preoccupations in curriculum materials with the technicalities of objects and procedures and with particular market versions of economics leave out of consideration the question of the politics of the representation of cultural difference. Consider the following extract from classroom reading materials on the topic of shifting cultivation:

Just 250 kilometers north of Australia lies the territory of Papua-New Guinea, the second largest island in the world. Although much of the island has been closely linked with Australia for many years, a visit there would reveal what seems to be a completely different world. The people have dark skins; their languages, clothes, houses, food and customs are very different from those of people in Australia. Most of them live in small villages

[Class notes, reference unknown].

Here, the vantage point from which this writer views the people of Papua-New Guinea is similar to Rowan’s. They are completely different from us. I will not dwell at this point on the obvious omissions or exclusions here with respect to the indigenous people of Australia, not to mention the assumption of the white European racial identity of Australia’s other inhabitants. Rather, at this point, I want merely to focus on the fact of this production of otherness in terms of exoticism. In the light of such resource material, it is hardly surprising that Rowan’s text appears to reproduce such stereotypical forms of cultural representation. I will return to this point in a more general discussion of ‘Orientalism’ (Said 1974) in Chapter 6.

In Rowan’s text, according to the reading I have produced in these two subsections, an exoticist perspective on another culture is tied to an economistic meta-discourse on social-geographical processes. This is not an unusual combination, either in certain traditions of geographical research (WGSG 1984) or indeed in the school geography textbooks such as those discussed in Chapter 2. The effect of this combination is a representation of particular situations and events where people are subordinated to the imperatives of economic processes, as for example in the following excerpt from the selection presented in subsection 2.2.3:

The change to a system which depends on the production of surpluses for sale and on working for wages has proved difficult for the native... . He finds it hard to adjust ... .

[Class note reference unknown].
As I have already indicated, the *native* of this account is reduced grammatically to a circumstantial element in a process in which the thematised grammatical agent is *change* (to a system). Compare this with Rowan’s sentence:

> As you can see the people who do use shifting cultivation are being changed by technology and machinery.

Here, too, the people are constructed as agentless victims of change, although there is a difference in the degree of erasure of their participant status. They are, at least, thematic in the second, alpha clause of this sentence, and hence are grammatically obligatory participants in the process of change. Noteworthy in terms of lexis is that they are *people* rather than *tribes* or *natives*, (a point I discuss in the next subsection), though there is a further shift in the last sentence of the essay to *native*. I read these shifts as indicative of the ‘incompleteness’ of the discursive work the text performs of positioning the practitioners of shifting cultivation as exotics powerless in the face of the inevitable. It should be noted also that the text is generically heterogeneous, as I will discuss in section 4.3 (as well as further in Chapter 6).

### 4.3 The grammar of subject positioning: the writing position, the looking position and the ‘object’ position

This section looks more closely at how the text constructs positions for writer, reader and object domain: shifting cultivation and those who practise it. The aim here is to map something of the relationship between knowledge production as representation and self-formation in terms of the effects of participation in particular forms of discursive practice. In terms of drawing on linguistic technologies for investigating these relations, it is necessary to engage both the experiential and the interpersonal metafunctions of language in a complex simultaneity.13 Accordingly, in this account I draw on transitivity, mood structures and modality, together with thematic structuring, for this specific purpose, though I do not present ‘complete’ linguistic analyses (in the technical sense) of any of these linguistic functions. I will confine close analysis mainly to the first two paragraphs and the last paragraph of the essay.

A useful point of departure is a consideration of the distribution of verb voice. This distribution can be read as performing various discursive and generic functions at different points in the text. The first two paragraphs are structured in large part around agent-deleted passive constructions: five variations around *can be grown, are grown*. This repetitive pattern is consistent with a techno-geographical register, where what is at

13 See footnote 9 in Chapter 3.
issue, and is hence thematised, is crops. Throughout the text, when it engages in naming and description of the objects (things) of shifting cultivation, such as crops or tools (paragraph 9), these are thematised in passive-verb clauses which allows for the structural deletion of the users and makers.

In the third paragraph, there is a shift to active-voice constructions, as the subject under discussion shifts to the tribes. Now thematic, tribes use the land, move to new areas, and again use and clear the land. The accompanying generic shift is from description/definition to what I will term a species of ‘narrative’.14 This shift may also be characterised, in terms of Martin and Rothery’s (1980, 1981) genre typology, as a generic shift to procedure, within the ‘macrogenre’ of a particular kind of geographical essay. Within this predominantly active-voice sequence, there are three passives. Two of them maintain a clear procedural orientation: This is done by the men ... and this is done by cutting them down with axes. The third functions to add to the collection and naming of objects: Stone axes were originally used, but is then linked to the procedural sequence, which continues, in an active-voice construction re-thematising the users: ... but now they use steel ones.

Passive and active voice constructions can thus be seen to function generically within factual texts, to mark a sequencing of stages in the addressing of different aspects of a topic. However, as I have already indicated in Chapter 2, the distribution of verb voice and of grammatical metaphor will reward scrutiny in terms of the discursive work being done in the representation of people and geographical processes within a prevailing ‘man/land’ dualism. I have suggested in this earlier discussion that, in textbook representations of geographical topics, while natural features such as rivers, deltas, the sea and water levels may (safely?) be assigned causal agency through active-voice processes, human agency is regularly disguised and deflected through a range of grammatical strategies, including agent-deleted passive constructions and grammatical metaphor. As noted in Chapter 2, this functions in two main ways. Social and historical processes can be represented in all their inevitability like forces of nature, positioning people as powerless victims of these processes. At the same time, causal responsibility for changes can be deflected from powerful groups.

I have also raised questions concerning the positioning of non-European and indigenous people within a ‘man/land’ dualism, particularly in terms of ways in which this might be traced through transitivity and thematic structures at clause level. The tendency in textbook material is to thematise natural features in active-voice constructions and to

14 I use this term here in the way in a manner derived from anthropological ethnographers such as Brodkey [1987] or Tyler [1986], and will justify this use later in this subsection.
delete references to humans either by passive-voice or nominalised constructions. In what follows, I consider ways of reading the distribution of active- and passive-voice constructions in the text, in terms of their possible significance for these questions. Here I investigate briefly the relations among three positions set up by this text: the writing position, the looking position and what I will call the ‘object’ position: the position of those things and people who are represented in the text. I focus largely, though not exclusively, on the last paragraph of the text:

As you can see the people who do use shifting cultivation are being changed by technology and machinery. In a way its good but also its bad and all of the aspects have to be looked at before the natives really destroy the forests they live in.

First, as I have indicated earlier, the writing position in the text as a whole is effaced. The narrator is absent and the facts present themselves. This is the way the text performs what I have earlier termed the ‘immanence’ of geographical representations of the world. What we have here is a rhetorical claim of pure presence. Even judgement is produced as fact – declaratively, even if prevaricatively: its good ... its bad ... all of the aspects have to be looked at. Clearly, since there is no author of these judgements, there is no room for negotiation by the reader. The bulk of the text is concrete and specific. Only at the beginning and end is there another position, one oriented to more meta-level, overtly positioned, statements. The last paragraph is the only place where the narrator is present to any extent, as indicated by the presence of explicitly interpersonal language in the form of modalised and modulated statements: As you can see and all the aspects have to be looked at. At the beginning and end of the essay, economics is invoked with more-or-less explicit, though not reflexive, authorial endorsement, as the meta-discourse framing the specificity of the procedural and technical detail.15

Second, the writing position exists in a complicated relation with the looking position. In general, looking is associated with knowing. Throughout most of the text, the extensive focus on tools, techniques and procedures produced by an absent writer allows the position of the writer to resemble that of a camera. The voice in the text becomes, then, that of a commentator on the unfolding of a drama of nature, in which the people who practise shifting cultivation become the objects of the camera’s, and hence the

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15 In discussion of students’ verbal explanations of geographical and social processes, R. Gilbert (1989a:159) points out their readiness to mobilise commonsense discourses of technological and economic efficiency, even in the absence of these discourses in the original text. This raises important points concerning the nexus of discourses of community and school in the construction of particular kinds of ‘commonsense’ knowledge.
reader/viewer’s, gaze. From the writing/looking position, the narrator is able to tell the reader(s) what they do.

I have termed the writing/looking position the ‘David Attenborough’ position, though with some licence, since Attenborough regularly embodies his scientific commentary in the distinctive mode of television text, in a deviation from ‘real’ scientific writing. The appropriateness of the Attenborough analogy lies in its intertextual connection with the kinds of texts Rowan is likely to have drawn on in the construction of genre and its positioning of participants: television and film texts as well as the formal, ‘official’ texts of the curriculum. It should also be noted that the ‘David Attenborough’ genre in a broad sense applies to ‘natives’ and animals only. There is a clear and unbridgeable opposition operating between representer and represented, with important resonances for the ‘man/land’ question in geography.

There are complex relations among lookers. The ‘David Attenborough’ position is one of ‘showing’ what they do to a reader/viewer-ship who may be presumed not to know. However, there are other ways in which the looking/knowing dynamic operates. The last paragraph invokes other lookers: those who are to look at the question of change in the rainforest. The identity of these lookers is concealed by means of the agentless passive construction: all of the aspects have to be looked at. Those who are to do this looking (as distinct from those who are to be ‘shown’) are those who may be presumed to know: they are almost certainly white western scientific ‘experts’, though their relation to the writer is unclear. The writer may or may not consider himself a member of such a community and the rest of the essay does not help here, since no other passage deals explicitly with the issue of the looking position. However, the effaced writer position invites a reading as though the text is written by one who belongs with those who look/know. The form of instruction in the essay question, and the general expectations of writing in school subjects such as geography assume that student writers write as if they are members of scientific-disciplinary communities (Bartholomae 1988).

The looking/knowing position functions metaphorically within the text, both in terms of the rhetorical function of the as if writer/reader relations set up in the text and also in terms of the actual student-writer/teacher-reader relations operating in the institutional context of the text’s production and reception. The last paragraph begins on a summary note (somewhat inappropriately, since the text has not addressed the issues that follow): As you can see .... Here, looking is implicitly identified with knowing: [As you now know]. The reader, inscribed and directly addressed as you, is clearly invited to identify here as knowing, not only the facts about shifting cultivation, but also the cultivators themselves, together indeed with the issues of change surrounding the topic, and presumably even the answer to the dilemma, all aspects of which need to be looked at.
However, by implication, the writer is *showing* the reader, and so presumably can also be assumed to know. The clause might be read, then, as *Now you know [what I know about them]*.

Of course, since the actual reader of the text (under normal circumstances) is the Year 11 geography teacher, this writer/reader relation is also coded with a different relation of knowing, one which does not directly concern those people being represented in the text, but rather concerns the relative positions of teacher and student of institutional and epistemic power and authority with respect to the re-production of geographical truth. Hence, *As you can see* can also be read as *As I have adequately demonstrated*; that is: *Now you know that I know [about them]*. The teacher-reader is assumed to be closer to (if not at) full membership of the community of scientific geographers. The subtext may thus read: *I know about them like you do, or something like it*. A further possibility might be that what is being implied, even more distantly, is *As I have demonstrated that I can mimic being you, please give me a good grade*. This brings the student-writer’s task of ‘replaying’ the teacher’s knowledge to conclusion. Rowan’s articulated view of writing as a part (albeit an undervalued one) of an exchange which proved that students had *done their work and knew their stuff* may be seen to be graphically played out at this point. It should be noted at this point that this notion of ‘exchange’ is very different from the one operating in the relationship of gender-based collusion with Alan A in Rowan’s spoken work in the classroom.

The third position I have alluded to, the ‘object’ position, is the position of what is being represented – both *them*, the people who practise shifting cultivation, and their practices, as well as the things of their culture and their environment – the crops, the tools and the trees. What is significant is that, at different points in the text, *they* are represented in different and perhaps even contradictory ways. This is marked in part through transitivity and thematic structures, and is most graphically illustrated in the last paragraph.

In the first sentence of the paragraph, people who practise shifting cultivation are represented as being affected by change. *They are being changed by technology and machinery* [my emphasis]. The passive here puts *them* in the position of being acted upon. Paradoxically, *they* are also presented for the first time in Rowan’s text as *people*, a result, perhaps, of the emphasis in the previous three brief paragraphs on lifestyle, rather than technological detail. However, this passivisation has particular effects. In terms of the question of the relation of the indigenous people of the tropical rainforest to the ‘man/land’ dualism, here they are explicitly aligned with ‘man’. *Technology and machinery* then briefly take on an ominous role with respect to the daily life of *people*, fragmentarily evoked.
On the other hand, in the second sentence of the paragraph, they revert to being natives. Although this term can have a slightly technical sense (as in native to ...), it nevertheless functions as a marked alternative to the people of the previous sentence. 'Natives', on the whole, are not us. Rather, the term in common use refers to people who are both indigenous and coloured. Hence, this reversion may be read as a return to the exoticism of earlier representations. More significantly, what it also allows is a shift in orientation to the people who practise shifting cultivation. Once again they are in front of the naturalist's camera, and available to be watched acting. The people themselves are clearly excluded from the looking position. They are objects and cannot be subjects of the knowing gaze. This process of objectification works at a number of levels. The second sentence contains a further passive construction: all of the aspects have to be looked at. As adjacent passives, these two sentences operate as grammatically parallel constructions. Because of this, the contrasts between them are rendered all the more striking. It is useful to excerpt and abbreviate the salient features of both:

... people are being changed

... aspects have to be looked at

The first point to be made here is that the subjects of the clauses are different. In the first, people are thematised in subject position, but as acted-upon, not as actors. In the second, the actors are absent, while what takes the place of people in theme position is an abstraction: aspects. As objects, people are subsumed, together, presumably with technology, machinery and forest degradation, into a set of aspects for scientific investigation. The second point is that the introduction of modulation: aspects have to be looked at introduces a sense of urgency to the second sentence. More than this, however, it introduces the notion of compulsion, where the natives (together with all of the other aspects) are given no choice in the matter; the decision is being made elsewhere. In this clause there is a powerful and paternalistic coalition of epistemic and state authority assembled here to train its gaze upon the natives. There is reason to argue that, at this point, the indigenous people of tropical rainforests are represented as less than fully human. Following this, what is so striking about the final clause of the essay is its return to an active-voice construction, where the natives is thematic: ... before the natives really destroy the forests they live in. In the last analysis, responsibility for the destruction of the forests is to be laid upon the natives.

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16 This point is nicely illustrated in McGregor's (1991) article on photographs of Aborigines and the police.
At this point, it is necessary to consider the significance of this shift in verb voice for the theories of cause and effect, of history and change, which are operating in the text. As I noted in Chapter 2, Freebody (1991/unpublished paper) critiques the "synoptic correlational view" of history presented in school social studies textbooks. He argues that a lack of cause-and-effect analysis in explanations of social and historical processes conceals the workings of "perpetrators" of social violence on subjugated groups. In a similar manner to the textbooks analysed by Freebody, there appears to be, operating implicitly at certain points in Rowan's text, a theory of history as inevitability. Things just happen, at least to some people. In the first sentence of the last paragraph, the agents, technology and machinery, acquire the force of natural processes. This is, of course, not surprising as an outcome of the process of learning how to write geography, drawing on textbook materials such as those I have considered in Chapter 2. However, the readings of the textbooks produced in that chapter suggested a significant differentiation between two distinct human groups in terms of the textual ascription of agency, which could in turn be marked through grammatical structure. It could be suggested here that there are two contradictory implicit theories of history available to Rowan, one applied to 'us' and one applied to 'them'. If history is inevitable for 'them', according to this reading of Rowan's text (as well as of the class notes discussed in Chapter 2), history for 'us' is 'developmental', as exemplified in the 'resources' discussion in Chapter 3, in which Rowan participated. Technology and machinery, together with a cash economy, are good, as far as this account is concerned, though there is some prevarication in the last sentence of the text. This developmentalism is most clearly connected to 'us' by Alan A in turn 19:

Alan A: To maintain our living standard? Is that a way of putting it?

However, the last sentence of Rowan's essay produces a further apparent paradox:

In a way its good but also its bad and all of the aspects have to looked at before the natives really destroy the forests they live in.

Change is both good and bad, then, though there may be a suggestion (based on my reading of the implicit valuing of cash economy over subsistence agriculture in the first paragraph) that the position is something like: history is developing [natural process] towards goodness [that is, if the natives don't get it wrong]. Here it is they and not we

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17 There are important issues here regarding grammatical distinctions between spoken and written language, in terms of investigating the difference between 'developmentalist' and 'determinist' views of history. In general, passive and nominalised structures are much more common in writing, especially scientific writing, whereas active, congruently realised verb forms are common in spoken language. It may be possible therefore that agency in history is more readily ascribed in spoken discussions than in written texts. This point would reward closer investigation.
who are attributed with causal agency, that is, attributed with the power to act in history. This apparent paradox can be partly explained by reference to the imperative to position natives grammatically on the 'land' side of the 'man/land' dualism, where animals and inanimate objects are typically ascribed the (uncontrollable?) causal agency of forces of nature. This, then, may be understood as an extension or qualification of the history-as-inevitable position.

As two dominant discourses in geography, the discourses of history-as-developmental and history-as-inevitable appear to operate, not in competition, but in coalition with each other. There is no necessary logical or developmental link between the two. Both are available to be operationalised at different points, but they are not made to confront each other at a logical or meta-discursive level within geographical texts. They are never made to be mutually exclusive, since they do not refer to the same phenomenon. The contingency of discourses is part of their power. In this case the flexibility of dominant discourses of history allows the shifting and deflecting of different arguments in specific circumstances and with particular effects.

To pursue the question of agency and responsibility in Rowan’s text a little further, I would make several points. First, it is tempting to read this clause in the same manner in which I read the case study of the Burdekin delta problem in Chapter 2: it was the sea which did it. That is, the sentence might be read in terms of its effects in deflecting issues of causal responsibility for social and environmental problems away from powerful people and organisations and onto the forces of nature: those non-human and inanimate objects and processes which cannot help themselves. Natives, in this transformation from their human/victim position of the first sentence of the paragraph, are turned into ‘natural’, unknowing actors in the processes of environmental destruction.

The second point, lest this be seen as assuming a too-close causal connection with the constructions of cause-and-effect relations in geography textbooks, is an intra-textual connection. The word destroy appears twice in the text, once in the second-last and once in the last paragraph:

... a herd of cows would ... destroy too many crops.

... the natives really destroy the forests they live in.

Without labouring this point, the second appearance of destroy echoes the first, one at the end of each paragraph. I have termed the writing/looking position in this text the ‘David Attenborough’ position, and have argued that the unbridgeable opposition between representer and represented in this genre positions white western scientific experts on one side and aligns natives and animals on the other. The parallel between natives and
animals that I would argue is being set up in these two sentences may be understood in terms of discursive possibilities. Both animals and natives, like natural forces, like the sea, have destructive capacity. Significantly, the discursive parallel is echoed by and may be traced in part through the grammatical structure. In both sentences, cows and natives are both theme and actor in the destruction process. One reading of this construction sees irresponsible beasts lumbering and crashing around inside a fragile ecosystem, with the main difference between the two categories being that of intensification: while there is some danger from cows, it is the natives who might really destroy the whole system. Of course, the point is not that Rowan, the writer of this text, has intentionally set up this connection, nor even that he would be able to read it. Rather, what is operating here is a notion of discursive orientation which can be traced through what might otherwise be overlooked as accidental or incidental similarities.

One final point concerning the ways in which the text's grammatical choices position representer and represented concerns verb tense. Rowan's essay is overwhelmingly produced in the present tense. There are no explicit, and few implied, future constructions in the text, the two exceptions being the last two sentences of the text, extensively discussed here. There is only one past tense construction: Stone axes were originally used. This, as I have indicated, is incorporated into the present-tense explanation of the process of slash and burn farming. The narrative account of procedural writing characteristically uses the third person historical present, with the accompanying absence of a narrator, but with the effect of an eyewitness account. Brodkey (1987:72) has described the political effect of what she calls the "ethnographic present" in ways which bear a strong pertinence to geographical writing of this kind:

The use of what is commonly called the ethnographic present, the historical present ... also confounds story and experience by the very fact that the reader cannot locate the narrator. Are we to understand "Friday afternoon"18 as an unchanging sequence of events that are virtually an uninterruptible reality? If so, from this perceptual narrative stance is told a story so profoundly determinist that the historically present set of events appear to me to be unchangeable.

There is, moreover, an unmistakable and awkward similarity between the customary use of the ethnographic present (in which ethnographers represent data as at once immediate and irremediable) and the use of the historical

18 This reference is to an excerpt from Shirley Brice Heath's Ways with Words (1983:70-71), which Brodkey is critiquing both for its effacement of the narrative position and for its unreflexive use of the "ethnographic present".
present in colonial travel narratives (in which explorers reported their experiences of exotic peoples).

Rowan’s text is readily read in terms of the discursive features described here by Brodkey. In this, it conforms in important ways to what I will term dominant modes of representation in (school) geography. Importantly, it does this through a process of *not* including some very explicit information on the topic of cultural change which was available to Rowan in the class reading materials (and which he indicated to me that he had read and used for his essay). Consider, just as one brief concluding example, the following:

> Many people assume (wrongly) that before contact with the outside world, all tribal groups such as the Chimbu had an unchanging way of life. There has always been *change* and *innovation* in Chimbu swiddening, although only rarely at the pace of change this century... .

(Chapman and Codrington 1985: 268)

With respect to the specific issues of cultural, economic and environmental change which underpin the topic of shifting cultivation as a geographical topic, there is a great deal to consider here. In particular, what Brodkey raises is the political implications of a powerful nexus in the analytic practices of geography of the discourses of the physical sciences, of social sciences such as anthropology, and of (principally British) imperialism and colonialism (See also WGSN 1984, Thomas and Skeat 1990).

**Conclusion**

This chapter has sought to demonstrate the productivity of close textual analysis using functional grammatical categories for an investigation of the relations between textual practice and subject production. Rowan’s text has been characterised in different terms through this process. First, as a particular kind of student text, it has been read in terms of its status as an instance of geographical writing. The notion of ‘enculturation’ was introduced to explore, through traces in the text, the process of Rowan’s becoming a literate subject of geography. To see literacy in terms of a process of becoming literate is to allow for a notion of interim literacies: here, literate status relative to degree of ‘insider’ membership of a community of scientific geographers.

Second, the text has been read in terms of the politics of representation of the topic in general, and the inhabitants of the rainforest in particular. Though this point has not been explicitly theorised so far in the thesis, what sections 4.2 and 4.3 allow is an investigation of the the notion of ‘enculturation’ in more explicitly politicised terms. The
questions that might be asked of the notion of ‘enculturation’ are: which culture and whose culture counts?; which discursive orientation to a topic has currency in the regime of assessment which passes judgement on what counts as a ‘proper’ text? In my reading of Rowan’s text in terms of its facticity, its use of economics as a meta-discursive explanatory framework, its exoticism, its use of the ethnographic present, its clear differentiation between representer and represented, I situate the text as an instance of a very particular kind of geographical rationality. In Chapter 6, I will argue, from the perspective of feminist critiques of scientific rationality, that Rowan’s text is gendered in significant ways. After the reading of Karen’s text in the next chapter, I return to this issue, to investigate the gender significance of the differences between the two texts.
CHAPTER 5

‘THE CHARACTERISTICS OF SHIFTING CULTIVATION’:
KAREN

In the production of any text there is always the interaction of socially
differently located participants with their particular subject positions and
coding orientations (whether co-present or not) in structures of power-
difference. Hence there is always contestation and struggle – more or less.

(Kress 1989:457)
Introduction

This chapter is a reading of Karen’s essay, ‘The characteristics of shifting cultivation’, which is reproduced below. The chapter consists of two main sections. Section 5.1, in part parallel with section 4.1 in the previous chapter, considers the status of Karen’s text as an instance of geographical writing, exploring issues of technicality, ‘facticity’, the conceptual contextualisation of the text’s content, and what I term narratorial ‘voice’ in the text. Section 5.2, like sections 4.2 and 4.3 in the previous chapter, reads the text in terms of its discursive orientations, with respect to available discourses within geography. Close focus is on questions of ‘land’ and ‘difference’, as these emerge as issues in the text. Unlike Chapter 4, there is no third section considering grammatical issues separately from the discussion of the discursive possibilities read from the text. Rather, grammatical details are integrated into the discussion of the production of subject positions in the text. Like the previous chapter, the aim is to investigate the relation between discourse and subjectivity in terms of the textual realisation of particular discursive effects.

The Characteristics of Shifting Cultivation

Land may be used for agriculture in many different ways. However to prevent our land from being damaged or perhaps over-used we must learn and practice methods in agriculture that not only benefit us, but also our environment. It must be balanced for life to occur up to its full potential. Despite the fact that some countries are less developed, even primitive compared to others, sensible and productive farming can still take place. Shifting Cultivation is an agricultural land use system used in areas with low-level technology along the tropical locations of the world. However for this kind of system to work successfully there are several features or characteristics that we must consider.

When men first learned to grow crops their main purpose was to feed themselves and their families. This kind of activity is called subsistence agriculture. Subsistence agriculture is able to survive due to the fact that in areas where the system is practised, the man/land ratio is low and competition is low. There is an abundance of available land, yet only a small population to use it, which exists in small typical clusters of people called tribal groups. This may at first appear as a possible waste of the potential yet unused land, but has proven to be quite advantageous to this particular method of cultivation.
Today shifting cultivation is the main kind of agriculture but why is it so efficient. To examine shifting cultivation we can refer to countries that are using the system today. Papua New Guinea happens to be one of these places. Papua New Guinea is situated within 10° of the equator. Firstly climatic conditions are very tropical with high temperatures and rainfall which provides the necessary requirements of many different types of crops. As Papua New Guinea itself is not a first class developed country and population is low there is a limit on material available. The residents of Papua New Guinea do not know life as being any different to the simple way in which it is. They merely work to survive and make best use of the resources available, which includes making the most of the daily weather change in it's unique climatic pattern.

After the site for a clearing and garden has been selected referring to suitability and past vegetative life history, the actual process of shifting cultivation starts. A technique called 'Slash and Burn' is used, where the dense undergrowth of the forest is cut or lopped off, left to dry and finally burnt. This stage is quite important in the process of shifting cultivation, as not only does burning clear the land of litter, but also provides valuable minerals and plant foods from the ashes. Traditionally all members of the tribe contribute in this 2-3 month period event with the women mainly cutting and weeding the undergrowth, while the men do the more heavy work such as tree lopping.

When the site is finally prepared, divided and fenced, planting takes place. Even though there is a wide range of about 30-40 species of plants commonly grown, there are usually only one or two species that form the staple main products of diet. Such crops are tuberous plants such as sweet potatoes, yams, maize, taro and cassava. The reasons that those types of plants are grown are due to several factors. Briefly these are location, climate, soil, natural existing vegetation and most importantly settlement. This refers to the type of people who inhabit and work the land. Because they have no competition and merely work for themselves, they only grow what they need and want. Tuberous plants are common because they are healthy and easy to grow.

Due to the hot, moist climate very few crops will keep for long and there is no particular harvest season. Crops are harvested as they are matured and well looked after so that production may continue. The process of harvesting is
simple. The earth is loosened by hand and hand tools and the tubers are carefully uncovered and removed from the soil.

These tribal people take great pride and care in their crops as it is almost their most important thing. The simple yet sensible methods of harvesting are easy because the people work together as one group pitching in together. Examples of some of the hand tools used are dibble sticks, stone axes, knives etc.

Even though the tribal groups who practise this method of agriculture have the basic necessary requirements and skill to grow crops, yields are relatively low. Often supplementary hunting and gathering is needed to meet daily needs. In some small isolated areas fishing provides a main source of food, but land animals are unusually rarely eaten. An example of such an animal are pigs. Pigs are rarely eaten and killed except on special occasions like marriage, death, when visitors from other tribes arrive etc. They have a certain prestige in this way, yet are hardly cared for in an expected manner. As these animals are rarely eaten consequently the people's diets often lack protein.

The actual term 'Shifting Cultivation' refers to the act of shifting land or garden area. After the land has provided one crop it is left to rejuvinate itself and the tribe migrates or moves on to a new area to repeat the process again. In this way the environment is being re-cycled, untampered with too much and balanced, allowing natural healthy vegetation solid matter etc to remain in a stable, nutritious and usable condition.

The periodic migration of farms is a never ending process. However, even though sites are constantly changing, the tribes themselves do not move with them. They have a permanent residence and move around the land managing to stay within the vicinity. Housing is in the form of simple villages and they seem to live in general as a big family.

Despite the fact that shifting cultivation is so effective and beneficial it is slowly disappearing. As time progresses and modern technology steps in problems are beginning to arise. European migration is the source of these problems. An increasing population increases competition and pressure on food production which may eventually strip the soil of it's nutrients, as the limited time affects regeneration. European migration also encourages cash cropping or commercial agriculture, instead of subsistence. This also
increases the demands of new land and introduces new techniques that may at first be very productive, but on a long term scale destroy natural life forms and affect our way of life altogether.

To prevent the idea of shifting agriculture from being completely replaced by cash-cropping a lot of time and effort may be required. However we do have some control and it is the kind of control that involves participants world wide. Possible prospects are

* **mixed farming** – both plant and animals similar to agroforestry may help balance soil fertility etc.

* **population control** – prevention of excessive European migration

* **Limits and laws** – on land usage

We should consider these prospects now as tomorrow may well prove to be too late. Traditional ways of life are not only productive and cheap but also valuable in human understanding. We do not want life as we know it to disappear, so why not start now.

5.1: *The Characteristics of Shifting Cultivation*: a geographical text

Geography purports to be a ‘factual’ and ‘rational’ discourse. This first reading of Karen’s text attempts to account for the text as an instance of geographical ‘facticity’ and ‘rationality’. When such a reading is performed, certain features come into prominence, beginning with the fact that Karen’s text is almost twice as long as Rowan’s. While Rowan’s text was described in the last chapter as being highly ‘factivious’, what it is pertinent to investigate with respect to Karen’s text is the degree to which this extra length can be ascribed to a more detailed or elaborated treatment of the topic within the terms of official school-geographical discourses, and the extent to which it is something else: more, or other.

5.1.1: Facticity

According to the reading formation articulated in the examiners’ marking guide (SEA 1989c:3), quoted at the beginning of the previous chapter, geography texts appear to be receptacles ‘containing’ ‘facts’ (which are understood as discrete entities) pertaining to the physical and cultural landscape. What is not geographical ‘fact’ is not accounted for,
as far as the marker’s guide is concerned. Other textual material is, officially at least, de-focused and neutralised in terms of the text’s ‘container’ function.1 ‘Facts’ are, in this reading, linguistic phenomena. That is, the official reader of the text looks for the ‘right words’, the correct linguistic propositions delivered categorically in declarative mood. It is the linguistic phenomenon, so understood, that produces the effect of the ‘fact’ that maps directly and unproblematically onto the world.

In this regard, Karen’s text ‘contains’ quite a healthy number of the basic or required facts for a discussion of shifting cultivation as an agricultural land use system. Without entering into the counting process in any detail, it seems reasonably safe simply to note that there are more such ‘facts’, understood atomistically, in Karen’s text than in Rowan’s. This is, not surprisingly, perhaps, one of the features of the greater length of Karen’s text, and the correspondingly greater opportunity within it for elaboration and detail.

The other point to signal here, however, is that Karen’s text does not render itself ‘transparent’ in the way that I have described Rowan’s as doing, in terms of presenting ‘facts’ as though they can speak for themselves, denying or effacing the position of the writer in the text. In this sense, the text does not present itself in terms of ‘facticity’. Rather, through various linguistic mechanisms, perhaps most significantly modality and modulation, the text situates itself quite explicitly with respect to a particular set of cause-and-effect relations constituting the topic of shifting cultivation. This explicit positioning of a textual narrator is a major concern of the second half of this chapter.

5.1.2: Conceptual contextualisation

Another feature of Karen’s text, distinguishing it from Rowan’s, is that it draws on other topic areas within the Year 11 geography curriculum to contextualise the specific topic of shifting cultivation within a generalised notion of geography as a system of relations. This also mobilises a notion of geography as an ensemble of discourses. Concepts of location, landscape and climate do preliminary contextual work for the explanation of the practices of shifting cultivation which follows. In this way, this text performs a synthesising function within the field of bio-geography, drawing together parts in the production of a new whole. The first definition in the first paragraph locates the system geographically:

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1 This is to draw a distinction between ‘official’ school-geographical reading formations within the examination context and possible actual readings in classrooms, where other elements in the text may indeed contribute impressionistically to an account of the text’s identity.
Shifting Cultivation is an agricultural land use system used in areas with low-level technology along the tropical locations of the world.

Following this, in the third paragraph, locational characteristics are elaborated, while issues of landscape and climate are developed:

To examine shifting cultivation we can refer to countries that are using the system today. Papua New Guinea happens to be one of these places. Papua New Guinea is situated within $10^9$ of the equator. Firstly climatic conditions are very tropical with high temperatures and rainfall which provides the necessary requirements of many different types of crops.

As I have pointed out in the previous chapter, location is a primary ‘theme’ in geography and typically occupies the position of the first stage in the treatment of particular topics in texts produced for professional geographical journals (Cox 1982). In this sense, location functions generically, to identify and situate the text as an instance of geography, rather than, for example, anthropology or economics. While Karen’s is a beginning text in the subject-discipline of geography, it performs the appropriate generic move with some degree of specificity. Further, geographical location functions to structure the essay in the sense that it returns as an issue in the discussion of [excessive] European migration of the concluding paragraphs.

From paragraph 3, the text shifts to a narrative of the procedures of shifting cultivation which is in some respects similar to Rowan’s. It then returns to what I will call a more ‘contextual-conceptual’ mode in the fifth paragraph in a brief listing of factors influencing choice of crops. The shift is quite striking. The paragraph begins in narrative mode with the stages prior to planting in the cultivating procedure:

When the site is finally prepared, divided and fenced, planting takes place..

It then shifts to explanation:

... The reasons that those types of plants are grown are due to several factors. Briefly these are location, climate, soil, natural existing vegetation and most importantly settlement ...

What is of note in the second of these two extracts, in comparison with the first, is the degree of ‘abstraction’ of the language. I use ‘abstraction’ here to refer to the degree of generalisability of the explanatory concepts, and the degree of semiotic distance from the particular narrative being developed in the text. The more ‘abstract’ the language, the more the text can be understood as participating in a species of subject-discipline-specific
meta-commentary upon the object-domain. Factors such as location, climate, soil, vegetation and settlement are named. These read like the lists of “key concepts” which form the “substantive content” of geography as a discipline, according to accounts such as Cox (1982) or Hill (1989). In this text, they are evoked as a simple list. The writer-reader relationship being constructed here is one of assumed shared knowledge. The narrator need do little more than simply list because the reader knows the way geography discourse constructs and represents spatial relations. The narrator simply calls on this knowledge, briefly.

It is at points like this, however, that Karen’s text, like Rowan’s, might be considered as an ‘interim’ text in terms of geographical literacy. On the one hand, at the level of grammar, Karen’s list is an appropriate and homogeneous collection of nominalisations, unlike Rowan’s list of reasons for growing tuberous plants, discussed last chapter. There is no fissure in the ‘texture’ at this point, no evidence that the list has been ‘lifted’ from textbooks and simply inserted, without appropriate structural transformation, into the base text. On the other hand, at another level, Karen appears to have ‘improperly’ realised the actual pedagogic regime of writer-reader relations, by assuming that what the reader ‘knows’ can be invoked without an explicit rehearsal of the issues under discussion. What the teacher-assessor requires is what Lather (1988) terms a “textual staging of knowledge”: here, a staging of Karen’s knowledge of the salient features of location, climate, soil, vegetation and settlement which favour particular tuberous plants.

5.1.3: Technicality

A point related to all of the preceding discussion so far is the degree to which the text might be described as ‘technical’. The production of rational discourse, in its dominant-scientific manifestations at least, is contingent on (though not defined by) the production of an appropriate technical lexis. As I have noted earlier, a significant visible feature of school-geographical technicality is the degree of (re)naming, or definitional, work performed in written texts: what I have called the ‘this-is-that’ structuring of school-geographical language as I encountered it in this classroom. Karen’s text conforms quite closely to textbook writing in this regard, producing definitions such as the following:

Shifting Cultivation is an agricultural land use system used in areas with low-level technology along the tropical locations of the world.

When men [sic] first learned to grow crops their main purpose was to feed themselves and their families. This kind of activity is called subsistence agriculture.

... small typical clusters of people called tribal groups.
A technique called 'Slash and Burn' is used, where the dense undergrowth of the forest is cut or lopped off, left to dry and finally burnt.

The actual term 'Shifting Cultivation' refers to the act of shifting land or garden area.

More generally, Karen’s text can be described as being quite highly nominalised. In its middle sections, the text produces a fairly detailed description of shifting cultivation: of the crop types, the tools of cultivation and the processes of this land use system. The text exhibits extensive evidence of four distinct, if discursively related, kinds of nominal group constituents within the systems of thematic relations characteristic of school geography. The first kind consists of those terms and expressions already noted, which are “key concepts” within the discipline more generally: terms such as location and climate.

The second kind is a group which are specific to the technical register of the topic of agriculture/ecosystem modification. These are often, though not always, nominalised processes, and include terms such as the following:

- shifting cultivation
- subsistence agriculture
- climatic conditions
- past vegetative life history
- settlement
- periodic migration
- regeneration
- agriforestry
- cash-cropping
- commercial agriculture

A third group of items, also characteristic of techno-geographical discourses, is that of what I will call partial nominalisations of processes, in particular, the participial, or ‘-ing’ form of the verb, which performs a nominalising function to some degree. Scientific language functions in large part through the nominalisation of processes.
Nominalisations function to make processes available as ‘things’ for further analysis (Halliday 1989). In Karen’s text, the processes being outlined are consistently represented in this way, including participial forms, for example:

farming ... take[s] place

the actual process of shifting cultivation starts

the men do the more heavy work such as tree lopping

planting takes place

The process of harvesting is simple

In contrast, Rowan’s text is characterised by an almost exclusive (with only one exception) emphasis on congruently realised material processes to account for the procedures of shifting cultivation, such as: use, clear, cut, lop, burn, plant. The point is that Karen’s text produces a much wider range of functions of ‘verbal’ forms.

The fourth group contains quite a large number of a) nominalised processes and b) other nominal group constituents which might best be categorised as generalised abstractions; that is, not “technical” in the sense of “field specific” but necessary nevertheless to the text in their generalised functions in enabling the production of rational discourse. Hence, in this essay, shifting cultivation is represented in terms of the following:

<table>
<thead>
<tr>
<th>a) nominalised processes</th>
<th>b) general abstractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>process (appears 4 times)</td>
<td>system</td>
</tr>
<tr>
<td>prevention</td>
<td>technique</td>
</tr>
<tr>
<td>limits</td>
<td>technology</td>
</tr>
<tr>
<td>usage</td>
<td>resource</td>
</tr>
<tr>
<td>requirements (appears twice)</td>
<td>ratio</td>
</tr>
<tr>
<td>suitability</td>
<td>pattern</td>
</tr>
<tr>
<td>competition</td>
<td>stage</td>
</tr>
<tr>
<td>pressure</td>
<td>factors</td>
</tr>
<tr>
<td>production</td>
<td>method</td>
</tr>
</tbody>
</table>
Perhaps the most obvious thing to be said about Karen’s text, in comparison to Rowan’s at this point, is that Rowan’s text is much more ‘concrete’ than ‘abstract’ in the sense of traditional grammatical terminology. Where Karen’s text deals to a significant extent with systems and structures, Rowan’s works almost exclusively with specific objects and events. This is not to say that Karen’s text does not make reference to specific objects. There are (in a sense closely related also to the degree of ‘facticity’ of the text discussed above) fair numbers of vines, pigs and dibble sticks dotting this text. However, these items do not do the primary representational work in the text. Rather, they are illustrative of other systemic abstractions with respect to the topic of shifting cultivation, for example in the following extract:

*A technique* called 'Slash and Burn' is used, where the dense undergrowth of the forest is cut or lopped off, left to dry and finally burnt. *This stage is quite important in the process* of shifting cultivation, as not only does burning clear the land of litter, but also provides valuable minerals and plant foods from the ashes [my emphasis].

This extract functions as an abstraction of the notion of ‘process’, within which the particular procedures of cultivation are staged. Individual processes in each stage are aggregated together, so that the procedure is organised taxonomically. This level of abstraction further renders the stages available for technical explanation. This form of logical connection contrasts with Rowan’s realisation of sequences of single actions through conjunctions, such as for example in:

Once the trees are all burnt the ashes are spread over the area.

Karen’s mode of text organisation is sophisticated and effective. A point to note, however, is that the reading regime of the examination marker’s guide, as briefly reported above, does not have a way of acknowledging this kind of elaborative, aggregative discursive work, focusing, as it does, on the production of ‘facts’ as discrete linguistic items as evidence of geographical ‘knowledge’.

Karen’s text is abstract in other ways as well. Consider, in contrast to the above extract, the following:
These tribal people take great pride and care in their crops as it is almost their most important thing. The simple yet sensible methods of harvesting are easy because the people work together as one group pitching in together. Examples of some of the hand tools used are dibble sticks, stone axes, knives etc [my emphasis].

Here, the text is not organised around technical concerns at all. Rather, quite different discursive work is being done. It is in this sense that Karen’s text produces an excess over what is required in geography and is in some senses a problem text, within dominant reading formations, such as the examiners’ marking guides, which are distributed for teachers in classrooms to focus their class-based assessments. Rowan’s text is more readily identifiable as “technical” rather than “abstract” in the sense that Martin (1989) and Martin et al. (1988) have outlined in their discussions of the distinction between the discourses of geography and of history. According to these accounts, “technicality” in geography functions to “order and explain the experiential world”. “Abstraction”, on the other hand, functions, in the case of history, to “organise information to produce texts that interpret the past” (Martin et al. 1988:167 [my emphasis]). Taking this distinction on its own terms for the moment, it is useful to argue here that Karen’s text, organised significantly around abstractions, functions to interpret the present, within a specific set of space-time relations and concerns. Her text may be characterisable as a kind of spatial history. This is a point to which I will return in section 5.2.

5.1.4: ‘Voice’

One final feature which merits brief separate mention in a discussion of the text as a piece of geographical writing is the presence of what I will call a ‘geographer’s voice’ in the text. This ‘voice’ might be characterised as being produced from a speaking position of epistemic authority. It is in part a ‘rational’ voice, constructed from an amalgam of textual features already referred to. It is an effect of the extensive use of technical and abstract nominal forms, and of the equally extensive use of passive voice verbal constructions (to be examined more closely shortly). More than this, however, this voice speaks from a position within a community of scientists or scholars. The use of we, which is a recurring feature of both this text and Karen’s writing more generally, is a powerful rhetorical device, or, as Harré (1990:85) claims, a “narrative convention” of scientific writing, which functions to secure trust, complicity and agreement with the reader, with

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2 In Chapter 6, I discuss the actual responses made by Alan A to the two essays.
respect to the information being presented. In the following sentence, for example, the
we works to explain a geographical method:

To examine shifting cultivation we can refer to countries that are using the
system today.

This we might refer to an implied readership of non-geographers. In this case, it is a
pedagogic we, an echo of a textbook voice: let me [speaking for my geographer
colleagues, the ones who know the method] tell you [the student, the one who wants to
know]. Alternatively, it could be the voice of a writer for a non-scientific public, perhaps
a magazine writer. Chapter 6, section 6.2, returns to this point in a brief discussion of
genre. It is also possible to read this we as invoking a community which is being invited
to corroborate the report being made. In this case, it is a scientific we, predicated upon
common membership of a community of knowledge: let me remind you what we both
know and they [non-geographers] don't.

We is a prominent feature of both textbook material in regular use in the classroom.
Kress (1985a) discusses some of the functions of we in geographical writing in a
comparison between a school geography ('Regions') and a history text ('Pyramids'):

Like the Pyramids text, Regions contains explicit instructions. These are of
two kinds. One ... instructs the reader to 'be' the scientist: The area ... can be
described (described by the reader), the boundary ... can be defined, We need
to remember (where the coercively inclusive we instructs the reader to identify
with the text), and so on. The insistent use of the we is a generic feature
which signals a different relation to the audience; that the audience is here
regarded as ready to, suited to, and able to be identified with geographers, that
is, the audience is seen as far enough along the path towards induction into
the discipline to be included in the text, or to consider itself in that light.

(Kress 1985a:30)

We is also a prominent feature of the oral language of Alan A in classroom discussion.
Chapter 3 discussed an example of some of the ways Alan A's use of we functioned in
class discussion, ways which are quite different from those in Karen's written repertoire.
Because of the dual function of school discourses, epistemic and pedagogic, I would
argue that we in this context signifies the possibility of both an inclusionary and an
exclusionary relation with a reader/listener. Further, it is this contradictoriness which
most strongly characterises the position of the student-writer in the production of school-
scientific texts. However, as conventional and as contradictory as the we is in
geographical writing, its presence in Karen's text is also a point where an account of the
As a preliminary comment, I would argue that Rowan’s text produces an account of
typicality, within a generalised notion of the ‘other’, while Karen’s thematises and
politicises difference within a complex interrelationship between ‘self’ and ‘other’. I will
argue that the term different in the first sentence functions macrothematically as a major
organising and thematic principle for the whole text. This being so, the brief discussion
of possible signifieds of land in subsection 5.2.1 in fact becomes subsumed under the
more general concern for issues of difference. The discussion of land can serve as an
example of the operations of difference, understood in several senses.

5.2.1: Land

Land is in theme position in both the first sentence and the whole text. That is, as well as
being separated from the nominal group agricultural land use system in the wording of
the essay question, the order of terms is reversed: Land may be used for agriculture. The
reading of land that I want to produce here sees it as a ‘floating’ signifier which
mobilises more than one important discourse later in the essay. On the one hand, land is
clearly a central term for geography; consider the ‘man/land’ relation. Indeed, the entire
first sentence of Karen’s text is, even in its transformation of the question’s formulation,
quite acceptable within the terms of geographical discourses. On the other hand, when
the second sentence is read against the first, the move from this initial Land to our land
marks a significant discursive shift. The second sentence reads:

However to prevent our land from being damaged or perhaps over-used we
must learn and practice methods in agriculture that not only benefit us, but
also our environment. [my emphasis]

One way of reading the transformation (of the wording of the question) performed in the
first sentence is that it functions to set up the possibility for the second shift to our land.
Further, it predicts or allows the continuation of a line of argument which extends the
prefacing of the specific topic of shifting cultivation through the third sentence:

It must be balanced for life to occur up to its full potential.3

Together with our land, notions of benefit, balance, life and potential form a discursive
cluster which takes the text a long way from merely technical considerations of systems

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3 It is worth noting briefly here that Karen’s text appears to reproduce a traditional hierarchy in social
relations in this sentence. In comparison with Rowan’s general tendency to represent history as
inevitability, here Karen appears to be subscribing to a form of developmentalism. However, the
readings produced in section 5.2.2 would suggest that this is not an economic developmentalism but
a philosophical position concerning the possible attainment of something like the ‘good life’ and the
attendant threats to that possibility.
text's identity as school geography becomes insufficient to account for many of its features. We appears six times in the essay, us once, and our three times. Yet the question of the referent of we in each case becomes rather more complex and ambiguous, if other discursive features in the text accompanying these uses are foregrounded. Accordingly, I shift now to a discussion of other ways in which the text might productively be read.

5.2: The politics of difference

The first paragraph of Karen's text, and particularly the first sentence, may be read in terms of the macrothematic work it performs. The first sentence reads:

Land may be used for agriculture in many different ways.

As was the case in Rowan's text, a particular selection from the essay question has been made in this first statement. Whereas I have read Rowan's thematising of economical as a marked substitute for agricultural, I read Karen's first sentence in part in terms of an omission which functions as a deferral for particular discursive purposes. The essay question reads:

Discuss the characteristics of shifting cultivation as an agricultural land use system.

In Karen's initial sentence, while agriculture is present, the actual term shifting cultivation is absent and indeed does not appear until the fifth sentence of the paragraph. This is of course the obverse of Rowan's selection, where shifting cultivation is thematic in every sense, appearing as the first item of the text. In place of the specific topic of shifting cultivation outlined in the question, there is in Karen's text a more general statement concerning land use. The text signals from its outset that the topic of shifting cultivation is to be contextualised within a generalised conceptual schema of systems of agricultural land use. It is just one of the many different ways that land may be used for agriculture.

In order to investigate ways in which this sentence signals and organises some of the principal concerns of the text, I will consider the work being performed by two items in the sentence: Land and different. Read against the wording of the essay question, both of these terms are marked. Land has been extracted from being embedded within a complexly technical nominal group: agricultural land use system, and thematised as the first item in the text. Different has been included in an answer to a question which not only asks the student to focus specifically on just one of the ways in which land may be used, but which also arguably calls for a discussion of typicality rather than difference.
of agriculture. What is being mobilised in these two sentences is a bio-philosophical discourse: a discourse of nurture and custodianship which wants to hold (or bring) us as well as our environment in(to) balance. In the light of this, it is notable that the intended referent of the it in this third sentence is ambiguous. The question that begs to be asked is: what must be balanced? In terms of transitivity structures, this ambiguity may be understood as being one of both goal and actor in the material process of balancing. Hence land, our land, our environment and methods in agriculture are all possible and plausible goals of the 'balancing' process, while the actor is an implied we. A further dimension to the indeterminacies being allowed for here concerns the likely identity of this we, a point I will explore further shortly. As a way of signalling the work the text appears to be doing in this introductory paragraph, it is useful to describe the it as performing a kind of discursive balancing act here, working as a generalised referent to synthesise the concerns of, as well as different positions within, the different discursive universes within which the whole text is located.

5.2.2: Difference

The second marked feature of the first sentence of the essay is the term different. According to one reading, the topic under discussion – shifting cultivation – is an instance of difference which is subject (within the discourses of the geography of the classroom) to particular regimes of representation and evaluation. I will argue in this subsection that to thematise difference is to signal conflict and the possibility of resistance. In the light of this, the first word of the second sentence – However – is telling:

Land may be used for agriculture in many different ways. However to prevent our land from being damaged or perhaps over-used we must learn and practice methods in agriculture that not only benefit us, but also our environment.

The term however indicates that what follows is a qualification or transformation of what has come before. However is a concessive, part of a set of adverbs and conjunctions which include nevertheless, notwithstanding, and despite. Yet at this point, there is little indication of the discursive position the second sentence is implicitly gainsaying. The exception to this is the modal may in the first sentence. May codes modality of possibility, but also of permission. According to the latter reading, there is an implicit governmental agency being invoked. If this is at all a plausible reading, there is an intimation of the 'disciplinary' work that geography might be understood as performing in particular sites of practice, work that involves a coalition between knowledge
production in geography and forms of government, as Foucault (1977) has pointed out. Karen's text may be read as bearing traces of that work in its assumption of a geographer's 'voice', the assumption of a particular kind of epistemic authority.

In the light of the concerns of the whole essay, read retrospectively, several possible readings of this first however can be produced: for example, that some agricultural and cultural practices are valued more highly than others within geography and within the western world at large. Here again, something of the disciplinary work of geography might be traced through this reading. In contrast, and in retrospect from the vantage point of a close reading of the whole text, it is possible, indeed almost necessary, to read the however as suggesting that there are issues to be addressed here which transcend or exceed techno-geographical ones, and that that there are other ways of evaluating differences than commonly-dominant ones within geographical discourses. This however can be read, in part, as a defence of difference against the most readily available representations and valuations within the discourses of geography as Karen has encountered them in school.

Accordingly, the rest of the text can be read as an elaboration of that defence for a particular political purpose. Indeed, it is not surprising to discover that shifting cultivation is set up through this introduction as precisely the difference that matters in an essay which functions in large part as a more general argument concerning global environmental balance. It is represented with consistent use of positive attitudinal lexis. At regular points throughout the whole text, shifting cultivation as a land use system is represented in the following ways:

sensible and productive

successful

efficient

able to survive

advantageous

balanced

effective

beneficial

natural
In terms of positive valuing, this list is discursively mixed. Of note is the economic value placed on shifting cultivation practices with the terms productive and cheap. These are placed in a kind of semantic opposition (not only ... but also) to the notion of valuable which follows. The last sentence of the essay reads:

Traditional ways of life are not only productive and cheap but also valuable in human understanding.

In a manner similar to Rowan’s use of economics, Karen’s text also slips between a more techno-economic reference to productivity and a more domestic account of household economy. The contrast between the two is that I have read Rowan’s text as valuing cash cropping over subsistence agriculture, whereas Karen’s explicitly values traditional ways of life such as shifting cultivation in economic terms, over new techniques which will have deleterious long term effects. One reading of the juxtaposition between economic value and value in human understanding suggests that Karen is deploying economics in the service of a larger argument, taking economics into account, but exceeding it.

The argument for the positive valuing of shifting cultivation functions rhetorically by setting up its own ‘other’. Inscribed into these first sentences is one particular kind of reader, among other possible ones. This reader is an ‘other’ who holds different views from those of the narrator about the merits of shifting cultivation as compared with ‘advanced’ western agricultural methods. This is an ‘other’ who must be convinced of the vital significance of issues of global environmental protection. As the text proceeds, there emerges another ‘other’, a problem ‘other’ who is responsible, not only for the destruction of the way of life of the people who practise shifting cultivation, but for global environmental degradation more generally. This ‘other’ is not directly named but identified in terms of:

excessive European migration
modern technology
competition and pressure on food production
cash cropping
commercial agriculture

The text does not at any point explicitly claim that these two ‘others’ are in fact identical, even though they are united in not being the people whose practices of shifting cultivation are under discussion here. Indeed, relations of identification and difference are complex and at times ambiguous in the text. The following discussion explores some of these relations, and the ways in which they position the narrator in the text with respect to the issues being raised.

The first point to signal is that the text does not perform a seamless defence of shifting cultivation practices, in spite of the clear line-up of positively-valued attributes with which the practice is imbued, as listed above. In the fourth sentence of the first paragraph, after the three sentences already discussed, countries which practise shifting cultivation are introduced as being:

... less developed, even primitive compared to others ...

Following this, in the third paragraph of the essay, Papua New Guinea is used as a case study example and represented in the following manner:

As Papua New Guinea itself is not a first class developed country and population is low there is a limit on material available. The residents of Papua New Guinea do not know life as being any different to the simple way in which it is.

At these two points in the text there would appear to be an opposition set up which is reminiscent of that which is more consistently produced in Rowan’s text: an ‘us/them’, or an “advanced/backward” (Said 1974:207) binarism which values the ‘development’ of the ‘first world’ over the ‘simplicity’ of the ‘third’. As was the case with Rowan’s text, the point here is that it would be surprising if the text did not exhibit traces of some of the cruder representational stereotypes in the textbook versions of the topic, such as those excerpted in Chapter 2.

Second, however, these points in the text are fairly clearly in some tension with the prevailing tendency throughout the text to valorise shifting cultivation practices within a different discursive economy. Just as the word different in the first sentence sets up the conditions under which such a valorisation can be made explicit, so the last paragraph of the essay makes the clearest statement of the value to be placed on a certain kind of difference. Here it is difference from a problematic we: a we characterisable in general terms as practitioners of environmentally dangerous commercial agricultural practices, as
colonisers of the third world, and yet importantly also as possible agents of beneficial change:

We should consider these prospects now as tomorrow may well prove to be too late. Traditional ways of life are not only productive and cheap but also valuable in human understanding. We do not want life as we know it to disappear, so why not start now. [my emphases]

One marked feature of the way in which the text works quite explicitly to challenge or re-write the dominant modes of representation of the topic is in the manner in which the participants are represented. In the bulk of the text book material, the people who practise shifting cultivation are called, simply, tribes. This term is also used extensively by Rowan. Karen’s text, in contrast, performs the following complicating moves:

- a small population
- small typical clusters of people called tribal groups
- residents (of Papua-New Guinea)
- members (of the tribe)
- women
- men
- people who inhabit and work the land
- tribal people
- people
- tribal groups
- people
- tribe
- a big family

Of particular note is the second item on the list. The structure of this sentence fragment (containing an embedded defining relative clause) indicates that what is being performed is a geographical definition (Wignell, Martin and Eggins 1987). According to this reading, Karen is re-writing the account from vernacular into techno-geographical
language. Another reading, however, is that what is being performed here is a different kind of writer re-positioning: a marking of a subjective separation from official school geography. The sentence might thus imply: Geography calls these people “tribes”, but ... . What it is pertinent to query is precisely this self-positioning of the writer with respect to this discursive work. In the light of the rest of items in the list, it is plausible to suggest that Karen is setting up a separate position in her text from that of the negative valuing of tribe (understood within an ‘us/them’ binary). This is achieved by the explicit signalling of the term as technical. According to this reading, what is significant is that the first reference is to people before they are re-identified as tribal groups.

The third point concerning the issue of difference in the text concerns one of its most striking features: the degree to which it engages in qualificatory and transformative work. The first however has already been mentioned, in terms of the work it does to set up two potentially conflicting positions with respect to the cultural and environmental meaning and value of shifting cultivation as a practice. This first instance is also significant in the way in which it signals a structural and discursive schema for the whole text. A schematic outline of the text in terms of such features is revealing:

paragraph 1: However, Despite, However
paragraph 2: yet, at first ... but
paragraph 3: but
paragraph 5: Even though
paragraph 8: Even though, yet
paragraph 10: However, even though
paragraph 11: Despite, at first ... but on a long term scale
paragraph 12: However

In each case, the listed terms function to qualify, resist or transform the representations, whether explicit or implicit, which are organised around them.

To show how this works, the first Despite in the fourth sentence of the essay’s first paragraph is an important example. Here, the Despite establishes a resisting position with respect to:

... the fact that some countries are less developed, even primitive compared to others ...
and an affirming position with respect to the fact that

... sensible and productive farming can still take place.

This juxtaposition of attitudinal lexis (less developed and primitive vs sensible and productive) must be read within the context of the discursive resources available for the essay’s production. The words of the first clause, apart from the Despite, come directly from the prescribed reading – the ‘facts’ about shifting cultivation. As has been shown in Chapter 2, in two of the main textbook sources, shifting cultivation and those who practise it are represented in terms of primitiveness (primitive technologies, primitive implements) and lack (of capital, infrastructure, knowledge and adaptability). The affirmation of sensible and productive farming, on the other hand, is more closely related to the version of the topic produced in the collection edited by Chapman and Codrington (1985), pertinent sections of which are also cited in Chapter 2. The qualifiers sensible and productive are the writer’s own. Thus the Despite functions, through thematic shift and relexicalisation, to reverse the weighting given to these elements in all but one of the official versions of the topic (with the basic class notes being most important here, in the light of their function as the primary, authorised version of the topic). Most significantly, perhaps, it casts doubt on the appropriateness of the official descriptors, a point via which this text could be described in term of its resistance to dominant modes of representation within the available discourses.

As the initial capital letters indicate, Despite, However and Even though all occur on each occasion at the beginnings of sentences. That is, these words are in theme position each time they occur, which suggests that this pattern of transformation is a significant one within the logic of the text. That is, in clear contrast to Rowan’s text, which is almost exclusively categorical affirmative declarative in mood, Karen’s text foregrounds dissent and qualification, framing significant numbers of propositions with a qualification, an explicit production of a position which is presented dialogically as a response to a different and often conflicting position. As I have indicated in the previous section, Rowan’s text presents evaluation as fact, in what is arguably a direct appropriation of the dominant-rational mode of discourse of the textbook material. Karen’s, on the other hand, at least at these points, puts facts in doubt by evaluation, a process which marks the text as resistant and contestatory.

A further dimension of this is that, in the cases of paragraphs 8 and 11, Even though and Despite head the entire paragraph. Here, the terms might be read as functioning to some extent hyperthematically (that is, thematically for entire paragraphs). In paragraph 8, the first sentence sets up the discussion of diet and the need for supplementary hunting and gathering with which this paragraph is concerned:
Even though the tribal groups who practise this method of agriculture have the basic necessary requirements and skill to grow crops, yields are relatively low.

Here, though, the geographical ‘fact’ of low yields is not allowed to ‘speak for itself’. Nor are low yields to be ‘explained’ by available dominant discourses of primitiveness and lack. Rather, the *Even though* works to frame this fact carefully within a general sense of the ability and the right of these people to control their own lives. Indeed, within the context of the whole argument, the low yields could even have been recuperated for an argument about environmental balance, with the needs of the people being carefully balanced against the requirement for rainforest protection.

In paragraph 11, in a perhaps even more significant instance, the first sentence, flagged by the essay’s second *Despite*, functions in two ways. First, it organises the paragraph’s discussion of the problems of change:

> Despite the fact that shifting cultivation is so effective and beneficial it is slowly disappearing.

Second, it serves to echo or re-call the first *Despite* in the essay’s opening paragraph. Laid side-by-side the two sentences read:

**Paragraph 1:** Despite the fact that some countries are less developed, even primitive compared to others, sensible and productive farming can still take place.

**Paragraph 11:** Despite the fact that shifting cultivation is so effective and beneficial it is slowly disappearing.

Together, these two sentences may be read as a major statement of the position taken up by the narrator in the text. The work being done here is, first, a re-appraisal of dominant-received discourses of difference, and second, a signal of the dangers of change. In terms of lexico-grammar, the two sentences are substantially organised around attitude and positionality. Attitude is particularly marked in each case, with the second sentence mirroring or echoing the first in more than just the repetition of the *Despite the fact* structure. First, the *effective and beneficial* of the second sentence echoes the *sensible and productive* of the first, in its repetition and amplification of the positive valuation of shifting cultivation.

Second, there is a structural mirroring. In the first clause of each clause complex, *less developed, even primitive* is mirrored by *effective and beneficial* in an inverse attitudinal
relation. This is in itself a repetition of the relations set up within the two clauses of the first complex, where less developed, even primitive is juxtaposed against sensible and productive. In the second clause of the complex, the obverse is the case, with a positive in the first complex mirroring a negative in the second: effective and beneficial vs slowly disappearing. A significant variation in the grammatical structure in the second clause, from paired epithets in relational processes to a material process, foregrounds movement and allows an increase in urgency to appear at this point.

What is of note here is the use of the notion of ‘fact’ in each case. While it is the case that the ‘despite the fact’ construction does not always name a ‘fact’ in the strict sense in English, it is nevertheless useful to explore the fact-status of the propositions being mobilised here. In the first sentence, it is an official geographical ‘fact’ derived from the official accounts of the topic which is being qualified in the Despite the fact construction, though examination reveals it as a valuation posing as fact:

Despite the fact that some countries are less developed, even primitive compared to others ...

In the second, a new ‘fact’ has been established:

Despite the fact that shifting cultivation is so effective and beneficial ...

Yet this second ‘fact’ is not an official fact derived from the curriculum materials; rather, it is a construct of the essay itself. It too is a value position, but a more explicit one, since it has had to be established through argument. Further, this second position allows a retrospective re-reading of the status of the first ‘fact’ as indeed also a value position, albeit one doing double duty as ‘fact’ within the rational discourse of the official geography textbook materials. Predictably enough, this second Despite construction has not been produced in resistance to this new ‘fact’, but rather, in response to an implicit threat to the ontological status of the new ‘fact’ in the context of the whole argument. As an effect of this parallel construction, certain positions are constructed dialogically in the text. There is a symmetrical progression of valuation ([+] ... [+-]), leaving a space in between where shifting cultivation is situated. However, there are important transformations which need to be traced, which interrupt the clean symmetry of positionalities as they are represented here.

First, as I have already indicated briefly, there is a progression in the text in terms of what is subject to attitudinal lexis. The following shifts can be noted: i) a problematised negative valuing of people; ii) a positive valuing of processes; iii) a reiteration of positive valuing of processes; iv) an evocation of danger. Second, closely connected to this, there
is a progression in the narrator’s position with respect to the topic of shifting cultivation, as outlined below:

1) Despite the fact that some countries are less developed, even primitive compared to others ...

addresses an ‘other’: a reader who affirms the official ‘fact’

... sensible and productive farming can still take place.

declares a different position

2) Despite the fact that shifting cultivation is so effective and beneficial ...

restates the different position, now established as ‘fact’

... it is slowly disappearing.

evokes the other ‘other’; the ones who would threaten the balance.

One way to describe these transformations is to consider what is ‘at risk’ in each move. In the first instance, what is being negotiated is a relation of narrator and reader to shifting cultivation at the level of representation, where the question is one of difference and of value. In the second, what is being negotiated is of a different order. At risk, if Karen’s account is to be believed, is the future of shifting cultivation as a practice, and by extension in the argument more generally, the future of the world environment. This is a representation of the world in a temporally and materially immediate sense. The shift is usefully described as a shift from an “ethnographic present” (Brodkey 1987:72) to what might be termed a ‘material’ present (albeit an abstracted, rhetorical one), with a strong evocation of a future. It functions to reposition the reader in the text as an actor within a world drama, an agent whom the text can finally directly address in its last sentence through an interrogative which functions as an incongruently realised command:

We do not want life as we know it to disappear, so why not start now.

The fourth and final point concerning relations of identification and difference in the text takes up this issue of address. I have already made mention of the extensive use of the interpersonal metafunction in the language of this text. Rowan’s text, in contrast, might be characterised as being almost exclusively organised around the ideational
metafunction. To gain some perspective on the potential significance of this difference, I return briefly to the concept-metaphor of *position*.

In Chapter 4, I characterised Rowan’s text in terms of particular relations among what I termed the ‘writing position’, the ‘looking position’ and the ‘object position’. In Rowan’s text, the relations among these are relatively clear-cut, even though issues of relationality are effaced by the transparent, ‘factual’ discursive mode of the text. In a dominant ‘us/them’ relation between “shifting cultivators” and those who write about them, there is no ambiguity or cross-over of position. The ones who look, the ones who write, are the ones who know. The others are looked at and known. The writer is the knowing subject, the unified, universal subject of knowledge; the world, with its forests and tribes (which are not essentially distinguished; see figure 6.1) is the object. In the case of a ‘perfect’ text of this kind, the text performs a simple representation of the ‘facts’ and, in its categoricality and polarity, of the world itself. The reader-addressee knows who ‘he’ is and need not be directly addressed. In the case of Rowan’s text, of course, despite its predominant mood, there are indeed gaps and slippages – ‘imperfections’ which allow some space for manoeuvring of writer/reader positions: some space for pedagogy.

In Karen’s text, on the other hand, these relations among positions are much more complex. To explore this briefly, it is useful to return to the use of *we* in the text. As I have indicated, the presence of *we* in Karen’s writing is not in itself a notable feature. However, just as in the first two sentences of the essay there can be traced, between the two appearances of *land*, a significant discursive shift, so also in the case of *we*, important shifts or slippages may be read. These shifts and slippages are between inclusive and exclusive uses of *we* (Wright 1992), as well as more specifically among different referents. The first paragraph of the essay again rewards attention, where *we* occurs explicitly twice, together with two mentions of *our* and one of *us*. Additionally, there is a passive construction: *It must be balanced*, which implies an agent: *by somebody; perhaps by us?* But who are *we*? In this sentence alone, possible referents for an implied *we* are:

* we the community of geographers: balancing *land* and *methods in agriculture*

* we white westerners: balancing *our environment*

* we nurturers or we custodians of the land: keeping or restoring the balance of *our land*
These shifts are points from which traces of a range of possible discourses can be read: techno-geographical, bio-philosophical, environmental- and race-political, feminine-nurturing, and indigenous discourses of the land. I have already discussed the it in the text’s first paragraph in terms of its performance of a discursive balancing act. Here it is useful to take the metaphor a stage further. The we in this paragraph can also be read as a site of intersection of a multiplicity of discourses and subject positions. The implication is that, to write at all on this topic, it is imperative for this writer that she attempt to hold these different and differing discursive positions in some kind of narratorial balance, albeit a temporary or provisional one. In this way, the text functions both to produce and also to attempt to reconcile discursive differences. One way to read the text is as the imagining of a geography where all of the possible referents of we and it might be brought together.

What is interesting about this reading is that it demonstrates, at multiple levels of semiosis, the work that is done in a text in the production of particular meanings. It demonstrates that the notion of ‘position’ is verbal (active) rather than nominal (static/substantive); accordingly it is useful and possible to speak of writer-positioning, involving an on-going production of ‘self’ and ‘world’ in the text. Throughout the text, this multiple positioning recurs. Most significantly, it functions to complicate and disrupt a simple ‘us/them’ binary between representer (the knowing subject of scientific writing) and represented (those who live in rainforests in ‘third world’ countries and practise shifting agriculture). Further, it complicates relations more generally between knowing and not knowing and between causes and effects.

Paragraph 11 is an important point in the text in this respect. It follows 8 paragraphs of discussion (the bulk of the essay) which focus on specific issues concerning procedures of shifting cultivation. The paragraph begins a discussion of the effects of time and change on the life of the people and their land which forms the conclusion of the essay. It begins by establishing that the real ‘others’ in this narrative are time and modern technology, and more specifically, European migration. It returns to specific issues of land degradation and species depletion, using a highly technical vocabulary at this point. The writing position appears to be fairly clearly one of a high moral vantage point, consistently to be noted throughout the essay. In this paragraph it appears to be: let me tell you about what you/we are doing to them.

According to this reading, the unmarked pronominal reference to the people specifically under discussion here, those who practise shifting cultivation (in the last sentence in the discussion of the new techniques) would be their; that is, the new techniques under discussion would be techniques which in the long term threaten to affect their way of life. What actually occurs in paragraph 11 is more startling:
Despite the fact that shifting cultivation is so effective and beneficial it is slowly disappearing. As time progresses and modern technology steps in problems are beginning to arise. European migration is the source of these problems. An increasing population increases competition and pressure on food production which may eventually strip the soil of its nutrients, as the limited time affects regeneration. European migration also encourages cash cropping or commercial agriculture, instead of subsistence. This also increases the demands of new land and introduces new techniques that may at first be very productive, but on a long term scale destroy natural life forms and affect our way of life altogether [my emphasis].

Here, clearly marked by this our, is a realignment of relations of identification and difference, cause and effect. This shift serves a very important function in the general argument of the essay in its concluding phases. Most significantly, it enables a broadening of the scope of concern from an ethnographer's localised camera focus on the gardens in the rainforests to a more philosophical and global focus upon the entire planet. We can then refer explicitly, in the next two paragraphs, to all those who inhabit the planet:

However we do have some control and it is the kind of control that involves participants world wide.

We should consider these prospects now as tomorrow may well prove to be too late. Traditional ways of life are not only productive and cheap but also valuable in human understanding. We do not want life as we know it to disappear, so why not start now.

With respect to reader address, there is a very important set of regimes operating here. The final clause is striking in this regard: why not start now. It functions as direct reader address, positioning and producing the reader dialogically as interlocutor. One reading of this is Why don't you start now? ; another is: Why don't we start now? , while a third is we/you ought to start now. To conclude the essay on a note of direct address to a reader is to mark the shift in the text from an orientation to reflection to an orientation to action. Difference, the point at which the essay began, was initially a matter of representation. By the end of the essay, difference, now transformed into traditional ways of life that are productive and cheap and also valuable in human understanding, has been harnessed for an argument challenging a reader to act to prevent global environmental destruction.
Conclusion

In this chapter I have read Karen’s text, like Rowan’s, in several different ways. I have construed it, first, in terms of its status as an instance of geographical writing. In terms of a set of criteria for investigating this – criteria of facticity, technicality, conceptual contextualisation and ‘voice’ – the text appeared as quite a complex and successful instance of geographical literacy.

Second, I have read the text in terms of the ‘other’ and the ‘extra’ to techno-geographical rationality that the text exhibits. This excess consists, among other things, of the persistent use of directly interpersonal language. Direct reader address, the we and the implied you of the essay, together with consistent modalisation, contribute to the construction of complex relations between narrator and reader and between narrator and the world represented in the text. Rather than inscribe some transcendent notion of ‘self’ into the text, however, I have read the text in terms of a series of positionings: first, of the textual writer-subject with respect to her inscribed and real reader(s), and second, of this writer-subject and the information she is re-writing. Such a formulation captures something of the dynamics of subject production through textual practice.

However, reading the text for its excess over techno-geographical concerns raises important questions for the status of the text as a ‘proper’ text in geography. It is not sufficient to leave the discussion at the point in section 5.1, where the presence of certain features in the text provides it with an identity as a successful instance of geographical writing. On the contrary, the presence of directly interpersonal work done in the text and particularly the high levels of modalisation and qualification disqualify the text from being considered ‘rational’ writing in a dominant-scientific sense of that term. I will argue in Chapter 6, on the basis of the readings I have produced here, that this disqualification can be characterised in gendered terms.
CHAPTER 6

DANGEROUS MATTERS:

READING THE DIFFERENCES

If you put God outside and set him vis-a-vis his creation and if you have the idea that you are created in his image, you will logically and naturally see yourself as outside and against all the things around you. And as you arrogate all mind to yourself, you will see the world around you as mindless and therefore not entitled to moral or ethical consideration. The environment will seem to be yours to exploit. Your survival unit will be you and your folks or conspecifics against the environment of other social units, other races and the brutes and vegetables.

If this is your estimate of your relation to nature and you have an advanced technology, your likelihood of survival will be that of a snowball in Hell.

(Bateson 1980 quoted in Young 1990: 124-5)
Introduction

This chapter works to draw out the specifics of the differences between Karen's and Rowan's texts, and to establish these differences as gender differences. More specifically, relations between texts and contexts are investigated in terms of a gendering process which occurs through textual practice and can be traced through readings of the object-texts. The focus is in part retrospective, where the specifics of these relations, as read from these texts in Chapters 4 and 5, are engaged in ways that make them available for commentary on questions of the politics of literacy and literacy pedagogy. The chapter concludes the setting-up of an argument concerning the mutual implication of gender, literacy and curriculum, an argument which is elaborated in Chapters 7 and 8 in Part III. By drawing together some of the salient characteristics of the two texts in their differences from each other, this chapter argues that the two texts enact a significant gender difference through the production of different geographies. This difference articulates with curriculum politics in school geography in ways which can now be re-articulated as a gender politics.

The structure of this chapter is somewhat different from the others, in that there are five separate sections with no further subdivisions. The discussion will be organised around these sections which aggregate evidence in a cumulative sense, each one being dependent upon its predecessors for legitimation. Section 6.1, a discussion of modality in the two texts, concerns clause-level analysis, making it relatively independent of the other considerations. Following from this, sections 6.2 and 6.3, deal with genre and discourse, the latter term understood, not in a techno-linguistic sense, but in a sense similar to Kress's (1985b) reworking of Foucault, as outlined briefly in Chapter 1. These two sections retain their focus on the individual texts but, through an account of what I have termed 'dangerous matters', I situate the texts quite precisely within a gender politics of the discipline and curriculum of geography. Section 6.4, titled 'Textual practice/self-production', expands the meaning of 'text' to include the notion of 'corpus', a notion which questions the usefulness of dealing only with bounded single texts, in terms of the information that can be gained concerning the nature of the relationships between literacy and learning and between textual practice and subject production. Section 6.5 presents a brief discussion of the way these two texts were actually received within the curriculum context in which they were produced, and a more general consideration of the gendering of the production and the reception of written texts in school geography.
6.1: Modality

Modality is one of the linguistic technologies associated with the register variable, tenor, which realises interpersonal meaning. Briefly, in systemic-functional linguistics, the interpersonal metafunction of language is involved in the negotiation of social relations and the expression of personal feelings and attitudes. According to Halliday (1985a:86), modality codes degrees and kinds of indeterminacies between positive and negative poles. Poynton (1985:71) refers to modality as “the variety of means by which one can say something a little short of indicating that something categorically is, or is not, the case”. Modality is a strong marker of gender, particularly in terms of relations of power between both author and audience and author and utterance. I return to this point at the end of this section. Modality has most often been studied in interactive texts. However, I will argue in this section that in written texts, often thought of as ‘monologic’, modality is an important means of organising and articulating writer/reader relations and allowing for the possibility of negotiation over meaning. In terms of the theory of literacy being developed in this thesis, modality might be understood as a major means of foregrounding the dialogic nature of written texts.

It would seem that an investigation of the presence and absence, as well as the patterns of explicit modality markers in both texts, would be a way of tracing the self-positioning of the writers in terms of the status of what is being represented in the texts; something of the relation, that is, among representer, receiver and represented. Through a reading of modality structures in the two texts, I argue that it is possible to trace something of the subjective investments of the writer with respect to what is written. This can be done by investigating issues such as how much modality is being deployed in texts and by whom; what specifically in texts is subject to modalisation and what kind of modality is used. In this section, I will confine the discussion to a brief consideration of modal verbs (or modal auxiliaries) as they appear in both texts. Even such a limited investigation as this points to quite dramatic differences between the two texts with respect to writer positioning.

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1 I use the term ‘modality’, first, in a general sense to refer to the presence of explicit markers of interpersonal meaning: attitudinal lexis, modal adverbs and modal auxiliaries. Second, where necessary, I refer to the distinction drawn by Halliday (1985) between ‘modality’ (of possibility and ability) and ‘modulation’ (of obligation and necessity). I use the term ‘modalisation’ somewhat interchangeably with ‘modality’. The distinction is one of emphasis of a ‘process/product’ kind. ‘Modalisation’ allows a foregrounding of the process of self-positioning through text production.
Rowan

Rowan's text deploys very few modal auxiliaries, a discursive feature consistent with what I have termed the text's 'facticity'. The text attempts to perform a simple representation of 'the facts', with little or no qualification of the status of those facts. The focus is principally on the procedures of shifting agriculture and on detailed descriptions of tools and methods. The whole text is characterised by a preponderance of present-tense verbs which code material and relational processes. It is an account of what categorically is and what happens in the object-domain.

There are, however, several modal auxiliaries present in the text. In structural terms, they are mostly located in the first and third paragraphs and in the last. They are located principally around details of the procedures and the temporal and cause-and-effect sequencing of the activities of shifting cultivation. They code, with only one exception, modality of possibility or ability – can and may. The one exception is the must of the second sentence of the third paragraph:

Before they can use the land they must first clear the area.

In this case, what is at issue is the contingency and conditionality attendant upon the abilities being attributed to the people practising shifting cultivation. This must is an indication of the necessity of the sequencing logic of the cultivating procedure.

The last paragraph represents the only brief departure from this logic. The narrator shifts focus from an essentially unchanging cultural practice to a consideration of change. Accompanying this shift is a move to direct reader-address: As you can see. Here the modal can refers for the first time, not to matters of possibility or ability with respect to the people, objects and events in the rainforest. Rather, the narrator explicitly imputes to the reader his own seeing/knowing abilities with respect to the representation of the topic. The relationship being constructed has shifted from an internal to an external relationship with respect to the domain of representation. That is, rather than objects and events within that domain being modalised with respect to each other, modalisation occurs around the relationship between that domain and readers who are outside that domain.

The sentence following this is an injunction: all of the aspects have to be looked at. The modal auxiliary have to codes modulation of necessity or obligation. Again this sentence is an intervention in the dominant mode of representation in the text, this time through the introduction of an agentless passive. Though the identity of these implied agents cannot
be completely retrieved from this construction, they are at least clearly not the people who practise shifting agriculture. In terms of transitivity, the paragraph can be read as an assembling of ghostly participants in a process of a different order from the processes of shifting agriculture described above – a process of looking as opposed to simply doing. These participants – the narrator, the reader and those who are to look at the aspects concerning change in the rainforest – are marshalled in this last paragraph as us as opposed to them (the natives of the last clause of the text).

I have argued in Chapter 4 that the effect of the general effacement of the writer’s position in the text is for the most part to suggest a camera’s eye view on the rainforest domain – the exemplary twentieth-century metaphysical metaphor (although of course as a metaphor for ‘objectivity’, the camera can easily be dismantled). Here, an investigation of the distribution of modal auxiliaries casts some light on how the ‘David Attenborough’ position and its relation to the domain of representation is established. As established, the use of modals is almost completely confined to the practices of shifting cultivation. That is, there is a clearly bounded frame which can be drawn around the domain of representation. Within this frame, people and objects are represented in relation to each other in terms of modal verbs of possibility or ability and contingency. Modals are never deployed to render vulnerable or open for negotiation the relationship between the representer and that which is being represented within the frame – the status, that is, of the representation itself. Even the last paragraph does not represent an essential departure from this characteristic of the text, since what is being invoked might best be described as merely a pluralising of participants within an undisturbed us/them binary. Here, added to the ‘Attenborough’ function, are those of camera operator, film crew, consultant experts and a viewing public. The positioning of participants through the distribution of modal auxiliaries may be graphically represented thus:

\[\text{Figure 6.1 Rowan's text: relationships among participants through distribution of modal auxiliaries}\]
In figure 6.1, modalised relationships are marked by dotted lines. The frame is rectangular to suggest a television screen. The strong, continuous lines of the textual frame and the arrow directed from the narrator to the frame indicate polarised positions: that is, positions where no negotiation or indeterminacy is indicated. The narrator is located outside the frame, looking in and down. ‘Rowan’ is the knowing subject, the looker and the shower. This position is of course less representative of Attenborough in the safari suit in the forest and more characteristic of a ‘proper’ scientific position, that of the ‘detached’ observer. The only break in the frame, the narrow insertion on the bottom right hand side, indicates the small space made available in the last paragraph for a pluralising of looker/knower functions and the slight possibility at the end of the text for negotiation of narrator/reader relations.

With the exception of this last paragraph, the dearth of modalised constructions and the resulting categorical status of the representations function rhetorically to produce the text as an unmediated representation of the world itself. This ‘transparency’ of textual representation is what most characterises Rowan’s text as ‘scientific’. Geography as a science privileges the representational and categorical functions of language and backgrounds the interpersonal. Geography at its hardest is an exemplary instance of the Western positivist/empiricist intellectual tradition (Poynton 1990b). In this sense, and despite its many shortcomings, Rowan’s text approximates far more closely to the writing of school textbooks as official encodings of school geographical knowledges than does Karen’s.

Karen

Karen’s text, in contrast, is characterised by a strongly ‘personal’ tone and a strong sense of ‘voice’ in the sense most commonly used in pedagogic discourses of literacy in subject English. I will return to this point in Chapter 8. In grammatical terms, the text may be considered as being organised significantly around the interpersonal and textual functions of language with a concomitant backgrounding of the representational function. That is, the text arguably does not function simply as a representation of the world, but rather as a representation of the positions of a narrator, an inscribed reader and those who are represented, within that world, together with the complex of relationships among these participants.

As well as other indicators of explicit attention to interpersonal meaning and positionality (such as modal adverbs and attitudinal lexis), Karen’s text is particularly strongly characterised by its repetitive use of modal auxiliaries. However, the difference between Karen’s and Rowan’s texts is not confined to questions of the quantity of modal verbs.
Different kinds of modality are deployed in different parts of Karen’s text and with markedly different effects. These differences are most noticeable at the beginning and end of the text.

In the first paragraph, every sentence except one is organised principally around a modal function. The exception is the fourth sentence which introduces a definition of shifting cultivation and hence is arguably the most clearly techno-geographical, or ‘scientific’, sentence in the paragraph. The sequence of modal auxiliaries in the paragraph is may, must, must, can, must. The repeated must produces a strong sense of insistence and urgency in the paragraph and, in terms of the macrothematic function of the paragraph, for the entire text. This is a very clear establishment of a tone and a rhetorical position. Must codes modulation of obligation or necessity. The relation between these two is often difficult to determine and indeed may co-exist in a complex of writing and reading positions being constructed. On the one hand, there is a strong sense of necessity: if land is not to be damaged (transformed by the last sentence in the text into we do not want life as we know it to disappear) certain things must (of necessity) be done and not done. Further than this, however, there is encoded in the narrator/writer/reader relation an implicit imperative, an imposing of an obligation on the reader to agree with, or at the least, to allow the validity of, this account of the value of shifting cultivation practices. It is possible to argue that what may be traced here are what Frow (1986:234) terms “the agonistic rhetorical strategies of discourse and ... the shaping of language by the forces of power and desire”. The subjective investments of the writer in the topic may thus be rendered visible in part through the operations of these modals.

It is at the level of the bonding together of the participants in modalised relationships that the differences between Karen’s and Rowan’s texts are perhaps most marked. Rather than the distribution of modal verbs delineating a bounded frame between representer and represented, the modal auxiliaries in Karen’s text function to mark a crossing of those boundaries. The first paragraph is again decisive in the construction of this negotiable semiotic space. There are three modal constructions using must. Two (we must) directly invoke a communal obligation or necessity with respect to the issues at hand. The third (It must) may be read as being poised between a further obligation imposed on a we of indeterminate and perhaps shifting identity (we must balance) and a necessity attributed to It (It must balance, be in a state of balance).

The text can thus be read in terms of a series of positionings: first, of the textual narrator with respect to her inscribed and real reader(s), and second, of this narrator vis-à-vis the information being re-written. In contrast to Rowan’s, Karen’s text evidences a much more agonistic sense of a subject being ‘inserted’ into discourse. Modal auxiliaries allow
a tracing of dialogic processes of inscribing 'self' and 'other' within a discursive terrain which is explicitly politicised in the sense that differences in power as well as intertwinnings and interdependencies in interests are explicitly marked through the grammar. This multiplicity and complexity of positionalities and relationships may also be represented graphically, though there are limits that I have had to impose on the interrelationship complexities in the interests of coherence and for the specific purpose of articulating difference.

![Graphical representation of relationships among participants through distribution of modal auxiliaries](image)

*figure 6.2: Karen's text: relationships among participants through distribution of modal auxiliaries*

In figure 6.2, Karen’s text is represented as a circle. This is to indicate that, whereas Rowan’s text confines its domain of reference to the rainforest, Karen’s is explicitly concerned with the entire planet and the place of the rainforest on that planet. The practices of shifting cultivation in the rainforest are made to work to construct an argument for global environmental protection. They are, by the concluding paragraph, rendered central to the survival of the planet. The narrator as well as the reader are ‘in’ the text, as well as ‘in’ the world, and, together with the other participants, are related modally in a complex network of possibilities, abilities, obligations and necessities, only
part of which is represented in the diagram. The complex and ambiguous relationship between the narrator in the text and Karen the biographical writer/subject are too theoretically difficult to even begin to render graphic in a diagram such as this.

There is some work in linguistics investigating the connections between modality and gender, though as I have indicated, most of it has involved interactive texts. What is most striking about this work is that it also focuses almost exclusively on the negative effects of the uses of modality with respect to the positioning of participants in relations of social power. Poynton (1990a:27), for example, has referred to modality as coding relations of deference, hesitation, diffidence or excessive politeness in interactive situations. Elsewhere (1985:71), she refers to the use of modality in terms of the “stereotype of tentativeness” associated with women’s speech. Threadgold (1988:53) identifies the ways in which women’s speech has been examined historically in terms of “the silence, the subordinate tenor, the restricted fields of discourse, the undervalued modes of speech/genres” (my emphasis).

More generally, Poynton (1990b) argues that the interpersonal function of language is marginalised in western knowledge systems, while the representational and categorical functions of language have been privileged. This argument links linguistics with Derrida’s critique of western logocentrism and the feminist critiques of phallocentrism such as those of Kristeva and Irigaray which followed. It is not my intention to make too large a claim for the simple analysis of modal auxiliaries I have produced here. I would, however, point out that these critiques take the whole question of tenor in language, and particularly the gender dimension of the question, far beyond matters of individual power and of deficit. Indeed, as a result of the feminist work, together with poststructuralist notions of the indeterminacy of meaning and of semiotic play, the linguistic function concerned with orientations to, and negotiation of, meaning, take on a new significance. It is for this reason that the language of this thesis is often quite heavily and deliberately modalised, in order to articulate methodologically the multiple possibilities that exist in theory for readings of texts, and the impossibility of completion or closure.

It is important at this point, then, to reconsider some of the possible gender effects of modalisation as it has been traced through these readings of Karen’s and Rowan’s texts. Rowan’s text is polarised around the binary opposition between subject and object. Through this polarisation, the narrator remains outside the text, in a position which, when rendered graphic, provides an eloquent illustration of much of the feminist theorising about male separation from object-world in scientific work and scientific writing. For example, frequent reference is made by writers such as Fox Keller (1983, 1986) and Weinreich-Haste (1986) to Chodorow’s (1978) object-relations theory, in an
attempt to theorise masculinist constructions of scientific knowledge. Fox Keller (1986:180) writes of the need for scientists to be able to "count between one and two", in order to foster the capacity to count beyond two, that is, to transcend absolute dichotomies between self and other. There is an interesting parallel to this position in the phenomenon of modality in language, which is the system coding, as I indicated, the degrees and kinds of indeterminacies between positive and negative poles.

In terms of mainstream school science, Rowan's essay resembles, far more closely than Karen's, a 'proper' text. In this sense, it could be said that he has 'got it right', while in important ways, Karen has 'got it wrong'. Here, however, I have suggested readings of Karen's text that at least point to other ways of valuing the text within wider theoretical and political frameworks.

6.2: Genre

There is a large literature concerning the relationships between gender and genre. Much of this has either been within cinema and television criticism with theorists such as Modleski (1982) or Kuhn (1984) or focused on literary genres, beginning with Millett (1975), investigating such issues as the gender specificity of participant positions in fictional narratives. In terms of school literacy, a substantial body of research has been carried out on genres of reading and writing in subject English (for example P. Gilbert and Rowe 1989, Mellor and Patterson 1991). Less has been said on the subject of the genres of other subject-disciplines. This section comments briefly on some issues concerning relations between genre and subject positioning with respect to Karen's and Rowan's texts as instances of geographical writing. It works to construct a case for the gender-significance of generic choices in the two texts.

I am not concerned in this section to provide a technical account of linguistic-structural distinctions between varieties of 'factual' writing (description, report, explanation, procedure) to the degree of analytic delicacy which is available through the work of Martin and Rothery (1980, 1981). Rather, what I want to foreground is the effects and consequences for questions of gender of a larger distinction between, on the one hand, what I will group together roughly as 'factitious' genres and on the other, exposition. This distinction is made in contrast to the opposition more usually deployed in the field of literacy studies, between 'factual' and 'narrative' or 'fictional' genres (for example Martin 1985). In this subsection, I will relate this generic distinction to a distinction between "dialectical" and "rhetorical" forms of reasoning, in Palmeri's (1991) terms. The distinction I am drawing here is not strictly an opposition, but rather in individual texts, a
matter of degree. It will be understood as involving, at base, the degree of explicit inscription in the text of relations among writer/reader/object domain.

Rowan

Rowan’s text conforms to a significant degree to the type of text which belongs in school geography textbooks. It is readily identifiable generically as a ‘factitious’ text for reasons already discussed, including not least significantly, the low level of explicit modality. The text performs at different points the generic functions of description, explanation and procedure. The text is organised around a series of taxonomic and temporal and sequential cause-and-effect relationships. The first two paragraphs proceed by means of two taxonomic oppositions of different orders. The first is economic: the opposition of subsistence/cash economy; the second is botanical: the implicit opposition of tuberous plants to leafy plants within a standard plant taxonomy. Beyond this, a temporal logic prevails throughout most of the rest of the text, with an emphasis on stages in a procedure. The third paragraph marks this shift distinctly with a shift in conjunctive relations from a paratactic to a hypotactic clause logic organised around conjunctions of time and sequence: Once, Before, and sequential organisers: first and the next stage.

The text is not significantly structured in terms of the development of an argument. This marks the distinction I have drawn between ‘factitious’ and expository writing. There are vestigial elements of debate in Rowan’s text, principally located in the last paragraph, but these elements are inhibited by other considerations, most significantly the imperative to background the possibility of conflict and to represent the world in categorical terms as transparent and immanent. In this sense ‘Rowan’, as a narratorial construct of this text, may appear to a significant extent as a ‘good subject’ of school geography. This point is not made in an unreflexive conflation between forms of writing and subject formation. The issue is far more complex and indeterminate than that, Rather, I would argue that particular forms of writing, and the associated taking-up by a writer of particular narratorial positions in texts, have effects over time in the construction of possible forms of subjectivity in terms of the discursive “investment” (Hollway 1984:238) in the production of meaning. I discuss these matters further in relation to literacy in Chapter 8, but I have introduced them in Chapter 1 in terms such as the ‘embodiment’ of subjects in

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2 There is also an important distinction to be drawn here between ‘school-scientific’ writing which appears in textbooks, and the language of actual scientific practice. In the case of the former, facts are "told" as static givens; in the case of the latter, language is used for several different purposes, one of which is constructing hypotheses and speculating on results.
curriculum action, the notion of ‘self-production’ and the non-coerciveness of much that
goes by the name of ‘learning’.

As I have already indicated, the last paragraph is the only significant exception to the
realisation in Rowan’s text of this imperative towards categoricality and immanence. Its
difference from the rest of the text raises some important questions of genre and of the
relationship of the text to the intertextual context of its production. One explanation for
the existence and character of this paragraph comes from the wording of the essay
question:

Discuss the characteristics of shifting cultivation as an agricultural land use
system. Use examples and diagrams to illustrate your answer. Refer to the
impact of modern technology on this agricultural system [my emphasis].

Read in terms of the task at hand, Rowan’s essay reflects and replicates the structure of
the question. Rowan, then, has produced an end to his essay in accordance with the last
of the instructions encoded into the question. This is consistent with his single-draft
approach to writing, and serves as perhaps a stronger explanation for the features of the
last paragraph than a linguistic-genre-based reading which typically focuses only on the
single text as a whole, discrete entity, essentially distinct from and bounded by what
surrounds it as ‘context’ or ‘not-text’. This characterisation of the text might be
represented in terms of the congruence of text logic and temporal logic. This congruence
in fact marks Rowan’s text as an ‘improper’ text according to orthodox reading
formations of school-literate production. A ‘proper’, seamless or ‘tidy’ text effaces
process time and only produces the logic of the ‘concept’ and the ‘text’. This effacement
might be understood as the production of a particular kind of ‘rationality’. What counts
as evidence of a successful outcome of literate practice is an object, not the traces of a
process of inquiry. The text-in-school is a semiotic icon with certain cultural value as
icon. It is typically read as standing in for the process.

Rowan’s text might be read in part then as an instance of an ‘interim’ genre within a
notion of ‘interim literacies’. According to dominant subject-disciplinary reading
formations, Rowan’s is a text which, for various reasons, is on its way to articulation.
One way of representing some of the determinants of its production is to see that two
elements of text production may be working in tension here: that of fulfilling the
requirements of ‘the law’ (of the question) and that of fulfilling the requirements to
produce a single text. Another way of reading the essay, then, is that its writer has
internalised and mirrored, rather than ‘properly’ transformed, the logic of the question
and hence has produced a corresponding textual structuration. The text might thus be
characterised as a kind of 'question-answer' genre, a particular kind of curriculum genre closely tied to institutional conditions of text production, conditions which are of the 'dummy run' variety, generated to order, and not directly linked to any 'real' function in the world of geographical work.

A second, related, explanation concerns the relation of this text’s structure (and indeed that of the question) with what I have identified as a stable and consistent feature of the genre of much of the textbook-geographical writing which Rowan encountered in preparation for writing his assignments. I have referred in Chapter 2 to the 'fact/value' split identifiable in the treatment of most topics, realised through a 'fact/impact' structure in texts. This simple structure may be represented graphically thus:

![](image)

**figure 6.3: Rowan's text as instance of the 'fact/impact' genre**

This genre is most strongly marked by the strict separation of 'fact' and 'impact' and the one-way process of ordering the two principal stages, as shown by the arrow in figure 6.3. Many of the topics addressed within the curriculum were structured along these lines. Indeed, there is a strong 'fact/impact' sequencing of the whole unit called 'World Biomes' within which 'shifting cultivation' is located as a topic. This sequencing can be clearly read from the lists of objectives for the unit, which I have reproduced in Chapter 2. This last paragraph of Rowan's text can be read as reproducing, although in undeveloped form, a strong feature of the dominant mode of organising thematic relations in school geography textbooks. The last paragraph is, according to this reading, a coda. Its length in comparison to the whole text relates quite closely to the ratios of

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3 In Chapter 5, through a discussion of some transformations of textbook material in Karen's text, I have noted that 'impact' is value reduced to 'fact'. 'Fact/impact', then, in geography textbooks, may be better re-cast as 'fact 1/fact 2'.

'fact' and 'impact' in textbooks such as Robinson and Warburton and Chapman and Codrington discussed in Chapter 2.

Karen

Karen's text presents many of the salient features of expository writing. It might be read as what Martin (1985) has termed "hortatory exposition," a text produced to change something. Palmeri's (1991) distinction between "dialectical" and "rhetorical" reasoning in Aristotle's work provides a striking way of reading the differences between the two texts which relates to questions of genre being explored in this section. According to Palmeri, the two modes of reasoning were, for Aristotle, directed to fundamentally different ends. Palmeri notes that "[t]he end of dialectical reasoning was arriving at probably true premises. The end of rhetorical reasoning was arriving at action" (1991:52). This distinction can be applied to Rowan's and Karen's texts, where Rowan's text foregrounds facticity, substantially presented as an end in itself. Karen's, in contrast, is explicitly oriented to action. These differences in function 'shape' the texts in important ways.

As an expository text, Karen's text can be read as explicitly mobilised within the field of environmental politics. The text foregrounds difference, conflict and struggle through its opening and closing sections. As Chapter 5 demonstrated, these sections address issues, not of localised technical procedures, but rather of more global concern, in particular, the place of shifting agriculture within a world environmental context. As indicated in Chapter 5, the essay closes with a call for action and change. Karen's text can be represented in terms of its generic function in ways that render its difference from Rowan's quite graphic:

![Diagram](image)

*figure 6.4: Karen's text as instance of "hortatory exposition"*
The opening and closing sections of the text are the outside of the circle. These sections frame a substantial body of text which fulfils major requirements of the question and of the factitious nature of 'proper' school-geographical texts. However, Karen’s text cannot readily be assigned status as an instance of the ‘fact/impact’ genre characterising many school geographical texts. The opening and closing sections, when read together, form a coherent (though open-ended) macrotheme-macronew relationship, such that the 'factual' elements of the text do not speak for themselves, but rather are configured in terms of their effects upon an argument urging action with respect to land use and global environmental relations.

There are other generic considerations characterising the differences between the two texts, which warrant brief mention. The generic traces of popular television documentaries in Rowan’s work in the classroom more generally have been well documented in earlier chapters. Less obvious are the non-curricular intertexts for Karen’s practices of text construction. Yet clearly, narratorial positions articulating particular ways of knowing and demonstrating – of political responsibility and political mobilisation around environmental issues – are available to writers such as Karen from other cultural texts. Of note is the particular 'voice' the narrator assumes, traced through the different relations among we, us and you. There may, for example, be a trace in Karen’s narrative 'voice' of the voice of a magazine writer in concerned mode, a writer of an 'issues-based' article in Cleo, for example, or of a popular environmental writer such as Rachel Carson.

I began this section pointing out that very little is known about issues of gender and genre in the subject-disciplinary domains of the social sciences. While it has been well established that the generic split between fictional narrative and factual genres of writing in subject English is a significant one for gender in school-literate practices, it is not clear what the generic choices are likely to be available and made in more constrained circumstances, such as in a school geography curriculum, particularly one which privileges the discourses of the physical sciences. However, some points can be suggested. In a case study of gender and geography in South Australia, briefly reported in Chapter 7, I indicate that girls and women orient strongly towards human geographies, while boys and men locate themselves in, and succeed at, physical geography. This finding is in turn consistent with much of the available work on girls and women in science generally (for example Thomas 1990). This being the case, it is likely to provide a way of seeing the generic choices as closely linked to sub-disciplinary discursive orientations, and these in turn, linked to gender. In this sense, the generic differences between Karen’s and Rowan’s texts may be seen to be exemplary, in terms of being strongly characteristic of a wider generic patterning within the Year 11 classroom, where
the girls typically produced texts with more features of exposition ('rhetorical in Palmeri’s sense), while boys produced more ‘factitious’ (dialectical) texts. A hypothesis to be tested is that this generic difference might characterise the writing of girls and of boys in the social sciences more generally. There is further work to be done linking gender and genre in terms the degree of explicit writer-positioning in the world in social-scientific texts, with a particular view to Bateson’s critique in the motto at the beginning of this chapter.

6.3: Discourse

It is at this point in the chapter that I allude explicitly to the chapter’s title: ‘Dangerous matters’. This section reads the discursive orientations of the two texts in gendered terms, referring to the notion of ‘danger’ in two main senses. The first sense is at the level of meta-commentary in the following reading of Rowan’s essay. It articulates, with respect to this text, something of the critique being developed in the thesis of the dominant discourses in circulation in school geography. This is a position which reads texts such as Rowan’s, not in terms of levels of competence, but as instances of a politically problematic textual practice, from a feminist perspective. The sense intended at this point is that Rowan’s mode of representing the world in geographical writing is, in general terms as an instance of scientific ‘detachment’, ultimately a dangerous one for the human species and for the planet.

The second sense in which I invoke ‘danger’ is as an explicit feature of Karen’s text. This sense of the term reads Karen’s text as more or less explicitly contesting dominant modes of representation and as foregrounding of matters of life and death. According to this reading, the dominant techno-scientific and economic discourses of school geography might be understood as mechanisms for neutralising dangerous concerns about culture, development, exploitation, species depletion and environmental degradation. This is done in the curriculum in general by, on the one hand, devoting large portions of the curriculum to weather studies and landform studies, and on the other, by reading regimes such as those set up in the examiners’ marking guides, which implicitly but effectively reject the viability of certain discourse features which would mark more polemical or engaged productions in geography. Training in ‘rational’ practice in the geography curriculum might be construed as a process of keeping the lid on the discursive pot. The following readings make an argument for the gender significance of the discursive differences between the two texts, not in customary terms of deficit and disadvantage, but under the assumption that feminist scholarship is about the envisaging of a different reality, as Gebhardt has indicated in the quotation with which I began the discussion of the methodology in Chapter 1, section 1.2:
If we collect [data] under the hypothesis that a different reality is possible, we will focus on the changeable, marginal, deviant aspects – anything not integrated which might suggest fermentation, resistance, protest, alternatives – all the ‘facts’ unfit to fit.

(Gebhardt, cited in Lather, 1988:576)

Rowan

The readings which have been produced so far of Rowan’s text summarise the text in discourse terms as being preoccupied principally with matters of technique and technology, with a specific discursive framing in a ‘commonsense’ market-oriented economics. What is of central significance in this typical discursive orientation of Rowan’s textual work is the series of unexamined general racial/cultural alignments which appear to be entailed. Textbook versions of topics such as shifting cultivation link market economics with culture logically within unreflexive binary oppositions of advancedness and backwardness. Cultures and practices are evaluated along a linear pathway of development, in terms of capital and infrastructure. I have produced a critique of this curricular orientation in earlier chapters. It is important to reflect on the fact that geography is the most likely place in secondary schools where anthropological categories can arise. What is problematic about the structuring of the geography curriculum, in the way that I have outlined in Chapter 2, is that these categories come up in many versions of school geography without any of the cultural relativism common to the discipline of anthropology, partly because ‘people’ are introduced as circumstantial elements in a landscape represented primarily in physical terms. I read Rowan’s text in part as a problematic outcome of a politically problematic curricular-discursive regime in school geography. Through a reading of textual features in conjunction with certain gaps and absences, the text can be read as being discursively unreflexively centred along the following lines:

us/them

here/there

white/black

steel/stone

advanced/backward
The only real exception to the clear binary alignment is in the last paragraph, where there appears to be ambivalence over the environmental relationship between shifting cultivation and technological change. This ambivalence is signalled by the drawn line and the question mark distinguishing the last pair in the list above. The inclusion of this pair within the binary structuration was made in the light of other discursive work performed by Rowan in class. He articulated a (commonsense?) view that the imperatives of land conservation were typically in opposition to those of economic development. However, even the apparent space in the last paragraph for the possibility of other readings of this opposition is framed within the dominant-cultural ‘us/them’ binary. It is in this paragraph that Rowan articulates most clearly what might be termed, following Said (1974), an ‘orientalist’ position. According to Said:

... along with all other peoples variously designated as backward, degenerate, uncivilised and retarded, the Orientals were viewed in a framework constructed out of biological determinism and moral-political admonishment.

(Said 1974:247)

As I have indicated, this kind of problematic discursive work performed by Rowan’s text can be directly related to much of the textbook material encountered in the classroom. Further, it can also be situated within a broader international context of geography education. It is this that makes it dangerous. Catling (1990) has mounted a provocative and pertinent critique of the curricular structures and directions proposed for including geography in the compulsory National Curriculum in Britain. In particular, his critique focuses on what he sees as a serious problem in the ‘area studies’ approach of dividing the world into two parts (developed and developing) on the basis of economic and political criteria. He sees this move of the Geography Working Group as “naively, almost stereotypically divisive”. His argument is worth quoting here:

For example, it apparently ignores the central argument of development education, which is that all nations and places in their various ways are part of the developing world. More vitally, though, a subtle distinction in the
‘key topics’ strand appears: for The World Part 1 this strand focuses on named areas in relation to population and resources, while for The World Part 2 these become key issues to do with welfare, industrialisation (named areas) and aid. Such a difference of emphasis, to be ossified in future geographical schemes of work, seems set to reinforce a Eurocentric view of the world, an approach surely at odds with the aims the group proposes for geography.

(Catling 1990:85, original emphasis)

It would seem that Rowan had little choice but to construe people who practise shifting cultivation as exotic primitives, the other of *homo oeconomicus*, since the geography curriculum as inscribed in the spoken and printed word of the classroom does not engage with issues of the politics of representation. Environmental issues, as they are represented within the framework of bio-physical geography, have nothing to do with development politics. This is one of the consequences of a binary division between physical and human geography and an epistemological prioritising of the physical. This might be read as an excellent instance of the irrationality of ‘technological rationality’ as it is inscribed in the school curriculum. Here, the strong classification of educational knowledge (Bernstein 1971) might be read as gendered in terms of feminist critiques of the construction and policing of boundaries between categories and the inability to conceptualise the space between them (Fox Keller 1983). I consider this point in more detail in Chapter 7, subsection 7.2.5.

Karen

Karen’s text is much more discursively mixed than Rowan’s. This is in part a function of the text’s greater length and textual density, though this might not be sufficient to explain or contain its heterogeneity and complexity. I have described the text as ‘excessive’ to the task of writing in this context – as containing an excess of signification. That is, as well as being identifiable as an instance of geographical writing within the context of the Year 11 curriculum, the text is clearly identifiable as something else and other. Within a notion of scientific rationality as the performance of objectivity and pure presence, this ‘other’ may be described as the other of the rational and the proper within a scientific context.

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4 Yet Karen *did* take issue with the dominant modes of representation. It is this difference that problematises simple assumptions of one-way, top-down processes of literacy as reproduction: the replication of curriculum materials in student texts, and raises further questions about the politics and processes of subject production through these practices.

5 I have discussed elsewhere how one reading which was produced of Karen’s text by a male reader saw the text as featuring both an unappealing departure from the proper topic and a lack of control of academic language (Lee and Green 1990:251).
I have, in Chapter 5, produced a quite detailed account of the discursive work performed in Karen's text. Here, I suggest ways of reading this discursive work in gendered terms. As the readings in Chapter 5 and in earlier sections of this chapter have demonstrated in some detail, there is no clear-cut binary system of representation in operation in Karen's text. Or rather, there is a logic of binary pairs, but the writing is often explicitly located in the spaces between the pairs. In various ways, the text's work is to foreground issues of positionality and relationality with respect to the representational regimes being deployed within the context of this geography class.

As just one example of this work, I explore in this section questions of nurture, opening out a debate that has traditionally focused on the gender/power relations attached to the culturally entrenched nature/nurture binary. Karen's text may be read as being extensively organised around a logic of nurture. In the description of the practices of shifting cultivation, nurture might be characterised in the text as manifesting an everyday, domestic dimension. For example, a 'technical' discussion of health and nutrition mingles with descriptions of the people's cultural practices which stress matters of personal and group relationships, social life, family, balance, care and cultural perspectives. These concerns are seen to be quite distinct from Rowan's preoccupation with tools and technical details. The people are represented in the following ways in Karen's text:

> These tribal people take great pride and care in their crops as it is almost their most important thing.

> ... the people work together as one group pitching in together.

> ... they seem to live in general as a big family.

Elsewhere in the essay, the domestic or family dimension of nurture is re-articulated in the service of a global politics. The argument consists of two main stages. First, in the first paragraph, the term our land introduces a notion of custodianship with respect to the earth. According to the account developed here, we must take responsibility for the environment in order for life to occur up to its full potential. This is a notion of nurture in terms of taking responsibility for the continuing possibility of human growth and development, as I indicated in footnote 3 in Chapter 5. The second stage in the argument may be summed up through the second last sentence of the text:

> Traditional ways of life are not only productive and cheap but also valuable in human understanding.
The view articulated here allows a particular re-reading of the details of the practices of shifting cultivation in the body of the text in terms of the particular notion of nurture being developed there. This reading of the text aligns it to some degree philosophically with the movements (mentioned in Chapter 2) loosely assembled as “post-environmentalist” (Young 1990): deep ecology, gaia hypothesis and ecofeminism. These movements refuse essential binary distinctions between ‘man’ and ‘land’. For reasons of space-economy, the details of these positions cannot be properly explored here, nor can the extent of the alignment of Karen’s text be investigated. Indeed, the point is not necessarily to valorise unproblematically either any of the post-environmentalist philosophies or Karen’s position. Rather, I want to stress that ‘nurture’ can signify, within various available forms of public knowledge, in ways that do not relegate it to the domestic and the ‘feminised’ in an untheorised, unreconstructed sense, on the de-privileged arm of a binary.

A note-worthy feature of the ‘nature/nurture’ binary is that it is grammatically asymmetrical. ‘Nature’ is a noun, while ‘nurture’ is either a verb or a nominalisation of a verb. ‘Nature’ is a name given to what is in the world, while ‘nurture’ is an action, a transitive verb, something that is done to something else. The notion of ‘nature’ thus posits an essentially static entity. To attach masculine gender identity to such a term is difficult, since the relationship between masculinity and ‘nature’ is cloaked by the grammar. At the most, there is a sense of a static, one-to-one relationship: ‘man/land’. It is thus easy to elide the terms of masculine engagement with the world, an object which is ‘out there’, beyond the boundary of the subject. To investigate this relationship further, it can be re-articulated as an ‘I-it’ relationship in Benveniste’s (1958) sense. It is a relationship which begins with pulling ‘nature’ apart, to see how it works, and perhaps just for the pleasure of it, and culminates in technology, putting ‘nature’ to work. It is in so-called ‘technical rationality’ and its material outcomes that the legitimation of masculinist engagement with a third-person world resides.

Nurture, on the other hand, is explicitly relational, specifically engaging an ‘I-you’ relation. Further, nurturing is an action related to feeling, emerging out of and constituting affection and respect for people and for things. This is constituted as the ‘other’ of the rational, though paradoxically, according to Walkerdine’s (1985) argument concerning education, mothers and teachers as nurturers are understood as being able to develop rationality in their charges. Interestingly it is in terms such as ‘mother nature’,
with associated notions of nurture, that historically the binary opposition can be seen to collapse.\(^6\)

A re-reading of the politics of nature and nurture in these terms is of the greatest importance for contemporary questions of gender, literacy and schooling. For example, the nature/nurture opposition has led to some highly problematic and reductionist accounts of gender and literacy within Educational Linguistics, such as Martin (1985, 1991a), who persists in characterising literate practices in terms of boys being “interested in the nature, girls in the nurture of things”. This Martin goes on to gloss as a gender split along the lines of ‘factual’/fictional orientations in genre choices. Martin’s generalised macro-position in this respect is to privilege the ‘factual’. The position I am constructing in this thesis is that this is a masculinist position and a matter for intervention and concern, most particularly with a view to a valorising of the accurate reproduction of dominant-rational versions of geography. Yet the Educational Linguistic account of ‘factual’ writing, and of geography in particular, accepts too readily that what is must be. There is no sense that their view of geography (extensively discussed in Chapter 7) is a questionable view, or that geography might be conceived otherwise.

From this point of view, what Karen does in her essay cuts across and indeed transgresses the dominant school-geographical discourses. It is in this sense that Karen’s text represents an important problem-case in terms of the subject-specific literacy of geography. In its foregrounding of conflict and of dangerous matters, as well as in its refusal to remain within the binaries of the dominant discourses that classify the domain, shore it up and make it safe, the text sets itself up to be corrected and disciplined, just as Karen in the classroom set herself up to be corrected and disciplined in class discussion on the few occasions when she attempted to participate. Clearly, if Karen were to ‘learn’ to produce ‘proper’ texts, if she were to be properly ‘educated’ in geography, she needed to suppress the conflict and difference that marks her textual productions. At this point, the long term implication for a notion of literacy/learning as ‘enculturation’ and ‘induction’ has been seriously problematised.

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\(^6\) The nature/nurture binary exists in an apparently paradoxical relationship with the nature/culture binary, where, according to Ortner (1974) and others, nature is aligned with the feminine as the deprivileged term. However, the reading of ‘nature’ I have performed here sees nature as the object of man’s visitations and ministrations. Nature, then, is feminised by implication in this binary also. It appears that the grammatical asymmetry signals a category error in the debates!
6.4: Textual practice/self-production: Karen and the corpus

This section is an opening out of questions of the textual production of subject positions over time, as this can be traced through written texts. It contributes to an argument about the gendering effects of literate practices in that it is much more characteristic of the girls in the class than of the boys that a coherent and elaborated writing position could be read from their written productions in geography. I made a distinction in Chapter 3 between the boys’ and the girls’ work in the classroom in terms of speaking and writing. Chapter 3 indicated something of the quantity as well as the content and the manner of the boys’ talk. I argued in subsection 3.1.1 that it was through talk that the boys constructed subject positions which incorporated the technical lexis of a science of spatial relations, and that through this process they produced and performed versions of themselves and each other as masculine identities who knew particular things in particular ways. I indicated that while boys worked at this, girls simply ‘worked’ – as quiet and apparently compliant subjects of pedagogy. The place that was available for girls to negotiate semiotic space within the geography curriculum and the classroom was writing. Accordingly, I produce here a brief selection from Karen’s written corpus, in an attempt to trace something of this process.

Karen’s written production in geography for 1989 was collected in a large black plastic ringbinder. Though each piece of writing was produced separately, and explicitly in response to separate, teacher-initiated tasks, one way of reading this corpus is as a single text. Indeed, this reading is encouraged by the particular presentation of those pieces which Karen appeared to have designated as in some sense ‘public’ texts. Each was separately titled and bound, but both the titles and the binding are of a similar order and pattern, suggesting items in a collection, or chapters in a book.7

When the work is read as a single text, certain discursive and generic relationships between the individual pieces may be identified. My particular concern here is to pursue the notion of trans-textual discursive strands or coherences in the work. To do this, I re-introduce the notion of ‘motif’, which I have used in earlier chapters to indicate the sense of a pattern of concepts and metaphors that recurs across different fields of concern.

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7 I decided on a distinction between the ‘public’ and the apparently ‘not public’ texts in the folder on the basis of whether they were titled and bound. Some pieces, submitted for assessment, such as short tests, were indeed ‘public’ in a sense, but were distinguished from the bound pieces, which were all extended pieces, consisting of essays and field reports.
What follows is a brief series of excerpts from Karen’s ‘public’ texts, ordered chronologically.

1. ‘Biological and physical systems’ (last 2 paragraphs): April

Because of this we can see that many adaptations are made in biological and physical systems. These two systems rely on each other, for plants live off the land and climate, while animals couldn’t survive without plants. Not only is this because of the exchange of oxygen and carbon dioxide gases but also the fact that animals eat plants. Climate also plays an important part as some types of weather may be unsuited to some animals - like the panda with the hair.

Plants and animals, including humans, are greatly dependent on climate and nature of the land.

2. ‘Gradational forces: working together’ (first and last 2 paragraphs): April.

All over the world there is a difference in climate and physical features of the land. The Himalayas in Asia present a good example of how different plants and animals survive with different climate and vegetation of land.

[...]

Not only do we humans affect the landscape but it affects us. For example. If a mudflow occurs near a farming region this may soften the ground, making it good or bad for crops etc. Also, most people like looking at natural wonders, such as limestone caves like those caused by carbonation. Many different compounds and combinations of rock also may be made, supplying new building materials such as clay limestone and iron.

So mass movement and weathering has disadvantages as well as advantages. We must remember that gradational forces operate together to change the landscape, not only as separate processes. If something were missing the whole process of denuding the landscape would be different and may not even occur.

3. ‘Abrolhos Islands Field Trip’ (last paragraph): September

We must learn to give and take a little bit from everything. Management of these islands is needed before it gets out of control. When I say management I refer to the conservation of reefs for the fishing industry, recreation, tourism and the land’s flora and fauna. No one wants to see these islands go to waste,
but no one wants to see them ruined or destroyed from the carelessness of human impact. There must be a balance.

4. 'Ecosystems Case Study: Tropical rainforests (excerpts from last two pages): October

The dangers of interfering with the processes of an ecosystem are quite high. If cultivation and/or clearing has taken place the ground soils will not provide the necessary nutrients to fertilize and regenerate the forest. Thus the natural healthy balance of plant and animal species is affected and the rainforest is unbalanced.

[...]

These factors make the tropical rainforest ecosystem very important and we should preserve it making the most of our natural resources as possible. Without our tropical rainforests, life as we know it may not be apparent. After all, much of our daily requirements such as food are produced there and besides, we would be short a beautiful and luxurious nature strip to admire.

5. 'The Characteristics of Shifting Cultivation' (first and last paragraphs): November

Land may be used for agriculture in many different ways. However to prevent our land from being damaged or perhaps over-used we must learn and practice methods in agriculture that not only benefit us but also our environment. It must be balanced for life to occur up to its full potential. Despite the fact that some countries are less developed, even primitive compared to others, sensible and productive farming can still take place. Shifting cultivation is an agricultural land use system used in areas with low-level technology along the tropical locations of the world. However for this kind of system to work successfully there are several features or characteristics that we must consider.

[...]

We should consider these prospects now as tomorrow may well prove too late. Traditional ways of life are not only productive and cheap, but also valuable in human understanding. We do not want life as we know it to disappear, so why not start now.

6. 'Resources, population and pollution' (excerpt from page 14/16 and last paragraph): November

This problem [use of forests] is thus a social issue and arises at the question of how life will be sustained in the future.
The types of problems that are possible due to our forests being removed are:

* less life support, including water, food and industry.

* soil depletion due to reduced micro-organisms from vegetation.

Of course there are advantages and disadvantages of conserving our forests as much as possible but to make the best use of our forests that conservation must be balanced and maintained under control.

[...] These changes brought about by man are long term disadvantages. The advantages are short-term and are good at the time, but correct management and control must take place to ensure that life is maintained. As life is a long-term continuous cycle we must not destroy it but rather appreciate it with care.

Within these ‘public’ texts, there are many more instances than I am able to document here of this set of concerns with issues of balance, responsibility, interrelationship and interdependence. At first glance, this might not appear remarkable, since the statements are fairly familiar from within popular environmentalist discourses, such as might appear on television programs (including Harry Butler), in magazines or in Rachel Carson’s writing. Two points might situate the writing more precisely, however. The first is that these metaphors do not appear in the writings of other members of the class. The second is that a notion of balance does not appear prominently in the class’s textbook material as a geographical concept until the final topic of work (‘resources, population and pollution’), introduced late in November. Indeed, Karen’s work with these terms in class, for example in the ‘resources’ discussion, was marked out by Alan A as being inappropriate at that particular stage of the discussion, as I indicated in Chapter 3.

When the term ‘balance’ finally does appear formally in the readings, late in the year, it is incorporated, in grammatical terms, as a circumstantial element within definitions. For example, these two come from Karen’s ‘resources, population and pollution’ assignment:

Pollution is any substance entering the environment which is harmful to the natural balance of the ecosystem;

During the re-construction or use of a resource, by combining certain elements including heat and water, many foreign elements are also
constructed. Foreign elements are those that are harmful to the natural balance of the ecosystem [my emphases].

As I have indicated, definitions proliferate in geography, or at least, in the geography of the school curriculum and the school textbook. If a word has not been signalled orthographically in the customary way (that is with bold, italicised or underlined script on its first appearance accompanied by a definition), then it quite clearly does not operate as a techno-geographical term. ‘Balance’ is not defined in this manner in the Year 11 geography materials, so it is not, strictly speaking, a technical term.

Thus, the discursive preoccupation in Karen’s writing with issues of balance cannot really be predicted or explained from the immediate curricular context. I would argue, on the basis of the considerable work that the metaphor of balance performs in Karen’s participation in the curriculum over time, that it is an extremely significant one for the writer, in some sense. That is, the repetition can be read in terms of a discursive investment on Karen’s part in using metaphors of balance as major explanatory frameworks for making sense of the geographical information she is encountering.

One method for understanding this investment is by means of an informal extrapolation of the linguistic feature of ‘amplification’. Amplification is a term developed by Poynton (1990a), along with ‘reciprocity’ and ‘proliferation’, as three modes of operationalisation of the register variable, tenor; that is, they are mechanisms for the realisation of interpersonal meanings. In particular, amplification works through repetition of linguistic items to intensify the speaker’s position with respect to a particular speech act. Here, I apply the term in a way which is quite different from the more formal linguistic analysis deployed by Poynton. This is partly because Poynton’s analysis of amplification focuses on interactive texts, and partly because linguistics typically confines its analysis to what I have called ‘bounded’ texts: identifiable single ‘messages’ such as essays and interviews. Here I extrapolate from the text-level analysis to use ‘amplification’ metaphorically to refer to repetition of linguistic items across textual items in a corpus, with a resulting effect of intensification of self-positioning of the writer within the corpus. This in turn extends the notion of the interpersonal beyond that evidenced in grammatical structures and hence beyond ‘linguistic’ analysis in the strict sense. Metaphors of balance are realised across Karen’s corpus in different ways and on different scales. The following brief discussion further extends the notion of amplification to cater for these different modes and orders of realisation.

In terms of the structuring of field in each of the individual texts of the corpus, each of the different topics is centrally organised around the issue of environmental balance. This
becomes more explicit and more insistent as the individual pieces are read chronologically. Hence it is possible to speak of amplification in the sense both of repetition and of intensification in the sequence of pieces. Accompanying these processes is an increasing directness in reader address, a matter closely connected to the increasing explicitness and intensity with which the pieces engage in rhetorical reasoning oriented to action, as discussed in section 6.2. Such a notion of amplification with respect to field may be understood as allowing some tracing of that intersection of knowing/being which I mentioned in Chapter 3, an intersection which problematises the separation in linguistics of field and tenor, the ideational and the interpersonal.

With respect to generic structuration, these explicit concerns with metaphors of balance typically occur at the beginnings and ends of texts. ‘Balance’ is produced as part of a moral and political argument, where the writer most explicitly positions herself within biophilosophical debates. The individual pieces, in a similar manner to Karen’s shifting cultivation essay, are all more or less organised into expositions on this theme, which include as their central section, and frame, more or less conventional geographical reports or explanations (according to Martin and Rothery’s [1980, 1981] generic typologies of student writing). Typically, these central sections include appropriate techno-geographical lexis and modes of meaning construction (description, classification and explanation), while concerns about balance are situated within an exhortatory mode. There is, in many cases, a fairly symmetrical frame, as could be seen quite clearly in figure 6.4 in the case of the shifting cultivation essay. One way of describing these pieces is in terms of a physical balancing of ‘fact’ and ‘argument’, or rather, techno-geography and politics. Another way of representing the balance is in terms of the text doing double duty: obedience to formal assignment requirements and other work.

‘Balance’ as a metaphor can, indeed, be pursued further as a striking way of reading the actual realisation in language of the discursive concerns of the individual pieces. In each excerpt above, the language of the text is substantially structured around lexical pairs. These pairs exist in relation to each other, not so much as binary opposites, but as two items in a complex. These pairs are either related to field (for example, biological and physical) or to the textual function, the mode of organisation and generation of the text (for example, not only ... but also). They thus perform different grammatical functions and so are not entirely symmetrical with each other, as the following lists will show. Two examples will suffice to establish the pattern. Hence, in excerpt 1 there are the following pairs (paraphrased):
biological and physical

plants and land

animals and plants

not only ... but also

plants and animals

climate and nature

Again, in excerpt 6, the following:

advantages and disadvantages

balanced and maintained

short term and long term

management and control

not destroy ... but appreciate

The point being made here is not that the pieces are concerned with equilibration as a techno-scientific imperative. There may be traces of that at times. Additionally, however, there are tendencies on the one hand to reconciliation (closure) as well as to refusal of polarity (opening out). Positioning the writer in these pieces with respect to balance is a complex matter, involving, at different points, the foregrounding of field, tenor and mode in a complex metaphoricity.

6.5: Reception

What is of note with respect to the reception of these texts in class is that Karen’s essay did receive a better mark than Rowan’s, though not markedly so (Rowan’s text was assessed as 19/30, while Karen’s was assessed as 21/30). Further, discussion with Alan A revealed that Karen’s few extra points were awarded despite, and not because of, the complexity of the text. That is, Karen’s text, like Rowan’s, was marked substantially in
accordance with the guidelines produced by the examining authority (Secondary Education Authority 1989c). According to this reading, Karen’s text, apart from the additional work that it does, also produces geographical ‘facts’. Indeed, it produces more such ‘facts’ (understood in the atomistic sense of the examiners’ guide) than Rowan’s text. This is despite my characterisation of Rowan’s text in Chapter 4 as quite highly ‘fictitious’, in the sense that it does not perform a complex of different functions; rather, despite its limitations as a text, it presents facts in accordance with the dictates of school-scientific rationality – as stable, observable features of a transparent universe.

The marginally greater success of Karen’s text, in spite of its excess to the production of rational discourse, was understood by Alan A in several ways. What he saw as the first and most obvious point was the greater length of the text and the number of geographical facts it contained. He also mentioned care in the production of the text as being important. By this he meant both accuracy in surface conventions such as spelling and punctuation and also neatness of presentation. He read this in terms of commitment and hard work, and saw these in two somewhat contradictory ways. On the one hand, he stressed that care in presentation was important to good scholarship in geography; on the other hand, he understood Year 11 as being an interim stage in learning to become a geographer and was prepared to tolerate forms of writing and apply criteria of reception which were something of a hybrid between what he saw as ‘high school writing’ and what he termed proper geographical writing. That is, Karen’s text received a more positive reading than it might have if it had been presented at the end of Year 12.

Alan A characterised Rowan’s text as more orthodox than Karen’s. However, my request to discuss the text with him was greeted with a facial expression somewhere between wryness and indulgence. Alan A characterised Rowan’s approach to writing as careless and as evidence of the fact that Rowan, like all of the boys, was not much interested in writing. There appeared to be a notion of ‘credit’ operating for Rowan, where Alan A read Rowan’s preparedness to participate actively and purposefully in classroom discussion as evidence of his commitment to good scholarship in geography, his good understanding of basic principles of the subject-discipline, and his general ‘ability’. As I indicated in Chapter 3, a position of some privilege was recuperated for Rowan, where any shortcomings in his text were read via particular discourses of masculinity and development.

One final point concerning the production and reception of these two texts is pertinent here. In the middle of the time the class was given to write the ‘shifting cultivation’ essay, a classroom discussion took place. This had been at my request, as a way of my assessing how much students understood and could articulate what was involved in
writing a geographical essay. Alan A asked the class what they thought was being asked for in this essay, and how they thought the task of answering the question should be approached. Each student was asked to give a view. At one point, in response to one student, Alan A quite explicitly stated

Alan A: No, you really don’t want to go into advantages and disadvantages. That’s not what you’re being asked at all. In geography you don’t want to give your opinions about things; a geographer’s just interested in the facts, remember – observable facts. Whatever a geographer can see, he’s interested in.

It is difficult to imagine a more explicit indicator of the valuing of ‘facticity’. Given this, Karen’s departure appears to have been a conscious and deliberate one although, when asked about this, Karen dismissed the suggestion:

Alison: Did you deliberately write your shifting cultivation essay differently from the way Mr A said?

Karen: No, not really. I just wrote it. I did all the reading and I wrote it how I understood it.

It should be noted that neither Karen nor Rowan found it easy to discuss their writing with me. They were clearly not accustomed to talking about writing and did not appear to have a position or an appropriate language for doing so. The same was true, though to a lesser extent, for Alan A. Writing appeared, on the whole, to be a transparent entity. On the one hand, texts were ‘containers’ for quantities of given geographical facts; on the other, they were ‘windows’ into the domain of a writer’s knowledge, understanding and ‘self’, understood in an essentialist way in terms of ‘ability’ and ‘personality’. The want of a shared set of understandings between researcher and researched and the lack of a common meta-language concerning writing were features restricting dialogue on these issues. There are clear implications here for further research into literacy and writing in subject-disciplines other than English.
Conclusion

The differences between Karen’s and Rowan’s texts may be understood as gendered in complex and significant ways. The greater elaboration of Karen’s text, its multi-functionality and its excess may be read in terms of a greater investment in writing on Karen’s part than on Rowan’s. This in turn may be represented in part as a refusal of speech in the social site of the geography classroom, as I suggested in Chapter 3. More generally, however, this phenomenon may be understood in terms of a general feminine investment in the textual. This has had particular consequences historically, in terms of a generalised feminisation of textuality and of particular forms of literacy (White 1986).

Writings such as Karen’s may be understood much more explicitly than may Rowan’s in terms of a textual production of self, a dynamic process marked by time, repetition and transformation. That is, the writer takes up positions within the range of discourses marking the text’s production, with particular, though indeterminate, consequences for a notion of ‘self’ as well as of ‘world’. In one sense, all discursive practices are practices involving the setting up and the taking up positions by and for participants. In this sense, all textual practice is positioned practice. What distinguishes Karen’s writing from Rowan’s, however, is the extent to which it is explicitly positioned.
PART III

READING THE ‘META-TEXTS’
OVERVIEW

Part III consists of two chapters which explicitly engage the field of literacy studies. On the basis of the classroom study and of the readings produced of the curricular materials in Year 11 geography, as well as the two ‘shifting cultivation’ essays, these chapters raise questions about current conceptions of, and interventions into, literacy and literacy pedagogy. They investigate how literacy and literacy pedagogy need to be re-theorised, in order to account for the particular account of this classroom and its literate practices.

The thesis has, in Parts I and II, demonstrated that literacy cannot sensibly be understood outside a consideration of specific literate practices within the curriculum contexts within which they are embedded. Further, it has demonstrated that notions of ‘context’ need to be considerably enriched from narrow conceptions such as those in Educational Linguistics, and to be informed by curriculum history and politics and critical curriculum theorising. Parts I and II work to generate a ‘thick’ account of the literate practices of two students in Year 11 geography, as an exemplary instance of the workings of power/knowledge and desire in the production of gendered subjectivities in the geography curriculum project. Close tracing of relations between the written texts of the students and curriculum contexts on different scales of abstraction reveals the operation of a complex gender regime. This regime produces and positions differently gendered student-subjects and in turn is produced and sustained through the semiotic practices of individual students in interaction with other students, the teacher and the material resources of the curriculum. Through these processes, geography is re-produced as a particular set of hegemonically masculinist representations of the world and of the positions of the students within that world. Other, resistant and competing versions of geography exist and are promulgated through specific instances of language production in the classroom. However, these are marginalised through pedagogic practices which strive to achieve some singularity and coherence according to the imperatives of examination and classroom daily life more generally. These differences are significantly aligned along gender lines. Moreover, they are not random but rather reflect in significant part some of the major contending versions of geography and the social sciences more generally, within a basic technicism/humanism split.

Chapter 7 investigates attempts within Educational Linguistics to describe the field of geography. The aim of the linguistic work has been to contribute to an understanding of the ways in which language organises disciplinary fields, and eventually to use that knowledge to generate a pedagogy for school writing. Chapter 7 presents a critique of this work, focusing in particular on the lack of sufficient contextualisation of the linguistic analyses within the history and politics of the geography curriculum. The chapter
maintains a particular emphasis on issues of gender and feminist critiques of masculinist knowledges. It spells out some of the consequences for literacy pedagogy of not attending to curriculum and, in doing so, demonstrates the severe limitations of a literacy pedagogy based solely on the application of linguistic theory.

Chapter 8 works to locate the issues raised in this thesis within the field of contemporary literacy studies, in terms of one of the major concerns currently being explored and articulated in Australia – the question of ‘critical literacy’. Beginning with a review of the processes of gendered subject production in geography curriculum practice, the chapter addresses the question of what a theory of literacy and a literacy pedagogy needs to have in order to account for the issues raised in this study – relations among discourse, subjectivity and power in specific locations. The argument is made that existing accounts of ‘subject-specific literacy’ need to be expanded to engage two senses of the word ‘subject’: both the specificity and multiplicity of the discourses of subject-disciplines and the concomitant production of different human subject positions through textual practice. Any notion of ‘critical literacy’ must engage the politics of subject production through textual practice, and must, accordingly, rigorously grasp the problems both of normativity and of difference in curriculum production. Finally, the thesis reviews its methodology in a concluding discussion of the importance of engaging together the domains of linguistics, curriculum studies and feminist theory. The case is put that if literacy pedagogy is to take seriously the possibility of education for social change, then what is needed is a way of investigating the modes of realisation of knowledges and social relations in and through curriculum action in local sites.
CHAPTER 7

READING SCHOOL GEOGRAPHY:
A CRITIQUE OF RECENT WORK IN EDUCATIONAL LINGUISTICS

The curriculum is avowedly and manifestly a social construction. Why, then, is this central social construct treated as such a timeless given in so many studies of schooling?

(Goodson 1992:66)
Introduction

The discussion in this chapter focuses closely on one of the papers in the fifth collection of *Working Papers in Linguistics* produced by the Linguistics Department of the University of Sydney (Eggs, Martin and Wignell [eds] 1987). Three of the papers in this volume report research into writing in a junior secondary school in New South Wales conducted in 1986 by Eggs, Martin and Wignell. The first paper reports an ethnographic study by Wignell of writing in history and geography in an inner Sydney school. The second and third papers are accounts of the linguistic structuration of the school subject-disciplines, geography and history (Wignell, Martin and Eggs, Wignell and Martin respectively). Two subsequent papers have drawn heavily on the work reported in the 1987 collection, and aspects of these papers will be reviewed here. The first is by Martin, Wignell, Eggs and Rothery titled ‘Secret English: discourse technology in a junior secondary school’ (1988). The second, by Martin (1989), is titled ‘Technicality and Abstraction’. These two papers elaborate pedagogic implications of the original geography and history reports. Both of the original reports have attracted considerable attention within systemic linguistic circles and elsewhere and are extensively cited, a point I elaborate in subsection 7.2.1.

Before embarking on a reading of this material, I draw attention to the frequent deployment of the term ‘discourse’ in the texts. Indeed, the term is foregrounded by its appearance in the titles of three of the papers: ‘The Discourse of Geography’; ‘The Discourse of History’; ‘Secret English: discourse technology ...’. It should be noted that the term as it appears in these accounts is different from the way in which I have used it elsewhere in the thesis. In linguistics, ‘discourse’ has traditionally been taken as being synonymous with ‘text’, or the supra-sentential ‘level’ of language. ‘Discourse analysis’ is textual analysis. Used in this way, the term has little to do with Foucault’s analysis of the relationship between institutions and power in the delineation and policing of particular ways of using language. However, in these *Working Papers*, it is apparent that the term is deployed differently from traditional linguistic usage. ‘Discourse’ appears to have passed into the language of social analysis in a general way.¹ For practical

¹ In a similar manner to the aberrant use of the term ‘discourse’ in these texts, the term ‘deconstruct’ is used for the process of analysis of the ‘discourses’ of history and geography. The Introduction states: “The second and third [papers] focus on the discourse of Geography and History, deconstructing these as technologies which are by and large learned by students through copying” (no page number). Again, it appears this term has been appropriated from Derrida without the attendant political critique of poststructuralist uses of the term. I do not use ‘deconstruct’ in this reading but understand it as meaning ‘unpack’, a term frequently used by Martin in other contexts to describe this kind of analytic work, or more generally, ‘analyse’ (in the sense of breaking down to components).
purposes, I read ‘discourse’ as being approximately equivalent to the register category
‘field’, a term which is used in its techno-linguistic sense in the papers. ‘Field’ is defined
in the papers as referring to the division of the ‘experiential’ world into “institutional
areas of activity” (57). However, there is no theorisation of ‘institutions’ within linguistic
theory which incorporates questions of power. These issues are engaged by Educational
Linguists in relatively untheorised ways, as I indicate at the end of subsection 7.1.2. In
reporting the linguistic work in geography in subsection 7.1.2, I will reproduce the term
‘discourse’ in the sense that I understand it to be used in these texts, but will explicitly
draw attention in section 7.2 to the point at which a shift in my text back to more
politcised considerations is appropriate.²

The chapter is divided into two main sections. The first is a discussion of aspects of the
linguistic work, a discussion which attempts in the first instance to summarise the work
on its own terms. The second frames this work in terms of the theoretical and
institutional issues that have arisen through the investigations reported in the first six
chapters of this thesis. The chapter does not aim to analyse the techniques of the
linguistic analysis. Instead, the focus is on the politics of the starting assumptions which
ground and make possible the production and technical manipulation of a ‘data corpus’
by Wignell, Martin and Eggins. In particular I investigate the issue of what is meant by
‘geography’ in the linguists’ accounts, in order for them to have found a sample of it to
analyse. The readings I produce in section 7.2 range from a critique of what is absent
from the linguistic work as an account of school curriculum geography to a critical
recontextualisation of what is represented. The readings are concerned to expose the text
as deeply problematic as a base from which to derive a literacy pedagogy.

7.1: A reading of geography through linguists’ lenses

7.1.1: ‘Internal’ contexts

The work being reviewed in this chapter represents one of the most influential recent
attempts at engaging the notion of subject-specific literacy from within a functional
linguistic framework. It forms part of a larger and longer-term project of investigation
into the language of science which has been carried out over many years by Halliday and,
more recently, by Martin and others. Some of this work, applied to educational issues, is
shortly to appear in the Falmer Press ‘Critical Perspectives in Literacy Education’ Series
(Halliday and Martin/ in press).

² The relationship of ‘discourse’ to linguistic categories is generally complex and unclear. McHoul’s
(forthcoming) article provides a useful discussion.
Discourse-analytic work such as that of Eggins, Martin and Wignell in the 1987 *Working Papers* forms a distinct strand of the work in Educational Linguistics more generally. Much of this work has been developed within the Writing Project of the Linguistics Department of the University of Sydney and the subsequent Disadvantaged Schools Programme in Metropolitan East Sydney. The literacy pedagogy being articulated within these projects has been based on a linguistic theory of genre initially developed from and applied to a corpus of written texts produced by primary school children. This theory has focused to a considerable extent on schematic-structural features of texts in terms of genre and has, on the whole, been less concerned to work systematically with the organisation of subject-disciplinary fields. The work on genre connects with issues of subject-specific literacy principally in its critique of the marginalisation of ‘factual’ writing in primary school curriculum and in debates about literacy pedagogy. The papers in this collection represent one of the few attempts to focus on ‘factual’ writing within the concept of field. The work is considered to supplement and complement Educational Linguistic work on genre (see subsection 7.2.1 for further contextualisation).

I focus principally on the report titled ‘The Discourse of Geography: ordering and explaining the experiential world’ produced by Wignell, Martin and Eggins (1987:25-65, republished 1990: hereafter referred to as ‘the WME text’). As I have indicated, I am not concerned to summarise/reproduce the techno-linguistic details of the report as a whole, for several reasons. First, the linguistic analysis, being ‘technical’ (in the sense articulated in the report with respect to the technology of geography discourse), is not susceptible to ready summary. Second, I am not concerned to interrogate the linguistic analytic technology *per se*, which may be, according to its own terms, exemplary. The readings of student geography texts in Part II of this thesis have not been primarily concerned to engage these linguistic analyses, either to apply or to interrogate them. Rather, they have been deliberately constructed as alternative readings, focusing in large part on the ‘other’ of, or the ‘extra’ to, the technical. Certain linguistic technologies have indeed been mobilised in these readings, among other reading formations. However, these technologies have been engaged to open out questions of the gender politics of representation, subjectivity and difference in students’ writing in geography, rather than to delimit or close down on what counts as ‘geography’, as I will argue the WME account does.

It is WME’s account of the functions of technicality in geography that provides the focus of the discussion in this section of the chapter. This account, a relative of similar

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3 Section 7.2.5 returns to consider questions of linguistic technicality. At that point, a portion of the linguistic analysis in WME is reproduced in an adapted format as a kind of system network.
accounts elsewhere (for example Martin et al. 1988), provides a crucial part of the rationale for the proposals that are articulated within Educational Linguistics for particular interventions into writing pedagogy.

7.1.2: A linguistic account of the functions of technicality in geography

On the first page of the report, WME outline their project as follows:

Through our study of junior high school geography textbooks we have tried to develop a description of "the discourse of geography": i.e. how language is used to represent and teach the field of geography and the geographer's task (25).

They begin the process of articulating their model of geography discourse by incorporating brief quotations from page 3 of the textbook they have used most extensively for their study (Sale et al. 1980):

The primary task of the geographer is to "look for order and meaning in the world". The procedures to uncover this order and meaning are, first, to "observe and describe"; then, "to group and classify" and finally "to analyse and explain". ... The three stages of the geographer's task can thus be summarized as: observing, ordering and explaining the experiential world (25).

According to WME's analysis in this report, language is used in three distinct ways in geography. In its function of observing and describing the world, geography has created an extensive technical vocabulary. To achieve the function of ordering the world, geography has set up a series of taxonomies engaging that vocabulary in a set of precisely defined, though often implicit, semantic oppositions. Finally, language is used in geography to explain the experiential world by means of the positing of "implicational relations" between natural and "man made" (sic) states (26). Thus, the discursive moves from everyday language into geography discourse are, first, a move towards technicality in terms of the naming and classifying of things and second, a move to the explanation of cause-and-effect relationships among geographical processes.  

[4] 

At the end of the report, WME return to a more detailed discussion of the functions of technicality in geography. They identify two main functions. The first is the precise

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4 See McHoul and Watson (1984) for a quite different account of the move from everyday language into geographical language.
delineation of a field: a domain of concern and the production of a specific way of talking about it. In general, it is through technicality that “a discipline establishes the inventory of what it can talk about and the terms in which it can talk about them” (58). According to WME’s account, geography takes everyday things, renames, reorders and explains them. It is this functionality that WME refer to when they call geography discourse a “technology of technicality” (57).

The field of geography is realised linguistically through technicality, defined by WME as follows:

As we are using the term, TECHNICALITY refers to the use of terms or expressions (but mostly nominal group constituents) with a FIELD SPECIFIC meaning (35).

Field is represented in the text, somewhat imprecisely, as being “closely linked to experiential meaning in the grammar” (57). More precisely, field is realised linguistically through patterns of lexis and transitivity. These patterns perform the functions of describing, classifying and explaining phenomena. As such, technicality is “field-creating” (58). Geography can thus be defined in linguistic terms by WME in the following manner:

The Field of geography is thus made up of a number of interrelated taxonomies and sets of implication sequences, realized by technical terms.(62)

The second function of technicality, after that of field creation and demarcation, is that of “distillation”. According to the account in WME, geography discourse has developed a “shorthand” way of referring to the world from a geographer’s point of view (59-60). One way of understanding this function is by considering the linguistic difference between description and classification in the terms of this account. Description involves the use of epithets and qualifiers, while classification involves the construction of taxonomic relations, often using a classifier^thing structure. A term such as ‘physical landscape’ (classifier^thing) can enter more readily into a taxonomic opposition with, for example, ‘cultural landscape’, than a description of a particular landscape could ever do. The language of classification is more ‘precise’ in a technical sense than that of description, though the shedding of the epithets and qualifiers of non-technical language results in the loss of detailed information about specific instances of an item within a classification.5

5 For a more detailed discussion of this, see Chapter 6 in Halliday (1985).
This precision of technical language is produced by the processes of naming and defining. However, geography does not simply re-organise informal classifications of things into more systematic taxonomies. The most important “distilling” function is performed by the technicalisation of geographical processes through the grammatical process of nominalisation. It is this function above all which compresses the language and characterises geographical discourse as ‘scientific’ (61). WME provide the example of the geographical process of *adiabatic cooling* from the physical-geographical subdomain of hydrology. As an exemplary instance of the condensing function of technical language within one of the topic areas of the Western Australian Year 11 geography curriculum, the explanation is worth quoting in full.

As air is moved upward away from the land-water surface or downward towards it, very important changes occur in the air temperature. Air moving upward away from the surface comes under lower pressure because there is less weight of atmosphere upon it, so it stretches or expands. Air moving downward towards the surface from higher elevations encounters higher pressures and shrinks in volume. Even when there is no addition or withdrawal of heat from surrounding sources, the temperature of the upward or downward-moving air changes because of its expansion or contraction. This type of temperature change which results from internal processes alone is called *adiabatic change*.

(Trewartha 1968:136, cited in WME:61)

In technical language, definitions are often structured through identifying relational clauses (what I have termed the ‘this-is-that’ function of technicalisation). However, the relationship between token and value in definitions is often quite unequal. There is no simple one-to-one relationship in instances where, typically, whole geographical processes are being named through technical terms. The above example of textbook technicalisation through definition indicates this quite clearly, where the token, ‘adiabatic change’ has as its value a long sequence of material processes.

Technical terms are introduced by definition, and typically, as I indicated in Chapter 2, are marked orthographically, followed thereafter by incorporation into the body of the text in ‘plain text’ print. After being defined, the meaning of a technical term can be assumed and the term can be used throughout the rest of the text without further elaboration (60). Textbooks often produce a list at the head of a chapter of the concepts and technical terms associated with the topic. According to WME, the task of a geography textbook is “to elaborate the technical taxonomy and generate terms for how things come about” (62).
Being substantially a report of the linguistic analysis of geography textbooks, the WME text proposes very little in the way of a pedagogic framework attendant upon their findings. However, since the work is situated within the project of Educational Linguistics more generally, it might be assumed to imply a pedagogy, particularly since it is presented in the Working Papers following Wignell’s report of his ethnographic study of the school where he gathered the textbook material being analysed (Wignell 1987:1-25).

In his report, Wignell is highly critical of existing writing pedagogies in secondary schools. He identifies a lack of teacher knowledge about discourse features in the two subjects, leading to a lack of explicit modelling of appropriate language and appropriate text types for students. He identifies unproblematised assumptions about the connections between speech and writing, and a desire for students to use their “own words” in their written assignments. Wignell reports a considerable amount of teacher and student talk about what “in your own words” might mean. Teachers identified a vast amount of direct copying from textbooks in student texts. Students claimed to be doing most of their writing at home and to be mostly learning how to write from outside school sources.

Wignell’s conclusions in this piece are consistent with those of the Educational Linguistic position generally, as articulated, for example, in the paper in the same volume by Martin, Christie and Rothery (1987: 116-152) as well as in various papers in 1989 issues of English in Australia. Martin et al. (1988), referring to the technical language of subjects such as geography as “secret English”, provide the most explicit account of a pedagogy based on the linguistic analyses of geography and history textbooks:

Secret English is a collection of specialised registers which have evolved to get on with different kinds of work. Though not designed to mislead and control, they are used in this way – because specialisation involves apprenticeship and the relevant apprenticeship is made selectively available to specific members of our culture. Secret English is powerful, and needs to be explicitly taught if this selectivity is to be broken down. Teaching it to empower means giving students from a range of backgrounds conscious control over its technologies. Critical literacy makes sense only in these terms. It is in bringing these discourse technologies to consciousness that linguistics has its special role to play.

(Martin et al. 1988:171)
In terms of explicit reference to pedagogic concerns in the WME report, there is only the following brief statement, on the second-last page, about what it might mean to ‘do’ geography in school:

Learning the discourse of geography; learning to be a geographer entails learning the technical terms and their ‘valeur’ within the field. (62)

A ‘straight’ reading of this statement might conclude that the relationship between language and learning is assumed by WME to be straightforward. Even so, what is articulated here does not reflect the linguistic complexity of the preceding account. According to the WME account, speaking or writing geography is clearly not just a matter of ‘learning terms’, but of constructing implicational relations among terms. This clearly takes the issue far beyond the level of lexis or even of the clause. Even in linguistic terms, there is a great deal missing from this statement as an account of what it might mean to ‘learn’ geography, not the least of which is a consideration of issues of genre.

Martin et al. propose a pedagogy of induction into “secret English”, a category which enters into a binary opposition with “commonsense English”. They articulate learning in terms of an “apprenticeship into specialisation” (171). There is the assumption of the at least intended neutrality of “secret English”. It is important to this project that technical registers are represented as functional and practical. They “have evolved to get on with different kinds of work” (Martin et al. 1988:171). The question asked at the beginning of this paper is “whether in fact [secret English] is designed to mislead and control – or has it in fact evolved in contexts where it is simply the most effective way of getting on with the job?” (148). This point echoes WME’s defence of geographical technicality against accusations of “jargon” (58-59).

These notions of “secret English” and of ‘apprenticeship’ and ‘induction’ imply a particular theory of institutions operating in the Educational Linguistic project. The work is informed by a liberal theory and attendant politics of access and participation. There is no engagement with the point that has been developed in this thesis: that what is often at issue in specific disciplinary-institutional sites is the competition among different specialisms, different registers, competing discourses with associated hegemonising and marginalising properties. At this point, however, since these paragraphs have clearly shifted from reportage to critique, it is now necessary to begin the process of interrogating the adequacy of the terms WME have set themselves.
7.2: A Critique of linguistics-based interventions in curriculum and literacy

7.2.1: WME: a "seminal paper"

As I have already indicated, the reports in the 1987 Working Papers have attracted a good deal of attention and are extensively cited in a range of different contexts concerned both with linguistic theory and with its application in literacy studies. I begin this section of the chapter with a brief review of the recent history of the reception of the WME text. The argument I make here is that, through particular citational practices, Educational Linguists and their supporters have positioned this paper as a 'keystone' to an edifice of 'knowledge' about the language of schooling. As such, it is represented as being 'in place' and available to be used in further research work by others – research of a 'building-block' nature. Particular citational practices and particular uses made of the text in a range of different sites have worked to render its contents transparent and unproblematic. The techno-linguistic complexity stands, perhaps, as a warrant for the adequacy of the account to its purpose: to account for the field of geography. It is important to note that, because of the largely 'insider' status of the citations, the significance of the WME text is largely (though not entirely) self-avowed, rather than ascribed from a wider field in literacy studies. It is the status afforded this text, its essentially neutralised position as 'knowledge', that renders the critique being mounted here an important one for literacy studies in Australia more generally.6

Martin has been one of the central figures in the canonisation of the WME text within Educational Linguistics.7 Martin regularly invokes the text as a central part of a knowledge infrastructure for the production and pronouncement of principles for teaching writing in the sciences. Apart from the two papers already mentioned (Martin et al. 1988 and Martin, 1989), extensive use has been made of the WME text more recently in Martin’s paper in the edited collection, Literacy for a Changing World (Christie 1991c: 79-117). More recently still, Martin has re-iterated his positioning of the WME text as a central ‘building-block’ of linguistic knowledge about the language of school subjects in his as-yet unpublished paper entitled ‘Technology, Bureacracy and Schooling: discursive

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6 I confine the discussion of the reception of the WME text to the 1987 publication in the Working Papers, since that is the version most often cited in the Australian context. Clearly, with the republication of the paper in the international Linguistics and Education journal, its sphere of influence is considerably widened from what is reported here.

7 Martin is one of the central figures in the project of Educational Linguistics. Here is not the place to rehearse the history of the movement and Martin’s role in it. Versions of that history are available, told from different perspectives. An ‘insider’ view written by Martin, Christie and Rothery is included as the fourth paper in the volume of Working Papers under discussion here (117-152). Other accounts have been provided by Hammond (1987) and, more recently, from an ‘outsider’ perspective, by Richardson (1991).
resources and control’. This paper is a version of Martin’s address to the seventh Australian Reading Association National Conference in Adelaide, July 1991. At this conference and in an (untitled) address to the Post-Conference Institute in Educational Research, Martin referred explicitly to the WME text as one of the most important knowledge bases ‘in place’ in the project of constructing a linguistic account of school knowledge discourses. A 6-page list of references assembled by Martin was distributed at this Institute. The WME text is included in this list in a section titled ‘Halliday’s work on the evolution of scientific English’. This section of the list contains a detailed account of systemic work in the language of science. Distributed to researchers and teachers as an aid to research into literacy, the reference list exclusively cites systemic and “closely related” work in the field. Through practices such as this, the status of the WME text (together with three other publications of Wignell’s and all of the papers authored by combinations of the Eggings, Martin and Wignell partnership) has been and is continuing to be established.

Christie has been another central figure in the canonisation of the WME text in her capacity as editor of the 1991c ACER publication, Literacy for a Changing World, which is being used as a textbook in many teacher education courses, and as Director of the Project of National Significance in the Pre-service Preparation for Teachers of English Literacy and editor of the report (1991b). In ‘overviews’ of what she presents as the field of literacy studies, Christie has been repeatedly quite explicit about the position of the WME text as a ‘foundation’ for further linguistic-analytic work into the fields of school subjects (Christie 1991a/unpublished paper, Christie 1991b). Characteristic of the way the work is simply assumed to be in place and available for elaboration and development are statements such as the following:

Furthermore, for the purposes of schooling, the teaching of literacy differs depending upon the subjects taught, as Martin, Eggings and Wignell have shown in particular with reference to their studies of geography, history and science.

(Christie 1991a: unpublished Plenary Paper: 8, my emphasis)

The term ‘shown’ suggests both a ‘putting on the record’ of this work as a ‘matter of fact’ and also a demonstration for the edification of others. There is certainly no suggestion of the contingency and provisionality of the claims made in the text, nor of the contingency, provisionality and situatedness of knowledge more generally.

Christie’s Literacy for a Changing World collection stands as a major recent statement of current theory and practice in literacy pedagogy within an Educational Linguistic
framework. Predictably, it contains, apart from the chapter by Martin (already mentioned), a range of references to the WME text, further cementing its position in the corpus. In their chapter in the collection, Cope and Kalantzis make extensive use of the material of the WME text. It is interesting to note, in the light of my commentary on the methodological naivety of the piece in subsection 7.2.3 below, that Wignell’s ‘ethnographic’ piece, ‘In your own words’ (the first paper in the 1987 Working Papers) is also accorded status akin to ‘matters of fact’ by Martin (81) and Cope and Kalantzis (131-132). Hammond, in contrast, merely cites the WME text in her reference list (53), without referring to it in the body of her chapter. This may be read as an oversight. Alternatively, it might be an indication of ways in which inclusion of the WME reference in educational linguistic bibliographies in general in the last four years has become quasi-automatic, quasi-mandatory, functioning almost as incantation.

Still within the Educational Linguistic framework but in a context more closely oriented to teaching practice, McNamara (1989) cites the WME text as a reference point in what is represented as a linear, one-way process of construction of linguistic knowledge about the language of school subjects. The McNamara paper is itself firmly inserted into the network of reciprocal and self citations within Educational Linguistics, as a reference point for the testing of theories of genre within the curriculum. The WME and McNamara projects have come to represent two distinct but complementary facets of a larger pedagogic enterprise, one on the side of ‘theory’, the other of ‘practice’.

Moving outside the network of self citation within Educational Linguistics, other references to the WME text within systemic-functional linguistics are striking in their uniformity. In The Australian Review of Applied Linguistics, from 1988 onwards, many papers cite the text as an important contribution to linguistic theory. In 1989, for example, Rubino incorporated the WME report into her brief overview of recent developments in theories of register:

One linguistic approach that has proved particularly fruitful in this respect is the systemic functional model of language, based on Halliday’s functional grammar and on the theories of register and genre developed by Martin and others (Halliday, 1985a; Martin, 1984a, 1984b; Eggins and others, 1987; Wignell and others 1987).

(Rubino 1989:70)

It is in this context that Rubino calls the reports “seminal papers” (71). The excerpt quoted here shows how close to the ‘centre’ of systemic-functional theories of register Rubino considers the papers to be. This indicates more about the position Rubino is
writing from than the status of the WME text within systemic linguistics more generally. That is, the text is ‘central’ to the project of Educational Linguistics as Martin conceives it, and not necessarily to the broader spectrum of work in register theory, though distinctions such as this are nowhere made clear in work published for people working in the field of literacy studies in an educational framework. Indeed, in terms of a notion of ‘centre’ in the epistemological and institutional contexts of systemic linguistic work practices, it should be noted that Halliday himself incorporates the WME text in his own work without critical discussion, for example in his recent work on the language of physical science (Halliday 1988, 1989, Halliday and Martin/in press).

Even outside the circle of systemic functional linguistics, the references to this work bear a striking similarity. For example, in an overview of contemporary literacy debates in Australia published in the British journal, Educational Review, which has an international readership, Richardson (1991:177) refers to the reports in the Working Papers as forming part of a “data base” of research studies into literacy. This term serves as well as any deployed by linguists to invoke the seemingly neutral, reliable, factual status of the material in the reports.

Nowhere, it seems, in any of these citations, has there been any serious attempt to establish (rather than merely assume) the legitimacy of the accounts of the school subjects in question, for example, from the perspective of a geographer or historian, or a geography or history educator, let alone a curriculum analyst. Nowhere is there a critical review of this text or of what it is taken to ‘mean’ in the field of literacy studies, of geographical studies, or of curriculum studies. From the above account, it will be clear that, in terms of the ways in which the texts are being cited, there is a conflation between their status as linguistic theory and their status as representative of a domain of practice. Of course, the two are not unrelated, since a significant part of the claim for theoretical validity, within a functional linguistic theory, must rest on assumptions of the representativeness (of that domain) of the texts being analysed. However, it is possible to distinguish these two areas of concern, since methodological aspects of the theoretical work might be re-applied in different discursive-institutional sites. Perhaps the distinction might best be made on the grounds of what is differently at stake, and for whom, in the light of the concerns of this thesis. That is, I would argue that a different theorisation of institutions and power is needed to situate the linguistic work. The next two subsections provide a critique of the text in terms of its adequacy to its task of identifying and describing “the discourse of geography”.

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8 Rubino's position also makes no allusion to the large body of work in linguistic understandings of classrooms, such as that of Cazden (1988), Mehan (1979) and J. Green (1983). Nor, indeed, has Educational Linguistics in general engaged this important work.
7.2.2: Discourses of geography: discursive multiplicity

In most cases we do not fully understand any particular text until we have some concept of the discipline into which it fits, and in which it has its sense and significance. Conversely, we do not understand the discipline adequately until we are familiar with the historical works which make it up.


This subsection situates the WME text within a brief account of the recent history of geography as a discipline, while the next two subsections investigate issues more specifically related to geography as a school subject. This is in some ways an arbitrary separation, since discipline and school subject are closely related, both historically and institutionally. However, they are also clearly not identical (though no acknowledgement of this is made in the WME text) and there are important issues regarding the relations between the two that need to be considered here. This point has already been foreshadowed in the structural separation exercised in Chapter 2 of this thesis between what I termed “two major ‘cultural’ or discursive domains framing and mediating the production and enactment of a curriculum: the domains of ‘education’ or ‘pedagogy’ (in subsection 2.1.1) and of ‘disciplines’ (in subsection 2.1.2)”’. The order in which these two domains are investigated in this chapter is the reverse of that of the readings of the geography syllabus in Chapter 2. This is because of the apparent conflation in the WME text between the ‘cultures’ or institutions of discipline and curriculum. Because the claim in the text is to be representing “the discourse of geography”, it is necessary to produce other readings of ‘geography’ as a discipline, before turning to more particular concerns of ‘school geography’.

There is a large body of important work investigating the relations between disciplines and school subjects in a range of areas, from curriculum history to the sociology of school knowledge. Of particular relevance here is Goodson’s curriculum-historical work focusing specifically on geography (1983, 1988) and work on the language of school textbooks (Olson [1980], Luke, de Castell and Luke [1983], de Castell, Luke and Luke [1989], Apple and Christian-Smith [1992]). The commentary available from these directions represents a complex matrix within which to situate and frame WME’s analysis of geography. However, as a beginning to this discussion, it must be noted that neither

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9 At this point in the chapter I signal a shift in the use of the term ‘discourse’, away from reporting it in WME’s sense to again engaging a more explicitly Foucauldian emphasis. Further references made to the linguistic use will be marked in quotations.

10 This is not intended to suggest a simplistic ‘top-down’ relationship between the two domains. Subsection 7.2.3 addresses this issue.
the WME text nor any of the supporting or supplementary material does any of this framing work. Indeed, the only account of 'context' conceded in the collection is the brief 'ethnographic' account of the school of Wignell's study, where the textbook material was collected. This, it appears, in the absence of anything else, is to be read as the 'context of situation' which generates and is generated by the literate practices under investigation within the study (Wignell 1987:1-24). The "discourse of geography", it appears, simply is. On this level alone, as an account of a field, the text represents a problematic piece of scholarship.

The contextual problems are manifold and complex but, in this subsection, I am concerned only to address the implication in the WME text that 'geography' represents a single discipline realised through a single discourse ("the discourse..."). One consequence of this implication is that the discipline is represented as a given, an 'in-place' body of knowledge with no reference made to issues of history or change, let alone conflict and contestation. Yet detailed work in curriculum theory and curriculum history demonstrates persuasively that, in Goodson's (1983:165) terms, "[i]t would seem that, far from being timeless statements of intrinsically worthwhile content, subjects and disciplines are in constant flux".

The singularity and timelessness of the representation of the discipline in the WME text allows no space for politics. Yet it is politics at the macro-institutional level which produces what counts as the discipline of geography in universities and professional journals, where practitioners of different 'paradigms' have historically competed for status and resources. It is also politics at a more micro-logical level which produces and positions human subjects through the discursive practices of the discipline within particular relations of privilege and marginality, which align in powerful ways with the naturalisation of technicist methodologies. As this thesis has demonstrated in one particular site, these relations map closely onto larger social structures of domination, particularly along the lines of race and gender.

The texts selected by WME for the linguistic analysis, despite the implicit claim for general representativeness, refer to only one particular 'paradigm' of geography and represent that 'paradigm' in one particular way. A selection has been made from the discursive multiplicity which constitutes the discipline in the totality of its sites of practice. However, to be able to read this selection as selection, it is essential to engage the history and politics of geography as a discipline. In what follows, I select several moments in the recent history of geography, focusing in particular on the positivist 'revolution' in the 1960s. The developments reviewed here are germane to two arguments being mounted in the thesis. The first, more general argument, supported by the case study in the first six chapters, is that technicist and rationalist rhetorics and
technologies are significant mechanisms for the production of gendered subject positions in geographical-discursive practices. The second, more specific, argument is that the particular texts selected for linguistic analysis, far from being random selections, or determined wholly by the 'context of situation' of the curriculum and the classroom, may productively be understood in terms of the congruence of particular disciplinary interests (that is, geography with linguistics).\textsuperscript{11} This argument will be elaborated in subsection 7.2.5.

At various stages in the process of 'becoming' a discipline, since its beginnings in Britain in the second half of the nineteenth century, geography has struggled for respectability. At different historical points it has been accused of having no substantive conceptual framework and no exclusive 'territory' of its own.\textsuperscript{12} In particular, in the earlier part of this century, there was serious criticism of the theoretical expansiveness of geography, an expansiveness which had been motivated by utilitarian concerns: to serve the military during the world wars, and to serve diplomatic and political interests between and after the wars. Goodson (1988:168) notes:

... in the 1930s the Norwood Committee [investigating curriculum and examinations in secondary schools] was concerned by the way geography appeared effortlessly to change direction and definition, thereby intruding on the territory of other subjects and disciplines. Above all, the Committee was concerned with the temptation afforded by what it called the 'expansiveness of geography', for 'environment is a term which is easily expanded to cover every condition and every phase of activity which makes up normal everyday experience'. Hence 'enthusiasts for geography may be inclined sometimes to extend their ranges so widely as to swallow up other subjects; in so doing they widen their boundaries so vaguely that definition of purpose is lost, and the distinctive virtues inherent in other studies closely pursued are ignored in a general survey of wide horizons'.\textsuperscript{13}

The concern to attain (and to assert) a true 'identity' for geography is common across different historical periods. Goodson produces a social history of the discipline from the

\textsuperscript{11} Clearly the selection that I have made from the history of the discipline of geography is itself partial and interested. There is insufficient space, within the economy of this thesis and the arguments it is engaging, to represent that history adequately. For more complete accounts, see in particular Goodson (1983, 1988), Biddle (1976, 1985), also R. Gilbert (1984, 1988), Henley (1989), and in the Western Australian context, Marsh (1987).

\textsuperscript{12} Because geography studies territory, it is difficult to see what might set the limits on what can and cannot be geography.

point of view of vested interests in the pursuit of resources and of the career ambitions of individual academics and teachers in the field. It is these vested interests which explain much of the impetus behind, and the effects of, the era of ‘new geography’ in the 1960s. ‘New geography’ represented the introduction of quantitative methods of spatial analysis in a late arrival of a technologically driven positivism. Through its newly discovered methodological rigour, geography’s position as a ‘real’ science could at last be assured.

However, much of the rhetoric surrounding the introduction of positivist epistemologies and methodologies in geography is far from ‘rational’. A feminist reading of the metatexts of the ‘new geography’ might produce instead an account of the powerful workings of masculinist desire in the epistemological revolution. For example, the following comments, by prominent ‘new geography’ protagonists, Chorley and Haggett, can be read as the articulation of an imperialist desire attached to the new methodology, a desire which exposes itself, perhaps inadvertently, to a feminist psycho-social analysis:

... to stand still is to retreat, to move forward hesitantly is to fall back from the frontier. If we move with that frontier new horizons emerge in our view, and we find new territories to be explored as exciting and demanding as the dark continents that beckoned any earlier generation of geographers.

(Chorley and Haggett 1965, cited in Goodson 1988:173)

As a literal account of geography’s disciplinary beginnings in British expansionist imperialism, this image is predictable enough. These comments can be read as articulating a masculinist fantasy of voyeurism, seduction and rape (Easlea [1983,1986], French [1992]). The dark continents are feminised in this account, represented as “beckoning” the geographers to penetrate their depths (Said 1974). As a metaphor for discursive-institutional imperialism within the recent history of the discipline, though, Chorley and Haggett’s words are particularly revealing.

As has been documented through various sources in earlier chapters of the thesis, the contemporary discipline of geography can be roughly (though problematically) divided into the domains of ‘physical’ geographies and ‘human’ or ‘social’ geographies. Depending on the disciplinary orientation in particular sites, geography may be seen as either a ‘natural’ science or a ‘social’ science. ‘New geography’, in its quest for ‘hard data’, represented a move to the ‘technical rationality’ of positivist versions of the ‘natural’ sciences. However, as I indicated in Chapter 2, this did not mean that only physical phenomena were subjected to quantitative analysis. Rather, in the terms of the critiques mounted by R. Gilbert (1984, 1989a) and Henley (1989), positivist geography represented an attempt to subject both physical and human processes to the same kinds of
quantitative spatial analysis. Social processes were explained in terms of "natural forces", in a direct transfer from accounts of 'natural' physical processes, resulting in what Henley (1989:166) terms "a flattening out of reality" and the production of the "plastic" human figure of quantitative and systems-theoretical accounts.14

From the point of view of the reading I have produced of the metaphor deployed by Chorley and Haggett, there is a clear gendering of the technologies of the 'new geography'. With what is a quite stunning consistency in men's writings about science and philosophy (Easlea [1983, 1986], Lloyd [1984], Montgomery [1989] French [1992]), these two geographers reproduce the characteristic masculinism of 'hard' science and the concomitant feminisation (and sexualisation) of its other. This unarticulated 'other' is a diffuse category, in contrast to the 'hard' and sharply focused positivist technologies. On the one hand, the 'other' is the object of investigative work: the "new territories" and "dark continents" of a feminised 'nature', waiting to be explored. On the other hand, though, this 'other' is a space which can be read in terms of marginalised research domains and methodologies in geography: in particular, according to Henley's critique, those which, informed by versions of a critical social theory, want to challenge positivism and empiricism and attend to issues of conflict, domination and subordination in spatial histories.

Recent feminist critiques of dominant 'paradigms' in geography, including and especially positivism, are aligned with more general feminist critiques of phallocentrism in western epistemology (for example, Lloyd 1984). In a recent review of this work, Johnson (1990:21) argues that feminist critiques have de-stabilised the theoretical foundations of geography in its positivist and rationalist moments. Johnson points out that positivism lines up with humanism and marxism as the major explanatory 'narratives' informing mainstream geography and joins Gross (1986) in seeing all three of these as central to the phallocentric disciplinary apparatus. The focus on positivism in the account I am producing is not intended to elide the question of the coalition of these narratives, but rather to focus on the privileging of the positivist and technicist arm of the geographic-disciplinary apparatus in the account presented in the WME text.

Johnson argues for a "transformation" of existing knowledges in geography and for the development of new categories to map the "spatio-temporal conditions of existence and political interests" (22) that characterise women's lives on a global basis.15 An example

14 This shift parallels that of the development of positivism in psychology, in Foucault's (1977) account.
15 A related point here is that a radical rethinking of space has indeed been undertaken by Derrida in his analysis of Rousseau's eurocentric concept of space in Of Grammatology (1986).
of this feminist work which is of considerable relevance to the readings I produced of Karen’s and Rowan’s ‘shifting cultivation’ essays in previous chapters is Thomas and Skeat’s recent review of issues of gender in third world development studies. They summarise their paper as follows:

As this brief review has shown, the theoretical frameworks for considering gender remain focused on three major paradigms: underdevelopment as the result of shortages of capital, technology and skilled labour; underdevelopment as the exploitative extraction of wealth from poor countries by the rich; and underdevelopment through the economic dependency of poor countries upon the rich. These paradigms are based on capitalist economic considerations and do not provide an alternative to development based on industrialisation or the concept and structure of patriarchy. As Gross (1987, 477) has complained, for all the growing body of literature and the development of new feminist methodologies within anthropology, women’s studies and economics, theories based on the concept of patriarchy are still used to discuss the hitherto excluded object – women. The quantitative data used to support these theories continue to exclude the bulk of women’s work. While it is recognised that what women produce is difficult to incorporate within standard economic measurements, the inability to place value on women’s work suggests limitations of existing theories and the need for rethinking.

(Thomas and Skeat 1990:11)

Two points need to be made here. The first, more general point is that the work of geographers such as Johnson, Thomas, Skeat and others publishing within journals such as *Australian Geographical Studies* demonstrates graphically how far it is necessary to depart from the WME text to engage in matters many contemporary geographers are concerned about. The second, more specific point concerns one of the implications of the particular choice of focus exercised by WME. This subsection is concerned with matters of disciplinary rather than school-curricular knowledges. Nevertheless, it is difficult to resist making the point, in the light of critical-theoretical work in geography such as that summarised above, that a curriculum which does not provide some self-reflection on the representations it is purveying is seriously failing students such as Karen, who are left to devise their own resisting socio-political explanatory frameworks. Further, it becomes clear that, received within a pedagogy developed from the WME analysis, Karen’s ‘shifting cultivation’ text could never be read as anything other than aberrant. Chapter 8 revisits this point in its review of pedagogies of ‘induction’ and of the ‘critical literacy’ movement.
The WME text is an analysis of physical geography textbooks. However, the analysis does not claim to represent physical geography (let alone school physical geography) but 'geography' itself. The disciplinary division between the domains and methodologies of the 'physical' and 'human' elements of geography is not acknowledged. Accordingly, geography is quite clearly and unproblematically represented here as a 'natural' science. This is consistent with Halliday's and Martin's more general characterisations of the work (Halliday 1988, Martin 1991). Interestingly, Cope and Kalantzis (1991:132) invoke the WME text as an analysis of geography as a social science. However, there are no elements of 'the social' in any of the geography texts used for exemplification in the account. Without exception, the textbooks are drawn from the physical-geographical subdomains of hydrology, climatology and geomorphology. There is no human being to be seen on WME's geographical earth. Indeed, there appears to be an assumption that, in geography, the 'experiential' world is the physical world, despite the brief mention on page 26 of geography's concern for both "natural and man made" states. That Cope and Kalantzis were able to perpetuate this elision in their own highly politicised work in social literacy is perplexing. It is difficult to conclude that they believed that the methodologies of techno-linguistic analyses of techno-geographical accounts of the physical landscape could be simply re-applied in other domains. If this were the case, it would seem necessary to ask how different this position was from the "flattening out of reality" which characterises the positivist position according to Henley's (1989:166) critique.16

It will probably surprise no one to learn that most of the small minority of women geographers in Australian and British universities are working in and across the fields of human and social geographies, while physical geography is dominated by men (Johnson 1985, WGSG 1984). Subsection 7.2.4 investigates some of the consequences of this gender division in terms of status and resources in an account of the micro-politics of geography curriculum in the South Australian school system. This is not the place to rehearse in detail the sociological implications of this disciplinary split; this work has been done elsewhere (for example, Fahey 1988). However, the implications of this for a reading of dominant 'paradigms' in geography from a gender perspective are nicely invoked by Gale:

Again it seems to me that, as social scientists cringing in our colonial mentality against natural scientists, we have been willing to accept all too easily the label of 'trivial', or 'superficial' or 'subjective' for areas that we do

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16 The depopulated landscape of WME's geography also sits oddly with the companion paper on history (Eggnis, Wignell and Martin), which critiques the deletion of grammatical and historical subjects.
not think physical scientists will judge to be of high intellectual rigour.
Virtually everything that concerns females is still in this shady area.

(Gale 1985:59)

Gale's point concerns the trivialisation and effacement of women as knowing subjects in science. It is worth setting this alongside the massive 'objectification' of women by science since the early nineteenth century.

The unreflexive promotion in the WME text of the dominant 'paradigm' of physical geography and the concomitant celebration of technicism are thus open to critique from a feminist perspective. This critique would investigate the alliance between physical geography, with its borrowing of metaphors and methodologies from the physical sciences and the 'new geography', with its appropriation of positivist and technicist methodologies from information systems analysis. This alliance might be investigated in specific sites in terms of the gender politics of participation, as well as of representation.

Finally in this subsection I want to consider the partiality of WME's account of geography from another direction: that of some geographers' accounts of their own discipline.17 It might seem strange that no reference is made by WME to any of this reflective work produced by geographers. Part of the reason for this is that, given the confluences of discipline and curriculum, and of curriculum as a generalised entity and the specific curriculum site being visited in Wignell's ethnographic work, the linguistic work was confined to an account of what is - in one restricted location. Further, the account of 'field' in the WME text text pays curiously little attention to issues of 'content'. Emphasis is on the 'how' of semantic structuration but not on the 'what' - as if this were neutral and transparent. 'Content' is reproduced within the various taxonomic and implicational structures as a representational given. These confluences and elisions have combined with the politics of self-citational practices to ensure that the identification of the local and specific with the general and universal has until now gone unchallenged. Given the status enjoyed by this work, this situation is again deeply problematic. To counter this closedness it is useful to review some recent accounts by geographers to articulate what Cox (1982) terms the "substantive disciplinary structure" of geography.

In indirect answer to the concerns in the 1930s of the Norwood Committee cited above, Cox, working in an Australian academic context concedes that:

17 The geographers cited in what follows are all men. There may be gender issues to be investigated in these accounts, since none of these commentators mentions feminist work in the field. Rather, in their attempts to represent the 'typical' and 'general' of the discipline, they may be engaged in producing one further element of marginalisation of difference. There is a clear task to be undertaken in producing a feminist reading of these metacommentaries.
... most geographers agree that there are no facts peculiar to geography. Rather, geographers draw from the universe of knowledge in the pursuit of answers to various questions about spatial characteristics of phenomena on the surface of the earth.

These questions are listed as:

1. Where are phenomena located? distributed? associated? or moved?
2. Why are phenomena so located? etc.
3. What are the consequences of their location? etc.
4. What spatial alternatives may be considered in decision making?

(Cox 1982:8)

Cox’s method of investigating the substantive structure of geography is a principal components analysis, a quantitative content analysis of what he terms “themes” that occur in the texts of published geographical journals. Through this analysis, Cox identifies the following “key concepts”:

1. location
2. spatial distribution
3. areal association and variation (covariation) – associated concept:
   man/land relationships
4. spatial interaction
5. region
6. spatial change through time
7. spatial scale

In a survey and reappraisal of the work being undertaken in identifying global geographical concepts, Hall (1982:25) gathers a smaller group of four terms: place, landscape, region and space. More recently, Hill (1989:3), in the USA, develops the following framework of “fundamental themes”:

1. Location: position on the earth’s surface
2. Place: physical and human characteristics

3. Relationships within places: human/environmental interactions

4. Movement: relationships between places

5. Regions: their formations and dynamics

My intention here is not to simply represent these accounts as unproblematic givens but to indicate attempts within the discipline to identify common indexical components. It should be noted, of course, that, within each of these conceptual domains, there is a multiplicity of discursive criss-crossings of interests and approaches. Each of the papers from which I drew these schematic summaries engages in discussion of ways in which each of these ‘themes’ or ‘concepts’ is realised in geographical texts. Cox’s work is particularly interesting in this regard (though his methodology is problematic) because his data on the distribution of ‘thematic’ elements point to the possibility of identifying characteristic generic elements in the structuring of geographical texts. The point to be made in conclusion is that various of these attempts, even in their difference from each other, might productively have been one starting point for selection and contextualisation of texts for linguistic analysis.

Instead, in the WME text, what is offered is a representation of the functionality of a “technology of technicality” within an all but de-contextualised account of a field, a field presented as a representational given. Geography, in the terms of this account, simply is the way it has been mapped in the WME text. Despite the claim in the text that learning geography means “learning the technical terms and their valeur within the field” (62), there has been little serious attempt at rigour in determining the constitution of that field. Accordingly, the ‘valeur’ of any of the terms engaged in the analysis can in no sense be determined. Situated within an account of the history and contemporary politics of the discipline, in particular the politics of the technicist revolution, the linguistic work is seriously skewed.

7.2.3: Discourses of school geography

In their analysis, WME appear to proceed on the presupposition that school textbooks are neutral representations of disciplines – that is, that they ‘tell the truth’ (singular) about disciplines. A further presupposition appears to be, in the absence of any explicit commentary, that the relationship between school subjects and disciplines is a straightforward and transparent ‘top-down’ relationship. This term, taken from Goodson (1983, 1988), refers to an assumption in educational philosophy that school subjects derive from the intellectual disciplines and the specialist scholars practising them who
bear that name in universities. This is a view, according to Goodson (1988:163), which has been “generally accepted both by educationists and laymen [sic]. It is a view supported by spokesmen for governmental agencies, subject associations and, perhaps most significantly, the media”. ¹⁸

Goodson’s social histories of school subjects, with his particular case-study focus on geography, are influential required reading for students of curriculum, whether they have a more specifically theoretical or a practical orientation. Goodson (1988) details how geography as a discipline has been formed historically to a considerable extent in a ‘bottom-up’ manner, a point which carries important implications for curriculum analysis and critique. It seems difficult to imagine an enterprise aimed at intervening in pedagogic practice in specific curricular contexts simply not taking account of the existence and status of work of this kind. However, Wignell is quite explicit about this in terms of the data ‘collection’ phase of his enterprise:

... I had no pre-determined theoretical or methodological perspective. Linguistically yes but ethnographically no.

(Wignell 1987:1)

The implication here is that linguistics on its own is sufficient to account for what is ‘going on’ in a school classroom doing duty as a research site. Further, the implication is that the curriculum ‘context’ is assumed to be immediately available in all its transparency to a ‘commonsense’ (that is, not ‘theoretical’) perspective. In this subsection and the next, I demonstrate that linguistics and ‘commonsense’ on their own cannot retrieve very much of the complex intersection of cultural mediations and determinants which constitute geography curriculum action in specific sites.

It appears, from the absence of framing statements, that WME see the geography textbooks as producing language which is indexical of the discipline of geography. For example, they begin their report with the following:

Through our study of junior high school geography textbooks we have tried to develop a description of “the discourse of geography”: i.e. how language is used to represent and teach the field of geography and the geographer’s task (25: my emphasis).

Here and elsewhere in the report, WME fail completely to address the specificity of school textbooks and their difference from professional texts within a discipline. In

¹⁸ Hunter’s (1988) work on the history of english is a counter-instance of this point.
particular, they do not take account of the explicitly pedagogical function of textbooks. Textbooks are, in a very specific sense, pedagogic representations of disciplines. They are often structured, not primarily according to disciplinary imperatives (multiple and contested as these are), but rather according to pedagogic logics. Professional texts, on the other hand, might, with some caution, be characterised as attempts at representation of a domain of investigation. They are not engaged in a primary sense in a pedagogy of induction. Rather, they instantiate and maintain, as well as stretch or transgress, disciplinary boundaries. Relations among writer, reader and object domain ('field') are thus significantly different, in accordance with the different functions the texts are performing.

Having established this basic distinction, it is important to add immediately that pedagogies, like disciplines, are also multiple and contested and historically, theoretically and politically situated. One important point that must be made of school textbooks is that they do not represent a singular, unified version of any subject-discipline. Rather, studies such as those produced in Chapter 2 of the curricular texts in use in the Year 11 classroom demonstrate powerfully the differences among them. WME make no mention of how the textbooks they analysed compared with each other, and there is no acknowledgement of differences. It is clear that, according to the various readings of geography curriculum in Chapter 2, the Sale text (the principal text used for analysis) is a very traditional text, yet no mention is made to provide even this minor contextualisation of textbook choice. It is left to Cope and Kalantzis (1991:129) to note that the texts used in the WME analysis are "traditional geography texts". One vital (if obvious) question to ask, as I indicated in the Introduction to this chapter, is: who has decided which are the representative texts and on what basis have they decided?

One important historical example of this will serve to illustrate the material effectivity of pedagogic theories on the constitution of textbook versions of subject-disciplinary knowledge. In geography, like many other school subjects, Bloom's Taxonomy of Educational Objectives (Bloom 1956) has had an enormous influence on the structuring of geography curricula and school textbook representations of the discipline. Robinson (1985) has reviewed the use of the taxonomy in the construction of 'objectives'-based curricula by the "rational curriculum planning movement" in geography in Britain in the nineteen seventies:

The increase in teacher awareness of curriculum study led to better organised and more logically structured geography syllabuses in many schools. But one important side effect of using modifications of Bloom's taxonomy should be noted. Bloom's separation of the cognitive domain from the affective domain emerged for many geographers as separate sets of objectives for cognitive
learning and for learning concerned with attitudes and values. As a result ‘content’ (especially ideas and concepts) became submerged under headings that had grown from cognitive objectives and was split from the affective domain. The illusion of value-free content was reinforced.

(Robinson 1985:44)

This account suggests one possible causal antecedent of the common generic structuring of geography textbooks along the lines of ‘fact/impact’, as I discussed in Chapter 2. It also offers an explanation for the dispersal of ‘impact’ into a question of ‘value’, understood in an individualistic psychologistic sense in terms of ‘affect’. In his survey of British geography textbooks, R. Gilbert notes:

Texts generally avoided controversial issues in one of two ways. First, certain questions were simply not raised, but, second, a common strategy was for an issue, once confronted, to be turned back to the reader in the form of a question calling for an expression of opinion. The conflict was not analysed, but acknowledged and implicitly classified as a matter of opinion about which the text could say no more. The suggestion was that such matters are outside the province of geography. But if geography is to assist people to make decisions, it must show how values and controversial issues are related to evidence, since they will be a part of any decision.

(R. Gilbert 1988:14-15)

Importantly, in terms of the reading I produced of those textbooks as ‘fact/impact’, WME’s analysis lines up categorically under ‘fact’. Their selection of texts for analysis and the readings they produce neglect even a possible after-image of ‘impact’. As my own survey of geography textbooks has indicated, even the most conservative of curriculum materials typically includes an ‘impact’ coda. This apparent oversight functions in the WME account to entrench the purity of the physical landscape and to underwrite the myth of a pure, unmediated nature constituting the centre of the discipline, which can be retrieved by empirical methods, geographical and then linguistic.

The lack of curricular contextualisation of the selection of textbooks analysed in the WME report has led to a reductionist view of the subject-discipline. It ignores the complex intersection of disciplinary, curricular, historical, school-institutional and other (such as gender, age, social class, ethnicity), mediations and determinants which go to produce any moment of curriculum action. Through the WME account, a complex curriculum dynamic has been subjected to a particular, crude form of mapping which represents it as singular, unitary and a-historical. The question has to be asked: how
might students, trained in the technicality of the WME account, constructed as subjects of this discourse, then learn to engage more complex models?

7.2.4: discourses of geography: school curriculum history and politics

To avoid unproblematised assumptions about the unity of geography as a school subject-discipline, and to avoid the assumption of a linear ‘top-down’ relationship between discipline and school subject, it is necessary to conduct close investigations of actual curricular practices in specific localities. In order to investigate what is to count as ‘school geography’ in a specific site, the micro-politics of curriculum must be engaged in terms of the playing-out of contests over status and resources, within a framework of broader epistemological and social-political struggles. In this subsection, I document a case study of recent curricular history and politics in South Australia, which opens out important questions concerning the relations between the school-subject and the discipline of geography with specific reference to gender. In Western Australia, very little work has been focused on the politics of the geography curriculum, and none has investigated the gender politics. The focus on South Australia is due to the availability of information regarding gender and geography at a state-wide level, as a result of a research project currently being undertaken at the Senior Secondary Assessment Board of South Australia by Whitehouse (1992/draft report).

In South Australia, geography, together with other ‘academic’ subjects, is structured, taught and assessed in two different ways at senior secondary level. Public Examination System (PES) geography is the higher-status tertiary entrance qualification, while School Assessed System (SAS) geography is a lower-status certification. It has recently become clear to researchers within the Senior Secondary Assessment Board of South Australia (hereafter, SSABSA) that there are some major gender issues emerging from analysis of assessment data in geography. A closer investigation of these issues reveals a configuration of gender-political concerns which is fascinating in its homologousness with the complex set of issues addressed in this thesis.

The main ‘core topic’ of PES geography is physical geography; additionally, teachers have something of the same flexibility allowed teachers in Western Australia to turn a ‘physical’ focus to the other ‘core topic’, economic geography. For example, a common approach to economic geography is the analysis of statistics of the urban/rural split in

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19 The material for this brief case study was gathered from the Resource collection of the Senior Secondary Assessment Board of South Australia and in interview with administrative and research personnel in the subject of geography, as well as from the draft research report. Material from interviews was recorded in field notes. No tape recordings were made.
resource production and distribution. This is justified in terms of a "lack of time" to introduce more complex analyses such as those afforded by a study of the political economy of geography. SAS geography, on the other hand, is strongly oriented to human and social geographies, and is assessed internally on a continuous basis.

In terms of student enrolment on 1990 figures, the percentage of boys enrolled in PES geography was 60%. The enrolment in SAS geography was nearly 50-50, though in previous years, girls had made up a slight majority (Whitehouse 1992:13-16). In terms of assessment outcomes, girls typically perform significantly better than boys in SAS geography, while the obverse is the case in PES geography (12). Interviews with girls give a preliminary indication that girls choose SAS geography for reasons of 'personal' interest, even when they are aware of the status differential.20 At the level of staffing, the majority of geography teachers in South Australia are men. However, a breakdown between the two subjects reveals that while 30% of SAS teachers are women, women only constitute 15% of PES geography teachers. Typically, where the subjects are timetabled together in a school, PES geography is taught by a man and SAS by a woman, if one is available. Predictably, PES geography is the subject which will lead most readily to teacher promotion.

The gender breakdown in staffing can be traced in part back to choices of optional units by male and female students of geography in their undergraduate degrees, where, in general, men typically choose physical geography and women, human geography units (extensive anecdotal evidence). These in turn can be attributed in part to the staffing in Australian universities, where the few women staff employed at that level mostly teach human geographies. At Adelaide University, physical geography has been clearly privileged over other 'paradigms' over at least the last thirty years, and its status is not seriously being challenged. Male physical geographers were promoted and now exclusively hold the senior positions. Senior university physical geographers are the representatives of disciplinary interests on the Subject Advisory Committee of SSABSA. Both the present and previous Chief Examiners are senior male academic physical geographers.

The PES examination paper is divided into two parts. The first, worth 60%, consists of short answer questions involving interpretation of data and mapping. The second, worth 40%, consists of two essays. Girls have traditionally performed badly on the first section and well on the second (essay writing) section of the paper, while the obverse is the case

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20 These interviews are part of an incomplete investigation currently being carried out by Wheeler within SSABSA concerning girls' and boys' reasons for subject choice. No publication details are available.
for boys (Whitehouse 1992:30-35). Drawing on a range of theorists, the draft report states:

Girls are far more likely to see ambiguity, which leads them to see no right answer or to think of several possible responses. The general process of abstracting and focusing down on a right answer reflects a more 'male' style of thinking. Boys as a group find it easier to judge a problem in isolation and consider the context of an activity to be idiosyncratic.

(Whitehouse 1992:37)

As a result, girls have been considered to write with "less precision" than boys (comment from interview with Whitehouse). Male teachers typically privilege the computational aspects of the subject in PES geography and, while acknowledging that girls often write well, claim that that is not what is valued in geographical training. One interviewee who had frequent contact with teachers commented that it is not uncommon for male geography teachers to claim to be "illiterate" and to lay claim instead to skills in practical and analytical aspects of the subject. My mention of Rowan's identification of a 'Harry Butler' image for geography met with immediate recognition by my interviewees. Interviews with girls being conducted by Wheeler indicate a strong preference for more socially complex topics and a dislike of mapping, computational and short-answer questions. A common comment by girls with respect to the first section of the examination paper is that they "did not have enough space" to answer the questions to the depth that they understood the question to be demanding.

In 1991, some startling examination results in PES geography prompted the initiation of the research project. An unusually high number of girls did not pass the examination. Analysis is being undertaken which suggests that the questions were gendered in significant ways, in terms of the use of illustrative examples. Part of this analysis is produced in the draft report (Whitehouse 1992). The draft has been rejected outright by the Chief Examiner and the other senior male academic physical geographer on the Subject Advisory Committee. In a response characterised by overtly and offensively discriminatory language, these members intimated that the problem lay in girls' deficiencies, rather than in the gender-skewed structuring and content of the examination.21

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21 One illustrative example is the comment, derisively delivered by a male geographer on the Committee, that perhaps girls might best be taught to map by being provided with tasks to map living rooms and bedrooms.
The most likely outcome is predicted to be, in the short term at least, that more classroom time will be spent during the year on preparing students better for answering the short-answer section of the examination paper. This is predicted to have the result of further marginalising girls' interests and strengths in essay writing and more considered exploration of geographical-social issues, and subjecting them further to what can clearly be characterised as a masculinist-technicist regime within the subject-discipline. Together with the de-privileging of human geography in its relegation to SAS status, this devaluing of the more speculative, socio-politically oriented aspects of the publicly-examined curriculum appears to be seriously working against girls' interests. Furthermore, in the terms set up in Chapter 6, this in turn can be characterised within feminist critiques of masculinist modes of knowledge production to be politically problematic.

It is important to acknowledge, in concluding this subsection, that politico-historical investigations can be proliferated and amplified indefinitely in terms of detail and local specificity. What matters is to work within this to the degree of delicacy that will serve particular strategic purposes. Here, the point has been developed sufficiently to demonstrate that 'geography' has no necessary or absolute identity, and that piecemeal analysis of specific locations is an important counterbalance against the imposition of universal structures by linguists or indeed any analysts with an interest in curriculum and pedagogy. WME occupy a position of an implicit universalism (geography is), though in actuality they may simply have been unequipped to select representative cases for analysis. If the latter is the case, their selection of the 'hardest' possible kind of curricular text is not unexpected because of the dominance of this 'paradigm' in the Australian school geography curriculum. That it is problematic is clear.

7.2.5: The gendering of a linguistic "technology of technicality"

In subsection 7.1.2, I summarised WME's position on the functions of technicality. According to WME, technical language functions to create and demarcate fields and to distil and condense language. In their discussion of "secret English", Martin et al. (1988) speak of "specialised registers which have evolved to get on with different kinds of work" (171). Earlier, in a rhetorical question, they ask whether "secret English" is designed to mislead and control, or whether it is "simply the most effective way of getting on with the job" (148). There is a clear privileging of the technical in the work of Martin and his colleagues more generally, within a polarised opposition with its other,

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22 This point is not intended to imply that girls' interests necessarily lie in not engaging 'hard' geography at all. On the contrary, the position to be argued for is one of critical reflection on the 'fact/value split in scientific knowledges.
variously referred to in WME as "non-technical", "everyday" and "vernacular" language. Martin (1985, 1991) operates within a further binary of 'factual' and 'fictional', which he genders, as I indicated in Chapter 6, by mapping it onto a gendered 'nature/nurture' binary. Theorisation in this work of the social relations and effects of technicality is often implicit and crude. The politics of technicality in their work relate only to questions of access, and the rhetorical question regarding 'misleading' and 'controlling' features of technical language is explicitly answered by WME in their dismissal of the "folk notion" of technicality as "jargon" (58). Here the functionalist position is at its most complete. There is no sense of the historical contingency and arbitrariness of much specialised language, and no critique of its effects. In its place, I will argue here, is in effect a fetishisation of technicism and a celebration of a masculinist mode of knowledge production.

In this subsection, I explore ways in which the linguistic work achieves this effect. To contextualise this exploration and the critique it mounts, though, it is important to indicate that trenchant critiques of technicism in geography education have already been made from several different directions. At the level of curriculum content, for example, R. Gilbert's study of school textbooks in England notes the following:

The texts indicated a strong interest in technological processes, revealed in surprisingly detailed descriptions of processes in such industries as steel making, textiles and electric power. This emphasis was considerably more than could be justified by the need to study the effects of by-products or raw material demands, the traditional reason for the geographic interest in manufacturing processes. There seemed rather to be an assumption that manufacturing technology in the study of geography was important in itself.

(R. Gilbert 1988: 15)

Further, in terms of pedagogic orientation, Gilbert notes some of the effects of the process of 'scientification':

Texts which tried to reflect more scientific approaches to geography tended to overemphasise skills and models of explanation. In particular, the treatment of an important issue was often seen as an opportunity to focus on a technical skill with the loss of the real significance of the problem, an example being when a topic 'Contrasts in living standards' became a study of the problems of deriving indices to measure standards of living. At other times, hypothetical models seemed to become ends in themselves rather than partial aids to understanding. This impression resulted largely from the
common practice of presenting and explaining the model first, rather than focusing on the problem which the model attempted to solve. Scientific models were another instance of how human activity was shown to be determined, not by the environment, but by space, and efficient spatial distribution became the criterion of optimal social conditions.

(R. Gilbert 1988: 16)

Gilbert’s concerns with the content of geography textbooks and with positivist methodologies reveal a privileging of a generalised technicism at the level of both curriculum content and of pedagogy, a characteristic of school geography which is widespread and longstanding. His work is aligned at these points with critiques of the positivist orientation of the secondary school curriculum more generally, such as that of Collins (1992) in Australia. It is important for the concerns of this thesis to situate WME within this critical tradition, a location they would appear to be unaware of.

In what follows, I read WME as being methodologically, as well as theoretically, aligned with a technicist position, and argue that this functions to produce as well as to reflect particular forms of knowledge in the geography of their analysis. As I have indicated in section 7.1, the bulk of the WME text consists of a techno-linguistic account of the processes of “technicalisation” (ordering) and of the construction of causal relations among phenomena (explaining) in geography. Here, I explore the productivity of this method – the implication, that is, that the use of this particular set of analytic technologies produces a very particular kind of knowledge. To begin this exploration I have adapted, in figure 7.1, a substantial segment of the explanation into the format of a kind of linguistic system network. It should be pointed out that figure 7.1 does not constitute a ‘proper’ construction within systemic linguistic notational conventions. This is because the task was to reproduce as faithfully as possible, within the terms of these conventions, a part of the actual account produced in verbal text by WME. The point being made is the extent to which the logic of taxonomies and system networks pervades the representation of the geography textbook material.
fig 7.1 Processes of technicalisation

naming

- assigning new value to technical terms
  [e.g. environment]
- reassigning terms already technical in other fields
  [e.g. transpiration]
- indexical technical terms [e.g. mesa]

categories of realisation

- single nominal or thing
  [e.g. mesa]
- classifier thing
  [e.g. physical environment]
- implication sequence
  [e.g. relief rainfall]
- nominalisation
  [e.g. condensation]
- nominalised classifier thing
  [e.g. convection currents]
- processes
  [e.g. condenses]

phenomena

making technical

- orthographic marcation
- definition (elaboration)

using processes for naming

- non-projecting
  [e.g. Green plants are called producers.]
- projecting processes
  [e.g. When air contains a lot of water vapour we say that the humidity is high.]

defining

- identifying relational clause
  [e.g. The biome is the living part of the ecosystem]
- embedded defining relative clauses
  [e.g. When water evaporates, it changes into an invisible gas called water vapour.]
- elaborating nominal groups
  [e.g. protozoa (single celled animals)]
- elaborating conjunctions
  [e.g. ... trophic level 1, that is, where life forms are the simplest.]
- reference
  [e.g. All species live in a balanced state. This means that they depend on one another and live in harmony unless disturbed.]
One of the most immediately striking features of the WME analysis is that the conventions of technical writing are used for linguistic analysis in much the same way as the geography textbooks WME are investigating. That is, linguistic phenomena are technicalised through the development of a field-specific vocabulary which is then ordered and classified taxonomically. An additional point of similarity is that the WME text functions in part as a pedagogic text produced for non-specialist readers. Accordingly, many technical terms are introduced in a manner similar to that of school geography textbooks. When they first appear, they are marked orthographically (in this text through bold print), defined and thereafter used in their technical sense.

I indicated in subsection 7.2.2 that an argument could be made that the particular school geography textbooks selected for linguistic analysis, far from being random selections, or determined wholly by the immediate ‘context of situation’ of the curriculum and the classroom, might productively be understood in terms of the congruence of particular disciplinary interests (techno-linguistics and technicist geography). By this I mean that particular kinds of semantic structuration lend themselves more readily to technical analysis such as that in the WME text than others. In particular, synoptic and taxonomic structures in geography texts can be neatly mapped through linguistic taxonomies which produce semantic oppositions as stable, self-identical presences. According to the argument I am making here, such forms of textual structuration are privileged over other possible ones. Indeed, they are implicitly elevated to the position of representativeness of the discipline ‘in itself’. This is not to point to some conscious conspiracy in the linguistic project. Rather, the point is that linguistic technologies such as these will seek out and also produce discursive formations most like themselves. That is, there is an important case for arguing that the project, the work of linguists of a particular kind, has been to look for and find their own theoretical premises in the world.

In summary, the argument here is that linguistic analysis proceeds by, first, selecting those texts which are most congenial to analysis and, second, subjecting those texts to a very particular kind of reading. That is, the linguistic work both mirrors what is in place in dominant traditions of school geography by virtue of their selection and further produces it as taxonomic by virtue of reading it through its own methodology.23 This production can be read through feminist critiques of the binary structuration of knowledge in science. For example, in her critique of binary (“zero-sum”) thinking in

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23 There is a further reading which can be made of this process, relating it to the wider pedagogic project of Educational Linguistics. That is, it is not unreasonable to assume that Martin and his colleagues would seek out those texts and those curricular practices which most resemble the pedagogic position they are arguing for; that is, within a binary logic of opposition to 'progressive' pedagogies, what is re-valourised is what appears to be the 'traditional'.
mainstream, masculinist science, Fox Keller (1983, 1986) suggests, as I indicated earlier, that there is a need to think between one and two in order to be able to think beyond two. Significantly, she locates the problem in the actual technical language which is deployed in specific fields. In an example drawn from her own work in evolutionary biology, she points out the middle ground between the categories of altruism and competition around which debates have been polarised. She asks:

How come ... all those questions about the middle ground between my gain and your loss, between self interest and self sacrifice, between individual cost and group benefit – questions so simple and fundamental – are not being pursued? And does our language – even (or especially), our technical language – help to keep these questions and the wide range of phenomena to which they point out of our vision?

(Fox Keller 1986:180).

Critiques such as this combine with feminist work in gender and modality in linguistics, which I discussed in Chapter 6 and the South Australian draft research report on girls’ modes of thinking and question answering in school science (Whitehouse 1992) to raise serious questions about the supposedly neutral functionality of technicality in geography. The WME text is a celebration of the ‘hardest’ kind of binary organisation imaginable in geography. As such, it is open to the criticism that it represents both an extremely conservative and a strongly masculinist account of the subject. It is difficult to imagine texts such as Karen’s being constructed as anything other than ‘wrong’ according to the epistemological regime proposed here.

Conclusion

This chapter has argued the importance of investigating curriculum history and politics in the shaping of a literacy pedagogy. In particular, the investigations made here have contextualised the WME text as a strongly masculinist account of the school-subject-discipline of geography. The split between physical and human or social geographies is gendered in significant ways, as this and previous chapters have indicated. Gale (1985) has pointed out the conservatism and masculinism of basing the discipline in the physical sciences, and subordinating the social-relational, environmental-philosophical, ethical and political dimensions. From the South Australian case study, it is clear that this split continues to exercise a material effectivity in the gendering of ‘choices’ made by girls and women to attend to that which is marginalised and subordinated, to their own detriment in terms of qualification and employment status. To imply that these matters constitute a simple issue of access would be naive. Rather, there are important issues to consider in
the shaping of a literacy pedagogy which this thesis has engaged in terms of representation and subjectivity.
CHAPTER 8

CONCLUSION:

TOWARDS A FEMINIST POLITICS OF LITERACY AND CURRICULUM

Those who would propose a subject created through signification would not limit their formulation of signs to ‘language’ but ... argue against the limits set on what counts as ‘language’ within the discourse of linguistics.

(Walkerdine 1982:130)
Introduction

This final chapter works to locate the issues raised in the thesis within the field of contemporary literacy studies. It consists of four separate sections which, like Chapter 6, are not further subdivided. Section 8.1 reviews the geography case study in terms of gendered subject production through curriculum action. It makes the case that gender/power/knowledge relations are not purely binary or linear; rather, they are complex and indeterminate relations specific to local sites. Section 8.2 investigates relations among discursive practices and subject production in a discussion of ‘subject-specific literacies’. Section 8.3 considers notions of ‘critical literacy’ in the light of the politics of subject production according to the account developed in the thesis. Section 8.4 concludes the discussion with a consideration of the implications of the bringing together in the thesis production of the three disciplinary domains of curriculum studies, linguistics and feminist theory for literacy and literacy pedagogy.

8.1: Gendered geographies

The thesis has, in its first seven chapters, demonstrated that literacy cannot sensibly be understood outside a consideration of specific literate practices within the curriculum contexts in which they are embedded. To claim, as I did in Chapter 1, that literacy implies curriculum is a crucial first point. Further, the thesis has demonstrated that curriculum, and the literate practices that are generated by (and constitute) curriculum, need to be read in terms of a complex politics of subject production. Ethnographic and textual-analytic methods were deployed to investigate material processes of curriculum realisation in a local site, to engage closely the complex and piecemeal nature of the playing out of larger dynamics of social differentiation such as gender.

In this section, I review the case that has thus far been constructed concerning the ways in which gendered subject positions are set up and taken up in and through curriculum action in one local site. To do this, in the first instance, I re-assemble here a list of the major binary oppositions around which much of the discussion has been organised, theoretically and methodologically. I elaborate and explicate the binarised categories in terms of the complex sets of gender/power/knowledge relations attached to them. Here, I have listed these binaries under an initial gender binary, masculine/feminine, and will go on to argue for a paradigmatic relation (albeit a complex and often contradictory one) among the items on either side of the binary, in terms of the constitution of a complex regime of gendered subject production in geography curriculum action. Reading, or rather writing (‘fabricating’ in Foucault’s [1980c] sense) the curriculum in this way
functions to produce and position the figures of ‘Rowan’ and ‘Karen’ as gendered subjects in complex ways within the geography classroom and the school.

The terms or categories in the list refer to different degrees of specificity and generality, concreteness and abstraction, and relate to very different domains and orders of knowing/being within this curriculum context. Of particular note is that some of the categories refer to positions and orientations available within the curriculum, which are taken up by Rowan and by Karen and other students and which can be read as gendered subject positions. Other categories refer to oppositions in operation in Rowan’s essay, a text which, as I have argued, is substantially organised around clear binary oppositions. In the case of these latter pairs, the gender relation is one of masculine knowing subject and feminised world-object, in something of the sense developed by Lloyd (1984), Easlea (1985) and Montgomery (1989). In sum, then, it is possible to produce the following typology:

- masculine/feminine
- skills/content
- process/product
- physical/human
- ‘man’/land
- ‘fact’/value
- ‘fact’/impact
- speech/silence
- external/internal
- speaking/writing
- doing/writing
- public/private
- instrumental/relational
- subject/object
The order in which these binaries are listed is roughly the order in which they occur in the thesis chapters: beneath ‘masculine/feminine’, the next six pairs occur in Chapter 2, the following six occur in Chapter 3, and the next seven occur in the three chapters of Part II. The last pair is a meta-level characterisation of a general discursive bifurcation in geography, within which many of the previous items could be located. In many cases, these binaries signify gender/power relations in what are at this stage fairly self-evident ways, since many of these relationships have been drawn out and discussed in the analytic chapters. It does not seem productive to repeat these arguments at this point. Rather, the list can be understood in part as assembling for the reader a set of reminders of what has gone before. In the following discussion, I will draw out significant relationships among the different pairs, building an account of gender and ‘subject’, in the several senses of that term. In doing so, I indicate a set of issues for a theory of gender and literacy that can be marshalled by, though not simply reduced to the terms of, these binaries.

The first two binaries in the list beneath the gender binary, masculine/feminine, are those of ‘skills/content’ and ‘process/product’. These, I would argue, can be persuasively read in terms of a gendering process at work on several levels. Rowan and Karen take up different positions with respect to their orientation to geography, positions which are intelligible within the terms of this binary. In Chapter 3, I identified a further, related operating opposition between ‘writing’ and ‘doing’, at least according to Rowan’s self-understanding of his orientation to geography. While Rowan saw geography principally in terms of fieldwork and its attendant emphasis on practical skills, Karen more clearly oriented herself to writing. This put her in a position to engage with curriculum content in a more primary and extended way than Rowan. That these are characteristically gendered positions in geography is evident from the discussion with teachers in the school, from the study of the South Australian geography examination results (discussed in Chapter
7), and from other studies of gender and literacy in the curriculum more generally (White 1986, 1991). One effect of this difference is that Karen appears (to be better positioned to be) the ‘good subject’ of school geography since, as Chapter 2 suggested, the syllabus privileges ‘content’ over ‘skills’ in several different ways.

However, White (1991) points out that boys generally recuperate a considerable amount of the success and power they enjoy in classrooms through the promotion of competence in oral language. This point does not indicate a simple reversal in the shift of terrain from the syllabus to the classroom. Rather, a different set of binaries is activated: those of speech/silence and speaking/writing. As an effect of the material immediacy of speech and, I would add, as a result of boys’ particular forms of verbal display, teachers identify boys as having a generalised competence in technical subject-disciplines. White’s point underscores Walkerdine’s (1990) work on the way girls’ and boys’ performances are read differently in terms of ‘ability’ in mathematics:

Indeed, the positioning by teachers was such that it almost seemed that no matter how well a girl performed she was still seen as lacking and no matter how badly a boy performed he was understood as having some, as yet invisible, capacity.

(Walkerdine 1990:127)

Thus, while a self-positioning with respect to ‘skills’ or ‘content’, ‘process’ or ‘product’, and ‘doing’ and ‘speaking’ or ‘writing’ within the curriculum may be understood as gender-significant, the relation of such self-positionings to available positions of power and privilege within the pedagogic discourses in circulation in the classroom and the school is complex and contradictory.

Gender also signifies in terms of these binaries at more generalised and abstract levels. The ‘skills/content’ and attendant ‘doing/writing’ oppositions may be read as symptomatic of larger discursive oppositions in theorising curriculum and pedagogy. Walkerdine (1990) refers to the division between overt pedagogic principles of the child-centred progressive pedagogies and the covert operations of older, more regulatory rule-governed pedagogies.1 In terms of this formulation, there are multiple and contradictory

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1 It is important to re-emphasise here a point I made in Chapter 1: that there is a generalised tendency in debates about literacy and curriculum to operate in terms of binarised ‘pure’ positions. Here, ‘progressive’ is opposed to an ‘older’, more regulatory pedagogy, which is represented as an origin, as not itself having a history. Similarly, Bernstein’s (1977) categories of “visible” and “invisible” pedagogies are often invoked by Educational Linguists (Martin 1991b/unpublished paper) in order to situate themselves oppositionally with respect to ‘progressivism’. These operate powerfully in debates as post facto reconstructions of much more complex positions and relations. In using these categories in this discussion, I do not wish to reify them; rather, the point is similar to the one made
positionings to be read both from the syllabus document and from my reconstructions of curriculum action in the classroom. On the one hand, the syllabus posits in its ‘aims’ an active, autonomous, curious subject who will acquire ‘real understanding’ of geographical processes by first-hand experience. The inscribed subject of these aims is readily identifiable as that of student-centred ‘discovery’ pedagogies. On the other hand, the ‘objectives’ implicitly posit a rule-following, compliant, rote-learning student subject who will give back a body of knowledge which has previously been transmitted by the teacher via textbooks and teacher speech. The active, autonomous ‘child’ subject of discovery pedagogy is a masculine subject, according to Walkerdine (1985, 1990). In contrast, I would argue, the position of the subject of transmission pedagogies is a significantly subjugated, ‘feminised’ one.²

What is noteworthy here, however, is that these positions are not clearly or obviously aligned paradigmatically with other terms in the above list of binaries. Though not specifically included in the list, ‘transmission’ and ‘discovery’ pedagogies can be seen as signifying in complex ways in gender terms. In particular, they articulate with the last pair – technicism/humanism – which I have described above as a meta-level characterisation of the discursive bifurcation within the discipline and curriculum of geography. ‘Technicism’ is aligned in the list with the ‘masculine’ arm and ‘humanism’ with the ‘feminine’ arm of the binary. This has been a productive explanatory framework for the gendering of many dimensions of curriculum realisation. Here, transmission lines up with technicism, while discovery-based, child-centred pedagogies are much more readily identified with humanism. Karen’s self-positioning as, at least in part, the compliant subject of a transmission pedagogy is an apparent paradox.

In order to investigate this, it is useful to consider the gendering of these pedagogies from another direction. Child-centred progressive pedagogies may be read as ‘feminised’ pedagogies in a more positive sense than the above formulation, in that they represent attempts to theorise and practise nurture and to include notions of process and even affect within the pedagogic practice. Walkerdine (1985) points to the predominance of women as teachers in pedagogic positions of this kind in early childhood education and the primary school, so that it is possible to refer to a ‘feminised’ pedagogy and curriculum in

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² It is important to note here that the notions of ‘masculine’ and ‘feminine’ in these formulations do not simply map onto the essentialised biological categories of ‘male’ and ‘female’, but rather are metaphors of generalised relations between ‘doing’ and ‘being done to’. I will argue in section 8.4 that it is crucial for a feminist politics to imagine the possibility of actual girls having positions other than feminised ones in this sense. It is also crucial to interrogate and displace the binary categorisation in pedagogic practices.
several senses. In contrast, transmission pedagogies may in several senses be read as ‘masculine’. With their emphasis on the strong framing of pedagogic relationships and strong classification of educational knowledge, in Bernstein’s (1971) sense, transmission pedagogies emphasise separation and the setting and policing of boundaries. In particular, there is a formalised separation of ‘knowing’ and ‘being’ which can be read via psychoanalytic theories such as object relations theory (Chodorow 1978) as characteristically masculine. More obviously, transmission pedagogies occur in more senior educational contexts and within ‘scientific’ subject-disciplinary domains. These are the domains characteristically taught by men, so that here it is possible to refer to a generalised ‘masculinising’ of the curriculum. This complex can be re-read schematically as follows.

<table>
<thead>
<tr>
<th>progressive ‘child-centred’ pedagogies:</th>
<th>masculine/feminine</th>
</tr>
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<tbody>
<tr>
<td>student / teacher</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>transmission pedagogies:</th>
<th>masculine/feminine</th>
</tr>
</thead>
<tbody>
<tr>
<td>teacher / student</td>
<td></td>
</tr>
</tbody>
</table>

The contradictory positions set up in the syllabus between ‘skills’ and ‘content’, ‘aims’ and ‘objectives’ and the self-positionings of Rowan and Karen in terms of an orientation to ‘doing’ and ‘writing’ can be read in terms of the differential construction of the ‘student’ within these different discourses. That is, the positioning of the student as subject of these pedagogies can productively be read as signifying in gender terms, in terms of ‘doing’ or ‘being done to’, ‘producing’ or ‘giving back’. According to this reading at least, it would seem ‘natural’ for Rowan to construct himself as the autonomous ‘doing’ subject of discovery pedagogy, while it would seem to be ‘naturally’ less stressful for Karen to take up a position as the compliant, echoing subject of transmission pedagogies. This is not of course to suggest that a pedagogy determines these positions in any direct sense. The thesis has read the geography classroom as a site where pedagogical structures and practices, together with discourses and subject positions supplementary or even contradictory to the putative or ‘official’ curriculum accrete and where actions are best understood as local, rather than governed from ‘outside’. The point is rather that these are positions, traces of which can be read in the syllabus, which would in some form be readily available to Rowan and Karen within the geography curriculum and within the institution of schooling. Importantly, these are

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3 Walkerdine’s (1985, 1990) analyses of the contradictory positioning of girls within child-centred pedagogic discourses are important here.
positions which would coalesce relatively unproblematically with other, internalised notions of ‘self’ as gendered subjectivities more generally.

Within the complex of gender relations set up by means of these binaries, the above account represents one strand with particular effects in terms of student-subjects being positioned along gender lines. It is by no means the only, or even the major one. To complicate this account, it is necessary to re-consider the ways in which Karen and Rowan understood the function of writing in the curriculum (discussed in Chapter 3). While Rowan privileged ‘doing’ over ‘writing’, he saw writing as a form of display, rather than as a site for ‘discovery’ or production of knowledge. At the same time, he saw geographical action such as fieldwork more in terms of ‘being a man’ than of ‘being a student/child’. Being in the field was for Rowan very explicitly both gendered and connected to the world of work outside school; it was *the thing that men do*. Clearly, there are slippages, particularly at more senior levels of schooling, between activities constructed out of pedagogic logics and activities structured around ‘real life’ and the ‘real work’ of disciplines and professions. The field trip is one site where these slippages may productively be explored.

Karen, on the other hand, consistently spoke of writing in very different ways from Rowan:

Karen: You are writing it for yourself really. ... Just - not until you put in it the right words so that you can understand it. You just got to get it all in order - you can really fix it up and get it straight. Remember it properly. It’s there to see so you can’t forget it. ... In our assignments I put it down so that I could understand it better, in the words that I would understand and interpret it.

Karen appeared to see writing in terms of ‘understanding’; it was by writing that she came to know and understand in geography. Writing was both productive and ‘personal’ in that she saw it as being ‘for herself’. Here, Karen is constructing herself very much as the ‘good subject’ of a ‘discovery-based’ writing pedagogy. The complications and cross-overs apparent at this point are too numerous to investigate. Section 8.3 considers briefly one dimension of what is being traced here in a discussion of the gendering of the curriculum along the lines of english/science.

At this point, it is useful to turn next to a further consideration of the ‘speech/silence’, ‘speaking/writing’, ‘doing/writing’ and ‘public/private’ binaries. Chapter 3 has argued that the girls’ greater attention to writing could be construed as their retreat, as embodied subjects in the classroom, into a semiotic space which was relatively safe from the
extrusive and intrusive speech practices of boys in the classroom. That is, writing could be construed as a relatively private activity, in contrast with speaking, where positions could be taken up and elaborated without being closed off in the interests of producing the singular account of a topic necessary for curricular coherence. This reading of writing is in contrast to a reading commonly articulated within Educational Linguistics, which relegates speech characteristically to the domain of the private, while writing (with an emphasis on the production of object-texts, rather than on the process or practice) is permanent public-domain language (Kress 1985a:44-46, Halliday 1985b, Hammond 1991). The reading I am suggesting here is not ideosyncratic, however, on the contrary, it is akin to Ong’s (1982) account of speech as oratory.

One of the things this distinction points to is the complex nature of the classroom with respect to the ‘public/private’ binary generally. There are two important points to consider. First, as C. Luke (1993) has pointed out, girls and women have a very different relation to the public sphere from boys and men, being positioned in ambivalent ways as the subjects of different and contradictory discourses. In the specific case of this curricular site, there are some clear contradictions. On the one hand, generalised available discourses of femininity position girls as belonging ‘inside’, in the domain of the ‘private’. On the other, the dominant discourses of physical geography in this curriculum privilege knowledge of, and orientation to, the ‘outside’. Mapped onto this is the function of the classroom itself as a kind of ‘forum’, a place for debate and display of ‘public’ curricular knowledge. There were traces of these multiple positionings to be read in Chapter 3, beginning with the girls’ apparently lesser familiarity with the features of the (sub)urban landscape. Boys, in contrast demonstrated quite particular forms of knowledge of the coastal and river landscapes, a knowledge which emerged through their informal discussions about diving, cycling and surfing, as well as in more formal class discussion. The classroom functioned in part as a site for display of this and other (chiefly techno-scientific) knowledge by boys.

Given that particular discourses were privileged in class discussion, while others were marginalised and deferred, the only place for the articulating of positions from the vantage point of alternative discourses was in writing. This gives writing a different function from that posited so far in this discussion. Far from being only an obedient ‘giving back’ of a body of transmitted content, writing can be understood as opening a space where girls could locate and articulate difference. This is clearly not an unproblematic space, within some simple notion of the ‘private’, but rather a complex, multiple space to be read in part in relation to the ‘public’ domain of the classroom and in part in relation to the ‘public’ domain of disciplinary-curricular knowledge as it is
inscribed in the “reception regime” (Hodge and Kress 1988) of the geography examination.

The second, related point to make here concerns the more general ‘inside/outside’, ‘public/private’ and ‘individual/society’ binaries which, as I indicated in Chapter 1, have preoccupied much western thinking, and which also characterise much of the debate about literacy and schooling. In particular, much of what goes by the name of ‘progressive’ or ‘child-centred’ pedagogies privileges the personal and the individual, with associated notions of ‘authorship’ and ‘personal voice’ (P. Gilbert 1991). In contrast, the writing pedagogy associated with the project of Educational Linguistics privileges the public and social functions of writing. This position is explicitly taken up in a re-valuing of what it terms “traditional” or “visible” pedagogies, as Martin (1991b/unpublished paper) reads them from Bernstein (1971), though ‘genre’ pedagogy is not a mere return to these. Rather, the theory and pedagogic practices associated with notions of genre aim, as I have established in Chapter 7 (subsection 7.1.2), at explicitly teaching students how to ‘master’ and re-produce the discourses and genres of power. This is a pedagogy of apprenticeship into specialisation, a ‘public’ pedagogy which nevertheless aims for individual access and empowerment for an underclass which is referred to in an undifferentiated way as ‘disadvantaged’.

The Educational Linguists’ foregrounding of the social nature of textual practices and their problematising of notions of the ‘private’ and the ‘personal’ in progressive literacy pedagogies is important. So is their engagement with questions of access. However, there appears to be no place for discussion within this pedagogy of the problematic and ambivalent position of girls and women with respect to these discourses and genres and the representations of the world that they encode. There is no space for investigating what I have argued are, in the case of Karen, other and extra functions of writing – functions of resistance, critique, cultural re-writing, and what I have termed ‘self-production’ in the sense that I have developed in this account of literate practices in the Year 11 geography classroom. In Educational Linguistics, notions of the ‘private’ are relegated to the domain of liberalism within a largely untheorised generalised notion of power in terms of class. Without resorting to the simple opposition of ‘public and ‘private’, and without unproblematically privileging one or the other of the terms, I suggest that it is necessary to rethink notions of the ‘private’ in terms of the materiality of the gender regime in the classroom.

The gendering of relations of power and privilege in this classroom, then, are complex. On the one hand, it is fair to suggest that Rowan’s discursive orientations – to economics as a metadiscourse about social processes, and to clear separations between subject and object, self and other – position him as a ‘good subject’ with respect to dominant
versions of the subject-discipline. Even though he expends little effort on writing, Rowan’s position as an apprentice scientific geographer appears relatively straightforward. A pedagogy of apprenticeship or induction would position Rowan as simply needing more of what he already has in place, in order to succeed at geography. On the other hand, Karen is a problematic subject of the discourses of school geography. To succeed, she would need to be ‘disciplined’ in very particular ways, repositioned in terms of discursive and generic orientation and modes of language use. The thesis demonstrates, however, that Karen deploys other, arguably much more productive, resources for making sense of the world than does Rowan. It allows the argument to be made that Rowan’s self construction as a (nearly) knowing subject of school science confines him to a set of understandings of self and world which are politically problematic, as I suggested in Chapter 6. I shall return to consider in more detail the mutual implication of literacy and curriculum in section 8.2.

In conclusion to this section, I revisit a point I made in Chapter 1: the list of binaries assembled here was not intended, by itself, to set up a structure which speaks sufficiently for the sets of relations among gender, literacy and power. On the contrary, much of the detailed material of the surrounding commentary in successive chapters functioned to disrupt the possibility of a linear, neat, clean analysis of power in terms of an unproblematic elision of concepts on the same ‘side’ of each binary. Binary linearities were merely initial points of structural intelligibility around which and against which the specificity of this local classroom micro-space could be configured. Further, the discussion in this section has shown that there is not, in terms of curriculum enactment, an unproblematic privileging of the ‘pure’ masculine side of this set of alignments. Similarly, in making a resistant reading of the curriculum and the classroom from a feminist perspective, I am not simply reversing the terms of privilege and re-valourising a ‘pure’ feminine side. What the thesis study has found is local cross-overs at many points. The successive readings of the curriculum and the texts it produced demonstrated powerfully the productivity of curriculum-in-action in terms of the setting-up and the taking-up of subject positions by Rowan and Karen in geography. Donald’s (1985:242) notion of “the daily struggle and muddle of education”, which I introduced in Chapter 1, has been evoked in some of its complexity and ambivalence in this particular classroom. The analyses foregrounded the work that goes on on a moment-by-moment basis in negotiating the semiotic space and in the struggle for subjectivity. The picture that emerges from these readings is one of unpredictable, contradictory relationships of power between masculine and feminine subject positions. In making this reading, the binaries themselves are disrupted and displaced, as is the notion of gender being a binary relation in any simple sense. This is not to suggest that masculine privilege is not produced in the discursive practices of curriculum and schooling. Rather, what is clear is
that the privilege has to be *worked against the contradictions*. I will return to this point as a central underpinning to the possibility of a feminist intervention in literacy and curriculum in section 8.4.

**8.2: Gender and ‘subject-specificity’ in literate practices**

The thesis has presented a case for the necessity of engaging literacy as ‘subject-specific’ as that term was initially theorised by B. Green (1988) and Lemke (1988). The argument is that ‘literacy’ can have no simple identity, generalisable across different disciplinary-discursive domains. Rather, it is a plural concept, engaging the linguistic significance of discourse specificity in the curriculum. Accordingly, when considering the specificities of literate practices, I refer to literacies as a plural term. This point is to re-assert the significance of ‘context’, understood in something of the complexity that has been foregrounded in the chapters of the thesis. It is also to point to the urgent need for rigorous work in explicating the salient features of the discourses of the various subject-disciplines of the school curriculum. Such analysis can include linguistic work of the kind produced by Wignell, Martin and Eggin. However, the argument made here is that linguistic and other forms of discourse analysis must proceed within a notion of curriculum conceived in all its historical and local specificity and political situatedness.

Literate practices are directly implicated in curriculum and in the re-production of school knowledges. These knowledges cannot be understood as fixed and immutable, but rather as socially constructed and contingent. The thesis has investigated, in the specific case of geography, the complex and changing identity of geography through history, and the politics of discursive and curricular practices in local school sites. These matters have been considered at two levels. The first concerns the significant differences between school subjects and disciplinary communities. School geography presents, on the whole, the most conservative face of the discipline. In the specific case of a feminist critique of the geography curriculum, this means that there is no space available for interrogating the gender order implicated in the particular selections from the discipline that constitute the curriculum in any site. It also means that girls in schools are left to find their own means for formulating resistant or alternative positions to what I have termed dominant technicist-masculinist discourses. An investigation of what geography in any one site is deemed to ‘be’ involves, at the very least, an awareness of what selections are being exercised and the criteria and strategies for those selections.

The second level concerns the more general relation between discourse and subject positioning as it has been explored in this study. The thesis takes the position that literate practices are practices producing subjects. The analytic chapters have investigated the cultural politics of the privileging of economic and technicist discourses over other
discourses in geography which are available as explanatory apparatuses for the relation between physical and social processes. These different discourses produce and position participants in radically different ways. By ‘participants’ I refer here to students positioned as learners within the curriculum enterprise, to teachers positioned within the particular orientations of the curriculum and the syllabus, and more generally to those human figures which are produced and positioned in particular ways within geographical representations of the world, for example, as ‘natives’. These differences impinge centrally on what comes to stand as school knowledge in any particular site, as well as to what counts as a ‘proper text’ produced as evidence of ‘learning’.

A discipline can be represented in a general sense as a bundle of different available discourses, some of which are privileged and others marginalised, in a struggle over status and resources. A school subject-discipline represents a further selection from those available discourses, a selection which in turn is exercised in a highly political climate of competition and exchange among different participants, some located within the discipline, others within other institutions. Marsh (in an exceptional moment) produces, in his history of the Western Australian geography curriculum, a graphic glimpse of the struggle that is involved in constituting a curriculum

The concerns by geography teachers were eventually taken up by the Joint Geography Syllabus Committee after intensive lobbying by prominent geography educators and academics. The proposed solution was for a subcommittee of the Joint Geography Syllabus Committee to be established, comprising two academics, a senior education administrator (state education department) and a senior teacher (state education department) to establish a modified curriculum which clearly stated the areas to be examined. The subcommittee reorganised the previous concept clusters and more importantly, produced specific content details which would henceforth be examinable.

[...]

The academics on the subcommittee seized the opportunity to reorient the geographical paradigms included in the earlier curriculum. An ecological approach to geography was advocated most strenuously to replace the Man-Land perspective.

(Marsh 1987:198)

It is in the light of the site-specificity and politics of curriculum that the notion of subject-specific literacies must be investigated. Only then can the complex set of relations between school knowledge and social power be grasped. Educational Linguistics is one
project engaging the notions of subject-specific literacy. The various papers by Eggins, Martin, Wignell and Rothery reviewed in Chapter 7 purport to be accounts of the linguistic specificities of the registers of geography and history. What renders Educational Linguistic pedagogy problematic, however, is, as I mentioned in Chapter 7, the lack of curriculum analysis and the assumption of discursive unity and singularity within one disciplinary-curricular domain. The study of the geography curriculum produced in this thesis seriously problematises such singularity, both at the level of curricular materials encountered by students in classrooms, and at the level of student writing.

The Educational Linguistic project proposes a pedagogy of access to, induction into, and 'mastery' of, 'powerful' discourses and genres of the culture. There is a very particular notion of power in operation, as I will discuss in the next section. At this point, though, the problem with this formulation, in the light of the account of geography produced in this thesis, is clear. There is no single discourse of geography for students to 'master'. Rather, there are multiple discourses, differentially positioned in the curriculum in terms of privilege and marginality. Mobilising one or another of these discourses in the course of producing geographical representations of the world is not simply a matter of ability to access these discourses. Rather, something much more complex is going on. On the one hand, the selection of a discourse produces a privileging of a particular group subjectively invested in mobilising that discourse. On the other, I have suggested that it is much more useful to investigate literate practices in terms of relationships between discourse and subjectivity in a formulation of textual practice as involving both the reproduction of school knowledge and simultaneously a process of self-production – what I have termed elsewhere "the socio-discursive production of the subject of schooling" (Lee and Green 1990:244).

Accordingly, the notion of 'subject' can be re-articulated in the light of the investigations concerning the relations between discursive practice and subject formation. The notion of 'subject-specific literacies' must be extended to include two necessary, related dimensions of subject production in the schooling project. The first concerns the (provisional) positing of differential subject positions along the lines of a broad disciplinary split between the sciences and the humanities (Thomas 1990). This can be formulated in terms of what is often thought of as a 'subjective/objective' distinction, with due care to point out that the terms are available on a 'commonsense' basis and better describe the self-understandings of practitioners in different disciplinary domains.

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4 Of course, the notion of 'subjective' within this opposition is very different from the deployment of the term 'subjectivity' as it is used elsewhere in the thesis and briefly theorised in Chapter 1.
than any true possibility of knowledge that can be ‘objective’ in the sense of being unmediated by human thought structures.\textsuperscript{5} Here, the point to be made is that the distinctions delineate, in very general terms, different orientations to knowledge and hence different kinds of subject positions. These orientations and positions are gendered in particular ways, as I will discuss below.

At a finer level of analysis, students in schools must construct different forms of subjectivity in accordance with the subject positions proffered in different school subject-disciplines, such as English, mathematics or geography. These forms of subjectivity will be constructed in part within and in part against the terms of the above distinction. The notion of ‘curriculum’ as a generalised term involves students repeatedly constructing and reconstructing themselves as different \textit{kinds} of subjects in order to be in a position to participate in the specific forms of knowledge production and text production considered ‘proper’ in different disciplinary-curricular domains. Seen from the vantage point of a theorisation of discursive practice in terms of subject production, what otherwise might appear to be the most ordinary thing in the world becomes an extraordinary task to require children and young adults to perform as an everyday labour.

Complicating this notion of ‘subject-specificity’ still further is the point made in this thesis that disciplines and school subjects themselves have no necessary, singular identity. There are dominant discourses in specific sites but there are always alternative, resisting and oppositional discourses available as well. The thesis shows that different students are able to construct radically different forms of subjectivity within one, relatively constrained subject-disciplinary domain. I have argued that students construct themselves and the world through different geographies. Another way of saying this is that Karen and Rowan construct radically different literacies. The readings of Karen’s and Rowan’s ‘shifting cultivation’ essays illustrate a more general point with respect to the social sciences: that these disciplines offer a continuum of positions which can be made intelligible within the terms of distinct kinds of orientation to knowledge production. In part, these correspond to what I have indicated elsewhere are subdisciplinary orientations to, on the one hand, the ‘natural’ and on the other, the ‘social’ or ‘human’ sciences in subdisciplines of geography. The analyses read Rowan’s text as a form of dialectical reasoning in Palmeri’s (1991) sense, and as a ‘performance

\footnote{There is a clear problem in adopting, even provisionally, the terms of this binary, in the sense that binary polarity is far from helpful for exploring gender in the curriculum, as this thesis study has demonstrated. Though beyond the scope of this thesis study, it will be useful to engage other work in the field, such as that of von Wright (1971), who posits a more complex grid. Briefly, the axis of “explanation/understanding” is placed against that of “nomothetic/ideographic” approaches to knowledge production, thus allowing for four different basic orientations, as well as a continuum of positions at different points in the grid.}
of objectivity’, a detaching of self from world and an attempt to represent the world as transparent and immanent, according to ‘natural’ scientific discourses in their school versions. Karen’s text was read as representing more explicitly a struggle for self-positioning within the world and a rhetorical call to action, a highly modalised and modulated positioning of self and world in a complex set of interrelationships. In Australian schools, this kind of writing is valued in the subject-discipline of english, perhaps art, and often nowhere else.

According to Thomas (1990), the major knowledge disciplines are gendered in a variety of ways, broadly along the lines of a science/humanities split. Gender signifies in terms of participation within disciplines and in terms of the conscious self-positionings of students within the discourses of the disciplines. This self-positioning, while complicated and problematic, does serve as one way of reading the writing practices of girls and of boys in schools. According to White (1986, 1991) and Laurence (1991), girls construct themselves to a significant extent as literate subjects within an english curricular regime. As I indicated in Chapter 6, one way of reading Karen’s text, in contrast to Rowan’s, is in terms of its strongly ‘personal’ tone and strong sense of ‘voice’. These rows are in common currency within discourses of literacy in subject english. Similarly, the genre of the hortatory exposition, the genre of the explicitly positioned writer, seems most likely to be valued in english classrooms in the contemporary Australian secondary school curriculum. Not surprisingly, Karen was ‘good at english’. Not surprisingly, Rowan was not. In these and other ways, Karen and Rowan are exemplary gendered subjects of schooling, according to accounts such as those of Laurence and White. There are complex political issues to explore here, concerned with the privileging and marginalising of different discursive orientations along these lines in school subject-disciplines such as geography and the positioning of subjects within these discourses. In particular, as Collins (1989) points out, Australia boasts the most positivist academic curriculum in the world. A student who constructs a literate identity within an ‘english’ discursive framework is a marginalised (feminised) subject within this curriculum generally.

Finally, a notion of ‘subject-specific literacies’ which exploits the multiple meanings of the word ‘subject’ might render visible the complex interrelationship between literate practices and the production of text, self and world. This involves a closer nexus than is currently being articulated between literacy pedagogy and curriculum politics. Subject-specific literacies concern the production of what I have termed elsewhere ‘differenced’ social subjects (Lee and Green 1990:245). This is not a re-valorising of humanist and romantic notions of the ‘individual’. Rather, ‘differenced’ social subjects are constructed in and through the taking-up of different positions within different discourses. The relation between forms of writing and subject formation is complex and indeterminate. In
Chapter 1, this relation was briefly described along the following lines. The speaking/reading/writing subject takes up positions within knowledge discourses such that the world becomes intelligible through these accounts; simultaneously there is an investment of ‘self’ in the (temporary) fixing of the indefinite array of information in the production of that intelligibility. This fixing is neither completely pre-determined within naive or determinist accounts of curriculum as closure, nor is it arbitrary or unconstrained. Rather, selections are exercised and versions are constructed over time within a multiplicity of relational dynamics which constitute the social and discursive history of the student-subject.

This complex of dynamics around the term ‘subject’ displaces reductionist accounts of literacy which privilege one or the other arm of the ‘inside/outside’ and ‘public/private’ binaries. Within post-structuralist and feminist theory, this is a familiar move. Yet theories of literacy and literacy pedagogies have yet to grasp its implications. There is a great deal of work that must be done in this regard.

8.3: ‘Critical Literacy’? Induction and critique

This thesis has considered the politics of school literacy in terms of questions of the relation between textual practice and subject production. In Chapter 1, subjectivity was initially theorised in terms of the setting-up and the taking-up of positions within discourses. This was understood as necessarily and inherently a matter of relations of power within institutional practices. In its analytic chapters, the thesis has begun to open up the terrain of subject production via the notion of subject-specific literacies. A final move, in developing a poststructuralist literacy, is to confront the issue of power and hence to engage with the notion of ‘critical literacy’ as that term is currently applied in literacy and literacy pedagogy. As I indicated in Chapter 1, the term ‘critical literacy’ has been taken up in the last decade by literacy theorists from a wide range of theoretical and political orientations, for example Educational Linguistics, critical educational sociology and various feminisms (see also Comber [1992] for an overview of alternative positions). Because of this, the term represents a problem since, more than with any other term currently in currency in literacy debates, what it can mean depends totally on who is using it. Nevertheless, it is important to consider the term as it relates to the purposes and functions of literacy pedagogy.

I have referred to literacy in terms of ‘enculturation’ and ‘embodiment’. I glossed ‘enculturation’ in Chapter 1 in terms of processes of induction into authorised cultural forms and knowledges in their curriculum instantiations. ‘Embodiment’ referred to the materiality of curriculum action – the local situatedness of any moment of semiotic production and its effects in the positioning of student-subjects. These two notions need
now to be examined more closely in the light of the analyses presented in the thesis, in order to arrive at a dialogue with contemporary notions of 'critical literacy'.

What 'enculturation' refers to in curriculum terms is the notion of disciplinary communities with specialised fields and modes of meaning-making. Of course, the specificity of the subject-disciplines of the curriculum must be remembered here. School subjects are not just diluted versions of disciplines, but are formed in historically and locally specific ways. Nevertheless, it is fair to say that, in order to engage in a process of becoming 'enculturated', a learner must learn to mobilise appropriate discourses in the production of 'proper' texts. I have established through the close analysis of the curriculum area of geography, however, that there is no unitary disciplinary 'culture', no single discourse into which a student can be unproblematically inducted. Rather, one discourse or set of discourses functions to colonise and exclude others in the production of coherent curricular knowledge. I have argued that the processes of inclusion and exclusion function in ways which privilege masculinist (and other dominant) ways of knowing and forms of text production. 'Enculturation' in any singular sense, then, must entail a problematic limiting of the notion of 'subject-specific literacies' as it has been developed in the previous section. That is, only some forms of subjectivity are to be valorised; others are to be disallowed or deferred, within a generalised senior secondary curriculum climate of positivism and technicism (Collins 1992).

'Embodiment' also carries a notion of 'disciplining', this time in something like Foucault's (1980a:39) sense. According to this account, 'disciplining' occurs where power "reaches into the very grain of individuals", reaching into their actions, attitudes, discourses, learning processes and everyday lives. Literate practices and knowledge production are embodied in curriculum action in the classroom. Bodies are sexed, gendered, classed, raced and 'differenced' in many ways. This 'embodiment' is not ancillary to literacy and learning. On the contrary, the thesis has shown how, in the case of gender, differences signify in multiple and relentlessly overdetermined ways across different orders and scales of realisation of curriculum and pedagogy. The figures of 'Rowan' and 'Karen', as constructed through the readings of the classroom, the curriculum and the written texts, produced different geographies. As disciplinary/disciplined subjects, they occupied different discursive universes, even if as biographical subjects, they could never be simply reduced to the positions they took up and re-produced in their writings in geography.

The notion of literacy as induction, initiation and apprenticeship is a very current one in debates in Australia. Within Educational Linguistics, the position is a counter-balance to privatised notions of literacy as 'personal voice', 'authorship' and 'self-realisation', as these terms are developed in 'progressive' pedagogies. As I have indicated in Chapter 7,
Educational Linguists such as Martin explicitly see power as a matter of access to the specialised registers of “secret English” (Martin et al. 1989). The notion of ‘critical literacy’ in Educational Linguistic terms involves the notion of ‘mastery’ of ‘powerful’ forms of specialised language. Through ‘mastery’, it is posited, students gain power to control their world. According to Christie:

An educational process in an important sense is an initiation; an initiation, that is, into the ways of working, or of behaving, or of thinking (the terms all mean similar things to me) particular to one’s cultural traditions. Mastery of these ways of working, which are necessarily encoded very heavily in linguistic patternings, represents mastery of the capacity to exercise choice: choice, that is to say, in that one is empowered to make many kinds of meanings, enabled to operate with confidence in one’s world. And, let there be no doubt about this, without capacity to exercise choice in this sense, one cannot change one’s world. Learning the genres of one’s culture is both part of entering into it with understanding, and part of developing the necessary ability to change it.

(Christie 1987:30)

The notion of ‘change’ is explicitly a part of the Educational Linguistic project of ‘critical literacy’. However, there is some slippage in what it is that can/should be changed. According to Christie’s account, an individual’s own life can be changed by means of the confidence acquired in the ability to operate the discourses and genres of the culture. Further, the genres can also be changed in this process. Indeed, ‘the culture’ itself can be changed by means of an individual’s operating on it. It is not clear what the relationships among these forms of change are. What is clear, and what is of most importance for this discussion, is that no change can occur without ‘mastery’. Thus, there is an explicit chronology in operation, a before-and-after, means-end pedagogic logic which distinguishes the Educational Linguistic position from other ‘critical’ positions:

Once the genres are understood explicitly, students can use them to serve their own ends and ... they can also change the genres in the pursuit of other goals.

(Christie and Rothery, 1989:10)

Apart from this issue of chronology, the notion of ‘choice’ invoked by Christie is problematic here. Within systemic-functional linguistics, the term ‘choice’ is generally used, following Saussure, to indicate linguistic selections from paradigmatic sets of linguistic categories. What seems to be suggested here, however, is something of a
different order. The notion of ‘choice’ and ‘use’ in these two passages appear to refer to larger-scale choices of discursive self-positioning with respect to the world. The unified subject of humanism can readily be read from these accounts (Threadgold 1989); the student-subjects of Christie’s pedagogy are free to pursue “their own ends” by means of conscious choice. Yet it is difficult to imagine this kind of subject being produced out of a pedagogy of induction and ‘mastery’. If a student-subject is ‘properly’ constructed as the ‘good subject’ of a discourse, in what sense can that subject move outside the framing to take another position? In other words, how can “their own ends” be conceived outside that subject position? The relationship between discursive practice and subject formation developed in the thesis construes the process of ‘subjectification’ in terms of an investment in positions taken up. It is difficult to see, in a pedagogy of ‘mastery’, what space is available for a student to identify different positions and different discourses, much less desire to take up different positions or mobilise different or oppositional discourses.

The notion of ‘investment’ problematises the notion of ‘mastery’ more generally. Only a certain proportion of students will, in any local site, envisage taking up a position of ‘mastery’. A generation of feminist scholarship in education, as well as research into minority and ‘disadvantaged’ groups, demonstrates powerfully that this is not a simple matter of access or of degrees of teacher efficiency. On the contrary, for many students, it is often difficult to ‘see the point’ of participating in, and constructing themselves as subjects of particular forms of knowledge and of textual practice. Indeed, some may see a point in not doing so. For many, it may simply be too stressful, in terms of the work involved in accommodating subject positions which are in considerable conflict with other significantly internalised notions of ‘self’. Lewis and Simon (1986) articulated this point well with respect to particular forms of academic exchange in their paper titled ‘A Discourse Not Intended for Her’.

A further dimension to the pedagogy of apprenticeship advocated by Educational Linguists is the multiple layering of ‘master/apprentice’ relations. The ‘origin’ of ‘critical literacy’ in this framework is technical linguistic analysis of the kind produced in the WME text. Within this pedagogy, not only are students apprenticed to their teachers; teachers are apprenticed, either in initial training or in professional development schemes to linguistically trained professionals, who in turn are apprenticed to the ‘master’ at the centre of the project. That ‘master’, as Martin made quite explicit in an unpublished address to an Institute in Educational Research in Adelaide in 1991 (mentioned in subsection 7.2.1), is Martin himself. That there are problems with this, of an ethical, pedagogic, and logistic kind, should be clear. To map these would require a doctoral
thesis specifically dedicated to a longitudinal study of Educational Linguistic pedagogic practices. Such a study should almost certainly be carried out.

Power, according to the Educational Linguistic argument, is the property of those who can mobilise what Christie terms the "ways of working, or of behaving, or of thinking ... particular to one's cultural traditions". 'Critical literacy' is about personal empowerment through access to and mastery of those ways of working, behaving and thinking. This formulation precludes the notion of discourse critique as a first principle. Critique may be allowed as a second-order principle, but is only legitimated after the learner has been credentialled as a 'master' within a disciplinary community. It is in this sense that the Educational Linguistic pedagogy might best be termed a pedagogy of deferral. For Educational Linguists, questions of power are not engaged in any sustained way in terms of representations of the world in disciplinary discourses.\(^6\) This thesis has argued that the problem with pedagogies of induction, apprenticeship and 'mastery' is that they locate literacy pedagogy outside the politics of curriculum. One problem with this position is that there is never a single identity to be attributed to a subject-disciplinary area. A further problem is that, by ignoring the politics of representation in curricular content and language, what happens is that another form of inequitable selection is being exercised, one which is merely different in kind from that being opposed by advocates of access.

A major principle underpinning the production of this thesis is that critique of disciplinary positions and practices must be a first-order principle of a literacy pedagogy which is informed by feminist theory and politics. The political position produced here is that forms of literacy need to be developed to enable literate student-subjects to critique social structures, discourses and practices. Further, literacy pedagogy must be more closely aligned to available and new forms of curriculum critique, such as those reviewed in Chapter 2 in the case of geography. What is projected is a two-level engagement. At the same time as students are taught to critique dominant discourses and the representations of the world that they encode, teachers and curriculum analysts must work to change the curriculum. For example, it is possible to argue, as I did in Chapter 6, that geography is perhaps the only place within the school curriculum where systematic examination of the relationship between physical and social processes can occur. Similarly, it is often the only place where anthropological categories arise. A careful analysis of the politics of representation in geography curriculum documents indicates that much more is at issue than a training in a particular form of scientific reasoning. As I have demonstrated, major

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\(^6\) Of course, it is not that the linguistic technology is incapable of producing critique; indeed, Martin's work is often very generative in this regard (for example 1985). It is rather the question of the point at which critique is allowed that is at issue here.
epistemic and political issues arise and may be read from students’ writings in geography. Rather than a notion of ‘mastery’ through particular processes of ‘disciplining’, it may be necessary, within a framework of curricular critique, to re-assess the genres and forms of textual engagement in different curricular areas that count as ‘proper’ literate productions.

Yet a proviso must immediately be added to this position. To espouse discourse critique as a first-order pedagogic principle is not to refuse the material conditions under which teaching and learning occur – within the wider project of compulsory schooling. That is, questions of induction and ‘enculturation’ cannot just be ignored. There is no position for literacy pedagogy outside the task of preparing students to participate in the culture outside school. This does not, however, mean a slavish pursuit of disciplinary-discursive proprieties. A literacy pedagogy involving discourse critique constructs literate subjects capable of reflecting on the ways in which they are being positioned within discourses and the differences and alternatives that are available. Nevertheless, the relationship between initiation and critique is a complex and problematic one.

In his account of ‘subject-specific literacies’, B. Green (1988) has developed a way of thinking this relationship. According to Green, literacy involves three dimensions – the “operational”, the “cultural” and the “critical”. The operational dimension concerns the syntax, conventions and operations of language. The cultural dimension involves “cultural learning”, which Green sees in terms of socialisation into the specific content and ways of thinking of different systems of meaning in the school curriculum and the community. Green points out the close and necessary relation between the operational and the cultural dimensions, since ‘becoming literate’ involves learning to operate what Lemke (1984) terms the “language system” and the “meaning system” together. One is unthinkable without the other (except, of course in certain decontextualised forms of early literacy pedagogy).

The critical dimension involves a learner’s ability to situate the particular kinds of socialisation which are ‘cultural learning’ in different curriculum areas. That is, it allows the student-subject to reflect on what is being taught and on the grounds for selection and representation of content. According to Green, a critical dimension of literacy allows an “insight into knowledge production” and an ability to “transform and actively produce knowledge” (11). In other words, the operational and cultural dimensions involve learning a repertoire of specific literacies, while the critical dimension involves adjudicating amongst the different and sometimes conflicting versions or representations of the world that appear in disciplinary-curricular discourses of the classroom. The point here is that these dimensions must work in close interrelationship in the curriculum. One dimension is not logically or chronologically prior to another. This position is thus in
conflict with the position articulated within Educational Linguistics, the pedagogy of deferral which insists on a logical ordering of enculturation before critique.

It is in notions of the complex simultaneity of different dimensions to literate practices that the problematic question of induction can be grasped in a politicised framework. I have, in previous chapters, explored the notion of ‘interim literacies’, referring to instances of student writings as ‘texts on their way to articulation’. Briefly, this notion might involve in the first instance a pedagogic focus on the operational dimension, as in the case of some of the grammatically inappropriate structures in Rowan’s text. However, the operational implies the cultural, since grammatical choices signify at the level of genre and discursive orientation. What is pertinent in the case of Rowan’s essay, for example, is the function of nominalised forms in ‘factitious’ writing. A third step is to locate the functional explanation within an account of the politics of forms of representation in geography textbooks. This implies a pedagogy which focuses on student texts as sites for major attention to the construction of disciplinary-curricular knowledge. That is, they are not just viewed as more or less imperfect tokens of a single, ideal type. Rather, they might also be read as instances of difference and in terms of the politics of that difference.

It is also in notions of the complex simultaneity of different dimensions to literate practices that new forms of literacy pedagogy might be envisaged and new forms of literate student-subjects might be projected. Comber (1992) has mapped the ‘critical literacy’ terrain, identifying different pedagogic orientations and practices that go by the name of ‘critical literacy’. Under the heading of ‘Critical Literacies’, she lists three principal approaches: “repositioning students as researchers of language”, “respecting student resistance and exploring minority culture constructions of literacy” and “problematising classroom and public texts” (6-9). It is well beyond the brief of this thesis to explore these. Rather, it is useful to envisage a literacy pedagogy broadly located within Comber’s third category, which can develop, within the geography curriculum, the capacity to reflect on the different ways in which knowledge is constructed within this subject-discipline. Projecting this pedagogy is an act of considerable imagination, since it implies a different kind of teacher-subject position from any which might currently be available to teachers in geography classrooms in state schools.

This thesis is, however, not in the business of teacher education or curriculum development, though it carries considerable implications for pedagogic practices, implications which need to be envisaged and investigated within the general schooling project. Teacher education, curriculum development and classroom practice go on at the same time as issues of literacy and curriculum are debated and problematised at the level
of theory and politics. What is clear is that, in Lather’s (1991a:15) terms, the world greets the efforts of educational researchers to “know” it with considerable elusiveness. Lather’s project is to find ways of telling a “better story” about the institution of education and its practices. The work of this thesis has been to re-map a terrain, to generate an account of the complex gender politics of curriculum and of the differential positioning of students within it, as traced though their literate productions. What is very clear is that the implications of the thesis findings go well beyond the curricular domain of Year 11 geography. Notions of discursive heterogeneity and subject-specificity, in the sense in which those terms have been developed and explored here, raise fundamental general issues, issues which call for a re-appraisal of pedagogy from earliest literacy training onward.

8.4: Outcomes and prospects

I began Chapter 1 with a discussion of the theoretical and methodological location of the thesis study at the intersection of three broad disciplinary domains. This has enabled the construction of an interdisciplinary matrix within which questions of gender/power/knowledge could be raised with respect to issues of literate practices in geography. The three domains – feminist theory, curriculum studies and linguistics – have supplied in turn a theory and politics of subject production within the institution of schooling, the objects of the study and a method. Additionally, as the thesis has proceeded through a building up of analyses of the classroom site and its practices, it has taken three important concepts – discourse, power and subjectivity – from the domain of poststructuralism more generally. Referring in part directly to Foucault and in part to those theorists of schooling who have engaged post-structuralist perspectives, such as Walkerdine and Donald, the thesis weaves these through the theoretical matrix. To conclude, I return to consider the contribution to the field of literacy studies that has been made possible through the assembling of this particular set of intertexts.

Perhaps the most important point made in the thesis is that the notion of subjectivity, theorised through feminist and poststructuralist frameworks, offers ways of elaborating or re-constituting what it is that curriculum is actually engaged in producing. Curriculum might be regarded as a kind of given for educational studies. Education is a central site of subject production, given the extent and the kind of investment made in the institution by the state in societies like Australia. Curriculum, the ‘stuff’ of schooling might be construed as the ‘cutting edge’ of the whole process. Historically, the goals of curriculum have been theorised either in cognitive terms, as a result of the dominance of psychological frameworks in education, or in sociological terms, in terms of the reproduction or transformation of dominant social knowledges and relation of power. As far as critical educational sociology is concerned, curriculum has been the fulcrum around
which socially critical analysis of the institution of state schooling has taken place in the past three decades. In different moments, critique has focused on questions of curriculum content or on curriculum practice as a disciplinary mechanism in what C. Luke (1993) characterises as “waves” in a structure/agency debate.

Much of the sociological analysis of curriculum, particularly that which goes by the name of ‘critical pedagogy’, might be characterised as a theorisation of curriculum process in terms of the transformation of persons. Historically, as I indicated in Chapter 1, this has most often been made explicit in class, and more recently, race terms. In the case of the critical pedagogy movement in the USA, this is partly, as C. Luke has documented, a result of the conjunction of the theory and politics of its predominantly Freirean and Frankfurt School critical theory antecedents. Gender, in contrast, has remained comparatively naturalised and hence absent as a category for critical analysis in mainstream left-oriented curriculum theory. Feminist analyses are concerned to demonstrate the production, through curriculum practice, of gendered subject positions, as well as, and in their close articulation with, those of class and race. As I mentioned in Chapter 1, an important body of feminist critiques of radical pedagogy has been produced in recent years, as exemplified by the collection of C. Luke and Gore (1993).

This thesis is a contribution to feminist work in curriculum studies. It points up clear implications for analyses of the ways in which girls are positioned in and by mainstream curricular knowledges and processes. At the same time, it problematises curricular knowledges and modes of knowledge production through literate practices from a feminist perspective. The thesis does this by developing an analytics which engages both the political focus of feminist poststructuralist perspectives and the finely detailed technology of a particular version of linguistic analysis. As concluding comments, I will consider each of these two dimensions to the methodology in turn.

First, what the former perspective has allowed has been a re-visiting of issues of curricular content via a mode of analysis which exposes mechanisms that are embedded within curricular discourses. These are mechanisms which interpellate and ‘school’ certain kinds of subjects in and through the production of forms of legitimated curricular knowledge. In particular, the method of assembling lists of binary oppositions and reading them against each other in the light of the particular configurations and dimensions of curriculum realisation has exposed the workings of an extraordinarily complex and contradictory gender ‘machine’. What is important about this particular representation of the curriculum is that it is precisely in the ‘messiness’ of the classroom as curriculum micro-site that a space for feminism might be conceived. Relations of masculine privilege are maintained in different ways and on different scales through this particular instantiation of the institutions of geography and of schooling. They are
maintained, however, through work. Masculine power and privilege must be worked against the sets of complications, cross-overs and contradictions which manifest themselves at different turns. This is one instance of what Donald (1985) refers to as the "aggressivity" of subjectivity as a compensation for its fragility. Clearly, if the binaries can work in contradictory ways, this suggests a possible strategy for their (positive) manipulation by practitioners. Of course, the more complex the understanding of these processes is, the more space there is for intervention and change, for resistance and 'second-guessing' at different dimensions of the schooling project, from syllabus committees to classroom practices. According to this account, gender/power relations are not so closed and over-determined as they appear in many of the more reductive forms of feminism. This is a central political point of the thesis.

Second, the thesis has argued and demonstrated the necessity for a theory of language and a mode of linguistic micro-analysis for a project of politically motivated curriculum change. Curriculum has been presented as a set of texts – syllabus texts and the official printed texts of curricular knowledge – and as a complex moment-by-moment negotiation in the classroom of a series of intersecting textual practices. Curriculum outcomes are assessed by means of a further set of textual practices on the part of students in the form of their writings, produced and received as evidence of their 'learning'.

The thesis has argued strongly that linguistics on its own cannot offer a sufficient account of what is at stake for different participants in processes of textual production in specific sites. Linguistics has serious limits in terms of what it sets up as an interpretive framework for understanding processes of signification. Nevertheless, close attention to social processes involving language requires some form of fine analytic technology. What is useful about linguistics, particularly a functionally based grammar, is that it does offer a technology for attending to the fine details of language, viewed, not simply as a code, but as pointing beyond itself towards modes of signification; that is, linguistic forms function in texts to effect specific kinds of meanings. This technology presents a contrast and an alternative to other available forms of analysis. On the one hand in the context of curriculum analysis, traditions of ideology critique in terms of content analysis or various forms of speculative discourse analysis do not allow access to the work that constitutes the simultaneous realisation of discursive meaning-potential and the concomitant positioning/production of self and other through various forms of textual practice that constitute curriculum action. On the other hand, traditional/formal grammatical categories simply offer no opportunity to fill in the space between language as a central mode of semiosis and the key issues of representation and subjectivity which have been so foregrounded in poststructuralist work in general but in very specific ways in relation to power/knowledge in feminist work.
The thesis has argued for the importance of a more detailed perspective on subject production in terms of significant dynamics of social difference such as gender, race, or class. If this is to be possible, it is necessary to work with a theory of language and its relation to discourse, in order to access the micro-level of curriculum realisation and curriculum action. In particular, it is important to attend to students' own textual productions in terms of being able to trace something of what might be going on 'on the ground' in terms of subject production. The thesis has argued strongly that what is needed is a theory of literacy which attends to these dimensions of textual production. Such a theory needs to take into account the 'linguistic turn' but must not be confined to the application of a theory of language. A theory of literacy must be located alongside an analysis of curriculum. It is abundantly plain from curriculum work in the last twenty years that curriculum necessarily involves a politics. It has been the project of this thesis to articulate a feminist politics of literacy and curriculum. Historically, it has in part been work on class and race which has opened the way for a feminist analysis of curriculum. Contemporary critical literacy and critical curriculum studies in general can gain much from a theorising of textual practice which is generated out of feminist theory and politics and informed by a theory of language. There is a great deal to be done.
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Appendix A

1989 Year 11 Geography Syllabus

(Secondary Education Authority of Western Australia 1989/draft)
GEOGRAPHY (YEAR 11) — D305

TEACHING-LEARNING PROGRAMME

The course consists of two major sections as follows:

I MAPPING AND PRACTICAL SKILLS
II HUMANITY AND THE BIOSPHERE

It has as its focus an examination of the contemporary world from the geographic perspective of people, environment and resources.

The course emphasises the joint approach of pattern and process to the study of Geography.

Teachers and students should appreciate that the sections of the course set out below are not isolated and that there are important links between them.

It is of the utmost importance that students should have had the opportunity of studying examples in the field.

CONTENT

I MAPPING AND PRACTICAL SKILLS

Topographic maps: conventional signs, grid references, direction, scales and the measurement of distance; methods of depicting relief and the construction of simple, annotated cross-sections; gradient; identification of the main relief features, e.g., ridge, plateau, valley, steep and gentle slopes, cliffs, escarpments, hills and mountains, islands, elementary map description, analysis and interpretation.

Construction of sketch-maps from topographic maps, and of topographic maps from written instructions; atlas maps, latitude and longitude.

Statistical Analysis: An understanding of the following terms — arithmetic mean, mode, median, maximum, minimum and range.

Construction and interpretation of bar and the line graphs.

The use of aerial and other photographs, in isolation and in conjunction with topographic maps. The description and analysis of features on photographs, including the construction of sketch-maps from aerial photographs. (Knowledge of stereo-pairs and use of stereoscopes will not be expected.)

II HUMANITY AND THE BIOSPHERE

N.B. Appropriate mapping and practical skills, should also be incorporated in this section.

The Earth as the Home of Humanity

The biosphere, atmosphere, hydrosphere and lithosphere.


The hydrological cycle — seas, rivers, lakes, clouds, precipitation.

Importance of water to humanity. — water supply, irrigation and drainage.

Biogeochemical cycling: the circulation of elements (e.g., nitrogen, carbon, oxygen, sulphur, iron, calcium, phosphorus) in the environment. (Students are not expected to have a detailed knowledge of complex chemical processes, names of bacteria or rock compositions).

The planetary atmospheric circulation and the distribution of climates on the world scale. Properties of the atmosphere and elementary weather study — depressions, anti-cyclones, fronts, tropical cyclones and effects of these on man.

Reading, analysis and interpretation of Australian synoptic charts. Simple weather forecasts.

The continents and their major features, e.g., mountain, rift valleys, volcanoes, in terms of a very elementary treatment of the theory of plate tectonics. The processes of weathering, mass wasting, erosion, transport and deposition, as illustrated by selected landform examples. Students could select from the following — coastal landforms, arid landforms, rivers and related features, glacial landforms.

Ecosystems: a study of ecosystems to illustrate the environmental relationships existing between the living and non-living components, food chains and food webs, ecological pyramids; adaptation of organisms to environment; ecological succession; examples should be chosen from the world scale and from within Australia.

(a) World studies: tundra, boreal (i.e., coniferous) forest, savanna, tropical rain-forest, mesophytic (i.e., deciduous) forest, temperate, grass-lands.

(b) Australian case studies: sclerophyllous forest and/or woodland (i.e., eucalypt communities), desert, freshwater and wetland communities, coastal communities, scrubland.

Students should understand the factors influencing the distributions of the examples selected. If possible they should have had the opportunity of studying plant and animal communities in the field. Scientific names of plants and animals are not essential.

The Human Response

The role of people in changing the face of the earth and the relationships between habitat, economy and society, as illustrated by: agriculture as ecosystem modification in less technologically developed societies.

Examples could be selected from shifting cultivation, hunting and collecting, nomadic herding and wet rice cultivation.

The interrelationship between resources, population and pollution. The following could be seen as case studies and could be studied at any scale.

Forestry, mining, water resources and soil depletion and erosion.

RESOURCES

Whilst no one text book adequately handles all aspects of the course, the following are suggested as being suitable for teachers and students to use where appropriate:


RATIONALE

The Year 11 Geography course is designed as a Unit approach to introduce students to the physical and human components of the world in which we live. Emphasis is placed on the acquisition of practical skills within the context of each unit. Within the three physical units the relevant human issues must be addressed. The syllabus has a global emphasis. However, students should have the opportunity to study examples in the field. The course consists of six optional units of equal length, of which four must be completed during the year. These units are:

I. GEOLOGIC STUDIES
II. ATMOSPHERIC STUDIES
III. WORLD BIOMES
IV. PATTERNS OF DEVELOPMENT
V. RESOURCE STUDIES
VI. REGIONAL STUDIES

GENERAL AIMS

The Geography course aims to:

. integrate the concepts of place, process and issues within a global context.

. develop an understanding of global concepts.

. develop mapping and practical skills.

. develop fieldwork skills.

. encourage a values approach to the study of process and issues.

THE TEACHING - LEARNING PROGRAMME

(a) APPROACHES

Selection of Units: The requirement that four units be completed ensures that both the physical and human components of Geography are treated. Teachers can select those units in which they have expertise and both they and the students express interest. The existing resources within the school should be considered when selecting the units. Resources available in the local area may also be a factor in the choice of units e.g. opportunities for fieldwork studies.

Practical Skills: Practical skills are an integral part of the course. It is important that these skills be taught within the four selected units and not in isolation. Not all practical skills should be taught within each unit but those that are appropriate. However, all practical skills objectives must be completed during the year.

Fieldwork: Students must be given the opportunity to conduct fieldwork studies (see assessment structure). Such investigations are
enhanced when they are oriented towards testing hypothesis related to the identification and explanation of the chosen geographical patterns.

**Issues/Values:** Teachers should include a treatment of values when studying the issues within each unit. Students are to be encouraged to identify and appreciate values held by individuals and groups, examine the consequences of actions resulting from values and to make their own justifiable decisions (eg. to judge, evaluate, predict).

**Types of Learning Activities:**

Activities should involve students using a process of geographical enquiry. Emphasis on a student-centred approach with the teacher assisting to develop enquiry skills is to be encouraged. A wide range of learning activities should be used eg:

- written exercises (essays, short answer, reporting)
- laboratory activities (collation and analysis of fieldwork data, photograph interpretation, map construction, analysis and interpretation)
- research assignments
- field investigations
- audio-visual interpretation
- oral appraisal (interviews, guest speakers, group work)

(b) **STRUCTURE**

This course consists of six optional units, of which four units must be completed:

I GEOMORPHIC STUDIES  
II ATMOSPHERIC STUDIES  
III WORLD BiOMES  
IV PATTERNS OF DEVELOPMENT  
V RESOURCE STUDIES  
VI REGIONAL STUDIES  

Each of the four units selected should be allocated 25% of the time.

The Syllabus also includes mapping and practical skills which must be included in the course but is to be incorporated in the context of each of the four chosen units, rather than as a separate section.

I GEOMORPHIC STUDIES

**GENERAL OBJECTIVES**

Describe the theory of Plate tectonics to account for the distribution pattern of world landforms.

Describe the gradational forces that shape the earth's surface.
Explain the patterns and processes operating in one of the following global landscapes to account for the landforms: glacial, fluvial, coastal and arid.

Evaluate the human impact on the selected landscape.

Use the relevant mapping and practical skills as indicated on the matrix.

SPECIFIC OBJECTIVES

Define the terms geomorphology, tectonics, gradation and landscape.

Outline the theory of plate tectonics.

Discuss the evidence which supports this theory.

Identify, describe and account for the distribution of the world's major landforms in terms of the Theory of plate tectonics.

Discuss the impact of plate movement on the human environment.

Define the terms gradation, weathering, mass wasting, erosion, transportation and deposition.

Briefly describe the processes of weathering, mass wasting, erosion, transportation and deposition.

For one of the following global landscapes: glacial, fluvial, coastal, arid:

1. define and locate examples of the selected landscape
2. describe the processes of weathering, mass wasting, erosion, transportation and deposition
3. describe and account for the landforms resulting from these processes.
4. distinguish between landforms and landscapes.

For the selected global landscape:

1. identify the significant changes that humans have made to the landscape
2. outline the effect of these changes on the landscape
3. evaluate the impact of these changes

Use the relevant mapping and practical skills as indicated on the matrix.
II  ATMOSPHERIC STUDIES

GENERAL OBJECTIVES

Describe the components of the biosphere.

Describe how energy flows through the biosphere.

Describe the operation of the hydrological cycle.

Describe and explain the pattern of pressure systems and planetary winds.

Define the concept weather and interpret synoptic charts.

Use the relevant mapping and practical skills as indicated on the matrix.

SPECIFIC OBJECTIVES

Define and briefly explain the terms atmosphere, hydrosphere, lithosphere, biosphere.

Illustrate and briefly describe the operation of the heat budget.

Outline the significance of energy to the existence of the biosphere.

Identify the ways that humans have affected the operation of the heat budget.

Assess the impact of these changes on the biosphere.

Illustrate and briefly describe the operation of the hydrological cycle.

Outline the significance of water to the existence of the biosphere.

Identify and describe the ways that humans have affected the operation of the hydrological cycle.

Assess the impact of these changes.

Describe the characteristics of high and low pressure systems.

Illustrate the global pattern of pressure systems.

Explain the relationship between pressure and wind.

Account for the pattern of planetary winds.

Define the concept weather.

Identify the components of a synoptic chart.
Describe the weather conditions associated with the synoptic chart.

Predict future weather conditions from synoptic charts.

List and briefly describe the consequences of extreme weather conditions to the environment and human activities.

Use the relevant mapping and practical skills as indicated on the matrix.

III WORLD BIOMES

GENERAL OBJECTIVES

Describe the concepts of biome and ecosystem, and their components.

Identify the general pattern of world biomes.

Compare the characteristics and relationships within each of two biomes.

Evaluate the human impact on the two selected biomes.

Use the relevant mapping and practical skills as indicated on the matrix.

SPECIFIC OBJECTIVES

Define the terms biome and ecosystem.

Illustrate the transfer of energy through an ecosystem by using the concepts of food chain, food web, ecological pyramid, and biomass.

Identify these relationships within a local ecosystem.

Identify the general pattern of world biomes.

For tropical rainforest and one other biome selected from the following list: Hot Desert, Tundra, Boreal, Savanna, Sclerophyllous:

- Define and locate the biomes.
- Describe the components of the biome (climate, soil, vegetation, fauna).
- Examine the relationships within the ecosystems.

Recognise the delicate balance and dynamic nature of the ecosystem.
For the two biomes already studied:

1. identify and describe the ways humans have modified the biomes

2. assess the impact of these changes on the equilibrium of the biomes.

Use the relevant mapping and practical skills as indicated on the matrix.

IV PATTERNS OF DEVELOPMENT

GENERAL OBJECTIVES

Explain the concept of development in the global context.

Assess the role of agriculture and industry in development by contrasting a developed and less developed nation.

Describe and account for the changing patterns of transport, trade and settlement as development proceeds by contrasting a developed and less developed nation.

Use the relevant mapping and practical skills as indicated on the matrix.

SPECIFIC OBJECTIVES

Define the terms: development, less developed and developed.

Identify and categorise the indicators of development as social or economic indicators.

Assess the importance of these indicators as measures of development.

Explain the dynamic nature of development.

Identify and locate the developed and less developed nations of the world.

Evaluate the different levels of social and economic development that may occur within a nation.

Briefly contrast ONE developed and ONE less developed nation within the context of the following objectives e.g., India, China, Brazil, Egypt, Mexico, Vietnam (less developed), Japan, U.S.A., West Germany, Singapore, Sweden, U.S.S.R. (developed).

Identify and describe the characteristics of agricultural and industrial landscapes in your chosen developed and less developed nation.
Outline the characteristics of Agriculture in your chosen developed and less developed nation.

Assess the significance of agricultural improvements in the process of development, vis output, trade, industry and income.

Describe and account for the changes that occur to industry in the process of development.

Identify and describe the characteristics of urban landscapes.

Identify and describe changing patterns of transport, trade and settlement in the process of development.

Account for this changing pattern of transport, trade and settlement in the process of development.

Use the relevant mapping and practical skills as indicated on the matrix.

V

RESOURCE STUDIES

GENERAL OBJECTIVE

Identify and categorise resources.

Examine the utilisation of resources with reference to their exploitation, depletion and conservation.

Examine the global distribution and utilisation of ONE renewable and ONE non-renewable natural resource.

Examine the growth characteristics, location and utilisation of the world's human resources.

Identify and examine issues associated with the utilisation of human resources.

Use the relevant mapping and practical skills as indicated in the matrix.

SPECIFIC OBJECTIVES

Define the term 'resource'.

Categorise resources as natural resources (land/raw materials), cultural resources (capital) and human resources (enterprise and labour).

Categorise natural resources as renewable and non-renewable.

Define the terms 'resource exploitation', 'resource depletion' and 'resource conservation'.

Explain the difference between 'resource conservation' and 'resource preservation'.

.../8
Describe the concept of 'sustainable yield'.

Briefly examine how the utilisation of resources can lead to local, national or international conflict.

Describe the utilisation of a variety of resources in terms of their exploitation, depletion and/or conservation.

For one renewable natural resource (fish or forests or an agricultural crop) and one non-renewable natural resource (a fossil fuel or a metal ore):

- describe their global distribution patterns;
- describe their current utilisation; and
- identify and examine issues associated with the location and utilisation of these resources.

Outline the growth of the world's population since the Middle Ages.

Identify the factors contributing to world population increase.

Describe and briefly explain the global pattern of population distribution.

Describe the contribution made by human resources in the utilisation of natural resources.

Examine factors influencing the productivity of human resources e.g. education, mobility, health and age-sex, etc.

Identify issues associated with the world's human resources, (e.g. over-population, zero-population growth, aging population, famine and disease, role of women, exploitation, standard of living.

Examine two issues associated with human resources.

Use relevant mapping and practical skills as indicated in the matrix.

VI REGIONAL STUDIES

The objectives of this unit must be taught within a global regional context. The choice of regions to be examined is optional and may include the Indian Ocean Littoral, South-East Asia, Middle-East, Pacific Rim, East Asia, or other major regions. This chosen region must not be Australia.

GENERAL OBJECTIVES

With respect to the selected region:

- explain the concept of a region
- describe and account for the major physical features
describe and account for the major cultural features
examine the strategic importance of the region in
the global and Australian context.
use the relevant mapping and practical skills as
indicated on the matrix.

SPECIFIC OBJECTIVES

With respect to the selected region:

- explain the concept of a region..
- identify and locate the extent of the region.
- identify and account for the major geomorphic
  features.
- identify and account for the major climatic
  features.
- identify and account for any other major
  environmental features e.g., vegetation, drainage.
- describe the demographic characteristics of the
  region.
- identify and describe the major cultural and
  political groupings.
- identify and account for the major land uses e.g.,
  agricultural systems, forestry, industry, mining,
  fishing.
- account for the nature and pattern of rural and
  urban settlement.
- describe the importance of the region with respect
  to trade and political stability on a global scale.
- assess the importance of the region to Australia
  e.g., in terms of trade, immigration, defence,
  tourism.
- use the relevant mapping and practical skills as
  indicated on the matrix.

MAPPPING AND PRACTICAL SKILLS

Mapping and practical skills are to be taught within the context of the four
selected units and not in isolation.

The following matrix shows those skills which are appropriate for each unit.
Appendix B

‘official’ class notes for ‘shifting cultivation’ topic

(no reference)
CASE STUDY: SHIFTING CULTIVATION

Shifting cultivation is a simple form of agriculture in which people with low-level technology grow basic food crops in forest clearings. After one or two harvests the clearings are abandoned and the forest regenerates while the cultivators move on to establish a new site.

1. General Characteristics

1.1 a variety of subsistence crops are grown but tuberous plants in particular

1.2 the forest is cleared by a "slash and burn" technique before cropping

1.3 the man/land ratio is low, with the population typically clustered in small tribal groups

1.4 cultivation techniques are generally primitive, using simple hand tools

1.5 periodic migration occurs, leaving the clearing to recover lost fertility through "bush fallow"

1.6 yields are relatively low; supplementary hunting and gathering is often needed

1.7 there are no permanent buildings, apart from simple village housing

1.8 animals are relatively unimportant in the farm economy

2. World Location Pattern

2.1 Equatorial Africa in the rain forests (Congo basin, West African coast, small areas of the East coast and the island of Madagascar); also in parts of the adjacent Tropical Savanna region

2.2 Central America and South America (Amazon Basin)

2.3 S.E Asia, particularly in remote, inaccessible areas

2.4 Melanesia (e.g the highlands of Irian Jaya and Papua New Guinea)
3. Habitat

3.1 Climate - Equatorial hot-wet and Tropical wet-dry. High temperatures, low annual range; high rainfall with possibly a wet season and a dry season. Rapid plant growth is possible in this climate.

3.2 Slope - often located in rugged areas; erosion is a problem. Logs may be placed across slopes to reduce water erosion.

3.3 Vegetation - ranges from tropical rainforest to savanna. Removal of large trees is a difficulty; fire is used to assist in this task. Regrowth is a problem.

3.4 Soils - generally infertile due rapid breakdown of humus and high level of leaching (removal of soluble movements by the movement of water through the soil. As the main source of nutrients is forest litter, cleared plots quickly become infertile. Ashes from fires are scattered to provide some nutrients. The bare soil forms a hard laterite crust, making it difficult to cultivate and causing extra run-off.

4. Economy

4.1 Subsistence economy - provides enough for the basic needs of a small group. In modern times, some cash cropping may take place.

4.2 Lack of infrastructure - the lack of transport facilities prohibits the expansion of economic activity.

4.3 Lack of capital - often there are no machines or modern "tools available, forcing a reliance on manual labour and primitive implements (e.g stone axes, digging sticks)

5. Society

5.1 Low levels of technology - this is changing rapidly as contact with more advanced societies occurs.

5.2 Tradition - this is a customary lifestyle for the people involved and it is difficult to change.

5.3 Religion - religious beliefs and practices may reinforce this agricultural system.

5.4 Division of labour - men do most of the heavy work of clearing and preparing the plots; women and children tend the crops.
Ecosystem Modification

6. Planned Modification

6.1 Clearing forest - this reduces competition for moisture, nutrients and light.

6.2 Planting crops - chosen species are encouraged to grow, unwanted species weeded to a small degree but eventually allowed to regrow.

6.3 Ash from fires is spread over the plot - this acts as a simple fertiliser in adding nutrients to the soil.

6.4 Construction of simple fences - reduces crop losses to larger animals.

6.5 Energy in the form of human labour and fire is added to the ecosystem. However, it remains a low energy system.

7. Unplanned Modification

7.1 Nutrient budgeting - rapid depletion of nutrients due to leaching and cropping; apart from ash from fires, no nutrients are returned to the soil until the forest regenerates over many years.

7.2 Regrowth of forest stimulated by increased light. The regrown forest tends to be much more dense (i.e. jungle) until the climax community is re-established.

7.3 Erosion - inevitable, even though logs may be placed across slopes to minimise erosion by running water.

8. Maintaining the Modified Ecosystem

8.1 Equilibrium in the system depends on the cultivators being able to shift their plots often enough for the forest to regenerate and the soil to regain fertility. This is becoming increasingly difficult due to:
8.2 Population increase - more people per area means each plot has to be returned to more quickly (shorter fallow time).

8.3 Demands of cash cropping - cash crops are often tree crops which take a lot longer to mature; the owners of these trees may be reluctant to abandon them; cash cropping encourages over use of the forest to attempt to produce extra produce for sale.

8.4 Shortage of men to clear forest due to labour being diverted to outside areas e.g. mines, factories, urban areas. This leaves only old people, women and children to do the cultivating, and they tend to keep using the same plots for longer than desirable because they cannot clear new plots adequately.