

**The linguistic construction of business reasoning:
Towards a language-based model of *decision-making* in
undergraduate business**

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Declaration

This is to certify that to the best of my knowledge, the content of this thesis is my own work. This thesis has not been submitted for any degree or other purposes.

I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Eszter Szenes
November 2016

Abstract

This thesis reports on research whose aim is to arrive at a linguistically theorised understanding of the process of *decision-making* in undergraduate business studies. The use of ‘real-life’ tasks such as country reports – the major assessment task of the interdisciplinary unit *Business in the Global Environment* at a metropolitan Australian university – is intended to prepare students for the skills of ‘problem-solving’, ‘decision-making’ and professional report writing in international business environments. However, as indicated by the large number of students failing this task, few students possess the sophisticated linguistic resources necessary to build the generic complexity and persuasive rhetoric this high-stakes task demands.

This study is concerned with identifying the linguistic demands of demonstrating decision-making in country reports. Current modelling of ‘big texts’ in SFL (Martin, 1994, 1995) is insufficient for understanding longer texts stretching across the many pages tertiary students are generally required to write. This thesis will show through fine-grained linguistic analyses of High Distinction student assignments that not all ‘big texts’ are macrogenres made up of elemental genre complexes and illustrate that embedded genres play a fundamental role in enabling texts of the length of business country reports to grow bigger than a page. Drawing on discourse semantics (Martin, 1992; Martin & Rose, 2007; Martin & White, 2005), this thesis also will also show how business reasoning is construed in undergraduate business reports through different types of grammatical structure and how successful student writers construct cause-effect relations and three major types of rhetorical move in these texts. By making visible the academically valued meanings by which skillful writers demonstrate the process of decision-making in undergraduate business country reports, this research has pedagogical implications for academic literacy interventions aimed at making explicit the basis of achievement in business studies. It is hoped that this study will open up future research directions for the continued study of knowledge-building in undergraduate business studies.

Acknowledgements and dedication

"If I have seen further, it is by standing on the shoulders of giants".

Isaac Newton, 1676

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List of Symbols and Abbreviations

The symbols and abbreviations listed below are based on Halliday and Matthiessen (2004), Martin 1992a and Martin and White (2005). The system networks proposed in this thesis follow the conventions in Martin (2013b).

/	conflated categories (e.g. Cause/Effect)
	clause boundary
[]	embedded prepositional phrase
[[]]	embedded clause/embedded genre
[[[]]]	second-order embedded genre
+	positive attitude
–	negative attitude
=, +, x	elaboration, extension, enhancement
1 2 3...	sequence of elements in a paratactic structure
$\alpha \beta \gamma \dots$	sequence of elements in a hypotactic structure
[2.3]	sentence number, clause number; i.e. the third clause in the second sentence of the text
Ø	ellipsis
A	Attribute
a/disc	analytical discussion
a/exp	analytical exposition
add	addition
amp	amplifying
app	appreciation
B	Background
C	Carrier
C/E	Cause/Effect
cap	capacity
ch	challenge
Cl.no.	clause number
comp: bal	composition: balance
comp: compl	composition: complexity
conc	concession
concl	concluding
cond	condition
consq	consequence
CONT	continuative
contr	contrast
dep	dependent
des	desire
dev	developing
diff	difference
dur	durative
E	Elaboration of hyperTheme
excl	exclusive
exp	explicit
ext	external
foll	following

hap	un/happiness
hNew	hyperNew
hTh	hyperTheme
I	Issue
immed	immediately
imp	implicit
incl	including
int	internal
loc	locative
M	Medium
norm	normality
ord	ordering
P	Perspective
ph	phase
pos	posterior
prep.ph	prepositional phrase
Pr	Process
prop	propriety
purp	purpose
Q	Qualifier
R	Resolution
reac: imp	reaction: impact
reac: qual	reaction: quality
rel.attr.	relational attributive
rel.id.	relational identifying
sat	dis/satisfaction
sec	in/security
simul	simultaneous
succ	successive
T	Token
temp	temporal
ten	tenacity
Th	Thing
V	Value
val	valuation
ver	veracity

CHAPTER 1

Introduction

This thesis addresses the issue of developing business students' skills in problem-solving, decision-making and professional report writing in higher education. These skills, often referred to as graduate qualities in higher education policy (see e.g. Barrie, 2004; Hammer & Green, 2011; Moore, 2013), are especially relevant in the contexts of real world writing, workplace genres and professional genres. The long-standing interest in these skills across a wide range of academic and professional contexts is reflected in the large volume of literature on the subject (see e.g. Bawarshi & Reiff, 2010; Bazerman, Bonini & Figueiredo, 2009; Beaufort, 1999; Bhatia, 1993b; Bremner, 2005; Coffin & Donohue, 2014; Davies & Forey, 1996; Davies, Forey & Hyatt, 1999; Devitt, 1991; de Silva Joyce & Thompson, 2016; Gardner, 2012a; Ghadessy, 1993; Ghadessy & Webster, 1988; Flowerdew & Wan, 2006; Forey, 2002, 2004; Forey & Nunan, 2002; Gunnarson, Linell & Nordberg, 1997/2014; Hewings, 2002; Iedema, 1995, 1997, 1999, 2000; Karatsolis, Papadopoulos, Pessoa, Reynolds & Karthikeyan, 2011; Mizusawa, 2008; Nesi & Gardner, 2006, 2012; Nickerson, 1998, 1999; Nunan & Forey, 1996; Swales, 2000; St John, 1996).

As knowledge economies rely on the higher education sector to produce highly skilled graduates for the global workforce, universities are expected to prepare students 'for life', equipped with 'practical' and 'globally transferable skills' (ACCI, 2002; Ballantyne, Lowe & Marshall, 2004; Bjarnason, 2001; Briguglio, 2007; Knight, 1999; Maton, 2014; Nesi & Gardner, 2012). In Australia, where the research for this thesis was conducted, employers are calling for 'work-ready' and 'more employable graduates' who can demonstrate not only academic excellence but also a range of personal, social, entrepreneurial and global business skills (ACCI, 2002; Briguglio, 2007; Clark, Papadopoulos & Rogers, 2006; Middlehurst, 2001; Ryan, 2001; Watty, 2007). In business studies, the business skills of problem-solving and decision-making are often seen as 'soft skills' (alongside critical thinking), which are highly valued by employers (see e.g. Carrington, Chen, Davies, Kaur & Neville, 2011; Facione, 1990, 2010), backgrounding a focus on learning disciplinary knowledge and how it is construed through language.

The expectation that business faculties should prepare students for the challenges of a global multicultural workplace stems from the characterisation of business (and related areas such as business administration, finance and marketing) as an applied social science (Biglan, 1973; Coffin, Curry, Goodman, Hewings, Lillis & Swann, 2003; Kolb, 1981; Nesi & Gardner, 2012). Real-life writing tasks such as professional reports, case studies and proposals are used in business higher education to prepare students for practical problem-solving (Bargiela-Chiappini & Nickerson, 1999; Dorn, 1999; Flowerdew & Wan, 2010; Nesi & Gardner, 2012; Tan, Satin & Lubwama, 2013). These tasks aim to simulate real-world problems and expect students to demonstrate skills such as critical reasoning, decision-making, and persuasion.

Despite the widespread use of real-world tasks, complaints about ‘poor quality’ student writing and ‘unprepared graduates’ are commonplace in business higher education (Birrell, 2006; Hutchins, 2015; Lentz, 2013). In Australia, accreditation groups as well as the media have also expressed increasing dissatisfaction with the quality of business graduates, who are criticised as entering the global multicultural workforce with ‘skills deficits’ or ‘deficiencies’ (Ballantyne, Lowe & Marshall, 2004; Business Industry and Higher Education Collaboration Council, 2007; Freeman, Hancock, Simpson, Sykes, Petocz, Densten & Gibson, 2008; Hare, 2011). Another problem resulting from this focus on graduate qualities is *knowledge-blindness*, i.e. a focus on *knowing how* rather than *knowing what* (Howard & Maton, 2011; Maton, 2013, 2014; Maton, Hood & Shay, 2016; Maton & Moore, 2010). This thesis aims to explore *what* constitutes valued disciplinary knowledge in business studies and how this knowledge is realized through language in successful undergraduate students’ business reports.

In this thesis I will move beyond a focus on normative discussions of what students should be able to *do* (e.g. write like a businessperson) or what they should *become* (e.g. critical thinkers, problem solvers) to explore tertiary students’ knowledge as assessed through high-stakes assessment tasks (Lillis & Scott, 2007). I also explore the crucial but often neglected role of *language* in students’ construction of disciplinary knowledge and subsequent success or failure in these tasks. This neglect stems from the separation of ‘content’ from ‘language’ as if the two were not

interdependent: “while written communication may be a crucial dimension of academic work, discussing it (let alone teaching it), is not easy when ‘language’ is conceived as separable from the ‘content’ being taught and learned in the disciplines” (Purser, 2012, p. 57).

The theoretical framework used in this thesis is Systemic Functional Linguistics (SFL). From this theoretical perspective, I explore the linguistic demands of demonstrating decision-making in undergraduate business reports. From a pedagogical perspective, I aim to make explicit the basis of achievement in a major assignment of a core business studies unit. The relevant theoretical concepts and dimensions of SFL framing this study will be discussed in **Chapter 2**. In this chapter I highlight my motivations for undertaking this study and describe the undergraduate business studies context of the research.

1.1 Approaches to business writing instruction

Most studies focusing on professional genres in business education (and related disciplines such as management, finance, accounting and economics) recognise the importance of preparing students for writing in the workplace. Apart from this common goal, the research literature on teaching business writing covers a wide range of approaches. In the field of business higher education these mainly involve *non-linguistic* approaches that focus on skills such as **critical thinking** (Bloch & Spataro, 2014; Braun, 2004; Carrithers, Ling & Bean, 2008; Carson & Fisher, 2006; Fisher, 2003; Hammer & Green, 2011; A. Jones, 2004; Swan & Bailey, 2004) and **information literacy** (see e.g. Blaszczyński & Haras, 2008; Cooney, 2005; Katz, Haras & Blaszczyński, 2010; Kirk, 2004; Kuhlthau & Tama, 2001; Neely, 2006; Scharf, Elliot, Huey, Briller & Joshi, 2007). In economics and business faculties, the teaching of **business persuasion/rhetoric**, i.e. rhetorical ‘argumentation’ and problem-solving strategies for writing in business disciplines, is often approached through the Socratic method (see e.g. Desiraju & Gopinath, 2001; Schultz, 2012; Schwarze & Lape, 2011; Whiteley, 2006). Other approaches to business writing instruction include **case pedagogy** or case method¹ (i.e. teaching problem-solving

¹ The best-known PBL method is the Harvard Case Method (see Easton, 1982; Leenders & Erskine, 1978 for an introduction and Nathan, 2013, 2016 for a discussion).

through case studies) (see e.g. Clow & Wachter, 1996; Corey, 1996, 1998; Crespy, Rosenthal, & Stearns, 1999; Dorn, 1999; Hershey & Walker, 2006; Nathan, 2010, 2013, 2016; J. Zhao, 1996) and **problem-based learning** (PBL²; also called inquiry-based learning) (e.g. Allen & Rooney, 1998; Amador, Miles & Peters, 2006; Carvalho & Kirch, 1996; Pennel & Miles, 2009; Savery & Duffy, 1995).

These approaches to writing instruction in business education are mainly based on constructivist theories of learning. Constructivism³ can be traced back to Piaget's⁴ (1932, 1936, 1945, 1957, 1958, 1967/1971) theory of thinking, learning and human development (see e.g. Brooks & Brooks, 1993; Fischer, 1980; and Wadsworth, 2004 for detailed historical accounts) and Dewey's concept of learning by doing (1909, 1928, 1938) taken up in progressive approaches to education. It became a popular theory of learning around the 1960s and 1970s (Applefield, Huber & Moallem, 2000; Rose & Martin, 2012). Literacy pedagogy approaches inspired by constructivism are associated with 'student-centred' pedagogies and founded on ideals of creativity and freedom of thought and choice, and focus less on explicit instruction (Maton, 2014; Rose, 2006b). Constructivism is regularly positioned in opposition to 'traditional' pedagogies, which do tend to focus on 'explicit instruction' and 'transmission' rather than 'authentic' learning or 'discovery' (Maton, 2014; for well-known critiques see Kirschner, Sweller & Clark, 2006; Mayer, 2004). Savery & Duffy (1995) describe PBL as the best application of constructivism, reflected in Pennel and Miles' (2009) definition of this approach: "rather than presenting concepts first and then asking students to apply them, PBL creates situations in which students must learn the concepts in order to solve a 'problem' constructed for that purpose" (p. 378). This thesis will explore successful demonstrations of business decision-making in undergraduate business reports in the context of an intervention based on a *linguistic* approach to business writing instruction. I comment on such linguistic approaches in the following paragraphs.

² See Barrows (1985, 1986, 1992) for an introduction, and Savery and Duffy (1995) for a detailed discussion.

³ I will comment on *social* constructivist theories of learning as proposed by Vygotsky (1978) and Bruner (1960/1977, 1966, 1986) below.

⁴ Piaget's theories were first described as 'constructivist' by Gruber and Vonèche (1977).

Alongside these non-linguistic approaches to business writing instruction, there has also been widespread interest in the teaching of business writing from a *linguistic* perspective, notably in ‘three traditions’ of genre (proposed by Hyon 1996). Hyon’s trilogy comprises **Rhetorical Genre Studies**⁵ (RGS), **English for Specific Purposes** (ESP) and the ‘**Sydney School**’⁶ approaches to genre-based curriculum and pedagogy. The central debate between these approaches concerns the different conceptualization of genres⁷, which gives rise to different approaches to designing literacy pedagogies. More specifically, genre researchers are centrally concerned with *explicit* versus *implicit instruction*, i.e. whether genres should be taught explicitly or should be learnt by ‘osmosis’ or ‘immersion’ (see e.g. Bawarshi & Reiff, 2010; Martin, 2016; Rose & Martin 2012).

Genres in RGS are defined as “typified symbolic actions in response to stock sets of situation types” (Artemeva & Freedman, 2001, p. 166). RGS researchers emphasise that analyses of genres need to move beyond focusing on textual features in order to analyse the social contexts that “give rise to and shape genres” (Artemeva & Freedman, 2001, p. 166). This focus on the social context embraces notions such as dynamism, change and inherent fluidity⁸ which characterise the contexts in which genres are embedded (Artemeva & Freedman, 2006, 2015; Freedman & Medway, 1984/1994, 1994; C. Miller, 1984/1994a, 1994b).

RGS-based writing courses have been frequently adopted in business schools with the aim of inducting learners into disciplinary cultures, discourse or rhetorical communities or communities of practice⁹ (see e.g. Artemeva & Freedman, 2006; 2015; Bazerman, 2002; Dias, Freedman, Medway & Paré, 1999; Freedman, 1994; Freedman & Adam, 1996; Freedman & Medway, 1994a, 1994b; Green & Lee, 1994; Hyon, 1996; Lave, 1991; Lave & Wenger, 1991; C. Miller, 1994; Reid, 1987; Sawyer

⁵ Also known as North American New Rhetoric (Martin, 2015a).

⁶ See Martin (2015a) for a detailed historical and intellectual account, offering a correction of the inaccurate usage of this term to refer to all SFL work done in the Sydney metropolitan region.

⁷ The problems of RGS conflating genre theory within Systemic Functional Linguistics (SFL) with the ‘Sydney School’, i.e. its application as genre-based pedagogies, is discussed in Martin (2015a).

⁸ These notions have been used historically by RGS scholars to criticise the Sydney School notion of genres as ‘static’ and ‘fossilised’; we will further discuss this in **Chapter 2** in relation to the SFL concept of semogenesis and dynamic evolution of genres.

⁹ The fields of *New Literacies Studies* (NLS) and *Academic Literacies* are closely aligned with RGS (see e.g. Baker, 2010; Coiro, Knobel, Lankshear & Leu, 2014; Coffin & Donohue, 2012; Gardner, 2012b; Gee, 1991/2015; 2000, 2010; Kalantzis, Cope & Cloonan, 2010; Lea & Street, 1998; Lillis, 2008; Lillis & Scott, 2007; Street, 1995, 2003 for detailed overviews).

& Watson, 1988; Wenger, 1998). Recently, however, there have been calls for more explicit integrated instruction in business writing in business faculties (see e.g. Hutchins, 2015; Katz, Haras & Blaszczyński, 2010; Lentz, 2013; Pittenger, M. Miller & Allison, 2006; Wu & Kendall, 2006). Critics of ‘bolt-on’ approaches (see especially Knight, 1999 for a critique) argue for replacing standalone units with embedded approaches and freshman composition courses devoted to improving communication and writing skills (e.g. Sharp & Brumberger, 2013). The more comprehensive approaches include **Writing Across the Curriculum**¹⁰ (WAC) and its variations, for example, **Writing in the Disciplines** (WID) (e.g. Bazerman, Little, Bethel, Chavkin, Fouquette & Garufis, 2005; Dana, Hancock & Phillips, 2011; Dean & O’Neill, 2011; Emerson, 2012; Golson & Holdijk, 2012; McLeod & Soven, 1992; Plutsky & Wilson, 2001; Ranney & McNeilly, 1996; Riordan, Riordan & Sullivan, 2000) and more recently, **Business Writing Across the Core** (BWAC) (see Hutchins, 2015 for a detailed introduction).

In one BWAC program, for example, generic writing models common in WAC/WID programs has been replaced with ‘real-world’ business documents in order to “instruct students in the method of business rhetoric, or critical thinking, for problem-solving” (Hutchins, 2015, p. 134). These business documents included five typical business genres, as identified by business faculty: letters, memos, executive summaries, proposals and business cases (Hutchins, 2015). In the program, students were provided with explicit models of these texts and asked to write several drafts of assignments. Studies such as this often focus on *how* to teach business genres; however, what is often missing is *what* needs to be taught, i.e. clear descriptions of the generic structure of the texts and the language patterns that realise these structures. This concern is often pointed out by both ESP and SFL scholars:

North American style writing centres ably provide general process-oriented support related to drafting and revision that helps writers clarify their writing purposes and their ideas, but without additional attention being given to the linguistic features used by proficient writers in specific disciplinary contexts, it is difficult for writers to draw on their previous writing histories and

¹⁰ WAC programs often include an English for Academic Purposes (EAP) focus (see e.g. Chanock, 2004; Silva & Matsuda, 2012) which is often associated with second language writing (see Benesch, 2001 for an introduction to critical EAP practice).

associated linguistic resources in producing written work at university (Gardner, 2012a, p. 53).

This thesis argues that in order to provide students with scaffolded instruction and apprentice them into discourses of doing business in the global environment, it is necessary to understand exactly what disciplinary *knowledge* needs to be learnt and how this knowledge is realized through *language*. This is the major objective of this thesis.

There has also been considerable interest in workplace genres in the fields of **English for Specific Purposes** (ESP) and **English for Academic Purposes** (EAP) (the latter focusing specifically on academic contexts, see Hamp-Lyons, 2011 and Hyland and Hamp-Lyons, 2002 for an overview). ESP conceptualises genres as “staged, structured, communicative events ... performed by specific discourse communities” (Flowerdew & Wan, 2010, p. 78; see also Bhatia, 1993, 2004; Hyland, 2004b; Paltridge, 2001; Swales, 1990). Genre analyses in ESP provide detailed descriptions of the social functions of genres, which are usually aligned with genre staging and moves. Research on the functions of business-related genres (especially in economics) focus on **prediction** (Tadros, 1985, 1986, 1989; Tadros & Samson, 1981), **forecasting** (e.g. Backhouse, Dudley-Evans & Henderson, 1993; Bloor & Bloor, 1993; Bloor & Pindi, 1990; Dudley-Evans & Henderson, 1990; Henderson & Dudley-Evans, 1990; Henderson, Dudley-Evans & Backhouse, 1993; Henderson & A. Hewings, 1987; A. Hewings & Henderson, 1987; Pindi, 1988; Pindi & Bloor, 1987; Swales, 2000) and **rhetoric** (Hyland, 1998; Mauranen, 1993; Nguyen, 2011).

The most common genres identified specifically in business studies are **case study reports** (also termed business case analyses) and **business reports** (e.g. company reports, economic forecasts, market reports) (see e.g. Bargiela-Chiappini & Nickerson, 1999; Bhatia, 2004; BAWE, 2008; Boyd, 2002; Esteban & Perez Cañado, 2004; R. Miller & Pessoa, 2016; Nathan, 2010, 2013, 2016; Raymond & Parks, 2002; Uhrig, 2012; Yeung, 2007; Zhu, 2004). Most ESP research on business genres tends to focus on analyses of **schematic structures**, **episodes** and rhetorical **moves** within genres (see e.g. Flowerdew & Wan, 2010; Lung, 2006; Nathan, 2010, 2013, 2016; Swales, 1990, 2000, 2004; Bhatia, 1993; Dudley-Evans, 1994; Dudley-Evans &

Henderson, 1993). Researchers have found that these ‘relatively stable’ genres have ‘recurring stages’ (see e.g. Forman & Rymer, 1999a, 1999b; Freedman & Adam, 1996; Freedman, Adam & Smart, 1994; R. Miller & Pessoa, 2016; Nathan, 2013). *Table 1.1* below summarises the recurring genre stages found in case study reports across a range of studies. Nathan (2013), for instance, describes the *Orientation*, *Analytical* and *Advisory* moves in business case reports as obligatory stages (optional stages are indicated by brackets in the table). The moves identified by Forman and Rymer (1999a) and Zhu (2004) include similar moves, e.g. “defin[ing] significant problem(s) in case” (Forman & Rymer, 1999a, p.115) and “an identification/summary of key issues or problems” (Zhu, 2004, p. 120).

Typical rhetorical moves of business case reports			
Mauffette-Leenders, Erskine & Leenders (1997, p. 109)	Forman & Rymer (1999a, p. 115)	Zhu (2004, p. 120)	Nathan (2013, p. 62)
Title page	Define significant problem(s) in case	Analysis of the current situation	Orientation
Table of contents		Identification/summary of key issues or problems	(Methodology)
Executive summary	Propose and analyse alternative solutions		Analytical
Issue statement	Make logical recommendations	Analysis and evaluation of alternative approaches to solving the problems	(Options and alternatives)
Data analysis	Develop implementation plan	Discussion of specific recommendations for solving the problems	Advisory
Alternatives analysis	Connect relevant course materials to case	Justification/support for proposed solutions	(Summary and consolidation)
Recommendations	Show understandings of disciplinary theories, tools and principles		(Supplementary supporting information)
Action and implementation plan			(Reflection)
Exhibits			

Table 1.1 ‘Recurring’ stages (i.e. rhetorical moves) in business case reports

The descriptions provided by Forman and Rymer (1999a) and Zhu (2004) above focus on the *functions* of the different sections of business case reports. Zhu (2004) found that the more ‘general’ business report is the most flexible of all business genres: it could be *descriptive*, *analytical* or *hortatory* (i.e. prompting action). Yeung (2007) defines business reports as “formally prepared documents containing information and opinions as a result of careful investigation and consideration, with the purpose of furthering the business operations of an organisation in the private or public sector in fulfillment of its goals” (p. 159). Business reports are divided into different types: based on their target audience they can be *external* (e.g. consultancy and audit reports) or *internal* (e.g. company reports); based on their social functions, they can be classified as *review*, *problem-solving*, *market* or *feasibility* reports (Yeung, 2007, p. 160). As *Table 1.2* below shows, these analyses of the genre

structure (or rather, the rhetorical structure) of these texts seem to be based on major headings and sections of these reports (e.g. Introduction, Findings, etc.):

Typical stages of business reports (optional stages in parentheses)	
Zhu (2004, pp. 120-121)	Yeung (2007, p. 160)
Executive summary	(Executive summary)
Identification	(List of Recommendations)
Discussion	Introduction
Restatement	(Methods)
	Findings and interpretations/conclusions
	(Conclusion)
	Recommendations for decision-making

Table 1.2 Typical stages of business reports

In Carter’s (2007) genre classification system, business reports would fall under the category of the *problem-solving meta-genre*, which focuses on ‘solving problems by applying specialised knowledge’. In Nesi & Gardner’s (2012) framework, business reports could be classified as a kind of *apprenticeship* genre, whose purpose is to prepare students for professional and workplace writing. As pointed out by these authors, not all apprenticeship genres aim to find solutions to ‘complex’ and ‘ill-structured’ problems as in case study reports (p. 173). Some of these professional genres (business reports, for example) might focus on presenting well-reasoned arguments in order to demonstrate business decision-making. I will show in **Chapter 3** that the undergraduate business country reports analysed for this study are in fact apprenticeship genres which present well-reasoned arguments: their primary goal is to convince the reader about the viability of investments rather than offer solutions to business problems.

In order to make principled decisions about the *naming* of typical business genres it is useful to consider what these names are based on, i.e. whether for example they are to be shared within professional business contexts or within a community of linguists studying these text types. Yeung (2007), for example, argues that business reports are ‘sub-genres’ of the report genre. In fact, as pointed out by Nesi and Gardner (2012) and Zhu (2004), the naming of these genres as ‘business reports’ often rely on the

canonical *professional* and *academic* rather than *linguistic* naming of these texts. This thesis will classify the ‘business reports’ studied in this research based on the findings of the SFL-informed genre analyses presented in **Chapter 3**.

As for studying recurring linguistic patterns in genres, existing ESP research into ‘argumentation’ and persuasive business writing tends to focus on speech acts and markers of interpersonal meanings such as *modality*, *evidentials*, *attitude*, *values*, *engagement*, *boosters*, *hedges*, *tenor*, etc. (see e.g. Bloor & Pindi, 1990; Hyland, 2005; Pindi & Bloor, 1987 for a discussion). These resources are often discussed as realisations of *interactional*, *interactive* (e.g. Alyousef & Picard, 2011; Thomson, 2001) and *multimodal metadiscourse* (e.g. Alyousef, 2015; Prior, 2013) in workplace texts. Metadiscourse can be understood as an umbrella term for resources signalling writers’ attitude and stance, or more generally, resources of persuasion (see also Alyousef, 2013; Alyousef & Mickan, 2016; Carrió-Pastor & Calderón, 2015; Camiciottoli, 2010, 2011; Hyland, 1998, 1999, 2004b, 2005, 2010; Hyland & Tse, 2004; Nathan, 2013). The study of persuasive resources and writers’ stance is a crucial aspect of this thesis, however, the framework of metadiscourse has been evaluated as “under-theorized and empirically vague ... making analysis an elusive and frustrating experience” (Hyland & Tse, 2004, p. 156). Despite refinements and clarifications, the metadiscourse framework (Hyland & Tse, 2004) still does not provide sufficiently clear criteria for our analytical purposes. Specifically, as metadiscourse groups together a wide range of linguistic resources that operate at different strata of language, it is problematic for the purposes of a principled systemic description. For this reason, this thesis will draw on the appraisal framework from SFL to analyse interpersonal meanings in business reports, reviewed in detail in **Chapter 2**.

As this thesis will show in **Chapters 4** and **5**, apart from studying evaluative meanings, it is equally important to understand *what* it is that is being evaluated and argued about in the business reports analysed for this study. Other ESP studies analyse ‘rhetorical moves’ based on the Toulmin (1958) method of argumentation, i.e. they identify typical moves such as *grounds*, *claims*, and *warrants* (see e.g. Flowerdew & Wan, 2010; Rocci, 2015). While the focus on rhetorical moves and

their functions are important for business genre analyses, the explicit criteria for identifying the linguistic realisations of moves often remains unclear in these studies.

Unlike the majority of RGS studies on business genres and writing instruction, most of the ESP studies cited above emphasise the importance of explicit discipline- and genre-specific approaches in business higher education. This position is shared by the **‘Sydney School’ genre-based approach**. The term ‘Sydney School’ refers specifically to the *application* of SFL genre theory in educational settings, i.e. the recontextualisation of theory into pedagogic practice (Martin & Rose, 2008; Rose & Martin, 2012). The application of SFL theory to pedagogy emerged in the 1980s when a research group led by Martin and Rothery at the University of Sydney started using genre and register theory to identify and provide descriptions of genres in Australian school settings. Their distinctive pedagogy and curriculum became known as the ‘Sydney School’ approach to genre (Green & Lee, 1994, p. 208; Hyon, 1996; Johns, 2002). The Sydney School enacts the Hallidayan notion of linguistics as ‘an ideologically committed form of social action’ (Rose, 2011). Specifically, Martin & Rose (2008) describe this approach as:

- social rather than cognitive
- social semiotic rather than ethnographic, with tenor, field and mode explored as patterns of meaning configured together as the social practices we call genres
- integrated within a functional theory of language rather than interdisciplinary; note however that our theory is multi-perspectival (i.e. including several complementary ways of looking at text, e.g. metafunction, strata)
- fractal rather than eclectic, with basic concepts such as metafunction redeployed across strata, and across modalities of communication (e.g. image, sound, action and spatial design)
- interventionist rather than critical, since following Halliday we see linguistics as an ideologically committed form of social action (p. 20).

In the Sydney School, the concept of genre and interrelated SFL theoretical constructs provided a frame for the development of a pedagogy aimed at redistributing the

genres of power and providing students at all levels of schooling with the necessary linguistic resources to increase their meaning-making potential (Rose & Martin, 2012). The relevant theoretical constructs will be reviewed in more detail in **Chapter 2**. Based on what Martin (2015) calls “having a common problem to solve” (p. 57), SFL has continued to have constructive interdisciplinary dialogues over several decades with social realist scholars such as Bernstein and Maton (see e.g. Christie, 1999; Christie & Martin, 2007; Christie & Maton, 2011; Hasan, 2005, 2009; Maton, 2013; Maton, Hood & Shay, 2016; Martin, 2011, 2013; Rose & Martin, 2012). Social constructivist theories of learning, specifically, the notions of *Zone of Proximal Development (ZPD)* (Vygotsky, 1978), *the spiral curriculum* (Bruner, 1960/1977) and *scaffolding* (Applebee & Langer, 1983; Wood, Bruner & Ross, 1976) have also had a significant impact on the development of SFL-informed genre-based approaches (see e.g. Gibbons, 1991, 2002, 2006, 2009; Hammond, 2001, 2006; Hammond & Gibbons, 2005). I will comment further on the relevance of these theories to this study in **Chapter 2**.

One example of a ‘Sydney School’ approach to business writing instruction took place in a core senior interdisciplinary Bachelor of Commerce Unit of Study, *Business in the Global Environment (CISS2001)* between 2008 and 2011 (Stenglin, Welch & Piggott, 2009) and was aimed at the integration of disciplinary knowledge and academic literacy support in the curriculum. This intervention has provided both the context and data for this PhD project. I will describe the rationale for the design of this intervention before presenting the theoretical and pedagogical motivations for the current research.

1.2 Theoretical and pedagogical motivations for this study: Report writing in undergraduate business

Business in the Global Environment (CISS2001) was a Unit of Study coordinated by the discipline of International Business and The Centre for International Security Studies at a large metropolitan Australian university. Its primary objective was to apprentice students into “doing business in the global environment of the twenty-first century” (CISS2001, 2008, pp. 1-2) by developing students’ ability to analyse various factors presented by the global external business environment. This analytical

framework is commonly referred to as the PESTLE framework: the political, economic, socio-cultural, technological, legal and ethical external environments in which companies and businesses operate (Morrison, 2006).

The cohort of CISS2001 was very diverse as all undergraduate students enrolled in accounting, commerce and business law degrees in the Faculty (i.e. from different disciplinary backgrounds) were required to complete it (Stenglin, Welch & Cléirigh, 2014). The need for literacy support in this unit became apparent in 2008 when most students struggled to meet the demands of the major assignment, a 3,000-3,500-word *country report*. This task was intended to develop students' skills in problem-solving, decision-making and professional report writing, which are highly valued in international business environments, as noted earlier. However, in the completed assignments few students demonstrated the sophisticated linguistic resources necessary to tackle the generic complexity and persuasive rhetoric of this high-stakes writing task, evidenced by the large number of students who failed the assignment. The business country reports written by this cohort of students comprise the data for this PhD project. The assessment task and the choice of data will be described in more detail in **Chapter 2** together with the research questions.

The design of the intervention was inspired by the Sydney School genre-based pedagogy known as the Teaching-Learning Cycle¹¹ (TLC) (Callaghan & Rothery, 1988; Macken, Kalantzis, Kress, Martin, Cope & Rothery, 1989; Murray & Zammit, 1992; Rothery, 1994, 1996; Rothery & Stenglin, 1994, 1997; Rose & Martin, 2012). The first version of this pedagogy (Rothery, 1994) was inspired by Halliday's (1993) language-based theory of learning and Painter's research on early language development (1984, 1986). As described earlier, the primary concern of lecturers in the unit was equipping students with the skills required to perform complex, multi-disciplinary business writing. The TLC was particularly relevant for an intervention aimed at scaffolding students' disciplinary literacy (cf. Shanahan & Shanahan, 2008, 2012), i.e. what they "need to be able to do with language in order to be successful in education, in the community, and in employment" (Feez, 2002, p. 44).

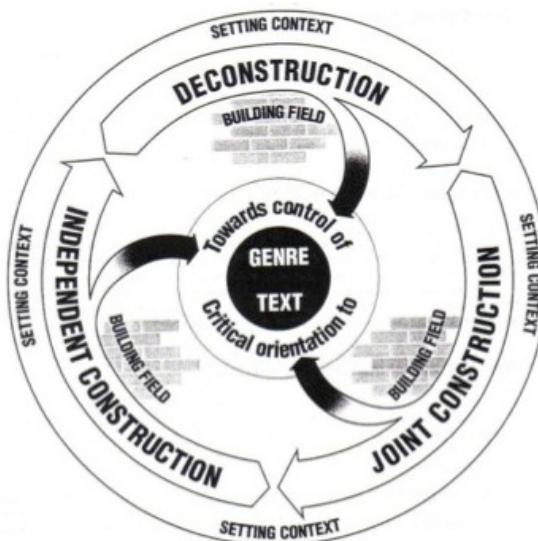
¹¹ See Rose and Martin (2012) for a detailed discussion of the evolution of the TLC.

The intervention was modelled on the three steps of the teaching-learning cycle: *Deconstruction* (modelling), *Joint Construction* and *Independent Construction*. Setting the context and building the field are overarching principles guiding each of these steps (Martin & Rose, 2005). During **Deconstruction**, model texts are typically unpacked and their meanings deconstructed to prepare students for the following steps of the TLC. The most important goal of Deconstruction is to make explicit to students the generic staging and key linguistic features of the target texts. It is deemed essential to undertake this work before asking students to complete tasks independently (Rose & Martin, 2012). This approach contrasts with constructivist approaches popular in business higher education and business writing instruction, where students are asked to perform some kind of writing and most of the scaffolding is provided as feedback *after* the completion of learning tasks.

The next step, **Joint Construction**, involves “*guidance through interaction, in the context of shared experience*” (Martin, 1999; following Painter, 1985). The main goal of this phase of the cycle is to engage in “teacher-led collaborative writing” (Macnaught, 2015, p. 49). Using knowledge gained in the Deconstruction phase, students collaboratively write new texts based on the model text. Teachers scaffold this joint writing by negotiating student prompts, and suggesting and discussing language choices. This collaboratively written text is supposed to follow the genre structure and include similar language features to the deconstructed model text.

The final step in the TLC is **Independent Construction**. Building on the knowledge gained in the first two steps in the cycle, students complete a learning task independently. During the cycle the level of support provided to students decreases through carefully scaffolded activities, i.e. the cycle starts with more teacher-led support and ends with the teacher withdrawing their support. When students arrive at the level at which they can work independently, control of the genres is handed over entirely to them. This is absolutely critical if students are to not only master control of genres but also to challenge or renovate¹² them (Rose & Martin, 2012). *Figure 1.1* below illustrates the TLC:

¹² A discussion of the renovation of genres in relation to semogenetic change will be taken up in detail in [Chapter 2](#).



*Figure 1.1 The Teaching-Learning Cycle of genre-based literacy pedagogy
(From Rothery & Stenglin, 1994, p. 8)*

The intervention team developed a three-week TLC (Stenglin, Welch & Cléirigh, 2014). In the first week, the team worked through the Deconstruction step, dedicated to strong field-building, i.e. the teaching of key curriculum content (the economic environment from the PESTLE framework and related economics concepts, e.g. *GDP per capita*, *Purchasing Power Parity*, etc.). These tended to be discussed in relation to business case studies of real world scenarios.

In the second week, during the Joint Construction step, students worked in small groups to solve and write case studies. Tutors provided step-by-step scaffolding so students could move from understanding and applying relevant key concepts to completing case studies. The design of the case study tasks followed the principle of genre-based literacy pedagogy and modelled the structure of the final assignment (including analysis of relevant PESTLE factors and writing a recommendation.)

Due to the complexity of the country report assignment, the teaching team decided to dedicate the third week of the TLC to the development of professional report writing skills, in three hours of explicit instruction devoted to writing a country report. Specifically, the overall structure of the model texts was presented in a two-hour lecture and deconstructed in more detail during a one-hour tutorial. After being provided with the model exemplars, students had to complete the country report in their own time outside of formal teaching hours (Stenglin, 2010; Stenglin, Welch &

Cléirigh, 2014). Therefore, the Independent Construction step was the least developed in the intervention's teaching-learning cycle.

The intervention described above represents an example of “strong, discipline-specific but isolated attempt” at ‘content-communication integration’ (Stenglin, Welch & Cléirigh, 2014, p. 1) embedded within the curriculum. Before the intervention itself commenced, the researchers had obtained High Distinction exemplars¹³ from the discipline lecturers, which were analysed for their social purpose and overall structure using SFL genre theory. The researchers drew on the same assignment types, i.e. the country reports analysed in this thesis, for their own analyses. These analyses comprised quantitative statistical analyses as well as manual qualitative text analyses. The statistical analyses investigated the impact of the intervention on student writing based on pre- and post-intervention texts (Stenglin, Welch & Cléirigh, 2014). Qualitative analyses included classifying the country report in terms of assignment type; identifying the key stages and social purpose of the report; and identifying key rhetorical features¹⁴. The preliminary results of the intervention's qualitative analyses opened up some of the research questions driving this PhD study. More specifically, the findings have provided the grounds for exploring the linguistic construction of decision-making and business reasoning in country reports. I will review these findings, and other studies focusing on similar text types, in detail in **Chapter 2**. The following section will justify the choice of an SFL genre and discourse semantics framework for the purposes of this study.

1.3 Towards a linguistic understanding of business reasoning

The nature of disciplinary knowledge in business studies, especially undergraduate, and the difficulty inherent in academically valued knowledge production (Bernstein, 2000) is an important concern for this thesis as it is often downplayed in discussions

¹³ Two of these exemplars, the Canada Report and the China Report, constitute part of the data set and have been reanalysed for the purposes of this thesis.

¹⁴ Some of the results of the qualitative analyses were presented at the 2010 International Systemic Functional Congress (ISFC) at the University of British Columbia, Vancouver, Canada and at the 2011 Free Linguistics Conference (FLC) at the University of Sydney, Australia. In 2012 the Faculty of Business and Economics, where the intervention was conducted, was split into the School of Economics and the School of Business. As a result, the unit *Business in the Global Environment* ceased to exist. Research on the country reports was never published.

of business writing instruction. In terms of this thesis it should be noted that a large number of students, half of whom are international non-English speaking background (NESB) students, failed the country report assignment in *Business in the Global Environment*, the core unit from which the data set for this research was collected. The rationale for the selection of business country reports for this study will be detailed in **Chapter 2**. It is argued in this thesis that before universities can develop successful writing support to equip business students with the skills of decision-making and business reasoning, it is necessary to study in detail the nature of lengthy business assignments. This should include a clearer understanding of the generic structure of these texts, i.e. what kind of genres they are, as well as the language resources that help build these complex texts.

This thesis makes two major theoretical contributions to SFL research. First, it complements and extends current SFL research on the “nature of big texts” (Martin, 1994, 1995, 1996). In pursuit of this goal, this thesis takes Halliday’s types of structure (1965/1981, 1979/2002, 1985) and SFL genre theory (Christie & Martin, 1997; Martin, 1992a; Martin & Rose, 2008) as its points of departure for revisiting Martin’s (1994) question of how texts “get bigger than a page” (p. 29). More specifically, **Chapter 2** will provide a detailed historical account of the types of structure theorised by Halliday (1965/1981; 1979/2002; 1985), Matthiessen (1988) and Martin (1996). In extending current SFL modelling of ‘big texts’ (Martin, 1994), two issues are of particular concern: 1) *analysis* of the types of structure activated in these long business reports, and 2) how these structures are *represented*. In order to study text structuring principles of long texts, I review in detail in **Chapter 2** the large volume of literature in SFL on the *elemental* genres students are required to write throughout their primary and early secondary education. While most of these non-tertiary texts fit neatly onto half a page to a page (Martin, 1994; Martin & Rose, 2008), the texts produced for the tertiary assignments studied in this thesis stretch across many pages. Few SFL studies to date have attempted to study the generic structure of long business reports and in those that have, the level of detail provided is insufficient for understanding the nature of these long business assignments. In **Chapter 3** of this thesis I aim to clarify the criteria for distinguishing elemental genres from macrogenres and embedded genres and to establish clear theoretical principles for the representation of these complex business assignments.

Second, this thesis aims to take the first step towards extending coupling theory (Bednarek & Martin, 2010; Hood, 2010; N. Knight, 2010a, 2010b; Martin, 2000, 2011; Martin, Zappavigna & Dwyer, 2007; Zappavigna, Cléirigh, Dwyer & Martin, 2010; Zappavigna, Dwyer & Martin, 2008a, 2008b) by building typologies for the different choices of grammatical configurations that construe business reasoning in undergraduate business reports (**Chapter 4**). Specifically, this thesis will reveal the salient linguistic resources that scaffold the generic structure of long undergraduate business country reports. In order to study how business decisions and cause-effect relations are realised at the level of discourse semantics, this thesis draws on the discourse semantic systems of APPRAISAL, IDEATION, CONJUNCTION and PERIODICITY (Martin, 1992a). The thesis will also illustrate, from a more dynamic perspective, the construction of three major types of rhetorical move through the co-patternings of discourse semantic systems. The effect is the construction of powerful business rhetoric (**Chapter 5**).

While this thesis provides a linguistic description of the genres and linguistic resources that construe business reasoning, it also represents the first step towards recontextualising the findings into pedagogical applications. It is hoped that by making explicit the basis of achievement in writing business country reports, the thesis can contribute to the design of future literacy interventions underpinned by a model of visible genre-based pedagogy such as that provided by the Sydney School approach. It is also hoped that this study will open up future research directions for the continued study of knowledge building in undergraduate business studies.

1.4 Organisation of the thesis

This thesis is organised into six chapters. This current chapter, **Chapter 1**, has positioned the study in the context of existing research on business writing and approaches to its instruction in higher education. It has introduced Systemic Functional Linguistics (SFL), the theoretical framework chosen for exploring the linguistic construction of business reasoning and decision-making in undergraduate business reports. The theoretical foundations underpinning this research will be presented in **Chapter 2**. **Chapters 3 to 5** will present the findings of the genre and

linguistic analysis. **Chapter 3** will specifically focus on the generic structure of business country reports. **Chapter 4** will present the typology of different types of coupling identified in the data. **Chapter 5** will illustrate the three types of cause-effect relationship found in the data set as well as three types of rhetoric construed by the co-patternings of discourse semantic systems. Finally, **Chapter 6** will conclude the thesis with a discussion of the significance of the findings, the theoretical contributions made to SFL theory and the pedagogical implications for the design of business writing interventions.

Chapter 2: Theoretical foundations

The major aim of **Chapter 2** is to establish the theoretical foundations underpinning the analyses of successful demonstrations of decision-making in undergraduate business country reports. It is further divided into four parts. **Section 2.1** will present theoretical principles from the architecture of SFL theory relevant for this study, such as stratification, metafunction, axis and instantiation. These theoretical constructs will provide the foundations for exploring the linguistic construction of business reasoning in this thesis. **Section 2.2** will build on SFL-informed genre theory to establish the theoretical foundations for the study of the text structuring principles in country reports. **Section 2.3** will review relevant concepts from discourse semantics in SFL in order to build on existing work on appraisal and other relevant discourse semantic systems for construing business reasoning. Drawing on the review of relevant theoretical principles, **Section 2.4** will describe the data and the text selection process. The chapter will conclude with the presentation of the research questions driving this study in order to contribute to a linguistically theorized understanding of the process of decision-making in undergraduate business studies.

Chapter 3: The generic structure of business country reports

Chapter 3 will complement and extend existing research on SFL genre descriptions of macrogenres, elemental genres and embedded genres by revisiting Martin's question of how texts "get bigger than a page" (1994, p. 29). It will also explore current understandings of embedded genres as "a relatively rare phenomenon"

(Martin, 2012b, p. 002). Based on analyses of High Distinction country reports this chapter will show that these texts unfold through multiple layers of embedded genres in their generic stages. This chapter is divided into three sections. Analogising from grammar and the structure of the clause, [Section 3.1](#) discusses from an ideational perspective the particulate structure of the texts analysed in this study. [Sections 3.2](#) will present a complementary orbital perspective on particulate realization. By bringing together complementary text structuring principles and focusing on axial relations [Section 3.3](#) will conclude this chapter with a discussion of the nature of long undergraduate business country reports.

Chapter 4: Making a business decision at the level of discourse semantics: Construing couplings and recouplings

Chapter 4 focuses on exploring the interpersonal meanings at play in construing business decisions at the level of discourse semantics. Specifically, this chapter will present the different grammatical structures that construe couplings of meanings through which business reasoning is realised on the instantiation hierarchy. [Section 4.1](#) will provide a detailed presentation of the grammatical structures through which couplings can be construed. [Section 4.2](#) will establish the criteria for grammatically distinguishing the different types of coupling identified in the data set. [Section 4.3](#) will present additional types of coupling construed through combinations of grammatical resources with different attitudinal choices from different subsystems of appraisal. The chapter aims to illustrate the importance of couplings as the basis for demonstrating the process of business decision-making at the level of discourse semantics.

Chapter 5: Making a business decision at the level of discourse semantics: The significance of couplings and recouplings

Chapter 5 will demonstrate the significance of couplings in ‘making a point’ and construing different types of cause-effect relationship in undergraduate business country reports. Specifically, [Section 5.1](#) will discuss the implications of affect, judgement and appreciation choices in couplings for demonstrating business reasoning. [Section 5.2](#) will illustrate how the positioning of couplings contributes to

the linguistic construction of different types of cause-effect relationship in the business country reports. **Section 5.3** will take a logogenetic perspective to explore how linguistic resources from different discourse semantic systems co-pattern into arguments and construct rhetorical moves in business country reports.

Chapter 6 Conclusion

Chapter 6 will conclude this thesis by providing a summary of the major findings and the theoretical contributions to SFL theory. **Section 6.1** will consolidate the major findings and the theoretical contributions made to SFL theory. **Section 6.2** will consider the pedagogical implications of the findings for future writing interventions in business schools that aim to make the basis of achievement explicit. Finally, **Section 6.3** will address the concerns that arise from this research and provide directions for future research.

CHAPTER 2 Theoretical foundations

2.0 Introduction

This chapter presents the theoretical foundations relevant for analysing demonstrations of decision-making in undergraduate business country reports. It is organised into four major sections. Specifically, **Section 2.1** will review relevant theoretical principles from the architecture of systemic functional linguistic (SFL) theory that underpin the analysis in this study (hierarchies and complementarities in particular). These theoretical principles will provide the underlying foundations for studying the linguistic construction of business reasoning in this thesis. In **Section 2.2**, I build on SFL genre theory in order to establish the foundations for my exploration of the structure of longer texts – some stretching across many pages – that tertiary students are generally required to write. One of these longer texts is the business country report, as analysed in this thesis. I will also discuss current SFL research into writing common business genres. In **Section 2.3**, I review and build on existing work on appraisal and relevant discourse semantic systems in SFL for construing business reasoning. Finally, in **Section 2.4** I will describe the data analysed for this thesis and review the text selection process. I will conclude the chapter by presenting the research questions addressing the development of a linguistically theorised understanding of the process of decision-making in undergraduate business studies.

2.1 Theoretical foundations: Systemic Functional Linguistics

Systemic Functional Linguistics (SFL), the theoretical framework underpinning this thesis, treats language as “a meaning-making resource” (Halliday, 1978, 1979, 1985; Halliday & Matthiessen, 1999; Halliday & Matthiessen, 2004; Martin, 1992a). Its architecture provides the theoretical principles and analytical tools for our exploration of business reasoning in business reports. While there are other semiotic systems through which meaning can be construed, such as images, music, dance, body language, art, space or mathematics (Caldwell, 2011; Doran, 2015; Dreyfus, Hood & Stenglin, 2011; Hood, 2011; Hood & Lander, 2016; Hood & Maggiora, 2016; Kress

& van Leeuwen, 2006; Martinec, 2004; O'Toole, 1994; Painter, Martin, & Unsworth, 2013; Popa Blanariu, 2013; Ravelli, 2000; Stenglin, 2004; Unsworth, 2001, 2008; van Leeuwen, 1999, 2011), this thesis focuses on the central role of language (specifically, tertiary level academic English in the written mode). Understanding the linguistic resources at stake in construing business reasoning is of crucial importance for providing undergraduate business studies students with appropriate academic literacy support. The construal of meaning in successful business reports is dependent on selecting the 'right' linguistic choices and configuring them into recognisable patterns of academically valued meanings which business studies lecturers identify as the demonstration of *business reasoning* and *decision-making*. As I will demonstrate in **Chapters 3 and 4**, the meaning-making choices available to writers of business reports to achieve their social purpose are represented as system networks in SFL. In this thesis, I focus on the "meaning-making potential" (Halliday & Matthiessen, 2004) of High Distinction country reports in undergraduate business studies.

This section focuses in particular on four SFL dimensions that are relevant to this research: **stratification**, **metafunction**, **axis** and **instantiation**. These principles are of crucial importance for identifying the linguistic criteria for the construal of business reasoning in business reports.

2.1.1 Stratification

The relationship between language and context is explained through the concept of **stratification** in SFL theory. In this regard SFL was influenced by Hjelmslev (1961)¹, who theorised language as a "stratified system of signs" that is divided into a content plane and an expression plane (Martin, 2014a, p. 6). Building on Hjelmslev's work, Halliday (1961/2002) conceptualised language as a hierarchy, with content divided into two strata: lexico-grammar and semantics. According to this model, language choices made by speakers and writers are realised on three strata: phonology-graphology (the expression plane) and lexico-grammar and semantics (the content plane). In SFL, this hierarchy is represented as co-tangential circles (Martin, 2014a), as shown in *Figure 2.1* below:

¹ See Hjelmslev (1961) for a detailed discussion.

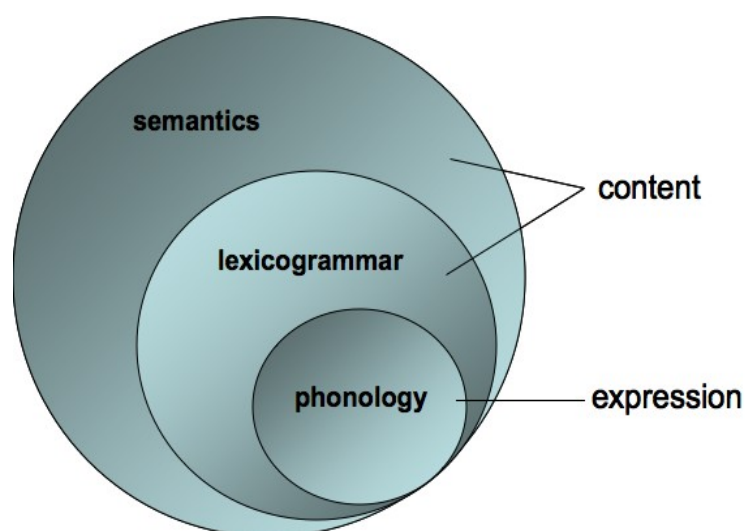


Figure 2.1 Halliday's representation of language as a stratified system (From Martin, 2014a, p. 7)

The relationship between language and context as envisaged in SFL was influenced by Hjelmslev's (1961) concepts of denotative and connotative semiotics, with language as denotative semiotic providing the expression plane for context as connotative semiotic. Building on this conceptualisation, in SFL context is interpreted as a higher-level stratum of meaning, with language as its expression plane (Martin & Matthiessen, 1991). The most basic resources at the phonological-graphological stratum are phonological or graphological units, which realise words and structures at the level of lexico-grammar (Martin & White, 2003/2007, p. 9). At the level of lexico-grammar, linguistic analysis is concerned with what choices are made within a clause, group/phrase, word or morpheme. The level of semantics, as theorised by Halliday and Hasan (1976), is concerned with what Martin refers to as 'clause semantics' (Martin, 2014a, p. 7). The highest level of abstraction or stratum in this model is context, imaged as *Figure 2.2* below.

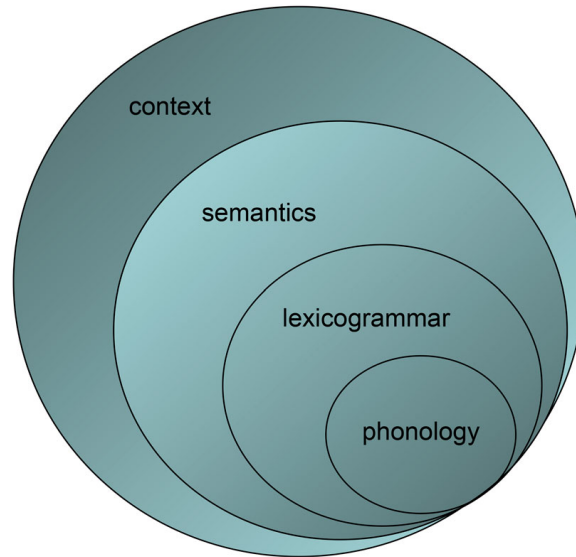


Figure 2.2 Context represented as a stratum of meaning (From Martin, 2016, p. 15)

Building on Malinowski's (1923, 1935) and Firth's (1957) conceptualisations of meaning in context, Halliday (1978) defines register as "the configuration of semantic resources that the member of the culture associates with a situation type. It is the meaning potential that is accessible in a given social context" (p. 111). The contextual variables, which function simultaneously, are field, tenor and mode. In Halliday's model of context, context of situation refers to the "immediate environment" of texts, which are in turn nested within the context of culture or a "broader environment" (Halliday & Hasan, 1985):

The context of situation, however, is only the immediate environment. There is also a broader background against which the text has to be interpreted: its CONTEXT OF CULTURE. Any actual context of situation, the particular configuration of field, tenor, and mode that has brought a text into being, is not just a random jumble of features but a totality – a package, so to speak, of things that typically go together in the culture. People do these things on these occasions and attach these meanings and values to them; this is what a culture is (p. 46, emphasis original).

Halliday's model is a non-linguistic model of the context of culture. Moreover, it is important to clarify that 'context' is *not* a technical term in Martin's (1992a) stratified

model. Since context has been stratified into two levels in Martin's model, i.e. register and genre, the term 'context' is no longer necessary. However, for the purposes of educational linguistics, the terms 'context of situation' and 'context of culture' have been adopted as useful *glosses* for register and genre. Martin (1992a) points out that individual register variables cannot be associated with the social purpose of texts, thus placing genre, a constantly evolving dynamic open system, into a "superordinate" relationship to register variables (1992a, pp. 502-506).

In his model, Martin (1992a) draws explicitly on Hjelmslev by treating register as "a semiotic system in its own right", with language as its expression plane (p. 502). As Eggins and Martin argue (1997/2002), categories of context make generalisations about patterns of linguistic features selected in a text from a system of options. Martin (1992a, 2001b, 2010, 2012b) positions genre as a higher level of abstraction above register, i.e. an additional stratum beyond field, tenor and mode. Martin's concept of genre refers to recognisable recurring patterns of meanings in texts which can be viewed as "staged, goal-oriented, social processes" (Martin & Rose, 2003, p. 6) and which perform particular social roles in society (Martin & White, 2005). For Martin, genre is a pattern of register variables (i.e. of field, tenor and mode). In this model, *field* refers to social activity; *tenor* refers to social relations; and *mode* refers to the amount of work language is doing in a more or less multimodal text (Martin & Rose, 2008). Context for Martin thus consists of two levels of higher order patterns of meaning, which are realised by the strata of language.

Martin (2014a) notes the significance of treating context as a pattern of clause semantic (cf. Halliday, 1984; Halliday & Matthiessen, 1999; Hasan, 2009) rather than discourse semantic patterns (i.e. *grammar* based analyses being presented as *text* analyses without consideration of discourse semantic structures and meaning-making resources beyond the clause (Martin, 2014a). According to his modelling of discourse semantics², the focus at this stratum is on patterns of texture realised within or between clauses. **Realisation** (Martin, 2008, 2010, 2011; Matthiessen, 2007) is defined as the relationship that makes visible how more abstract patterns at a higher-level stratum are realised by less abstract patterns at the adjacent lower level stratum

² See Martin (1992a) for a comprehensive account of his theory of discourse semantics; and Martin and Rose (2003/2007) for an accessible introduction.

(Martin & Rose, 2003). On the one hand, the meanings made at each stratum can *activate* (Hasan, 1996) resources at the stratum below. This means that discourse semantic patterns activate (i.e. are *realised by*) particular lexico-grammatical resources. On the other hand, lexico-grammatical resources can *construe* (i.e. construct) certain discourse semantic meanings or patterns, what Halliday (1992/2003) refers to as the ‘realising/realised’ relation (p. 210).

All strata instantiate, which means all strata of realisation represent the “meaning potential of a culture” (Martin, 2010, p. 18). Martin’s stratified model of context and language considers genre as “a pattern of register patterns, register a pattern of discourse semantics ones, which are in turn a pattern of lexicogrammatical ones, in turn a pattern of phonological ones” (Martin, 2014a, p. 14). This motif (patterns of patterns) has been referred to as **metaredundancy** (Lemke, 1984, 1995). Martin’s stratified model of context and language is represented in *Figure 2.3* below.

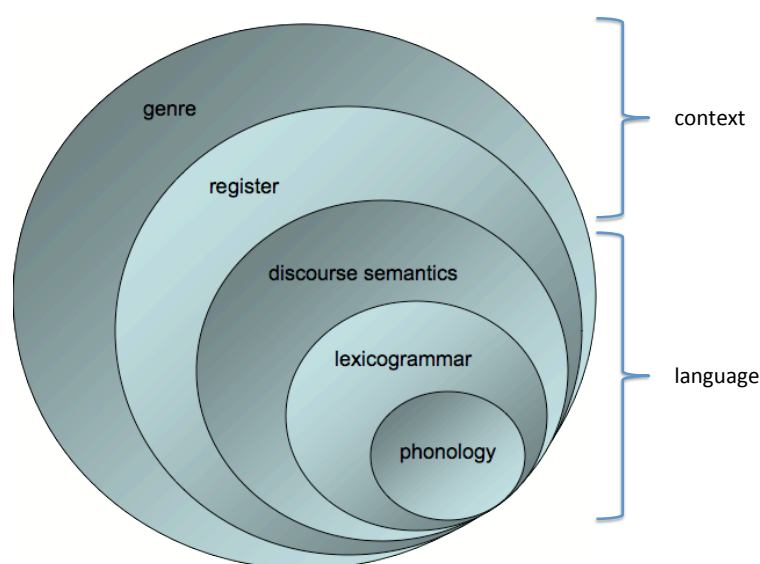


Figure 2.3 Martin’s stratified context plane (Adapted from Martin, 2014a, p. 14)

This thesis will draw on Martin’s conceptualisation of the relationship between genre and register, and language, stratified on both the context and content planes. Specifically, based on this stratified model of context, this thesis explores 1) how business reports grow bigger than a page and 2) what linguistic resources are at stake in scaffolding the structure of these texts in particular. Understanding these texts

depends heavily upon the conceptualisation of genre as a system of social processes (Martin & Rose, 2008). I will take up a more detailed discussion of genre theory in [Section 2.2](#) below.

Apart from the hierarchy of stratification reviewed above, the architecture of SFL also includes complementarities of language that are relevant to this study. I will now review the concepts of metafunction and axis (Halliday & Matthiessen, 2004; Martin, 2013).

2.1.2 Metafunction

SFL theory views language as a social semiotic, a social construct rather than a psychological one that exists in the mind (Halliday, 1978). Central to this understanding is the idea that language is *functional*: it shapes and is shaped by *social* functions (Halliday, 1969, 1970/1976, 1973/2003). Because it has a capacity to serve different social functions, language is organised metafunctionally (Halliday, 2009, p. 62). Language choices are interpreted as reflecting the register variables of field, tenor and mode (Halliday & Matthiessen, 1999). Field, i.e. the subject matter or social activity, is associated with the *ideational* metafunction; tenor, i.e. social relationships between participants, with the *interpersonal*; and mode, the role language is playing, with the *textual* metafunction (Halliday 1978; Halliday & Matthiessen, 1999; Martin & Rose, 2008). These different kinds of meanings relate to different kinds of ‘reality’: ideational meanings *construe* external and internal ‘reality’; interpersonal meanings *enact* ‘social reality’, while textual meanings *compose* ‘semiotic’ reality (Martin, 1991, p 104). The three metafunctions organise these three different kinds of meanings simultaneously:

Having evolved simultaneously as the means of making sense of our experience (construing “reality”) and of getting along with each other (enacting our social relationships), language manages these as complementary modes of meaning (**ideational, interpersonal**) – along with a third functional component (the **textual**) which maps these on to each other and on to the

context in which meanings are being exchanged (**bold** original, Halliday, 2009, p. 62).

In SFL, the stratification hierarchy and metafunctions are mapped onto each other (see *Figure 2.4*) to represent the construction of multiple meanings simultaneously across all strata of language.

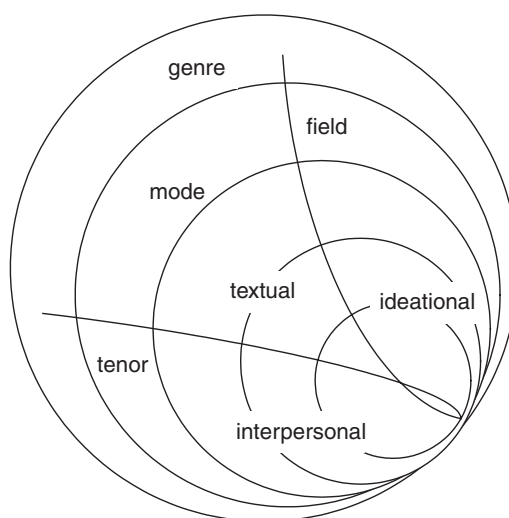


Figure 2.4 Strata and metafunctions in SFL (From Martin & White, 2005, p. 32)

Halliday (1979/2002) proposes that the three metafunctions are realised by different types of structure. Building on Pike's (1959) interpretation of linguistic resources in terms of particle, wave and field, Halliday (1979/2002, 1965/1981) aligns ideational meanings with **particulate** structures, interpersonal meanings with **prosodic** structures and textual meanings with **periodic** structures. These structures can be identified as organising principles at the level of lexico-grammar, for instance, at clause rank and group rank (e.g. in the nominal and verbal group) (Martin, 1992a; Martin & Rose, 2003/2007). However, these structures are not restricted to the level of lexico-grammar; they can be applied to the level of discourse semantics as well as higher order text patterns at the level of genre (Martin, 1996). Since in this thesis I am interested in different types of structure in relation to text structuring principles in business country reports, a more detailed discussion of these concepts will be taken up in [Section 2.3](#) on genre below.

2.1.3 Axis: system and structure

As introduced above, a systemic-functional theory of language sees language as a meaning-making resource. I have discussed the meaning of ‘functional’ in relation to metafunctions; I now turn to a discussion of ‘systemic’ in relation to another complementarity: **axial relations**, i.e. the relationship between **system** and **structure** in SFL theory (Matthiessen & Halliday, 1997/2009; Martin, 2013b). Axial relations underpin the concept of metafunctions and strata of language (Martin, 2013b). From the perspective of axis, system is understood as **paradigmatic** relations between oppositional meanings; structure is understood as **syntagmatic** relationships related to how meanings unfold in texts (Martin, 2013b). In contrast to formalist grammars, SFL privileges paradigmatic over syntagmatic relations and conceptualises language as a system network of choices rather than a set of grammatical rules (Martin, 1992a, 2013b). An important implication of privileging system over structure is that through system networks linguists are able to account not only for choices that were made but also choices that *could* have been made but were not (Halliday, 2004). Paradigmatic relations activate syntagmatic structures, which are labelled according to function and class in SFL. The syntagmatic axis organises language as “patterns or regularities”: “what goes together with what” (Halliday & Matthiessen, 2004, p. 22).

In this thesis I will follow the labelling conventions presented in Martin³ (2013b). *Figure 2.5* below provides a simplified representation of the TRANSITIVITY system in English, where this language system is shown as a set of oppositions from which a choice must be made. These options in the system activate particular linguistic configurations termed realisation statements for each choice. The contrasting options represent the paradigmatic axis while the realisation statements represent the syntagmatic axis. The system is read from left to right and the **entry condition** for the TRANSITIVITY system is the major clause. The name of this system is PROCESS TYPES, written as small caps. The paradigmatic oppositions in this particular system introduce six opposing choices, or **features**. These features are written in lower case letters. In running text these options or features are indicated by square brackets, a logical ‘or’ relation: a selection *must* be made from these features, the types of clause:

³ This work contains a detailed discussion of axial relations, system networks and the most current labelling conventions.

[material], [behavioural], [mental], [verbal], [relational] and [existential]. The system shows that the feature [relational] (PROCESS TYPE) is the entry condition of a smaller system with two features: [attributive] and [identifying], indicating more options in terms of **delicacy**. This means that if the feature [relational] is chosen from the first system, then either the feature [attributive] or the feature [identifying] must also be chosen from the second system as we progress from left to right in delicacy.

Realisation statements are indicated in the system by downward slanting arrows (↘) under the various features. These realisation statements relate system to structure by presenting syntagmatic configurations of the functions and constituents realising a particular feature. For instance, under the feature [attributive] two functions, Carrier and Attribute, have been inserted, indicated by the ‘+’ sign. This means that relational attributive clauses are realised by a configuration of Carrier and Attribute functions (the first letter of function labels are capitalised).

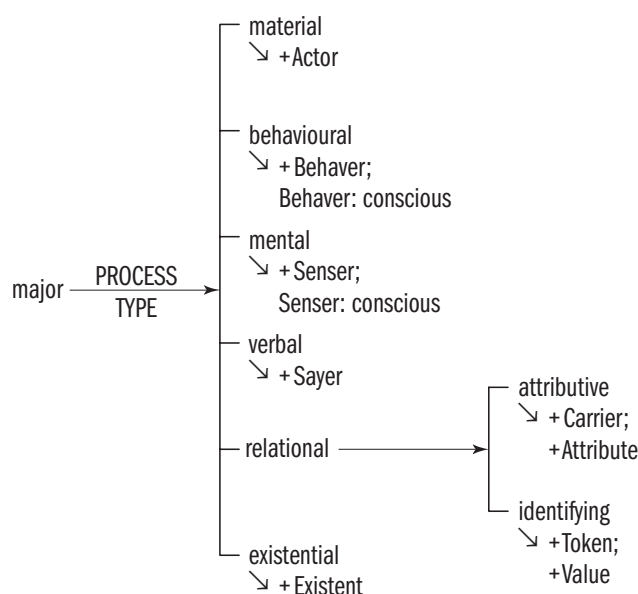


Figure 2.5 Simplified system network of TRANSITIVITY (From Halliday & Matthiessen 2004, p. 173)

While the system network exemplified above is a system at the level of lexico-grammar, system networks can express paradigmatic and syntagmatic relations at all strata. System networks will be of crucial importance in this thesis for the modelling of 1) the options that account for the generic structure of business country reports at

the stratum of genre (see **Chapter 3**) and 2) the linguistic construction of business decisions made at the discourse semantic stratum (see **Chapter 4**).

2.1.4 Instantiation

In the previous sections I introduced language as a social semiotic system of meaning-making resources. This meaning potential provides available choices to be taken up in individual texts. The relationship between language as potential – system – and language as individual text – instance – is referred to as **instantiation** (Halliday & Matthiessen, 2014, p. 27). According to Halliday (1992/2002), instantiation can be understood as a cline, with language as system at one end of the cline and instance at the other end of the cline. He explains this concept by analogising the relationship between climate and weather: climate represents the weather patterns recognisable at a particular location over a period of time; weather, experienced on a daily basis, represents one instance of the local climate.

Consider the notion of climate. A climate is a reasonably stable system; there are kinds of climate, such as tropical or polar, and these persist, and they differ in systematic ways. ... What does it mean to say the climate is changing? Climate is instantiated in the form of weather: today's temperature, humidity, direction and speed of wind, etc., in central Scotland are **instances** of climatic phenomena. [...]

The climate and the weather are not two different phenomena. They are the same phenomenon seen by two different observers, standing at different distances – different time depths. To the climate observer, the weather looks like random unpredictable ripples; to the weather observer, the climate is a vague and unreal outline. So it is also with language; language as system, and language as instance. They are not two different phenomena; they are the same phenomenon seen by different observers. The system is the pattern formed by the instances; and each instance represents an exchange with the environment – an incursion into the system in which every language is involved (**bold original**, Halliday, 1992/2002, p. 359).

Martin (2010) further characterises instantiation as “a hierarchy of generality” (p. 17). The hierarchy moves from system, representing all the linguistic resources available, through more and more specific choices until we arrive at text (cf. *Figure 2.6* below). We can understand movements along the cline as movements from the most general (the system) to the most specific (the text). Genre and register are included as “sub-potentials”, looking down the cline from the system end (Martin, 2010, 2011). The other intermediate level on the cline, text type, allows for patterns generalised across sets of texts, looking up from the instance end of the cline.

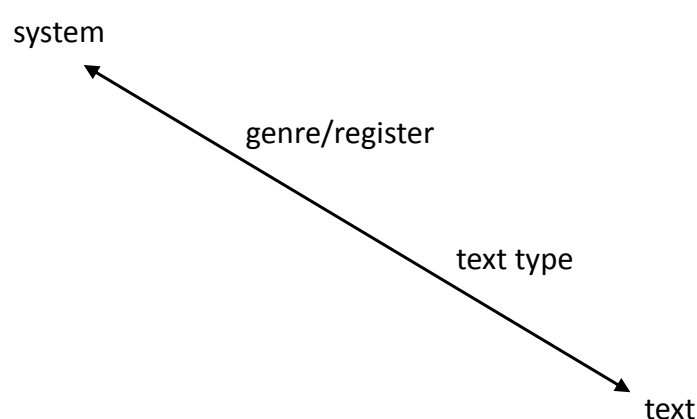


Figure 2.6 The cline of instantiation relating system to instance (Adapted from Martin, 2008, p. 35)

Instantiation is a useful concept to consider when studying business country reports, as we can view these texts as instances of the meaning potential available in the discipline of undergraduate business studies. The linguistic choices taken up in these texts to construe business decisions reveal patterns of business reasoning. By examining these patterns, we are able to generalise the sub-systems that represent these meaning potentials in relation to generic structure and discourse semantic resources (as I show in **Chapters 3** and **4**). Where the concept of realisation will enable us to study similarities and differences among texts in relation to the system, the concept of instantiation will allow us to consider “the generalisation of several texts as text types” (Martin, 2006a, p. 285). In other words, we can study country reports from two perspectives at the same time: as individual texts and as a particular text type in the field of business studies that selects similar resources and shares recurring patterns from the same systems.

Another reason this thesis will draw on the notion of instantiation is Martin's (2010) evaluation of this hierarchy as 'under-theorised'. He suggests that *coupling* could be one theoretical construct that offers a way of helping the development of our understanding of the instantiation hierarchy. As this thesis explores what kinds of meanings couple and why from the perspective of this hierarchy, I will take up discussion of couplings in [Section 2.3](#) and [Chapters 4](#) and [5](#) below.

The theoretical foundations of SFL theory reviewed in this section of this chapter will provide me with crucial guiding principles throughout this thesis. One of the aims of this thesis is to provide a systemic description of the genre/s that constitute long undergraduate business country reports. Therefore it is necessary to review SFL approaches to analysing text structure and relevant related concepts from SFL genre theory. This will be the focus of following section.

2.2 Systemic functional genre theory

As reviewed in [Chapter 1](#), current modelling of the generic characteristics of business reports written for undergraduate business studies courses is insufficient to fully understand how these big texts unfold and what genre/s realise them. To establish the theoretical foundations for studying the structure of business country reports, I now turn to the concept of genre as theorised from a systemic-functional perspective (Christie & Martin, 1997; Martin, 1992a; Martin & Rose, 2008). A systemic-functional definition of genre characterises them as "recurrent configurations of meaning" unfolding in stages (which are themselves recurrent configurations of meaning) (Martin & Rose, 2008, p. 230; Rose & Martin, 2012, p. 47) across language and attendant modalities of communication in a culture (Martin, 2014b, p. 309). This model of genre enables us to specify how field, tenor and mode variables combine in a way that is "appropriate" in a given culture (Eggins & Martin, 1997, p. 243).

Before exploring text structuring principles, it is necessary to review Halliday's proposals for types of structure (1965/1981, 1979/2002) and the reconceptualisation

of these types by Martin (1994, 1995, 1996) as **particulate**, **prosodic** and **periodic** structures. These concepts will be crucial for clarifying the criteria for distinguishing elemental genres from macrogenres and establishing the principles for their representation.

2.2.1 Types of structure

Section 2.1.3 above introduced the concept of metafunction (cf. Halliday, 1974, 1978, 1985), i.e. the resources that realise the three ‘orders of reality’⁴ (Martin, 1996, 2000): ideational (‘natural reality’), which is divided into the experiential and logical functions; interpersonal (‘social/intersubjective reality’); and textual (‘semiotic reality’) (Martin, 1995, p. 9; 1996, p. 36). According to Halliday (1979/2002, 1982/2002), these metafunctions activate three types of structure, as reviewed in the following sections.

2.2.1.1 Halliday’s types of structure

Halliday (1965/1981) defines structure as “relations among the parts [the elements] of a linguistic unit (of a sentence, a clause, and so on” (p. 29). According to Halliday (1965/1981⁵), two types of structure can be distinguished: multivariate and univariate (Halliday, 1965/1981). A **multivariate structure** is a segmental structure in which a definite number of constituents or units combine into a closed, bounded structure. The relationship between these units is traditionally⁶ represented by constituency trees. While multivariate structures provide a constituency-based perspective on text structuring principles, **univariate structures** are open (Halliday, 1965/1981), relating elements to one another in recursive sequences. That is, they are open-ended iterative structures involving *the same* variable (Halliday, 1965/1981). As univariate structures are represented as “chains of dependence” (Halliday, 1965/1981, p. 36), they provide an **interdependency** perspective on text structuring principles.

⁴ Martin uses Matthiessen’s glosses for ‘reality’, presented at the Finnish Summer School of Linguistics, University of Jyväskylä in 1989.

⁵ This paper was first written in 1965 as a working paper for the O.S.T.I. Programme in the Linguistic Properties of Scientific English (Halliday, 1965/1981, p. 41).

⁶ Formal and structuralist models of grammar show a bias towards constituency representation at the expense of prosodic and periodic perspectives. For a detailed discussion, see Martin (1995) and (1996).

The notion of interdependency chains realising univariate structures (Halliday, 1965/1981) relates to analyses of relationships in clause complexes, namely, **paratactic** and **hypotactic** relationships. In paratactic clause complexes, for example, clauses are of *equal* status (traditionally termed *coordination* and *apposition*) while in hypotactic clause complexes they are of *unequal* status (traditionally termed *subordination*), which means that one clause is dependent on another clause (Halliday, 1965/1981). Paratactic and hypotactic relationships can occur at lower ranks as well, for example in the structure of the nominal and verbal groups.

For the representation of paratactic structures Arabic numerals are used; for hypotactic structures the letters of the Greek alphabet are used, as in *Table 2.1* below. In order to indicate that the elements are realised in a sequence in the structure the caret sign ^ is used, e.g. 1^2^3 and $\alpha^{\beta^{\gamma}}$ (Halliday, 1965/1981).

type of structure	example of structure	notation
univariate	paratactic	1 2 3 4...
	hypotactic	$\alpha^{\beta^{\gamma \delta}}$

*Table 2.1 Conventional notation for paratactic and hypotactic univariate structures
(Based on Halliday, 1965/1981)*

Two further relevant concepts related to multivariate and univariate structures are **rankshift** (i.e. **embedding**) and **recursion**. Halliday (1965/1981) describes grammar as a ‘hierarchy of constituents’ (Halliday, 1965/1981, p. 40), termed the **rank scale**. Each level in this hierarchy constitutes a **rank** (Halliday, 1961). For example, at the lexicogrammatical level (or stratum) there are four ranks, each made up of the units from the rank below: clause, phrase/group, word and morpheme (Halliday & Matthiessen, 2004). A constituency tree example illustrating the rank scale from clause to word is shown in *Figure 2.7* below:

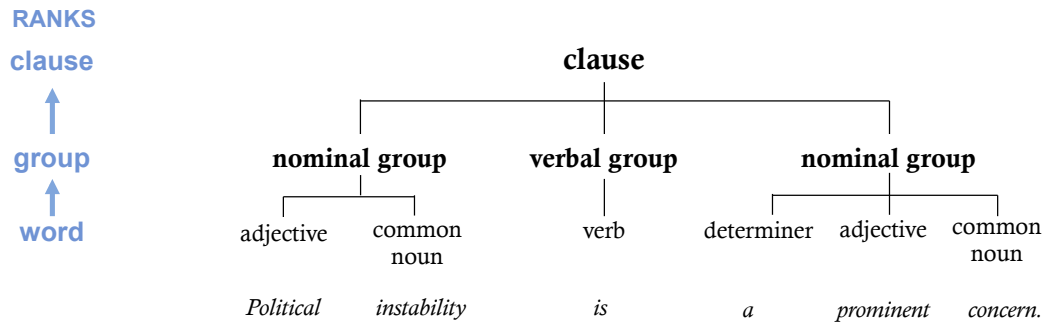


Figure 2.7 Constituency tree of an English clause
(Adapted from the thesis data set)

As the figure above shows, the clause is the highest-ranking unit on the rank scale and clause functions are realised by groups and phrases, i.e. constituents from the rank below (Halliday, 1965/1981). This is exemplified in *Figure 2.8*, where the nominal group *political instability* functions as the Token in the relational clause *Political instability is a prominent concern*.

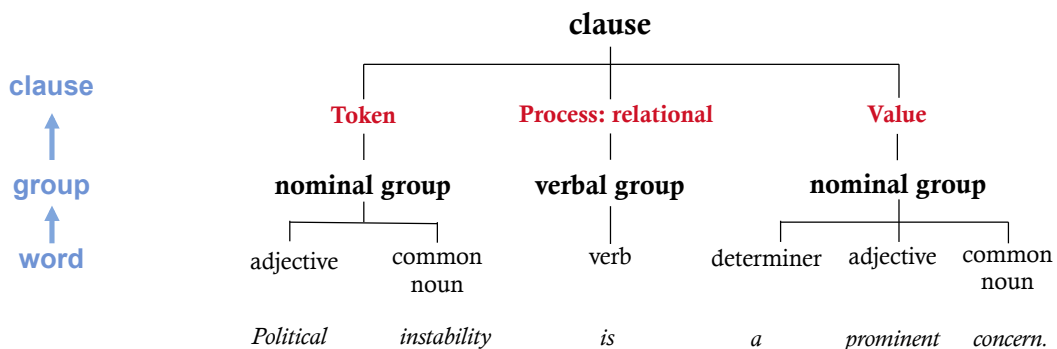
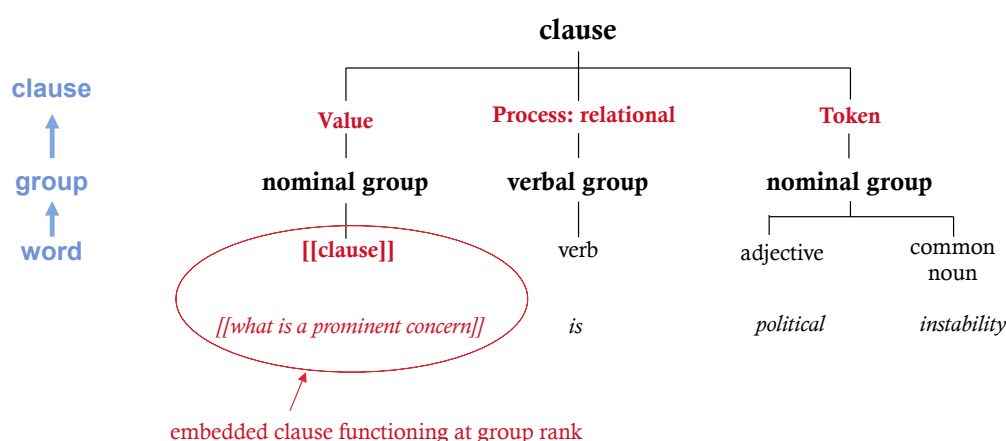


Figure 2.8 Groups realising clause functions
(Adapted from the thesis data set)

However, as the grammar allows units to function as constituents at the rank below, they can become **downranked** to the level of their own rank or one rank below, a process termed **rankshift** (Halliday, 1965/1981, p. 39), or more recently, **embedding** (Halliday & Matthiessen, 2004). Examples include a clause embedded in another clause, a clause embedded in a phrase/group or a group embedded in a phrase/group. Embedded clauses are conventionally enclosed within double square brackets [...]] and embedded phrases and groups within single square brackets [...]. *Figure 2.9* below illustrates this through an example in which a clause is downranked to the level

of a group. Specifically, the clause *what is a prominent concern* functions as the Value in the relational clause *[[What is a prominent concern]] is political instability*:



*Figure 2.9 Embedded clause realising a clause function
(Adapted from the thesis data set)*

The concept of rankshift/embedding is important as it is a device that allows closed non-recursive multivariate structures to open up their meaning potential through **cyclical recursion** (Halliday, 1965/1981): “if a constituent at a given place in structure is of rank higher than that specified in the hierarchy, it can be expanded recursively” (p. 40). As shown in **Chapter 3**, it is possible to downrank units much larger than the clause at the level of lexicogrammar. I will take up the discussion of embedding again in relation to larger text structures in **Section 2.3.3.2** below.

The notion of cyclical recursion needs to be distinguished from the concept of **linear recursion** (Halliday, 1965/1981, p. 40), which allows open-ended, recursive univariate structures to expand their meaning potential indefinitely. This is what Halliday (1979/2002) refers to as “true recursion” (p. 213) where the same structural element is selected several times and organised into a *linear sequence*. The characteristics of multivariate and univariate structures related to rankshift and recursion are summarised in *Table 2.2* below:

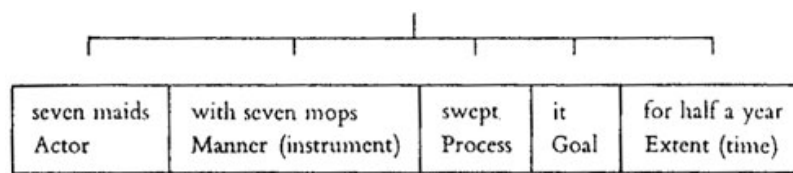
types of structure			
multivariate		univariate	
hierarchic (constituency)	involving rankshift	hypotactic	paratactic
non-recursive	cyclically recursive	lineally recursive	

*Table 2.2 Rankshift and recursion in Halliday's types of structure
(Adapted from Halliday, 1965/1981, p. 41)*

For Halliday (1979/2002), *experiential* meanings activate ‘**part/whole**’ **constituent-like structures** (meanings construed as segments/constituents); *logical* meanings are part of ideational meanings that activate ‘**part/part**’ **logical recursive structures**; *interpersonal* meanings activate **prosodic structures** (meanings saturating/colouring other units of meanings), and *textual* meanings activate **culminative periodic structures** (meanings construed as waves) (pp. 202-212). More specifically, Halliday (1966, 1979/2002) defines **constituent structures** as ‘configurations’ or ‘constellations’ of distinct elements, which together construe the structure as a ‘whole’. This is the kind of structure Halliday defined as multivariate (1965/1981) where each element or constituent takes on specific functions or values within the configuration, such as Actor, Process or Goal in a clause (Halliday, 1979/2002, pp. 203-204). **Prosodic structures** are ‘cumulative’ because they cannot be linked to specific individual segments; instead, they spread across constituent boundaries “as a continuous motif or colouring” (Halliday, 1979/2002, p. 205). Finally, culminative **periodic structures** generate ‘points of prominence’ such as *thematic* and *focal* prominence (Halliday, 1979/2002, 1982/2002). Thematic prominence is realised by first position, for example, the Theme function in the English clause while the last position, or focal prominence, is associated with the New function or information focus (when realised through unmarked tonicity at the end of a tone group).

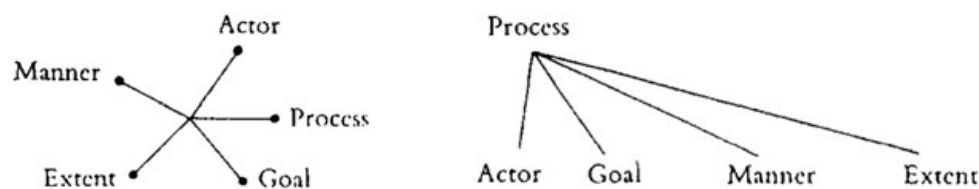
An important consideration is how these types of structure are *represented*. Experiential structures are constituent structures of ‘wholes’, therefore each element of the whole needs to be identified by a function label. **Function labels** in SFL are capitalised (e.g. Process, Manner, Argument etc.) in order to distinguish them from **class labels**, which are written in lower case letters (e.g. verbal group, prepositional

phrase, exposition). The constituency tree in *Figure 2.10* below (from Halliday, 1979/2002, p. 203) is a typical representation of experiential elemental structure:



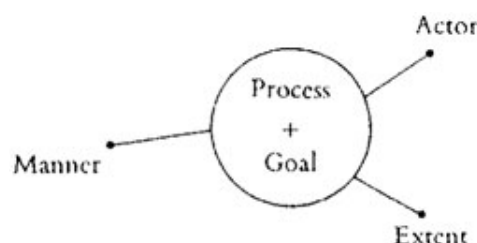
*Figure 2.10 Halliday's representation of constituent structure
(Figure 3 from 1979/2002, p. 203)*

According to Halliday (1979/2002), a constituency structure is not the only option for representing experiential structure. It is also possible to place the Process at the **centre**, with other elements represented in a dependency relationship as in *Figure 2.11* below:



*Figure 2.11 Halliday's dependency notation for experiential structure
(Figures 4 and 5 from 1979/2002, p. 203)*

Halliday (1979/2002) extends this representation by arguing that a **nucleus** (i.e. the central element mentioned above) should constitute a Process and a Goal around which other elements 'cluster' (p. 203). This is described as a 'non-linear' "molecular model of structure, with a taxonomy similar to cell: molecule: atom: subatomic particle" (Halliday, 1979/2002, p. 204), as illustrated in *Figure 2.12* below.



*Figure 2.12 Halliday's non-linear representation of experiential structure
(Figure 6 from 1979/2002, p. 203)*

Halliday’s work on types of structure resonates with Pike’s (1959) conceptualisation of linguistic resources as particle, wave and field: “constituent (experiential) structures are particulate, prosodic (interpersonal) structures are field-like, periodic (textual) structures are wave-like” (Halliday, 1979/2002, p. 209). *Figure 2.13* below sums up Halliday’s diagrammatical representation of these structures. The diagram below (Halliday’s Figure 11 from 1979/2002, p. 209) privileges a non-linear representation over the constituency tree shown in *Figure 2.10* above:

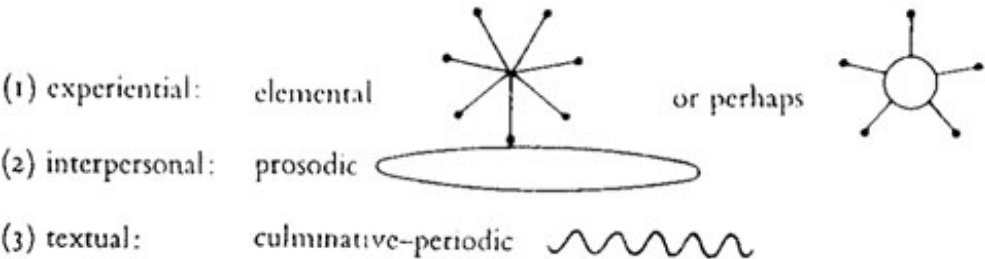


Figure 2.13 Halliday’s non-constituency representation three types of structure (Figure 11 from 1979/2002, p. 209)

Halliday (1979/2002, p. 211) introduced a constituency representation not only for experiential meanings but also for interpersonal and textual meanings, as in *Figure 2.14* below. In the figure these three types of meaning are mapped as constituents on the same clause. This type of constituency mapping was intended to assist text analysis as well as the comparison of the three tiers of grammar analyses.

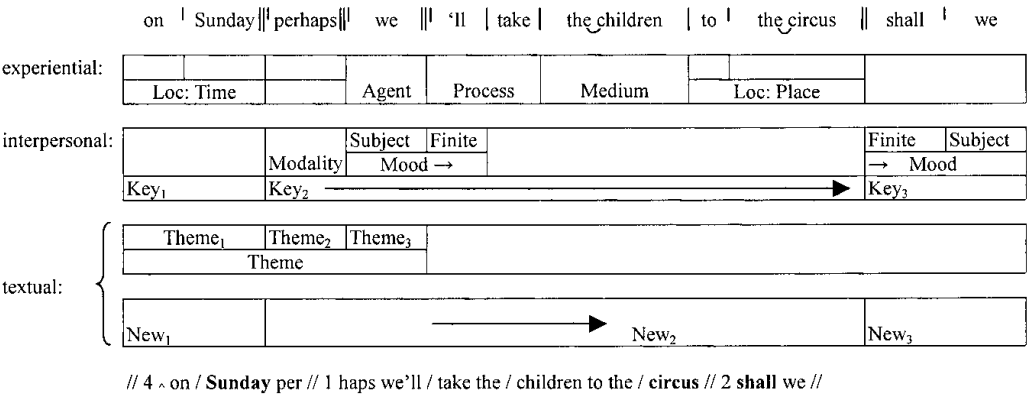


Figure 2.14 Halliday’s constituency representation of three types of structure (Figure 13 from 1979/2002, p. 211)

As noted above, logical meanings are realised by univariate structures (Halliday, 1965/1981), which are further divided into **paratactic** and **hypotactic** structures, i.e. interdependency relationships between clause complexes. Halliday (1985) refines his earlier work on clause complex relations. In the later account, clauses in a clause complex can be linked together by the **logico-semantic relations** of projection and expansion. **Projection** refers to the reporting or quoting of speech or thought; **expansion** refers to the type of connection that relates clauses to each other. Paratactic clauses, i.e. clauses of equal status, can be linked together by **extension** (signaled by the ‘+’ sign) and **elaboration** (signaled by ‘=’) sign. Extension means adding a new meaning by addition, replacement or alternation); elaboration means reformulating, restating or clarifying a meaning (Halliday, 1985, pp. 203-207). Hypotactic clauses on the other hand rely on relationships of **enhancement** (signaled by ‘x’) to link them to other clauses (Halliday, 1985; Halliday & Matthiessen 2004). Enhancement refers to qualifying meanings by specifying circumstantial elements of time, cause, manner, condition and so on (Halliday, 1985, p. 211). I will return to logico-semantic relationships in *Section 2.2.3.1* below as they are highly relevant for discussing the criteria used to distinguish macrogenres from elemental and embedded genres.

As mentioned in the preceding sections, a constituency representation has proven to be an appropriate way to illustrate particulate structure realising experiential meanings. However, as I will review in the following sections, it has its limits for representing prosodic and periodic structures (Matthiessen, 1988; Martin, 1996). The following section begins this discussion by reviewing Matthiessen’s (1988) work on these representational issues.

2.2.1.2 Matthiessen’s discussion of structure and representational issues

Matthiessen (1988) refers to Halliday’s particulate structure related to experiential meanings (1965/1981; 1979/2002) as constituency. While representations of **constituency** are well developed, and well suited for experiential structures, the

*representation*⁷ of **prosody** (cf. Halliday's prosodic structure) and **pulse** (cf. Halliday's periodic structure) 'lags' behind the theory (Matthiessen, 1988). Matthiessen (1988) points out that interpersonal prosody runs across several constituent segments, e.g. polarity is "not locatable in any particular place" (p. 161). He also problematises the mapping of Halliday's periodic structures in constituent terms because textual meanings are similar to interpersonal meanings in that they also run across bound constituent units. Matthiessen (1988):

The textual metafunction does not generate a constituency hierarchy of themes in the way the experiential metafunction generates a constituency hierarchy of phenomena decomposed into processes, participants, and circumstances, and then, for example, participants in their turn decomposed into things, epithets, and so on (p. 165).

Martin (1996) extends Halliday's (1965/1981, 1979/2002, 1982/2002, 1985) conceptualisation of types of structure and offers a different perspective on particulate structures. This will be reviewed in the following section.

2.2.1.3 Martin's types of structure

Halliday's metafunctions and types of structure, i.e. types of meaning related to their realisations, are summarised by Martin (1996, p. 40; following Halliday, 1979/2002) as in *Figure 2.15* below. Accordingly, experiential meanings are realised by part/whole structures and logical meanings by part/part particulate structures; interpersonal meanings are realised by prosodic structures; and textual meanings are realised by periodic structures.

⁷ For a detailed discussion of issues of representation, especially in the context of computational linguistics, see Matthiessen (1988) and Kasper (1988).

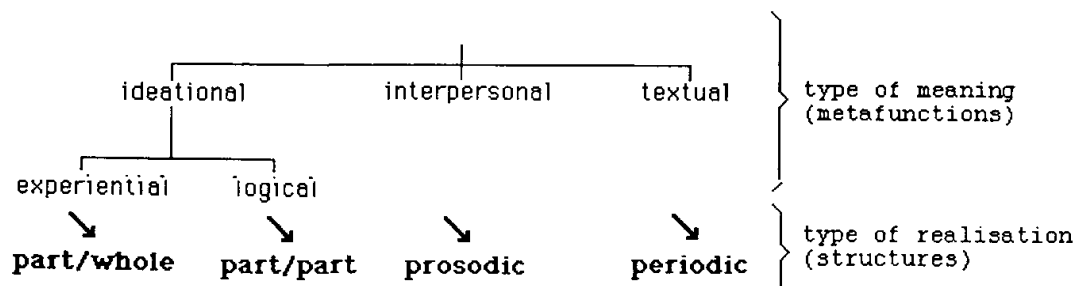


Figure 2.15 Types of meaning related to types of structure (From Martin, 1996, p. 40)

Figure 2.16 below sums up Martin's (1996) reading of Halliday's proposed **notations** for the representation of the three types of structure reviewed above:

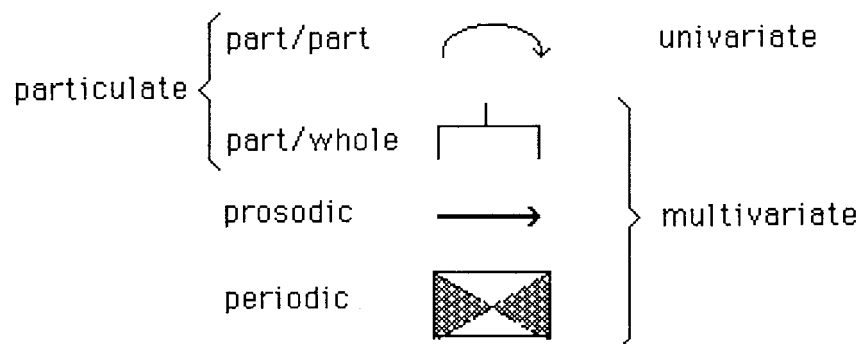
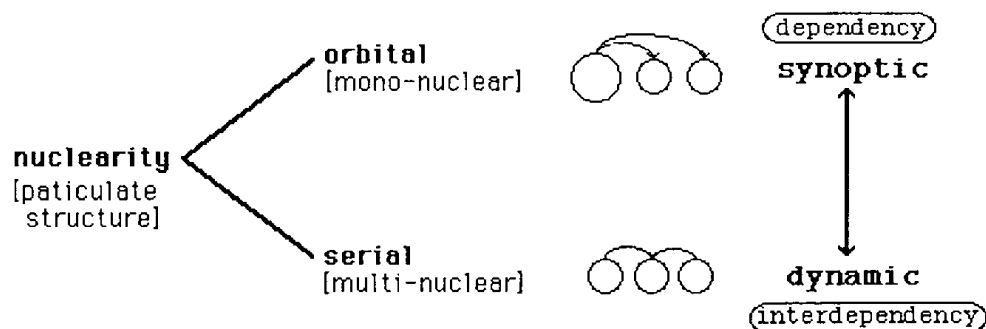


Figure 2.16 Halliday's proposed notations for types of structure (From Martin, 1996, p. 41 based on Halliday, 1985)

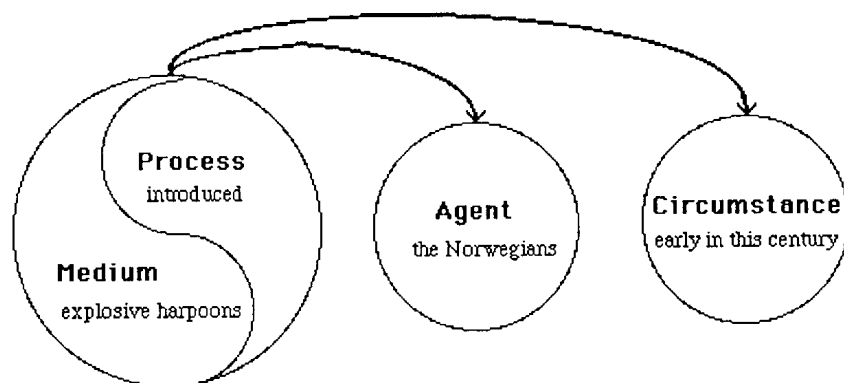
Building on Halliday's (1979/2002) work on types of structure, Martin (1996) provides a critique of constituency-based representations associated with particulate structures. Martin responded to Halliday's analogy that "a text is like a clause" (1982/2002, p. 234), with his own: "*a text is not a tree*" (1996, p. 60, *italics original*). He concludes that a constituency representation of texts is reductive for prosodic and periodic structures (Martin, 1996) as it takes only experiential meaning into consideration. Martin's (1996) **nuclearity perspective on particulate structure** aimed to replace Halliday's *part/whole* versus *part/part* distinction. As he points out, elements in a part/part structure that do not construe a whole should not really be called 'parts' (Martin, 1996, p. 47). Consequently, Martin revised these experiential *part/whole* structures into **orbital structures** and logical part/part structures into **serial structures**, with experiential meaning thus understood in terms of "orbital

dependency” (p. 61). In these kinds of structures, elements (i.e. Satellites) depend on one ‘core’ (i.e. Nucleus), which makes orbital structures **mono-nuclear**. Logical meaning on the other hand is conceived in terms of “serial interdependency” (p. 61) where elements are structured as steps in a sequence, with one unit of meaning no more important than another. This makes recursive serial structures **multi-nuclear** (cf. Martin, 1996, p. 51). Martin’s nuclearity model of orbital mono-nuclear and serial multi-nuclear structures is illustrated in *Figure 2.17*:



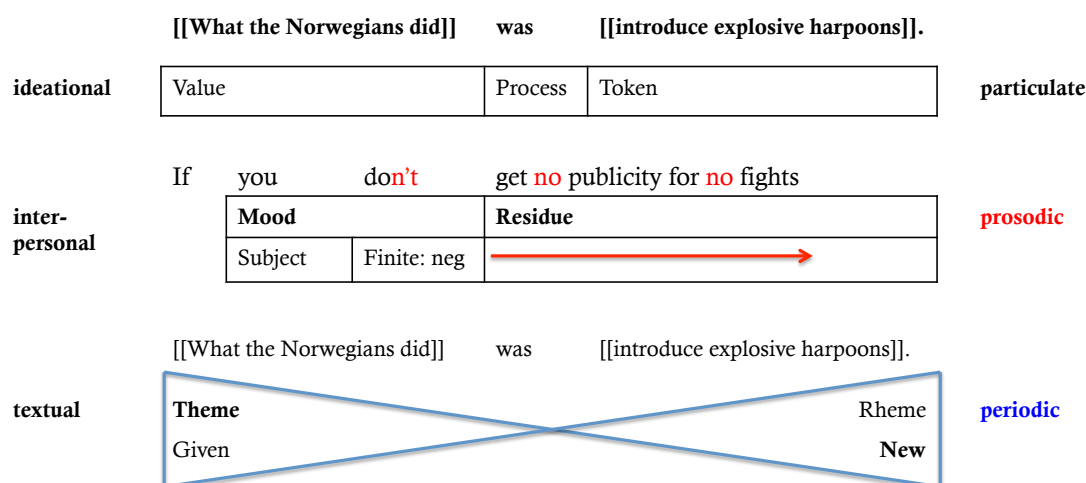
*Figure 2.17 Martin’s nuclearity model of particulate structure
(From Martin, 1996, p. 51)*

This principle of nuclearity provides an **orbital perspective** of the clause, where the peripheral elements represent *Satellites* depending on a *Nucleus*, i.e. the core element of the clause. Martin (1996) illustrates this perspective based on the ergative structure of the clause example: *Early in this century the Norwegians introduced explosive harpoons* (pp. 43-45). As in *Figure 2.18* below, the Nucleus, i.e. the Process/Medium configuration, is realised by *introduced + explosive harpoons* and the Satellites are realised by the Agent *the Norwegians* and the Circumstance *early in this century*.



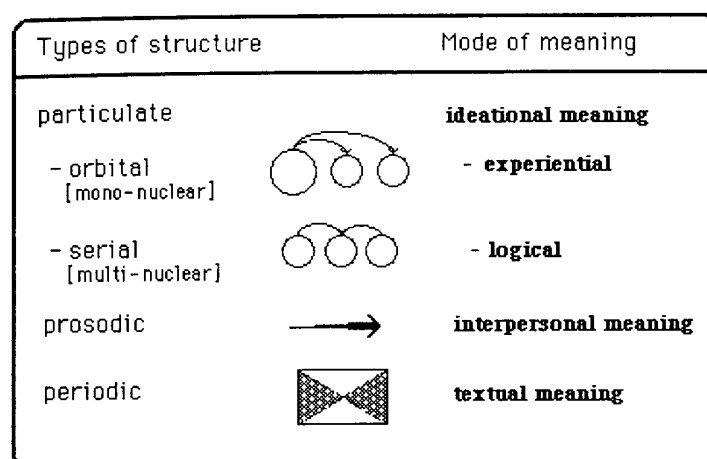
*Figure 2.18 Clause rank experiential meaning as orbit: a nucleus with satellites
(From Martin, 1996, p. 45)*

Figure 2.19 below illustrates particulate, prosodic and periodic structures as conceptualised by Martin (1996) at clause rank for the English clause example: *What the Norwegians did was introduce explosive harpoons*. The distinct experiential constituents that make up this clause are bounded segments which function as Value, Process and Token in the TRANSITIVITY structure of the clause. Each of these elements is a part of the whole clause, constituting what Martin refers to as a **particulate structure** (Martin, 1996). **Prosodic structures** on the other hand are ‘suprasegmental’, which means that interpersonal meanings may spread across the boundaries of distinct experiential constituents. Figure 2.19 shows how negation is established through the Finite function in the Mood element. Then, by what Martin (1996, p. 43) calls ‘opportunistic realisation’, the prosody of negation spreads to affect indefinite deixis in the Residue (*no* for this non-standard English; cf. the standard form *any*). Finally, textual meanings activate ‘wave-like’ **periodic structures**, which form peaks of prominence (Martin, 1996; following Halliday, 1982/2002). The Theme provides an orientation to the subject matter (field) and the New provides the information that is considered ‘newsworthy’ – *explosive harpoons* in the example clause below (Martin, 1996). Both functions are meaningful in relation to the patterns of Themes and News across phases of discourse (cf. Martin & Rose, 2003/2007 on periodicity).



*Figure 2.19 Three kinds of meanings associated with three modes of expressions
(Adapted from Martin, 1996, pp. 43-48)*

Based on his critique outlining the limitations of using constituency representation for the three types of structure reviewed above, Martin (1996) offers a revised model that *dissociates* constituency representation from one specific mode of meaning. This model is illustrated in *Figure 2.20*:



*Figure 2.20 Modes of meaning and types of structure
(From Martin, 1996, p. 62)*

Table 2.3 provides a comparative summary of work on relating types of structure to modes of meanings, or the three metafunctions, and shows the evolution of terminology used by Halliday, Matthiessen and Martin.

mode of meaning	ideational: experiential	ideational: logical	interpersonal	textual
types of structure				
Halliday (1965/1981)	multivariate; hierarchic/non- recursive; cyclically recursive	univariate; interdependency chain; lineally recursive		
Halliday (1979/2002)	experiential: elemental; parts, whole	logical: recursive; parts	prosodic	culminative-periodic; wave-like
Matthiessen (1988)	constituency	interdependency; chain	prosody	pulse; wave
Martin (1996)	particulate; orbital; mono-nuclear	particulate; serial; multi-nuclear	prosodic	periodic

Table 2.3 Comparative summary of Halliday's, Matthiessen's and Martin's terminology for modes of meaning and types of structure

Based on Lemke (1985), Martin (1992a) theorises another type of particulate structure, **covariate structure**. As covariate structure relates to discourse structures (Martin, 1992a), it will be reviewed in [Section 2.3](#) which discusses Martin's model of discourse semantics (1992a, in press b).

This thesis is concerned with the three kinds of structure (i.e. particulate, prosodic, periodic) reviewed above in relation to meanings much larger than the clause structures exemplified above, namely, text structuring principles. While genre is not metafunctionally organised from a paradigmatic perspective (Martin, 1996), it can be interpreted in terms of different types of structure. [Chapter 3](#) focuses on particulate realisation, with the generic staging of the business country reports presented from an ideational perspective. Multivariate and univariate structures are revisited in [Section 2.2.2](#) below, as these are highly relevant to complexing versus embedding in relation to elemental genres and macrogenres. Orbital structure is relevant to genre as applied to the country reports because a text needs to “hang together around a given centre” (Martin, 1996, p. 51). Previous research on orbital structure, including news stories (e.g. Iedema, Feez & White, 1994; White, 1997, 1998), directives in administrative discourse (Iedema, 1997, 1998, 1999) and curriculum macrogenres (Christie, 2002) provides a complementary perspective on analysing generic structure. These studies build on Martin's (1996) notions of nucleus and satellites.

There is an important challenge arising from the ideas presented above that need to be taken into consideration, that is, the importance of distinguishing *analysis* from *representation*. For the purposes of this thesis, a considered decision needs to be made about the kind of representation used to model the long business reports analysed in this study. Relevant for this decision are early discussions of representation in relation to types of structure (Martin, 1996; Matthiessen, 1988). Taking into account the concept of fractality, and following Halliday's (1979/2002, 1981/2002) work on types of structure, Matthiessen (1988) and Martin (1996) have both critiqued the reductionism of a constituency-based, multivariate form of representation for prosodic and periodic structures, which is inappropriate for these types of structure. Martin (1996), for instance, argues for the need to consider how ideational, interpersonal and textual meanings construe particulate, prosodic and periodic structures in texts, similar to clause structure in grammar. This thesis will take one step further in support of this work by exploring all three types of structure in business country reports. Specifically, **Chapter 3** will explore the nature of genres that build undergraduate business reports, focusing on the one hand on a **constituency representation** for experiential meanings realised by **multivariate structures**. On the other hand, Martin's conceptualisation of particulate structure will provide the theoretical foundations for examining these business reports from the perspective of **orbital structure** and **serial interdependency**. **Chapters 4** and **5** will focus on **prosodic** and **periodic structures** to 1) extend current research on couplings, and 2) demonstrate the effect of the co-patternings of discourse semantic systems on text structure. Before additional concepts relevant to particulate realisation from an ideational perspective are discussed (namely, complexing versus embedding in relation to 'big' texts), SFL approaches to the analysis of genres and text structure need to be reviewed.

2.2.2 SFL approaches to analysing genres and text structure

In order to explore SFL approaches to genre and text analysis and relate these to descriptions of genres in educational linguistics, the concept of **semogenesis** in SFL needs to be reviewed as this provides a useful framing for studies of genre from an educational perspective. The evolution of language, or the process of meaning-making, can be represented by different timeframes. Halliday and Matthiessen (1999,

pp. 17–18) and Matthiessen (1993) distinguish evolutionary semogenetic processes according to three time frames: **logogenesis** (unfolding), **ontogenesis** (growth) and **phylogenesis** (evolution) (Martin, 1999, p. 124). Logogenesis refers to the shortest timeframe as it concerns how meanings unfold in a text. Ontogenesis refers to the development of an individual's meaning-making potential over a longer period of time, for example, learning one's mother tongue (cf. Painter, 1999). The longest timeframe is termed phylogenesis, which refers to **semiotic change** within a culture, i.e. the evolution of meaning-making potential of not only individuals but the human species over time.

Examples of seminal SFL work on semiotic change (i.e. phylogenesis) include studies on the evolution of genres in news story articles (Iedema, 1994, 1997; Iedema, Feez & White, 1994; White, 1997), the greening of school geography and environmental discourse (Martin, 1985a, 1986, 2002b; Veel, 1998), the evolution of scientific discourse (Halliday, 2004; Martin & Veel, 1998) and social science (Wignell, 2007a, 2007b), human consciousness (Halliday, 1994) and ecosocial semiotics (Thibault, 2004), youth justice conferencing and restorative justice (Martin, 2012c, 2015a; Martin, Zappavigna & Dwyer, 2007, 2010; Zappavigna, Dwyer & Martin, 2008a, 2008b; Zappavigna & Martin, 2014), the evolution of language use on social media (Zappavigna, 2012) and 'Sydney School' interventions aimed at expanding students' ontogenetic meaning potential (see e.g. Martin, 1999; Martin & Matthiessen, 2014; Martin & Rose, 2008; Rose, 2015; Rose & Martin, 2012). The depth and breadth of this SFL research on semogenetic change illustrates, despite continued misrepresentation of SFL-based genre pedagogies by some New Rhetoric scholars (see e.g. Artemeva & Freedman, 2006; Devitt, 2000; Freedman, 1994; Freedman & Medway, 1994; Green & Lee, 1994; Hyon, 1996; Reid, 1987; Sawyer & Watson, 1988), that genres in SFL are not viewed as static and fossilised but as *constantly evolving* according to the changing needs of the communities that use particular genres in the context of culture (Derewianka, 2012; Martin, 2015a). This thesis focuses on logogenesis, i.e. the unfolding of meanings in long undergraduate business country reports.

In order to analyse the logogenetic unfolding of text structure in the country reports, three approaches to text and genre analysis within SFL will be considered in the

following sections: Hasan's model of Generic Structure Potential (1985), Matthiessen's typology of fields of activity (2015a, 2015b) and work by Martin and colleagues on identifying key genres in primary, secondary, and more recently, tertiary education.

2.2.2.1 Hasan's model of Generic Structure Potential

Text structure has been defined, in relation to larger texts, as **schematic structures** by Martin (1985b, 1992a) and as **Generic Structure Potential (GSP)** by Hasan (1985). For Hasan, text structure, or generic structure potential, is determined by the *contextual configuration* of the register variables field, tenor and mode. This configuration enables *predictions* to be made about a text's structure and the elements, or *stages*, within this structure. Elements that 'must' occur are termed *obligatory* while elements that 'can' occur are termed *optional*; the order in which elements appear is called *sequence*. Finally, the potentiality of an element occurring more than once in the text structure is termed *iteration* (1985, p. 56). The complexity of representing generic structure potential was illustrated by the analysis of the generic structure of the service encounter genre⁸. According to the notion of generic structure potential (Halliday & Hasan, 1985), genres can only be considered 'complete' if all obligatory elements of structure are realised and optional elements are specified regardless of their presence in the actual structure. The order of these elements must also be specified, including any iterative elements, in order to account for variation among texts that represent different instances of the same genre (and to account for texts realising different genres). As noted by Halliday and Hasan (1985):

[...] for some given texts to belong to one specific genre, their structure should be some possible realisation of a given GSP [Generic Structure Potential]. It follows that texts belonging to the same genre can vary in their structure; the one respect in which they cannot vary without consequence to their genre-allocation is the obligatory elements and dispositions of the GSP (p. 108).

⁸ See Mitchell (1957) and Hasan (1978) for comprehensive discussions, and Ventola (1987, 2005) for extending research on the service encounter genre.

GSP thus provides a useful first step towards the formalisation of the obligatory and optional elements in genres, and more specifically, available for writers of business reports in undergraduate business. The aim of this thesis is to generalise about the ‘responsibilities’ of the genres that build these long country reports. The question being considered is: “what ‘staged, goal-oriented social process’ is achieved in undergraduate business country reports?”, i.e. “what is the task that these reports aim to fulfill”? The discussion in **Chapter 3** on the generic structure of these texts will illustrate the ‘*actual*’ structures of two model reports (i.e. the choices that have been taken up in these texts) made available by the ‘*potential*’ 1985, pp. 258-259). In order to provide answers to the questions raised here, these choices will be formalised as system networks and realisation statements.

2.2.2.2 Matthiessen’s model of field-based activity

Another model that describes meaning potential according to context is Matthiessen’s field-oriented registerial cartography of types of ‘**field of activity**’ (2006, 2014, 2015a, 2015b) where field of activity is defined as “what’s going on in context” (2015a, p. 6). Matthiessen’s model draws on Halliday’s conceptualisation of context (reviewed in **Section 2.1.1** above) and privileges field over the other two register variables, tenor and mode. Activities can be either *social* or *semiotic*, termed the ‘**socio-semiotic process**’, as represented in the topological circle diagram in *Figure 2.21* below. The register map illustrated in this figure (Figure 6 from Matthiessen & Kashyap, 2014, p. 8) presents eight different types of activity (primary types) and their subtypes (secondary types) along the clines of stratification and instantiation (Matthiessen, 2015a). These categories are based on the division of the context of situation into institutions and the division of institutions into ‘situation types’ (Matthiessen, 2015a, p. 5). The eight different contexts, differentiated according to field of activity (with the first level of delicacy in bold, and the second level highlighted in ***bold italics***), are as follows (2015a, p. 6; Matthiessen & Kashyap, 2014, pp. 8-9):

- **expounding**: explaining general classes of phenomena (by ***categorising*** or “documenting”);

- **reporting:** documenting human experience of particular phenomena (by *chronicling*, *surveying* or *inventorying*);
- **recreating:** creating imaginary events (by *narration* and/or *dramatisation*);
- **sharing:** exchanging personal *experiences* and/or *values*;
- **doing:** engaging in social activities and behavior (by *collaborating* or *directing*);
- **enabling:** modelling an activity (by *instructing* or *regulating*);
- **recommending:** *advising* or *inducing* a course of action;
- **exploring:** debating public, communal values and positions (by *reviewing* or *arguing*).



Figure 2.21 Matthiessen's field-based map of activity.
(Figure 6 from Matthiessen & Kashyap, 2014, p. 8)

These two levels of delicacy have since been extended to include third and fourth levels of delicacy. It is at these more delicate levels where Matthiessen's model

converges with descriptions of genres in the Sydney School (reviewed in the following section). For example, the **expounding** field of activity, which Matthiessen evaluated as being “too indelicate” or “too general” (2015a, p. 8), includes the secondary level of *explaining*, which is related to explanation genres in the Sydney School model. *Table 2.4* below (Table 2 from Matthiessen, 2015b, p. 63) provides a summary of the convergence of these models, based on Matthiessen’s fields of activity cartography, Martin and Rose’s (2008) and Eggins and Slade’s (2005) accounts of written and spoken genres:

FIELD OF ACTIVITY		examples	mode: written	mode: spoken
			Martin and Rose (2008): “Genre model”	Egins and Slade (2005)
expounding	explaining	explanations (in text books, journal articles ...)	(Chapter 4 Reports and Explanations) explanations	
	categorizing	reports (in text books, journal articles, entries ...)	(Chapter 4 Reports and Explanations) reports	
reporting	chronicling	historical recounts, biographies; logs, blogs; procedural recounts; running commentaries; forecasts; news articles; (media) interviews	(Chapter 3 Histories) recounts, biographies (Chapter 5 Procedures and procedural recounts) procedural recounts	
	surveying	topographic reports, scene descriptions		
	inventorying	inventories, menus, product lists		
recreating	[narrating, dramatizing]	traditional stories (folk stories, legends, myths); short stories; novels; plays, screen plays, teleplays	(Chapter 2 Stories) stories: narratives	
sharing	[experiences, values]	casual conversation (see rightmost column); personal letters; email; text messages; chat sessions; diaries, personal blogs	(Chapter 2 Stories) stories: anecdotes, exempla	chat; opinion, teasing, gossip
doing	[directing, coordinating]	team work; games; service encounters; administrative directives; (real-time) directions		service encounters (Ventola, 1987)
recommending	promoting	commercials; advertisements; promotional letters		
	advising	(professional) consultations; advice columns; public warnings		
enabling	instructing	demonstrations; procedures	(Chapter 5 Procedures and procedural recounts) procedures	
	regulating	regulatory traffic signs; laws; agreements; declarations	(Chapter 5 Procedures and procedural recounts) protocols <or: embedded in procedures>	
exploring	arguing	expositions; discussions; debates (also included in disciplinary texts) ¹⁰	(Chapter 3 Histories) expositions, discussions	
	reviewing	reviews; opinions		
	rallying	speeches, sermons; editorials		

Table 2.4 Convergence of Matthiessen’s map of field of activity with the ‘Sydney School’ model of genre (Table 2 from Matthiessen, 2015b, p. 63)

According to Matthiessen (2015b), Martin & Rose’s (2003/2007) definition of genre as “‘social process’ can be interpreted as field of activity, or socio-semiotic process” (pp. 65-66). Matthiessen (2015b) also argues that genre in the ‘Sydney School’ model

seems to be oriented to field, i.e. the ‘subject matter’, rather than ‘social process’. However, as shown in [Section 2.1.1](#) above, in Martin’s stratified model of context, genre (i.e. recognisable recurring patterns of meanings in texts) is at a higher level of abstraction above register, i.e. beyond field, tenor and mode (Martin, 1992a, 2010, 2012b), with specific social roles in society (Martin & White, 2005). As genre is theorised as a pattern of register variables, Martin’s model does not privilege field over tenor and mode in the way both Hasan’s GSP and Matthiessen’s registerial cartography seem to do. It is Martin’s model that I draw on for the analysis of undergraduate business reports in this thesis.

[Chapter 1](#) above reviewed current work on business report writing. I pointed out that the naming of business reports as report sub-genres (e.g. see Yeung, 2007) is problematic from an SFL perspective on genre. [Chapter 3](#) will illustrate that the business country reports analysed for this study are not canonical report genres but analytical discussions. This finding confirms Stenglin’s (2010) and Stenglin, Welch & Cléirigh’s (2014) preliminary analyses of the structure of country reports that found these texts to be ‘discuss essays’. However, these analyses focus only on the overall global structure of these texts and do not reveal the different types of genre building their ‘depth’, i.e. the ways in which these texts grow bigger than a page. Therefore the aim in this thesis is to build on this work and explore the structure of these texts in more detail in order to discover which genres are privileged. As country reports are texts produced in the context of tertiary education, it is assumed that these undergraduate student writers’ have a control of genres introduced at the level of secondary schooling (Rose & Martin, 2012). Since I am interested in exploring the recurring configurations of meanings that construe the generic structure of these texts, it is necessary to review work on elemental persuasive or arguing genres from an SFL perspective.

2.2.2.3 ‘Sydney School’ research on elemental genres

Chapter 1 introduced the ‘Sydney School’ for describing the intervention that provided the context of this PhD study. In this chapter it will be discussed in relation to ‘knowledge genres’ (i.e. the description of school genres) that make up school curricula (Rose, 2017, in press). I have reviewed the theorisation of genre as an additional level of abstraction beyond register in **Section 2.1.1** above. I have also reviewed the broader context in which the application of SFL theory to the ‘Sydney School’ pedagogy emerged (cf. Martin, 2015a). This work (cf. Martin, 1992a) has drawn on educational linguists’ work on identifying school genres in the 80s and the 90s, starting with key primary school genres and secondary genres in Australian⁹ schools¹⁰. This genre research has had significant influence on school curricula and developing several pedagogic intervention projects¹¹. Based on the linguistic resources patterning into recognisable phases and generic stages, the genres were mapped into different genre families based on their social purpose in a wide range of disciplinary areas. These include English and literature, history, geography and science; *Table 2.5* below summarises seminal studies on research into school genres in these fields:

⁹ There has also been extensive research done on school genres in the United States, however, a review of this significant body of work is beyond the scope of this thesis (for detailed discussions see e.g. Accurso, Gebhard & Selden, 2016; Achugar & Schlepppegrell, 2005; Brisk, 2015; Chenhansa & Schlepppegrell, 1998; Colombi & Schlepppegrell, 2002; Iddings & de Oliveira, 2011; de Oliveira & Iddings, 2014; de Oliveira & Silva, 2016; Gebhard, Chen & Britton, 2014; Gebhard, Chen, Graham & Gunawan, 2013; Schlepppegrell, 1998, 2000, 2001, 2002, 2004; Schlepppegrell & Achugar, 2003; Schlepppegrell, Achugar, & Oteíza, 2004; Schlepppegrell & Colombi, 1997).

¹⁰ See Christie and Derewianka (2008) and Christie (2012) for comprehensive accounts of over 20 years of research into primary and secondary school genres in Australia.

¹¹ See Rose and Martin (2012) for a detailed historical account of genre-based pedagogic projects, e.g. *The Writing Project and Language and Social Power* (1980-1985), *Write it Right/The Right to Write* and the *Disadvantaged School Program* (1990-1994), *Scaffolding Reading and Writing for Indigenous Children in School* (Rose, Gray & Cowey, 1999) and *Reading to Learn* (Acevedo, 2010; Culican, 2006; Koop & Rose, 2008; Rose, 2004, 2008, 2011; Rose & Acevedo, 2006; Rose, Lui-Chivizhe, McKnight & Smith, 2004; Rose, Rose, Farrington & Page, 2008).

Disciplinary areas	Seminal studies on SFL research into school genres
English and literature	Christie, 2005; Christie & Dreyfus, 2007; Christie & Macken-Horarik, 2007, 2011; Macken-Horarik, 2003, 2011, 2014; Rothery & Stenglin, 1994a, 1994b, 1994c, 1997
history	Coffin, 1996, 2000, 2006; Eggins, Wignell & Martin, 1993; Martin, 2003; Martin & Wodak, 2003; Schleppegrell, 2004; Veel & Coffin, 1996; Wignell, 1994
geography	Humphrey, 1996; Humphrey & Takans, 1996; Martin, 2002; Sikes & Humphrey, 1996; van Leeuwen & Humphrey, 1996; Wignell, Martin & Eggins, 1993
science	Halliday & Martin, 1993; Lemke, 1990; Martin, 1993a, 1993b, 1998; Martin & Veel, 1998; Painter & Martin, 1986; Rose, 1997, 1998; Unsworth, 1995, 1997, 2001, 2004; Veel, 1993, 1997, 1998, 1999; Wignell, 1998; Wignell, Martin & Eggins, 1993

Table 2.5 ‘Sydney School’ research into school genres

Rose and Martin (2012) provide a taxonomy categorising three broader genre families based on their social purpose as shown in *Figure 2.22* below. These include the functions of *engaging*, *informing* and *evaluating*; more delicate typologies for each group are then provided:

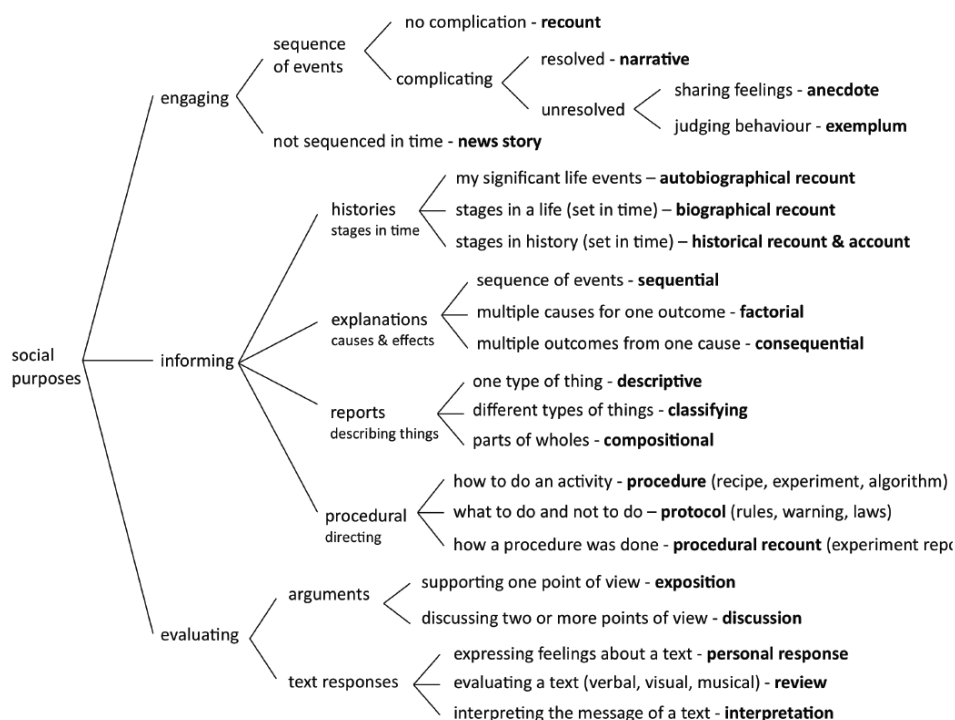


Figure 2.22 Mapping school genres according to social purpose (Rose & Martin, 2012, p. 128)

Genres with the social function of *informing* and *evaluating* are of particular concern for this thesis. With respect to the informing genres, reports and explanations are relevant for this thesis: specifically, one type of report genre (the **descriptive report**) and one type of explanation genre (the **consequential explanation**). As I will show in **Chapter 3**, however, it is the more evaluative genres that prove to be of most significance for business country reports: namely, the **discussion**, **exposition** and **challenge** genres from the *arguing* type of evaluative genres. In this thesis I am interested in understanding why *arguing* genres are privileged overall over both explanation and report genres. I am also interested in exploring when, for instance, a *discussion* genre is selected over an exposition genre from the family of arguing genres and for what social purpose. I comment on each of the three genre families in the following section.

According to Martin and Rose (2008), the social purpose of **reports** is to describe and classify phenomena (p. 141). In this genre family, prevalent in scientific discourse, three types of report have been identified, namely, **descriptive**, **classifying** (or taxonomic) and **compositional** reports. Each of these genres has specific stages that unfold in a specific sequence to achieve their social purpose. Descriptive reports first specify one phenomenon before describing its features; it has an opening Classification stage followed by a certain number of Description stages. The type of report genre relevant for this thesis is the descriptive report as I will show in **Chapter 3** below. The stages of these report genres are illustrated in *Table 2.6*:

Reports	descriptive report	classifying & describing a phenomenon	Classification Description
	classifying report	classifying & describing types of phenomena	Classification Description:types
	compositional report	describing parts of wholes	Classification Description:parts

*Table 2.6 Types of report genre, their social purpose and typical staging
(From Rose & Martin, 2012, p. 112)*

Interestingly, the business ‘reports’ studied in this thesis are not actually report genres from an SFL perspective. As **Chapter 3** will show in detail, only one instance of a descriptive report was found across the entire data set. This one report genre occurs in the only optional stage in the superstructure of one country report (the Canada

Report), which might imply that the report genre is not the most academically valued option for writing successful business country reports. More significant than report genres in this data set are explanation genres, the focus of the following section.

Explanation genres are concerned with sequencing cause-effect relationships (Martin & Rose, 2008, p. 150), which involves a type of logical pattern defined as implication sequences (Wignell, Martin & Eggins, 1993). There are four types of explanation: sequential, factorial, consequential and conditional. In the data set studied for this thesis only **consequential explanations** were found. This kind of explanation is concerned with multiple outcomes of events (Martin & Rose, 2008, p. 150). Consequential explanations open with the obligatory stage termed Input (Coffin, 1997) or Phenomenon (Martin & Rose, 2008). Typically their generic staging unfolds through multiple Effect or Consequence stages (see *Table 2.7*) in order to sequence the impacts or effects of various causes. Since these types of genre are not organised around field time but rather text time, they do not unfold chronologically like recounts and accounts but rhetorically. In the field of history factorial and consequential explanation genres are concerned with examining complex causes and consequences of past events, in other words, construing “a relatively complex, multi-layered causal ‘model’ of past events” (Coffin, 2006, p. 75). Key linguistic features of explanation genres include mainly internal and external conjunctive relations (further discussed in [Section 2.3.2](#) in relation to CONNEXION), specifically conjunctions of cause and consequence. These conjunctive relationships have been found to form **implication sequences**¹² defined as an “ordered connection” between phenomena/events where “each step through the sequence implies what has gone before” (Wignell, Martin & Eggins, 1993, p. 174). More specifically, implication sequences relate events in a logical sequence temporally or causally¹³.

Implication sequences have been found common in scientific discourse for example (see e.g. Halliday & Martin, 1993; Martin & Veel, 1998) not only because they play an important role in explaining “how things are, or came to be the way they are” (p. 174) but also in the construction of technicality. A relevant field for this thesis where

¹² For a detailed discussion of the difference between activity sequences and implication sequences in field see Martin (1992a).

¹³ See e.g. Unsworth (1995) on the importance of internal cause in implication sequences.

implication sequences in explanation genres were found significant is business studies at high school level in Australia (Weekes, 2014). I review this work below.

GENRE [staging]	INFORMAL DESCRIPTION	KEY LINGUISTIC FEATURES (Halliday 1994, Martin 1992)
consequential explanation [Input ^ Consequences]	complexifying notion of what leads on from what	text internal organisation of consequences; consequences externally linked to input; cause within clause; 3rd person; mainly generic & nominalised participants


*Table 2.7 Typical staging and realisation of consequential explanations
(Adapted from Martin & Rose, 2008, p. 132)*

One relevant study of explanation genres using an SFL framework is Weekes's (2014) research on how disciplinary knowledge is construed in high school leaving examination answers in business studies. To identify aspects of a hidden curriculum, the study investigated the generic structure and key linguistic resources of high scoring student texts so that teachers 1) become aware of the disciplinary literacy demands of business studies and 2) drawing on the findings of the study provide appropriate support to scaffold student learning. The results of the genre analysis showed that the exam questions generally required two-part answers: the first answer related to a syllabus point (topic) on business activity and profits and the second to a case study example. Each of these answers was realised by an explanation genre, specifically, factorial and consequential explanations. The key linguistic features of the explanation genre stages were implication sequences construed through cause-effect relationships. These cause-effect relationships play a significant role in high school exam responses in explaining how particular business activities would affect profitability. In order to 'make a point', i.e. exemplify the effects of the actions a specific company had on profitability, successful responses also include 'case studies', i.e. 'support statements' or 'background information' (Weekes, 2014, p. 143). Both parts of successful answers are construed by a Syllabus Point ^ Elaborate ^ Effect implication sequence (see *Table 2.8* below). This is termed a 'parallel implication sequence', which is used to link theory to case studies (Weekes, 2014, p. 192). The implication sequences were construed through the logico-semantic relations of elaboration, enhancement and exemplification.

	Successful response	realisation
Part 1 Implication sequence 1 (business in general)	Business takes some form of action ^ so it can reduce costs and increase profits	Syllabus Point ^ Elaborate ^ Effect
Part 2 Implication sequence 2 (case study)	A case study company takes action ^ so it can reduce costs and increase profits	Syllabus Point ^ Elaborate ^ Effect

Table 2.8 Parallel implication sequence linking a two-part response in high school business studies (Figure 4.6 from Weekes, 2014, p. 191)

Based on these analyses, a pedagogic device was created to scaffold students' ability to write parallel implication sequences, termed the 'SPIN FX mnemonic' (Weekes, 2014, p. 305). SP refers to 'syllabus point', IN refers to 'in other words', F refers to the elaboration move 'effect on the business' and X refers to the enhancement move (i.e. the case study used as exemplification). This device models the structure of a paragraph that makes a point, as shown in *Figure 2.23* below.



	SP	IN	F
	Syllabus point Sub point	In other words	Effect on the business
X Example	There are many advantages to starting from scratch.	The owner has complete freedom and no boss, he or she can start small and control growth. There is no goodwill to pay for.	This means that the business can minimise costs in the start up phase.
	Madhu decided to start a business from scratch for her new restaurant.	She wanted to be creative and create new dishes and not to have to answer to a boss. This gave her more independence	and enabled her to control her costs.

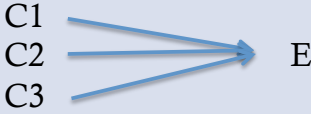

Figure 2.23 SPIN FX paragraph modelling how to make a point in high school business exam responses (From Weekes, 2014, p. 310)

Weekes (2014) defines implication sequences as “one activity implying another” (p. 183) and uses the logico-semantic relations of expansion as well as conjunction analysis to explore how they unfold in successful business studies texts. Martin (1992a) on the other hand distinguishes them in field as a kind of activity sequence where one event *determines* another event. Implication sequence is distinguished from expectancy sequence (another type of activity sequence) where one event is *followed* by another event (p. 324). Implication sequences are associated with ‘if/then’ causal relationships and expectancy sequences with ‘and then’ temporal relationships. A more detailed discussion is beyond the scope of this thesis, for more detail see Martin on ideation (1992a, Chapter 5).

In comparison to Weekes’ analysis of high school texts in business studies, it is interesting that relatively few instantiations of explanation genres have been found across the data set studied for this thesis. When looking at the Consequence stages of some of these texts more closely, it was found that cause-effect relationships do not only unfold through the stages of canonical explanation genres at the whole text level. Complex cause-effect relationships can also be construed in other genre types, such as expositions for example. Furthermore, in this thesis I will show that successful construction of cause-effect relationships is dependent not only on students’ control of genres but also on positioning couplings in configurations of varying complexity at the level of discourse semantics. These findings will be illustrated and discussed in detail in **Chapter 5**. In this chapter I will build on work by Donohue, Adinolfi and Shrestha (2013), whose work on cause-effect relationships in business case study analysis texts is also relevant for this thesis.

Donohue, Adinolfi and Shrestha (2013) found three main types of cause-effect relationship in business case study analysis texts, summed up in *Table 2.9* below:

- (1) **Type 1:** simple *cause-effect* where a cause simply leads to an effect,
- (2) **Type 2:** *causal chain* where a cause results in an effect which become a cause for another effect and so on, and
- (3) **Type 3:** *multi-causality* where several causes may result in one effect or one cause may result in several effects (pp. 82-83).

Types of Cause-Effect relationships		
1)	simple	Cause → Effect
2)	causal chain	C → E/C → E/C → E/C ...
3a)	multi-causal	
3b)	multi-effect	

*Table 2.9 Three main types of cause-effect relationship in business case study analyses
(Adapted from Figure 3.3 in Donohue, Adinolfi and Shrestha, 2013, pp. 82-83)*

Donohue, Adinolfi and Shrestha usefully provide examples and lists of “cause-effect relationship words” and distinguish four types such as *cause-effect verbs*, *cause nouns*, *effect nouns* and *causal linking words* (2013, p. 87). However, as this work is intended to provide students with writing support and was not intended to provide detailed description of linguistic analyses for systemic-functional linguists, we need to build on this work to explore how the three types of cause-effect relationship are realised linguistically. It is also important to study further how ‘cause-effect words’ combine with each other and with other important linguistic resources (such as resources of appraisal for example) in order to construe business reasoning. It is thus one of the aims of this thesis to make explicit the linguistic basis for construing these types of relationship. **Chapter 5** will illustrate in detail how cause-effect relationships in undergraduate business country is realised at the level of discourse semantics.

Explanation genres were shown above to be rhetorically rather than chronologically organised, according to text time rather than field time (Martin & Rose, 2008; Rose & Martin, 2012). Another group of genres that are rhetorically organised around internal cause are genres from the **arguing** genre family. Three main types of arguing genre have been identified and grouped into *one-sided* versus *multi-sided* depending on whether they are organised around one or multiple positions (Martin & Rose, 2008).

According to this classification, **expositions** and **challenges** are one-sided, **discussions** are multi-sided. Canonical **expositions** typically open with a Thesis stage and unfold through a number of Arguments stages. These may be followed by an optional Reiteration of Thesis stage (Coffin, 1996, 2006; Martin & Rose, 2008). Their social purpose is to promote a position without introducing alternative positions into the discourse. Similarly to expositions, **challenges** are also one-sided as their social purpose is to ‘demolish’ a position. They typically open with a Position challenged stage, which introduces the position that will be undermined. This is followed by the Rebuttal Arguments stage, which provides reasons for why the position is wrong and thus justification for the final Anti-Thesis stage. **Discussions** on the other hand are multi-sided because they introduce several points of view on an issue. Thus the opening stage is termed Issue and is followed by a number of Sides (Martin & Rose, 2007) or Perspectives (Coffin, 1996, 2006). As there are multiple positions, which will be negatively or positively appraised, one of the positions will be typically more dominant (Martin & Rose, 2008). The typical stages, social functions and linguistic features are summed up in *Table 2.10*:

GENRE [staging]	INFORMAL DESCRIPTION	KEY LINGUISTIC FEATURES (Halliday 1994, Martin 1992)
exposition – one sided; promote [Thesis^Arguments]	problematic interpretation that needs justifying	internal conjunction keying on thesis
challenge* – one sided; rebut [Position^Rebuttal]	someone else’s problematic interpretation that needs demolishing	internal conjunction keying on thesis
discussion – multi-sided; adjudicate [Issue^Sides^Resolution]	more than one interpretation considered	internal conjunction keying on thesis; & internal organisation of points of view

*Table 2.10 Typical staging and realisation of arguing genres
(From Martin & Rose, 2008, p. 134)*

This thesis set out to examine which genres from which genre families are more academically valued in high scoring business reports. Existing SFL research into the genre families reviewed above shows that some social purposes, stages and linguistic features (e.g. cause-effect language or arguing) can appear in different disciplinary areas. For example, arguing genres were found across several disciplines and domains

such as activist literacies (Humphrey, 2013a), history (Coffin, 2006; Matruglio, 2014) and science (Veel, 1997, 1998). Harvey (1995) classifies business reports as *hortatory expositions* ('persuade to' act); Yeung (2007) argues that business reports share characteristics with *analytical expositions* ('persuade that' an argument is correct). The analysis of country reports in this thesis found that business reports may in fact include not only *both* analytical and hortatory expositions, but also other arguing genres such as discussions and challenges. In the field of business studies, Weekes' (2014) work reviewed above found that control of *explaining* rather than arguing genres is necessary for producing successful exam responses at high school level. In fact, according to Coffin (2006), explanation genres play a significant role in building a 'bridge' between recording genres (i.e. story genres) and arguing genres. This PhD study found the role of *arguing* genres the most significant for construing the generic structure of business country reports. **Chapter 3** will illustrate in detail the genres that realise tertiary business reports in which *primarily* arguing, *some* explaining and *only optional* reporting seems to be highly valued. By showing that explanations only appear as 'lower-order' genres *in support of* arguing genres, this thesis will explain why tertiary business country reports were found to privilege arguing genres compared to high-scoring high school texts, while drawing on genres from the explaining and reporting families at the same time.

Other SFL-based studies whose object of study is 'persuasive' in business writing focus on the language of **economics** (Donohue, 2006; Wignell, 1998, 2007a, 2007b), **management writing** (Davies & Forey, 1996; Davies, Forey & Hyatt, 1999; Forey, 2002, 2004; Forey & Nunan, 2002; Nunan & Forey, 1996) and **business case studies** (Coffin & Hewings, 2003; Gardner, 2012b; Gruber, 2004). Of particular interest for this thesis are studies which focus on the application of standard analytical business frameworks such as the SWOT¹⁴ or PESTLE frameworks. For example, Shrestha (2017) defines business case study reports as "the study of an organisation by applying a business model or framework" (p. 4) (see also Gardner, 2012b). However, the generic boundaries between case study reports and 'general' business reports do not seem to be always clear-cut. This has also been pointed out by Coffin and

¹⁴ SWOT stands for Strengths, Weaknesses, Opportunities and Threats. In frameworks similar to PEST/PESTLE, the order of factors might change, e.g. STEP, STEEPLE.

Hewings (2003) who describe the rhetorical purpose of case studies as both “reporting on research and arguing a case” (p. 67). Further, Gardner (2012b) classified assignments that “include recommendations or suggestions for future action” (p. 20) as business case studies.

As this thesis will demonstrate, the business country reports analysed for this study also apply the PESTLE model to make a decision about investment and present this decision in the form of a recommendation. According to the results of preliminary analyses of country reports by Stenglin, Welch & Cléirigh (2014), the social purpose of these texts is ‘persuasive’ and they also resemble argumentative essays, i.e. ‘traditional’ essays in Nesi and Gardner’s (2012) categorisation of the most common tertiary genres. Stenglin, Welch & Cléirigh’s (2014) analyses found two preferred choices for structuring the country reports: *Structure 1* shares similarities with ‘discussion essays’ and *Structure 2* with ‘challenge essays’. *Table 2.11* illustrates the staging of *Structure 1*, with the *Opportunities* stage providing one view and the *Risks* stage an opposing point of view; typical of canonical discussion genres (Stenglin, Welch & Cléirigh, 2014, following Coffin, 1996, 2006):

Structure 1
Introduction
Opportunities
Opportunity 1
Opportunity 2
Opportunity 3
Risks
Risk 1
Risk 2
Risk 3
Conclusion

*Table 2.11 Option 1 for country report: Structure of a ‘discuss essay’
(From Stenglin, Welch & Cléirigh, 2014, p. 38)*

In contrast, in *Structure 2* opportunities and risks are organised based on factors relevant to individual PESTLE environments (see *Table 2.12*). The discussion of each opportunity and risk is interwoven into an “argument-counter-argument-rebuttal” structure, which resembles the structure of ‘challenge essays’ (Stenglin, Welch & Cléirigh, 2014, p. 15; following Coffin, 1996, 2006). This ‘rhetorical structure’ provides opportunities for students to “continually rank, weigh up and evaluate the factors organised around a set of thematic issues” (Stenglin, Welch & Cléirigh, 2014, pp. 14-15).

Structure 2
Introduction
Economic Factors
Factor 1 (opportunity - risk)
Factor 2 (opportunity - risk)
Political Factors
Factor 1 (opportunity - risk)
Factor 2 (opportunity - risk)
Socio-cultural Factors
Factor 1 (opportunity - risk)
Factor 2 (opportunity - risk)
Conclusion

*Table 2.12 Option 2 for country report: Structure of a ‘challenge essay’
(From Stenglin, Welch & Cléirigh, 2014, p. 38)*

During the intervention, students were taught both these structures generally as two options for structuring country reports. However, these preliminary analyses also found elements in these structures, which did not quite fit into the structure of canonical discussions or challenges. One example of this is the expectation that student writers “**preview their final recommendation** in their **introduction** rather

than saving it for the conclusion” (Stenglin, Welch & Cléirigh, 2014, p. 15, emphasis original). It is worth quoting the explanation for this example:

The presence of this recommendation preview clearly runs counter to the expectations and conventions followed in argumentative essays. Fortunately, the subject specialist involved in the intervention was able to explain **why this is a functional choice** in business. Previewing the recommendation is a feature of country reports **because it saves time for managers and CEOs**: who first read the recommendation, then selectively read the body of the report scrutinising the evidence and interrogating the reasoning on which it is based (Stenglin, Welch & Cléirigh, 2014, pp. 15-16; emphasis added).

This explanation is field-based, i.e. justified from an industry perspective. **Chapter 3** will provide a *linguistic* explanation of this phenomenon: the reason why a preview of the final recommendation appears in the introductory section of High Distinction country reports is because this section can be realised by an *embedded* arguing genre; I will review this concept in **Section 2.3.3.2** below.

Shrestha’s (2017) analyses of business reports that are structured around a SWOT or a PESTLE model demonstrate similar findings to Stenglin, Welch & Cléirigh’s (2014) preliminary analyses of country reports. The report applying the SWOT framework was found to unfold through the following generic stages (optional stages are enclosed within brackets):

Orientation ^ **Component 1** (Strengths) ^ **Component 2** (Weaknesses) ^
Component 3 (Opportunities) ^ **Component 4** (Threats) ^
(Summary/Conclusion/Recommendations)

The text applying the PESTLE framework (termed ‘STEP’ in Shrestha, 2017) by was found to unfold through the same generic stages; the only difference is the naming of the Components based on the elements of the frameworks, e.g. Strengths versus Social:

Orientation ^ **Component 1** (Social) ^ **Component 2** (Technological) ^
Component 3 (Economic) ^ **Component 4** (Political) ^
(Summary/Conclusion/Recommendations)

According to Shrestha's (2017) the identification of these stages is based on what business lecturers within the school considered as 'successful features' of a SWOT/STEP analysis. As both Stenglin, Welch & Cléirigh's (2014) and Shrestha's (2017) analyses of business reports reveal the overall global structure of these texts, they provide a useful first step for generic analyses of business country reports. However, the level of detail these findings provide is not sufficient for the purposes of this thesis. Because country reports are such long texts, the overall global structure of the texts shown above does not reveal all the genres that can realise the different sections of these reports. Accordingly, a more detailed genre analysis is necessary in order to discover the whole range of different types of elemental genre from different genre families that appear in these texts.

This review of existing work on business reports has shown the problems associated with the classification of these texts, namely, their treatment as report genres and 'sub-genres', unclear and vague criteria for the identification of genre stages and moves and the relative lack of analysis of salient linguistic resources at the level of discourse semantics. Genre analysts also need to be careful about claiming to have identified 'new' genres and conflating the professional names of genres with assigning them into an SFL genre family. This thesis will show in **Chapter 3** that the country report for example cannot be named 'country report genre' because it is not a report from the perspective of SFL-informed genre analysis but an analytical discussion, i.e. an arguing genre.

So far in this chapter I have reviewed the considerable SFL research on genre families, which were identified mostly based on primary and secondary school texts. This SFL-based work on genre has been invaluable for the identification of salient genre types in the texts studied in this thesis. This extensive research on elemental genres is mostly based on short texts written in primary and secondary schools, which means they fit neatly on 'half a page to a page' (Martin, 1994; Martin & Rose, 2008). However, most university assignments tertiary students are required to write – such as

the country report – are much longer texts, which could be from 1,500 (e.g. essays) up to 4,000-5,000 words (e.g. research reports). Writing an assignment the length of the country report (between 3,000-3,5000 words) proved to be a challenging task for many students in the unit *Business in the Global Environment*, indicated by the large number of students failing this major assessment task.

In fact, a common argument in studies focusing on tertiary assignments is that students need to move from controlling genres learnt in high school to writing longer and more complex texts at university. Examining knowledge-building in the field of undergraduate biology, Hao (2015) also points out the complexity involved in producing tertiary assignments and its implications for analysing the various genres that play a role in construing these texts. Humphrey's (2013b) work on biology textbooks arrives at the same conclusion. Humphrey and Dreyfus (2012) analyse approximately 2000-word postgraduate *interpretive genres* in the field of applied linguistics. These texts were found to have a *Research context* ^ *Results/Discussion* ^ *Conclusion* staging. Even though not stated explicitly in Humphrey and Dreyfus' (2012) paper, this finding is significant since it implies that despite their length, these linguistic interpretation essays are structured as elemental genres. The researchers focus on smaller units of analysis such as phases and moves within these stages in order to explore 'more delicate' linguistic resources linguistics students draw on to 'make a point'. This research is significant because it can provide a model for future research on longer tertiary assignments.

Based on analyses of literacy needs for constructing valued disciplinary knowledge in tertiary contexts¹⁵, there have been continued calls for explicit, scaffolded genre-based instruction in higher education contexts (e.g. Coffin & Donohue, 2014; Coffin & Hewings, 2003; Devrim, 2014, 2015a, 2015b; Dreyfus, Macnaught & Humphrey, 2011; Drury, 2006, 2011; Drury, Airey & O'Carroll, 2010; Drury & Mort, 2015; Drury & Muir, 2014; Ellis, Taylor & Drury, 2006; Hood, 2004, 2008, 2010; Humphrey & Economou, 2015; Humphrey & Macnaught, 2015; J. Jones, 2004; Mort

¹⁵ See especially Humphrey, Martin, Dreyfus and Mahboob (2010), Dreyfus, Humphrey, Mahboob and Martin (2015) and Martin (2011) on the SLATE (*Scaffolding Literacy in Academic and Tertiary Environments*) project; Gardner and Nesi (2013) and Nesi and Gardner (2006, 2012a, 2012b) on corpus-assisted genre analyses of university student writing in the U.K.; and Ravelli and Ellis (2004) on analyses of undergraduate academic writing.

& Drury, 2012; Taylor & Drury, 2007; Tribble & Wingate, 2013; Woodward-Kron, 2005).

While important (as demonstrated by the research interest in tertiary writing discussed above), research on long tertiary assignments can be challenging due to the time-consuming nature of manual analyses that SFL-based text analysis requires. Martin (1992a) points out the problem of working on big texts: modelling the system of genres that make up the context of culture from a metasystemic, dynamic perspective is a challenging and ‘pressing task’:

The major stumbling block to overcoming this obstacle and deploying the tools that are already developed is **unwieldiness**. The text structures realising genre are large and thus time-consuming to analyse, and compared with examples of syllable and clause structures agnate texts are hard to find (emphasis added, p. 571).

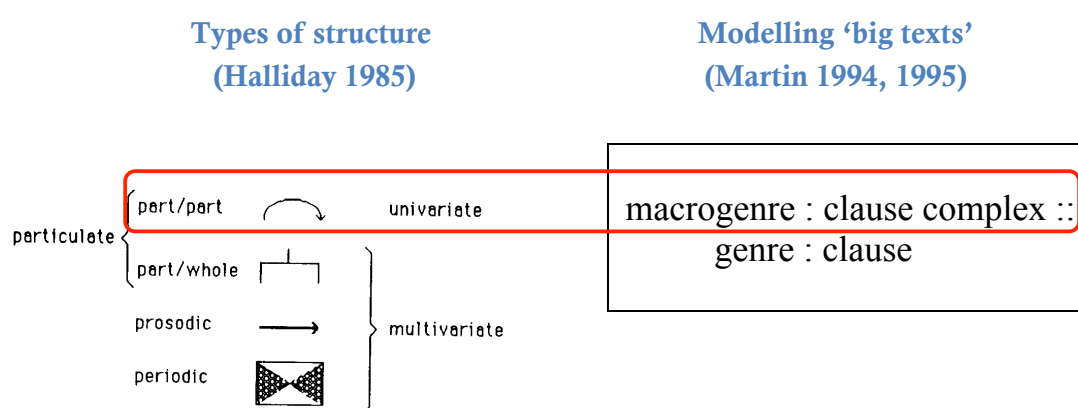
Despite these challenges associated with analysing and representing ‘big texts’, researching successful models of tertiary assignments remains an important area for research. Therefore in this thesis it is necessary to revisit Martin’s question of how texts “get bigger than a page” (1994, p. 29) in order to understand the nature of text structuring principles in business country reports.

This section focused on reviewing existing work on elemental genres, specifically texts produced at primary and high school level, which typically instantiate one single genre. In the following section I will review SFL research focusing on texts that may combine or include not only one genre but also several genres in a single text, such as the tertiary assignments studies in this thesis.

2.2.3 ‘How big texts grow bigger than a page’: Complexing versus embedding

Martin’s early work on analysing text structuring principles in ‘big texts’ has established that longer texts may ‘get bigger than a page’ (1994, p. 29) in two typical ways: either through **complexing** or **embedding** (1994, 1995, 2006). **Complexing** refers to serial expansion, i.e. the combination of several elemental genres into a

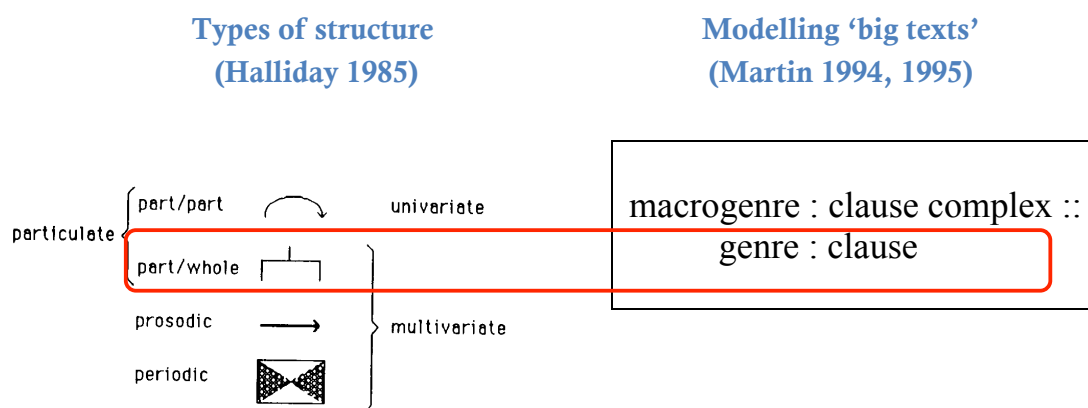
univariate serial structure. The elemental genres instantiated in a text represent the ‘parts’ in the univariate sequence (i.e. linear ordering, Halliday, 1965/1981, p. 29). These parts are linked together by logico-semantic relationships, i.e. expansion and projection (Halliday, 1985; Halliday & Matthiessen, 2004). These types of text, which combine elemental genres, have been termed genre complexes or **macrogenres**¹⁶ (Martin, 1994, 1995, 1996, 1997, 2002b). Martin (1994) building on Halliday’s (1982/2002, 1985) work has found that if “**a text is like a clause**” (Halliday, 1982/2002, p. 234), then ‘big texts’ that are macrogenres are proportional to clause complexes as in *Figure 2.24* below:



*Figure 2.24 Point of departure for exploring macrogenres: part/part univariate structure
(Based on Halliday, 1985; Martin, 2006)*

Apart from combining genres into a serial univariate structure, longer texts can also grow bigger through **embedding** genres. This means that elemental genres can function as stages of another genre in a multivariate structure. While macrogenres were found to be proportional to clause complexes, elemental genres are proportional to clauses (*Figure 2.25*):

¹⁶ The term macro-genre first appeared in Martin (1994, p. 29). This first usage is hyphenated, but later uses of the term are inconsistent (i.e. macro-genre versus macrogenre). Since the term has become a technical term in SFL, in this thesis it will be spelt as one word, i.e. macrogenre, unless it appears in a quote in which the hyphenated usage occurs.



*Figure 2.25 Point of departure for exploring elemental genres: part/whole multivariate structure
(Based on Halliday, 1985; Martin, 2006)*

In this thesis, I explore the generic structure of long business reports. Specifically, I will investigate the structure of these texts to see whether they grow bigger than a page through complexing in a univariate structure or through embedding in a multivariate structure. In the following section research on both complexing and embedding will be reviewed in more detail; then I discuss the issues arising from the current state of this work relevant for this thesis.

2.2.3.1 Macrogenres: Growing bigger than a page through genre complexing

Having canvassed the extensive work on elemental genres, Martin and Rose (2008) found that in fact, many of the shorter genres were found inside longer texts. These longer texts get bigger than a page by combining “familiar elemental genres such as recount, report, explanation, exposition and so on” into macrogenres, which are genre complexes (Martin, 1997, p. 16). Complex multimodal texts, which often include other modalities apart from language, are often realised by macrogenres. Such macrogenres combine a series of shorter genres as well as images in textbooks, web pages, magazines and newspapers (Martin & Rose, 2012, p. 3). Analogising from the logical metafunction, Martin (1994) and (1995) conceptualise the structure of macrogenres as a sequence of genres. Logical meanings in these types of text are realised by ‘segments’ or ‘steps’ in a univariate serial structure. This means that these steps do not form a ‘whole’ the way multivariate structures (which realise experiential

meanings) do. Instead, they are related to each other through an **interdependency** relationship.

For studying text structuring principles in longer texts, the logico-semantic relations of expansion are most relevant as they afford a visual representation of a sequence formed by elemental genres in a serial structure. This ‘expansion reading’ (Martin, 1995, p. 18) (as opposed to a ‘constituency reading’, discussed below) is exemplified by Martin and Rose (2008, p. 218) through an example of a geography textbook chapter. As highlighted in *Figure 2.26* below, the macrogenre of this textbook chapter combines exposition and explanation genres. The figure shows that the genres are in a relationship of interdependency with one another: the chapter commences by an exposition genre, which is enhanced by a factorial explanation genre (signalled by ‘x’), which is then extended and elaborated by four consequential explanations (signalled by ‘=’ and ‘+’). Another similar example shown in Martin and Rose (2008, p. 146) is the science textbook macrogenre made up of classifying reports and their subtypes. In this example the text structuring principle behind the organisation of the science textbook as a macrogenre is based on criteria for classification taxonomies of each text type. This kind of taxonomic organisation is typical of vertical disciplinary fields within a hierarchical knowledge structure (cf. Bernstein, 1999).

[5:25] 3 Managing arid lands

Exposition (rationale for geography informing management)

Imagine spending months at a time in Uluru National Park trying to find out about Australia's arid land animals. This is what Lynn Baker does. She spends long days in search of a small marsupial called the mulgara.

...

Much of Australia's unique desert fauna is vanishing before our eyes and most Australians have not heard of, let alone seen these animals.

...The second reason that all Australians should be concerned is that arid lands are a major grazing area for sheep and cattle.

...

If landowners can make sure that desert habitats are better managed, two things will happen:

- the desert will be able to continue to support grazing activity, and,
- Australia's unique flora and fauna will survive.

x **The issues involved in managing the arid lands**

Factorial explanation (former poor management)

For thousands of years people have used the arid lands. With the arrival of European settlers the arid lands began to be used to graze cattle and sheep. The way the land was used or managed has changed.

...

= Consequential explanations x 4

Issue number 1 Changes to burning

...

+ **Issue number 2 Changing land ownership and responsibilities**

...

+ **Issue number 3 Disappearing vegetation and soil**

...

+ **Issue number 4 Changing animal life**

...

Figure 2.26 The macrogenre of a geography textbook: Combining exposition and explanation genres (From Martin & Rose, 2008, p. 221)

Chapter 3 will show why an expansion reading, i.e. an interpretation of business country reports as genre complexes, would be insufficient in this thesis for the exploration of text structuring principles in these long tertiary assignments. Further, in this thesis the focus is on verbal language, therefore multimodal texts, which combine verbal and visual texts as different genres or draw on mathematical symbolism to build mathematical macrogenres will not be reviewed here. For a more detailed discussion of these types of text see Bednarek and Martin (2010), Doran (2016), Dreyfus, Hood and Stenglin (2011), O'Halloran (2005), Unsworth (1997, 2001, 2004, 2008), Ventola, Charles and Kaltenbacher (2004) and Ventola and Guijarro (2009).

Macrogenres can contain not only elemental and embedded genres, but also *other macrogenres*. Building on previous work, Martin and Rose (2012) name a macrogenre – one section from a high school geography textbook chapter (Scott & Robinson, 1993, as cited in Martin & Rose, 2012, p. 5) – a ‘classifying macro-report’ (p. 5). This macrogenre expands through weaving not only elemental genres into its sequence, (such as descriptive reports and explanations), but also other macrogenres. One of its elements (titled *Mulga plains* in the textbook chapter) itself is a classifying macro-report, which combines a ‘macro-explanation’ and a factorial explanation and a conditional explanation. This is shown in *Figure 2.27* below:

Mulga plains (macro-report)
 The mulga tree (macro-explanation)
 Surviving the long drought (factorial explanation)
 Flowering and setting seed (conditional explanation)

*Figure 2.27 The ‘macro-report’ macrogenre in secondary school geography
 (From Martin & Rose, 2012, p. 5)*

It is useful to label the elements shown in the figure above ‘macro-report’ and ‘macro-explanation’ in order to distinguish them from single elemental genres. Martin & Rose (2012) refer to this phenomenon of a macrogenre providing one of the elements that make up the macro-report genre complex (i.e. the textbook chapter) as “genre-within-genre nesting” (p. 7). This idea is not explored further in Martin and Rose (2012) but it opens up interesting further questions about how macrogenres can expand by adding more genres and “macro-genres within macro-genres” (p. 18). Considering the fractal properties of language, it is possible that nesting occurs in big texts, similarly to clause complexes. Since this thesis focuses primarily on big texts renewing their meaning potential through embedding, exploring macrogenres occurring in larger macrogenres is beyond the scope of this thesis. However, how nesting may provide big texts another means to expand their meaning potential seems to be a worthwhile direction for future research. I will discuss this potential further in **Chapter 5**.

Several researchers have built on Martin’s early work (1994, 1995) on macrogenres to explore diverse disciplines such as pedagogy (Christie, 1997, 1999, 2002), health care

of cancer patients (Jordens, 2002; Jordens & Little, 2004; Jordens, Little, Paul & Sayers, 2001), science and technology (Martin & Rose, 2008) and therapeutic counselling (Muntigl, 2004, 2006). This work will be reviewed in the following section. As mentioned in [Section 2.2.1](#) above, it is important to distinguish between the issue of *analysis* and issue of appropriate *representation* when discussing the nature of larger texts and their types of structure.

Christie's (1997, 2002) work on macrogenres builds on Martin (1994) to explore curriculum genres, in other words curriculum cycles, in classroom discourse. These often (but not necessarily) occur within individual lessons, and thus constitute the largest unit of classroom interaction (Christie, 1997, 2002). She found that over extended periods of time curriculum genres form a genre complex, which unfolds in a linear, univariate sequence¹⁷. Christie (1997) argues that for a sequence of lessons to constitute a macrogenre, there has to be a "'beginning, middle, end' progression [...]" some growth in the *logos*" (emphasis original, p. 148) from a logogenetic perspective. *Figure 2.28* below from Christie (1997, p. 149) illustrates this logogenetic unfolding through the sequence of Curriculum Initiation, Curriculum Negotiation/Collaboration and Curriculum Closure. The genre of Curriculum Initiation is linked to the Curriculum Negotiation genre by the logico-semantic relation of elaboration (=); the Curriculum Negotiation/Collaboration genre is linked together with Curriculum Closure genre by extension (+). The first curriculum genre in the sequence is *Curriculum Initiation*, which consists of three elements. The first element in the sequence is Task Orientation, which involves the teacher's directions. The second element is Task Specification, which makes the pedagogic tasks explicit. The third element is Task Deconstruction, which involves text analysis of a target text. The second genre, *Curriculum Negotiation/Collaboration* only includes the element of Task Collaborations, which refers to teachers' and students' collaborative work in preparation for writing. This element is lineally recursive, which means it can occur several times. The final genre is *Curriculum Closure*, which includes the elements Task Draft and a Task Finish. During Task Draft students discuss and produce drafts

¹⁷ Another way curriculum genres can unfold over multiple sessions is through an *orbital* structure. We will return to the discussion of this kind of structure in [Chapter 3](#) in relation to business country reports.

of the target text, during Task Finish these drafts are finalised. Similarly to Task Collaborations, these elements are also recursive.

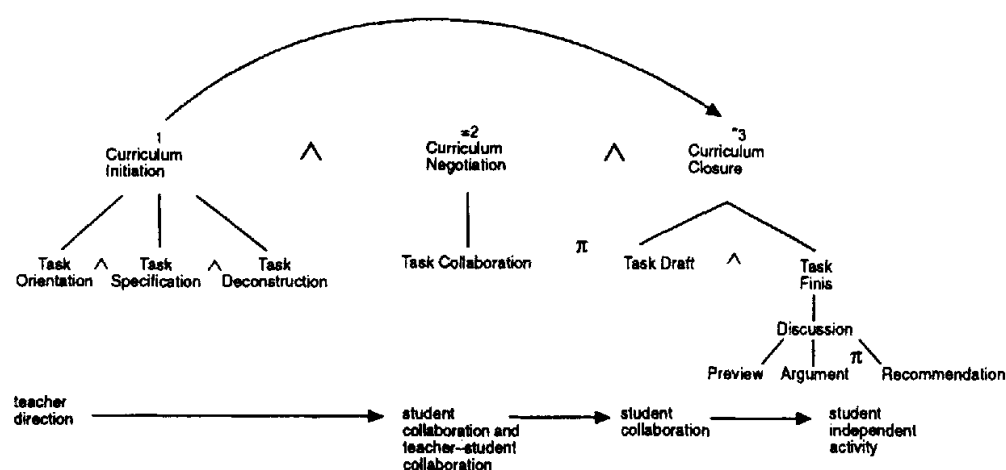
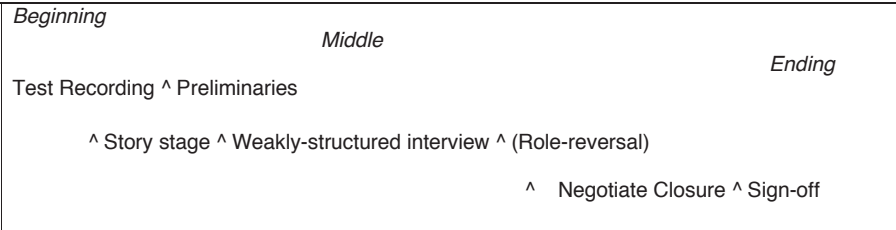


Figure 2.28 The structure of a high school social science curriculum macrogenre (From Christie, 1997, p. 149)

A typical example of a curriculum macrogenre is the Sydney School's Teaching-Learning Cycle (reviewed above). Building on Christie's (2002) concepts of curriculum initiation – curriculum negotiation – curriculum closure, Macnaught (2015) illustrates that the three main steps of Deconstruction, Joint Construction and Independent Construction constitute three main curriculum genres. As these unfold in a linear sequence, they thus constitute a macrogenre. Rose (2005) and Rose and Martin (2012) have extended this model by integrating reading activities alongside writing activities to create a more 'elaborate' macrogenre (Macnaught, 2015). Christie's work (1997, 2002) on macrogenres is of crucial importance for this thesis as it provides the basis for our reasoning that business country reports are not macrogenres unfolding in a serial univariate structure, despite their length.

Similarly to Christie, other researchers have built on Martin's (1994, 1995) work on macrogenres. One of the most influential among this work is Jordens' (2002) ground-breaking work on the generic complexity of *illness narratives*, i.e. *narrative-style' interviews* with cancer survivors in the field of clinical discourse. As it includes several elemental genres, the narrative-style interview has been characterised as a macrogenre (Jordens & Little, 2004). Its overall linear serial structure is illustrated in *Figure 2.29*. The macrogenre commences with the *Test Recording and Preliminaries*

elements, which signal the ‘beginning’ phase of the interview: clarification of the interview’s purposes and beginning of the tape recording session. The most important element of the macrogenre is the *Story* in the ‘middle’ of the interview session, during which story genres are elicited from participants about their experiences of cancer and its disruption of the lives of participants. The subsequent *Weakly-structured Interview* element is characterised by the interviewer’s follow-up questions. The following optional *Role-reversal* element (signaled by the brackets in the figure below) provides the interviewees with an opportunity to ask questions. The macrogenre ends with the final *Negotiate Closure* and *Sign-off* elements.



*Figure 2.29 The structure of the narrative-style interview macrogenre
(From Jordens & Little, 2004, p. 1638)*

As mentioned above, the *Story* element represents the core of the narrative-style interview, during which stories were elicited from the participants. The research found that the interviews include five time-structured genres from the family of story genres: recounts, narratives, anecdotes, exempla and observations¹⁸. Ten ‘illness narratives’ were ranked according to their complexity: *Figure 2.30* below shows that one interview consists of a single recount genre while the most complex interview includes as many as 28 story genres, instantiating all the five types (Jordens, Little, Paul & Sayers, 2001). The most significant finding was that generic complexity is strongly correlated to life disruption and chaos experienced by cancer patients¹⁹.

¹⁸ For detailed discussion of story genres, see Martin and Rose (2008) and Rose and Martin (2012).

¹⁹ For more detail on this research, see also Little, Jordens, Paul, Montgomery and Philipson (1998), Little, Jordens, Paul, Sayers and Sriskandarajah (1999), Little, Paul, Jordens and Sayers (2000, 2002), Little, Jordens, Paul and Sayers (2001), Little, Jordens, Paul, Sayers, Cruikshank, Stegeman and Montgomery (2002).

Bert	R
Ben	RR
Helen	RNN
Jean	RRONE
Li	NAEON
Jos	NNONAAAN
Mary	RNEEERO
Bill	RNEOEAEEO
Lynn	RARNNNRROONNOONEOOO
Mark	RRNRANRRRAANARRRRRRNRREEORO

Key

R = Recount
N = Narrative
A = Anecdote
E = Exemplum
O = Observation

Figure 2.30 Generic complexity of ten illness narratives (From Jordens et al, 2001, p. 1233).

Later phases of this research included interviews with clinical practitioners, all experts of colorectal cancer with different specialisations. Genre analyses of the interviews found recursive elements in the interviews that did not ‘fit’ descriptions of story genres (Jordens & Little, 2004). Closer analyses found that other than story genres may also occur in the narrative-style interview macrogenre, such as *expositions, discussions, explanations, descriptions* and *procedures*. After story genres, however, spoken *policy* genres were found to be the most common in these interviews. A policy genre has the following structure: an optional *Abstract* stage followed by the obligatory stages, a *Scenario*, *Policy* and *Rationale* stage, and ends with an optional *Coda* stage (Jordens & Little, 2004, p. 1638):

(Abstract) ^ Scenario ^ Policy ^ Rationale ^ (Coda)

The social purpose of the policy genre is to demonstrate clinical reasoning as policy is described as “the unfolding of practical wisdom in speech” (Jordens & Little, 2004, p. 1642). The authors glossed this purpose as “In this scenario, I do this, for these reasons” (Jordens & Little, 2004, p. 1638). If story genres represent *specific* instantiations of participants’ particular experiences, then policy genres represent broader recursive constructions of more *general* scenarios based on many instances of specific examples. Its use was found to be more appropriate for the construction of professional ethical identity than story genres. Thus narrative-style interviews were found to expand through the logico-semantic relation of addition of story and policy genres (Jordens, Little, Paul, & Sayers, 2001; Jordens & Little, 2004), constituting the most important characteristics of clinical discourse.

Extending Martin's early work, both Christie's and Jordens' research provide important theoretical foundations for the study of macrogenres as univariate serial structures or genre complexes. It is important to make the point here that the diagrammatical representation of the curriculum macrogenre in *Figure 2.28* above is not represented by constituency representation, as the stages of elemental genres in a multivariate structure would be. The diagram indicates the main steps of the sequence, i.e. the 'beginning, middle, end' of the curriculum macrogenre by using the caret (^) symbol. This can also be observed in Christie's work on the overall structure of the curriculum macrogenre. It is also crucial to note that Christie (1997) does not refer to *stages* of curriculum genres; she calls these 'elements' in the structure. In the diagrammatical representation of Christie's curriculum macrogenre above the linear univariate sequencing is indicated by a dependency arrow, which signals the interdependency between the elements. There is no indication of an overarching 'superstructure': the curriculum macrogenre is analysed as a serial structure, reflected by its representation. While Christie uses multivariate labelling to name the elements (e.g. Curriculum Initiation), the univariate labelling of the elements in the curriculum macrogenre structure as $1^{\wedge}=2^{\wedge} \times 3$ also reflects its representation as serial structure.

Christie's work on curriculum macrogenres seems to provide the basis for Muntigl's (2004, 2006) work on the narrative counselling macrogenre in the field of psychotherapy research. This macrogenre unfolds over several counselling sessions for couples. The elements of the 'beginning' and 'ending' phases are the same as those of Jordens' narrative-style interview macrogenre, discussed above (see *Figure 2.31* below). These counselling sessions were tape-recorded so the 'beginning' phase of the counselling macrogenre commences with the obligatory *Test Recording* and optional *Preliminaries and Abstract* elements, whose purpose is to sum up the previous counseling session. The core 'middle' element of the macrogenre is the *Narrative Counselling Interview*. According to Muntigl, in terms of its social function this core macrogenre represents "the institutionalisation of social (often referred to instead as psychological) problems" from a 'western' cultural perspective (Muntigl, 2004, p. 115). The macrogenre's 'end' phase is realised by the *Negotiate Closure* and optional *Sign-off* elements:

[Test Recording ^ (Preliminaries) ^ (Abstract) ^ Narrative Counselling Interview ^ Negotiate Closure ^ (Sign-off)]*

*Figure 2.31 The structure of the narrative counselling macrogenre
(From Muntigl, 2004, p. 116)*

In terms of *analysis*, Muntigl (2004) illustrates the overall structure of the entire macrogenre as a linear, serial univariate structure. However, the diagrammatic *representation* of the core element of this macrogenre, the *Narrative Counselling Interview*, differs from Christie's (1997, 2002) representation of the elements occurring within curriculum macrogenres. According to Muntigl (2004), the counselling interview is also a macrogenre in its own right. *Figure 2.32* below shows that this interview includes different genres: a *Problem Construction* and a *Problem Effacement* genre. The social purpose of these genres is to construe and negotiate clients' problems. The counselling interview macrogenre made up of these two genres is modelled by a constituency tree conventionally used for representing closed or bound segmental experiential structures. The diagram below also represents a logical perspective by incorporating univariate labelling (i.e. 1^+2) the logico-semantic relationships: Problem Effacement is linked to Problem Construction by the relation of extension: addition (signaled by the '+' sign).

In addition to the *univariate representation* discussed above, the individual staging of each of these genres is also indicated by a *multivariate constituency representation*. The Problem Construction genre includes two stages, *Problem Identification* and *Problem Agency*; Problem Effacement includes *Identification of Alternative Events* and *Alternative Event and Client Agency*. The first stages of both these genres, *Problem Identification* and *Identification of Alternative Events*, are further deconstructed into the stages of *Formulation* and *Reformulation*; both *Formulation* stages are realised by embedded genres: a recount and a narrative.

Section 2.2.1.3 above, I will follow Martin's (1996) model of orbital and serial particulate structure.

Based on the above review of the most salient studies of macrogenre, the criteria for analyses of the structure of longer texts need to be considered. In Christie's and Jordens' work, for example, there has been a clear distinction between multivariate and univariate structure, reflected in the representation as well as the labelling. In other studies however this distinction is not always clear-cut, which opens up further questions about the criteria used to distinguish complexing from embedding in large texts. For instance, Muntigl's (2004) representation of the structure of the narrative counselling interview macrogenre in *Figure 2.32* above is a constituency tree that has several 'lower-order' ranks. Constituency trees should only appear in univariate chains if they represent embedded genres in the sequence. In this case, we can have a multivariate structure appear in a univariate chain, however, only as a lower-order genre.

In other studies concerned with analysing larger texts there has not always been a clear distinction between embedding versus complexing (or multivariate and univariate structure). For instance, Hood (2010) analyses the generic structure of the Introduction sections of published research articles in different disciplines such as Education, Chemistry and Cultural Studies. Based on analyses of field shifts and shifts in thematic progression, she terms these types of text **research warrant macro-genres** (p.39). In Education and Chemistry she found that the Introduction sections can combine descriptive reports and Descriptions; in Cultural Studies a range of story genres were found (e.g. exemplum, anecdote) within the larger structure of the research warrants. Hood (2010) argues that while the research warrant in different disciplinary fields can be realised by different genres, they share the same social purpose: they "function to establish the significance of the object of study, and contribute in similar ways to the construction of the research warrant" (p. 46). An interesting question is whether to represent the genres identified in the research warrant as steps in a serial structure or functional stages in a multivariate structure, i.e. whether the research warrant is indeed a macrogenre combining elemental genres or an elemental genre that expands through embedding? And how would then the research warrant fit into the overall superstructure of the entire research article?

To sum up, one common thread in these studies is the challenge of how to approach the analyses of longer texts, i.e. what counts as macrogenre, elemental genre and embedded genre. What elements function as ‘wholes’ and what elements function as ‘parts’? Are all big texts macrogenres? As this issue is one of the most relevant for this thesis, I will expand on this point in the following section in relation to embedding and return to it again in **Chapter 3**.

2.2.3.2 Genre simplexes: Growing bigger than a page through embedding

As mentioned in the introduction to **Section 2.2.3** above, apart from complexing (i.e. sequencing elemental genres into a univariate serial structure), longer texts may also ‘get bigger than a page’ through **embedding** (Martin, 1994, 1995). Analogising from clause grammar, the structure of macrogenres was proposed to be proportional to clause complexes and elemental genres proportional to clauses. Following Halliday’s (1985/1994; Matthiessen & Halliday, 1999) conceptualisation of the fractal properties of language, Martin (1995) extended this principle to embedding. According to this principle, the same properties of language operating at larger scales can be observed on smaller scales (cf. Martin, 2008), i.e. all levels of language. Therefore if an elemental genre is proportional to the clause, then an embedded genre is proportional to the embedded clause:

$$\begin{array}{l} \text{genre: clause::} \\ \text{embedded genre: embedded clause} \end{array}$$

This means that if a clause can embed down-ranked clauses, then an elemental genre can also embed other elemental genres down-ranked to the level of a genre stage. For example, Martin (1994, 1995) illustrates the embedding of an elemental genre in the structure of another elemental genre through the classic Zero Population Growth (ZPG) text (Mann & Thompson, 1992) example. The constituency representation of the ZPG text shows that it is generically a solicitation genre (an example of a macro-proposal). *Figure 2.33* below shows that its first stage, the *Involvement*, is realised by an elemental news story genre, which has two functional stages, the *Lead* and the

Lead Development (Martin, 1994, pp. 39-40; 1995, pp. 24-25). From a part/whole constituency perspective, an elemental genre represents a ‘whole’ and its functional stages represent its ‘parts’. Martin’s early work on longer texts (1994, 1995) thus reveals that a genre, which constitutes a whole in itself, can become a part or segment in the structure of another genre. In the ZPG text a news story genre realises the Involvement stage, which means that this genre is down-ranked to the level of a genre stage. It has become a ‘part’ of the whole (i.e. the solicitation genre realising the ZPG text) in order to function as a multivariate stage. In the figure below this embedded genre appears at level of a genre stage, which is represented by double brackets. This follows the representation of embedded clauses, which appear at the same rank as other functional elements in the structure of the same clause:

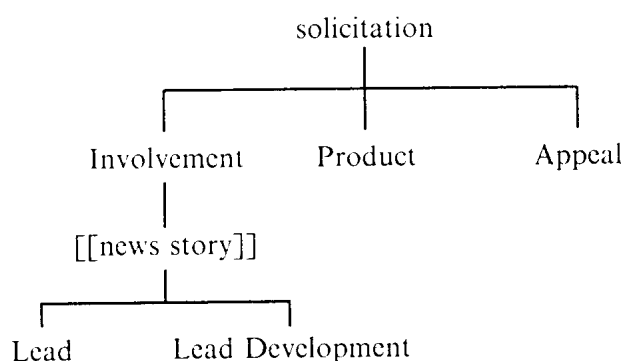


Figure 2.33 An embedded news story genre functioning as the Involvement stage of a solicitation genre (from Martin, 1995, p. 25)

In [Section 2.2.1.1](#) above Halliday’s (1981) concept of “cyclical recursion” was introduced, the grammatical resource that affords opening up the meaning potential of a closed multivariate structure (p. 40). It was also pointed out that it is different from linear recursion associated with serial iteration in univariate structures. Cyclical recursion is a very common resource for example in elemental story genres. An example of this is the addition of several Complication stages to the structure of a narrative. Apart from recursive stages, smaller units may also expand the meaning potential of multivariate structures. For instance, the Complication stages of narrative genres may expand through several *problem phases*²⁰ (Martin & Rose, 2012).

²⁰ See Rose (2006a) for a detailed discussion on *phases* in story genres.

If elemental genres can be down-ranked to the level of a genre stage, it means that they function as *multivariate* stages of another elemental genre in a closed ‘part/whole’ structure, where each unit has its own particular function. Muntigl (2003, as cited in 2004, pp. 109-110) observed this in Austrian students’ term papers. In these texts embedded historical recount genres provided the Background stages of historical account genres. *Figure 2.34* below shows the status of the historical recount²¹ as an embedded genre by enclosing it in double square brackets:

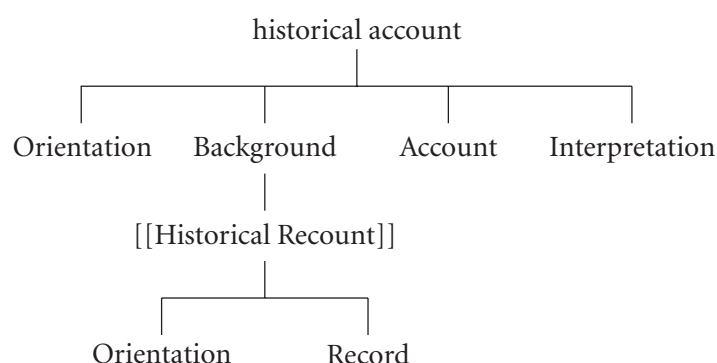


Figure 2.34 An embedded historical recount functioning as the Background stage of an historical account (from Muntigl, 2004, p. 110)

Drury’s (2006) research on short-answer tasks in undergraduate first-year biology problematises genre typologies and argues that the comparative short answer is a ‘transitional genre’ – a sort of bridge between report writing and exposition writing – “it appears to play a developmental or transitional role in first-year Biology, moving students from writing factual, descriptive reports at the beginning of the academic year to expositions at the end” (Drury, 2006, p. 105). Drury (2006) opens up the issue of categorising these texts as macrogenres or elemental genres. However, admittedly due to the small data set, no definitive conclusion has been reached about categorising the comparative short-answer as a macrogenre or a genre containing embedded genres. First-year undergraduate biology students move from describing scientific information and creating taxonomies at the beginning of the academic year to challenging the validity of biological knowledge (Drury, 2006). Drury (2006) argues that “unless students have control over elemental genres, they will not be able to

²¹ The diagram should indicate [[historical recount]] in lower case to follow the conventional notation in SFL for elemental genres.

move on to the more demanding macro-genres they will be required to write in the later years of their degree program” (p. 105). In this thesis we share this concern as the business country reports second-year undergraduate students are expected write may include as many as 16 elemental genres (e.g. Text 2, the China Report), which become embedded in the overall superstructure of these long texts.

Despite the clear criteria established for identifying macrogenres and embedded genres (i.e. genre complexing versus genre embedding), there have been some ‘adaptations’ of these technical concepts, which may pose a challenge for maintaining descriptive conventions and extending work in our field. I am using the word ‘adaptation’ here to refer to changing the original definitions of technical terms and their application to suit one’s purpose, which might lead to terminological confusion. Examples include conflation of macrogenres with elemental genres or of elemental genres with embedded genres (e.g. Cominos, 2011; Woodward-Kron, 2005), using the term ‘Macro-genre’ to mean “the dominant genre of a student's text” and re-naming embedded genre as ‘micro-genre’ (Woodward-Kron, 2005, p. 28). A common thread in the studies mentioned above is the automatic treatment of longer texts as macrogenres, however, as I will illustrate in **Chapter 3** of this thesis, large texts do not necessarily form genre complexes.

2.2.3.3 A word on genre ‘mixing’

The notion of genre mixing has interested scholars since Derrida’s famous provocation that we *cannot not mix* genres (1980, p. 57). This is evident in terms such as ‘mixing’, ‘blending’, ‘blurring’, ‘embedding’²², ‘bending’ of generic conventions and ‘hybrid genres/ hybridisation’ (see e.g. Bhatia, 1995, 1997, 1998, 2000, 2004, 2010; Fairclough, 1992, 1995, 2003; Swales, 2004; Varghese & Abraham, 2004) and ‘multi-generic texts’ or ‘mixed genres’ (see e.g. Threadgold & Kress, 1988; Threadgold, 1988). A common thread in these models of contextual variation is that they tend to consider ‘only’ one variable, i.e. genre versus four variables, i.e. genre and the register variables field, tenor and mode as in a stratified model of context. However, as noted in **Section 2.1.1** above, these register variables cannot be

²² Not to be confused with the notion of *rankshift* in SFL; in work on ‘mixed’ genres ‘embedding’ refers to the inclusion of one genre in another (cf. Bhatia, 1997, 2010; Lähdesmäki, 2009).

associated with the social purpose of texts (Martin, 1992a, pp. 502-506), as this would place too much pressure on only one stratum. In a stratified model such as Martin's (1992a, 2010, 2012b), where genre is in a "superordinate" relationship to register variables, register shifts from one stage to another within a genre can be accounted for at two separate strata.

A related concept is 'interdiscursivity', which has been used to account for the phenomenon of genre mixing. It is defined as the "appropriation of semiotic resources (which may include textual, semantic, socio-pragmatic, generic, and professional) [...] across professional genres, practices, and cultures (Bhatia, 2010, p. 35). The above terms have been used to explain the occurrence of elements or features in texts that did not fit existing generic descriptions or conventions. For example, Threadgold and Kress's 'beach resort door text' example (1988, pp. 238-239), according to their analysis, 'mixes' *rules* with *signs* and *instructions* (p. 240). However, Martin (1991) analyses this text as a macro-proposal (i.e. a text whose social purpose is to request action (Martin, 1992b)). Further examples include the changing of the *informing* and *reporting* 'communicative function' of corporate annual reports to the function of *promoting* (Bhatia, 2010); the inclusion of both *academic* and *promotional* purposes in book introductions (Bhatia, 1997); and the mixing of the *reporting* and *self-promotion* functions in the 'hybrid genre' of the press release (Catenaccio, 2008a, 2008b). In Raevaara and Sorjonen's (2006) study 'small talk' blends into the service encounter²³ genre.

There has also been renewed interest in SFL in the 'mixing' of genres, or more recently, 'hybridity' (see e.g. Mäntynen and Shore, 2014 and Miller & Bayley, 2015 for detailed discussions). This recent interest in genre mixing or hybridity in SFL is traced back to Hasan's (2000) concept of 'permeability'. For Hasan (2000) the notions of 'genre combination' and 'hybridity' are not useful since they imply a 'fusion' of "already existing recognisable objects": "[r]egisters/genres are not peaches and plums that can be hybridised into nectarines" (p. 43).

²³ See Ventola (1987), Hasan (1989) and Hasan (2009) for a detailed discussion.

Instead of ‘genre mixing’, Matthiessen & Teruya (2015) explore ‘register mixing’ or ‘hybridity of registers’ defined as “the mixture of functional varieties of language operating in different institutional domains” (p. 205). This stems from their management of what for example Martin and Rose (2008) treat as genre relations in an unstratified model of context comprising field, mode and tenor variables. Matthiessen’s (2015a) map of field of activity (discussed in [Section 2.2.2.2](#) above) distinguishes eight broad socio-semiotic process types but admittedly with ‘overlaps’ and ‘blends’ that “shade into one another” (p. 7). The notion of ‘registerial hybridity’ builds on Halliday’s notion of register (reviewed in [Section 2.1.1](#) above) and the concept of ‘indeterminacy’ (Halliday & Matthiessen, 1999) divided into *ambiguities*, *blends*, *overlaps*, *neutralisations* and *complementarities* (pp. 547-562). It is the registerial blend type that includes ‘hybrid/mixed genres’ (Matthiessen & Teruya, 2015). To give an example, if a text is found to actualise both the regions of *reporting* and *recommending*, then it represents a blend as in ‘advertisements dressed up as news reports’ (Matthiessen & Teruya, 2015, p. 211). Matthiessen and Teruya’s (2015) account of registerial hybridity provide extensive textual examples of ambiguities, blends, overlaps, neutralisations and complementarities. However, what remains unclear is the presentation of explicit linguistic criteria that realise recurring patterns of language in each of these hybrid registers.

A common thread in the studies reviewed above is the identification of different social purposes or functions within the same text. Martin (2002b) refers to the notion of ‘mixed genre’ as “a contradictory misnomer ... confusing genres with the texts that instantiate one or more of them; in addition, it unhelpfully groups together radically different kinds of ‘mixture’ (p. 277). Further, Martin (2002b) argues that for the consistency of analyses the technical term genre in SFL must be reserved to mean “recurrent configurations of meaning” (Martin & Rose, 2008, p. 230; Rose & Martin, 2012, p. 47). It is important to note that Martin already pointed out in 1991 that the notion of multi-genericity often stems from a rejection (often implicit) of established sets of criteria for identifying genres but without establishing an alternative set of explicit criteria. If we do not follow clear sets of “functionally motivated” criteria to analyse ‘mixed texts’ (Martin, 1991, p. 139), then, for example, a macrogenre that contains different elemental genres sequenced into a serial univariate structure *or* an elemental genre which contains embedded genres as multivariate stages might be

analysed as ‘hybrid’ genres. Instead, Martin (2002b) argues that if different types of elemental genre appear in a text, we may refer to these as ‘**mixed texts**’ rather than ‘mixed genres’ or ‘blended genres’ (p. 252).

References to ‘the evolution of new genres’ (see e.g. Threadgold and Kress, 1988; Kong, 2006 on journalistic reporting) takes us back to the concept of phylogenesis discussed in [Section 2.2.2](#) above. It has been emphasised by some SFL scholars that while certain configurations of meanings result in more ‘stabilised’ genres innovations enable the *renovation* of existing genres and the emergence of *new* genres (whose sources may well be mixed texts) (e.g. Martin & Rose, 2012, pp. 4-5; cf. also Martin & Rose, 2003/2007, p. 258; Martin & White, 2005, pp. 23-25). However, specific shifts in the configuration of field, tenor or mode variables do not necessarily result in the construal of a new genre. Simply because texts may include different kinds of genres, it does not mean that they are ‘hybrids’ as argued by Martin (2002b):

[...] the term ‘mixed genre’ is less than helpful as a characterization of discourse of this kind. For one thing, it confuses system and instance (Halliday & Matthiessen, 1999). In order to mix genres, we need something ‘canonical’ to mix. Accordingly we need to distinguish genre (system) from text (instantiation) – to distinguish recurrent configurations of meaning immanent in our culture from the textual instances that draw on one or more of them to reinforce these configurations or nudge the culture along. For another, the ways in which texts can draw on genres is varied, and a single cover term like ‘genre mixing’ draws attention away from this variation (p. 264).

This thesis draws on Martin’s conceptualisation of genre to show that undergraduate business country reports – despite their inclusion of several genres from the arguing, explaining and reporting genre families – are *not* ‘mixed’ or ‘hybrid’ genres but mixed texts that expand their meaning potential through embedded (i.e. rankshifted) genres.

2.2.3.4 Summary

The use of inconsistent terms and adaptations of existing terminology should be carefully avoided to prevent terminological confusion in relation to the theorisation of macrogenres, elemental genres and embedded genres. It is thus one of the aims of this thesis to provide a clarification of these issues. I will explore the down-ranking of elemental genres to the rank of genre stages, in other words, the embedding of genres into the multivariate superstructures that realise business country reports. Existing work has so far considered embedded genres “a relatively rare phenomenon” (Martin, 2012b, p. 002), therefore in this thesis I will explore the phenomenon of genre embedding further. Analogising from clause grammar, I will argue that not all long texts are macrogenres made up of genre complexes unfolding in a univariate serial structure. Based on the analyses of the undergraduate business country reports studied in this thesis, **Chapter 3** will demonstrate that embedding plays a fundamental role in construing the generic structure of these texts. This chapter will focus on the **particulate structure** of the business country reports from an ideational perspective. Specifically, I will show that these texts are genre simplexes, which grow bigger than a page through several layers of embedded genres, attesting to the fractal properties of language in Halliday’s terms that a text is indeed “like a clause” (Halliday, 1982/2002, p. 234). This finding will also reflect Halliday’s (1979/2002) reading of Huddleston’s early claim that particulate (i.e. elemental), prosodic and periodic structures generate **simplexes** (e.g. clauses, groups, words, information units) and logical structures generate **complexes** (e.g. clause complexes, group complexes, etc.) (Huddleston, 1965, as cited in Halliday, 1979/2002, p. 215).

Apart from a focus on particulate structures that create ideational meanings, this thesis will also explore prosodic and periodic structures that construe interpersonal and textual meanings in business reports. To fully understand text structuring principles that enable long business country reports to grow bigger than a page, I will explore the role linguistic resources play in scaffolding the superstructure of these texts at the level of discourse semantics. In the following section I will review the theoretical foundations of discourse semantic systems in SFL.

2.3 SFL tools for analysis: Discourse semantic systems

The previous section focused on relevant theoretical principles of SFL genre theory, which will inform our analysis of the nature of genres that build country reports. To explore the linguistic resources that scaffold the generic structure of these texts relevant discourse semantic systems need to be reviewed. Martin's *English Text* (1992a) presents the first comprehensive overview of his model of discourse semantics²⁴, the stratum of metafunctionally organised meanings between the strata of lexico-grammar and register. Based on the principle of stratification in SFL, this model is concerned with the relation between lexicogrammar and semantics, focusing on "text-size rather than clause-size meanings" (Martin, 1992a, p. 1). In Halliday and Hasan (1976)²⁵ resources of cohesion are interpreted as textual components at the level of lexicogrammar. In Martin's model these resources are reconceptualised as discourse semantic systems. Further, Martin reinterprets Halliday and Hasan's (1976) cohesive ties as discourse structures. *English Text* (Martin, 1992a) proposes four systems at the level of discourse semantics (summarised in *Table 2.13* below), which are related to register variables and metafunctions:

REGISTER	METAFUNCTION	DISCOURSE SEMANTICS
tenor	interpersonal	NEGOTIATION
mode	textual	IDENTIFICATION
field	ideational	CONJUNCTION
		IDEATION

*Table 2.13 Register and metafunction in relation to discourse semantic systems
(Adapted from Martin, 1992a, p. 403)*

In terms of information flow and texture, Martin (1992a) also extends Halliday's (1985) work on Theme-Rheme development and information structure as well as Fries' (1981) work on 'method of development'. What *English Text* (Martin, 1992a) refers to as 'sandwich texture' (p. 456) in written texts later becomes PERIODICITY,

²⁴ See Martin & Rose's (2003/2007) *Working with Discourse* for an accessible introduction; Martin's (2012a) *Discourse Semantics* (Vol. 2 in the Collected Works of J.R. Martin) for seminal publications and Martin (2014) for a detailed historical account of the evolution of discourse semantics.

²⁵ See *Cohesion in English*, their seminal account for more detail.

another discourse semantic system related to the textual metafunction (reviewed in [Section 2.3.3](#) below).

English Text (Martin, 1992a) relates the system of NEGOTIATION to the interpersonal metafunction but at that stage of the evolution of discourse semantics in SFL, attitudinal resources were not organised as a discourse system. Realisations of attitudes and feelings were mostly analysed at the level of lexicogrammar; lexicogrammatical systems include word CONNOTATION, ATTITUDE in nominal groups, mental PROCESS types and COMMENT in adverbial groups (Martin, 2014a). Based on research of story genres for the purposes of educational linguistics, a need has arisen for systematising attitudinal resources as a system beyond the level of lexico-grammar (Martin, 2014a). These resources were related to the interpersonal metafunction and organised as the discourse semantic system of APPRAISAL.

These developments have shaped Martin's current model (see *Figure 2.35*), which organises the six systems metafunctionally at the stratum of discourse semantics. Specifically, IDEATION and CONJUNCTION are related to ideational meanings; APPRAISAL and NEGOTIATION to interpersonal meanings; and IDENTIFICATION and PERIODICITY to textual meanings (Martin, 1992a; Martin & Rose, 2003/2007; Martin, 2014a, in press a, in press b). The resources of these discourse semantic systems often interact in order to create texture in discourse (Hao, 2015).

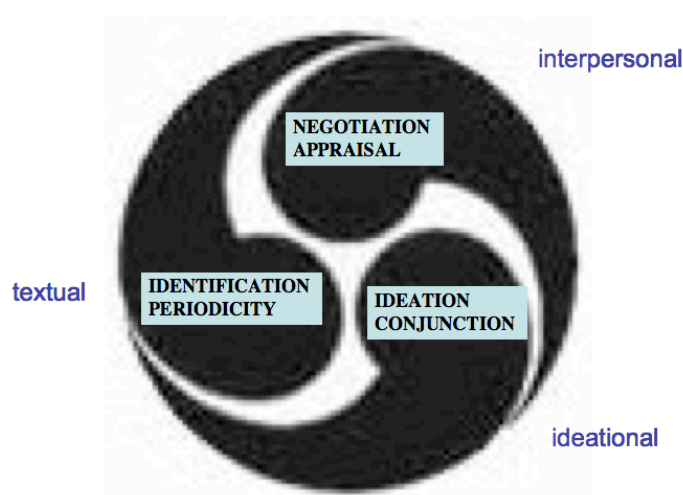


Figure 2.35 Martin's model of metafunctionally organised discourse semantic systems (2014a, p. 10)

In this thesis, discourse semantic systems will form the basis of our analysis of linguistic constructions of business decisions and cause-effect relationships at the level of discourse semantics. Specifically, the systems of IDEATION and APPRAISAL are relevant for the study of business reasoning. Further, to explore how ideational meanings couple with evaluative meanings I will review research on couplings. For the study of *logico-semantic relationships* from the perspective of the logical metafunction, I review the system of CONJUNCTION. Finally, because of the complex hierarchic structure of these long business reports, the system of PERIODICITY will be reviewed from the perspective of the textual metafunction. APPRAISAL and CONJUNCTION will be related to prosodies of saturation and intensification, PERIODICITY to prosodies of domination.

2.3.1 APPRAISAL and IDEATION

The system of APPRAISAL contains discourse semantic resources that together make up the model often referred to as “the language of evaluation” (Martin & White, 2005). APPRAISAL, is realised through prosodic structures (Martin, in press a). As reviewed in [Section 2.2](#) above, while particulate structures have clear boundaries (Halliday, 1979/2002; Martin, 1996), **prosodic structures** tend to transcend boundaries of clauses, phases or stages and spread interpersonal meanings across units of meaning (Martin, 1994, 1995, 1996). The spread of interpersonal resources across a text often results in ‘colouring’ or ‘saturating’ the text in a particular attitude, creating an ‘amplifying’ effect or enabling a text to grow bigger through “interpersonally oriented repetition” (Martin, 1994, p. 33; 1995, p. 13). Martin & White (2005), building on Halliday’s earlier work, therefore suggest that this type of structure affords three types of prosody: *saturating*, *intensifying* and *dominating*. APPRAISAL is propagated through these three types of prosody (Martin, in press a). More specifically, **saturating prosodies** ‘colour’ texts by spreading particular prosodic values across the discourse (Hood, 2010; Martin & White, 2005, p. 19). *Figure 2.36* below illustrates the piling up or accumulation of attitudinal instances unfolding in the text:

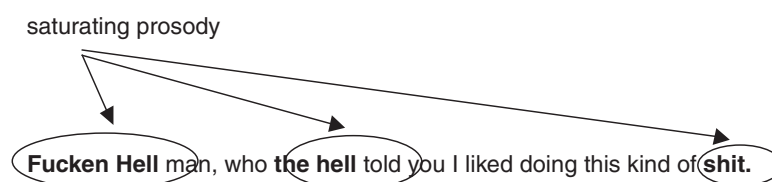


Figure 2.36 Saturating prosody (From Martin & White, 2005, p. 24)

Intensifying prosodies involve ‘loudness’ or ‘turning the volume up’, in other words, amplifying discourse semantic meanings whereby each following instance “makes a bigger splash which reverberates through the surrounding discourse” (Martin & White, 2005, p. 19). As shown in *Figure 2.37* below, intensifying prosodies “rely on highly charged attitudinal choices where the level of charge functions to spread the value beyond the instance” (Hood, 2010, pp. 158-159).

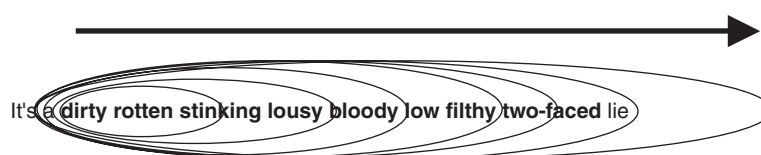


Figure 2.37 Intensifying prosody (From Martin & White, 2005, p. 24)

Finally, **dominating prosodies** are created when discourse semantic meanings ‘radiate from a point of textual prominence’ (Hood, 2010, p. 157). In other words a dominating prosody takes its dominant position in higher-level Themes and News, i.e. flows ‘prospectively’ or ‘retrospectively’ (Hood, 2010; Martin & White, 2005, p. 20). According to Martin and White (2005), this kind of prosody “associates itself with meanings that have other meanings under their scope” (p. 19) as shown in *Figure 2.38*.

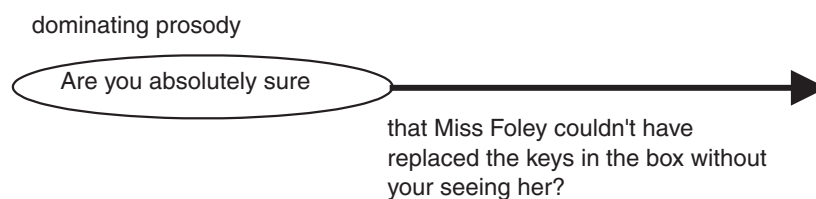


Figure 2.38 Dominating prosody (From Martin & White, 2005, p. 24)

In order to explore the nature of macrogenres, elemental genres and embedded genres in undergraduate business country reports, apart from ideational meanings realised by particulate structures, interpersonal and textual meanings realised by prosodic and periodic structures also need to be considered (Martin, 1994, 1995, 1996). In relation to undergraduate business country reports, this thesis is concerned with how interpersonal meanings are realised through APPRAISAL choices to construe evaluations of specific factors of the external business environments. APPRAISAL includes three sub-systems: ATTITUDE, GRADUATION and ENGAGEMENT, as illustrated in *Figure 2.39* below. These sub-systems will be reviewed in the following sections.

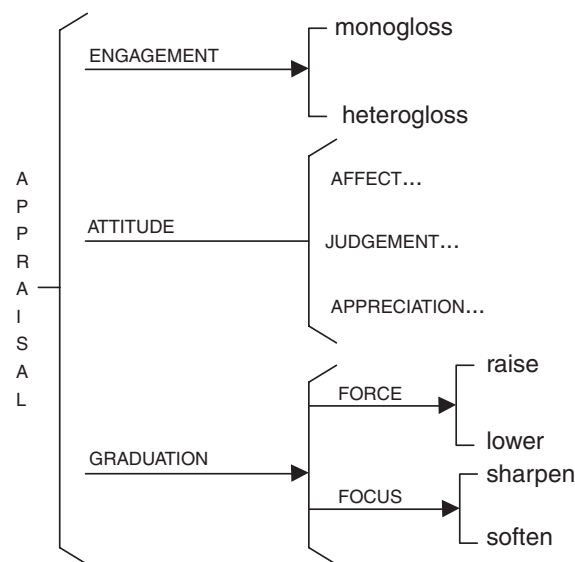


Figure 2.39 The resources of appraisal (Figure 1.18 from Martin & White, 2005, p. 38)

2.3.1.1 ATTITUDE and couplings

The system of ATTITUDE can be further divided into three sub-systems: AFFECT (evaluations of emotions/feelings), JUDGEMENT (evaluations of behavior) and APPRECIATION (evaluations of phenomena/things) (Martin & White, 2005). Attitudinal choices can be positive or negative, explicit (i.e. inscribed) or implicit (i.e. invoked).

Selections of attitudinal values from the subsystem of AFFECT involve linguistic resources, which signal positive and negative feelings, emotions and reactions in terms of **inclination** (e.g. *a preference for higher quality confectionary*), **happiness**

(e.g. *embracement of the fair trade concept*), **security** (e.g. *confidence in Brazil's long term growth potential*) or **satisfaction** (e.g. *subsequent feelings of resentment towards the Government*) (Martin & White, 2005, pp. 48-49; examples from my data set). Inscribed expressions of affect often involve a conscious participant who experiences a particular emotion, termed as Emoter, while the Trigger is what brings about that emotion.

Attitudinal choices from the subsystem of **JUDGEMENT** involve evaluations of human character and behavior (Martin & White, 2005, p. 52). Judgement choices of **normality** (i.e. one's un/usuality; *advocates social commitment*), **capacity** (one's capability; e.g. *qualified chemical engineers*) and **tenacity** (one's resoluteness; *loyalty to immediate family and friends*) can be related to 'social esteem' and those of **veracity** (one's honesty; *counterfeiting levels in China*) and **propriety** (one's ethics; e.g. *inherently corrupt*) to 'social sanction' (Martin & White, 2005, p. 52). In the business reports studied for this thesis, resources of judgement are more common than resources of affect but less common than resources of appreciation.

The third subsystem of **ATTITUDE** is **APPRECIATION**. According to Martin and White (2005, p. 36), it is related to the evaluation of 'things' as "concrete or abstract, material or semiotic" and this evaluation is dependent on the *field* of study. Analyses of appreciation choices in business reports revealed it to be more preferred than options of affect or judgement to evaluate the impact of factors from the external business environment on investment. **APPRECIATION** has three variables: reaction (i.e. evaluating the 'quality' or 'impact' of things; e.g. *attractive investment location*), composition (i.e. evaluating the 'balance' or 'complexity' of things; e.g. *stable political environment*) and valuation (i.e. evaluating the 'value' or 'worth' of things; e.g. *unfavourable for investment*). Reaction is closest to **AFFECT**; valuation is closest to **JUDGEMENT**; the most central variable of **APPRECIATION** is composition (Martin & White, 2005; Hood, 2010). Our analyses of business reports found that valuation was the most typical choice out of all the variables of the three sub-system of **ATTITUDE**. Valuation is the variable most sensitive to field as its use indicates an entity's *social value, worth* or *significance* (Bednarek, 2008; Hood, 2010). In the discipline of history, for example, Coffin (1996) found that the type of valuation she termed *social*

value is a key resource in construing historians' arguments in terms of *significance*, *efficacy* or *prominence*.

Martin and White (2005) position judgement and appreciation as '*institutionalisable feelings*' (see below *Figure 2.40*; their *Figure 2.1*, p. 45) by which they meant "ideationalised, technicalised as rules and regulations or as criteria" (Martin, personal communication). This means that they can become a kind of technicality – an 'axi-tech'²⁶ (Martin, personal communication) and are no longer inscribing attitude. A congruent instance of inscribed [judgement: propriety], for instance, can be 'formalised' as a legal technical term. For example, '*guilty*' in the clause *several high-ranking officials were found guilty* is an instance of inscribed explicit judgement. The attitude inscribed in *guilty* can become 'legalised' as the legal technical term '*sentencing*' as in the nominal group *the sentencing of several high-ranking officials*. We could code the instance *sentencing* as an ideational "token of judgement", i.e. an "indirect invokation" (Martin & White, 2005, p. 168), which *invokes* rather than inscribes social sanctioning of unethical behaviour.

For the purposes of this thesis, I will treat these kinds of axiologically charged tokens, whose definitions would include inscribed attitude, as instances of inscribed rather than invoked attitude in order to make explicit the evaluation of particular factors in these business reports. For example, in this thesis I will show how instances of appreciation can become formalised as values. For example, specific factors of the external business environment become 'ideationalised' as business *opportunities* or business *risks* (e.g. *the Canadian business environment represents a business opportunity* versus *the Canadian business environment is attractive for investment*).

²⁶ Martin (personal communication) referred to axiologically charged ideational meanings as 'axi-tech'.

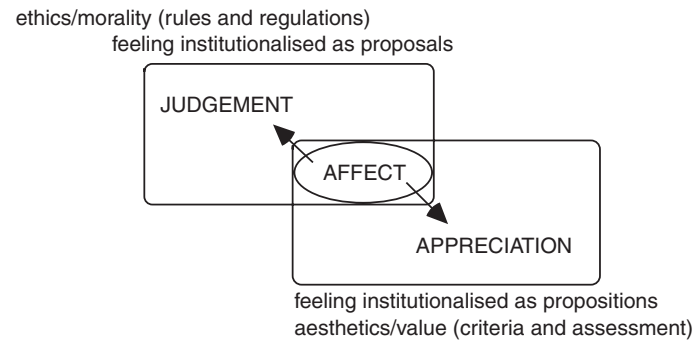


Figure 2.40 Overlaps of ‘institutionalisable feelings’ (Figure 2.1 from Martin & White, 2005, p. 45)

In relation to using the appraisal framework for analyses of evaluation in discourse, several researchers point out that it may be necessary to refine the categories depending on one’s field of study or context. For instance, Lemke (1998) identifies seven *dimensions*²⁷ of evaluation resources in newspaper editorials; Bednarek (2006) proposes a *parameter-based*²⁸ approach to the study of evaluation in a corpus-based study of news discourse. In their study on Discursive News Values Analysis (DNVA), Bednarek and Caple (2014) found that *potential* newsworthiness in news discourse is construed through nine *news values*²⁹. News values are realised through a range of linguistic devices; appraisal choices include attitudinal choices (often affect and aesthetics), graduation, and attribution (Bednarek, 2015; Bednarek & Caple, 2012a, 2012b, 2014; Caple & Bednarek, 2013, 2016; Potts, Bednarek & Caple, 2015). There have also been suggestions for the refinement of **affect** subcategories due to the ‘fuzzy boundaries’ of appraisal categories (see for example, Bednarek, 2008³⁰; Dreyfus, 2012, 2013; Dreyfus, Tilakaratna & Bales, 2013). In addition there are studies that propose *field-specific* **appreciation** subcategories cover a wide range of contexts. These include the language of wine appreciation (Hommerberg, 2011; Hommerberg & Don, 2015), customer reviews (Su, 2016), and narratives (Macken-

²⁷ See Lemke (1998) for a detailed introduction to his proposed dimensions for evaluation: desirability/inclination, warrantability/probability, normativity/appropriateness, usuality/expectability, importance/significance, comprehensibility/obviousness, humorousness/seriousness (p. 37).

²⁸ See Bednarek (2006, pp. 41–63) for a detailed introduction to the proposed parameters:
Core: comprehensibility, emotivity, expectedness, importance, possibility/ necessity and reliability.
Peripheral: evidentiality, mental state and style.

²⁹ The nine news values identified in this research are Timeliness, Consonance, Negativity, Impact, Proximity, Unexpectedness, Superlativeness, Personalisation and Eliteness See especially Bednarek and Caple (2014) and Caple and Bednarek (2016) for a detailed discussion.

³⁰ See Martin (2013a) for a detailed critique on the issues of core/non-core lexis, semantic prosody and the lack of appropriate data in corpora.

Horarik & Isaac, 2014); Ngo & Unsworth's (2015) study of evaluative resources in the spoken discourse of ESL postgraduate students (Ngo & Unsworth, 2015), and the evaluation of scientific phenomena in biology research articles (Hao & Humphrey, 2012). The fine-grained distinctions in the additional subcategories include '*field-specific, institutionalised values*' characteristic of individual disciplines, which provides greater delicacy for analysts of evaluation resources.

In assessing these renovations we should keep in mind, as outlined in **Chapter 1** of Martin and White (2005), that their appraisal system is a *description* of English informed by SFL theory, and that it needs to be 'refined' in relation to the comprehensive descriptions of language in context informed by that theory. This means keeping in mind that appraisal is an interpersonal resource (alongside ideational and textual resources) and that it is a discourse semantic system realised through lexicogrammar (and ultimately phonology, graphology and body language) and realising tenor (and ultimately genre). The appraisal system is thus realised through lexical items and grammatical structures; it does not model lexis as 'delicate grammar' (cf. Halliday, 1961/2002; Hasan, 1987). For the purposes of this thesis I have not found it necessary to adjust the general categories of attitude proposed by Martin & White (2005), although values specific to the business field are foregrounded in our consideration of [appreciation: valuation].

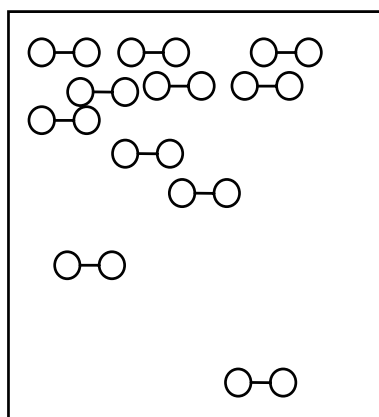
At the level of discourse semantics ideational meanings are realised through linguistic choices made from the discourse semantic system of IDEATION (Martin & Rose, 2003/2007). From the perspective of ideational meanings, all instantiations of appraisal are aimed at something, i.e. the 'source' or the target of evaluation is equally important (Martin & White, 2005, p. 59). Attitudinal selections represent interpersonal meanings; their targets represent ideational meanings. As I will discuss in more detail in **Chapter 4**, analysing targets, i.e. *what* is being evaluated, is important for this research as the targets of evaluation represent factors from the external business environment. The study of these targets will be important for understanding the construction of field in the discipline of business studies.

Before exploring the role of couplings in construing business decisions in undergraduate business reports, it is necessary to review some key definitions. The

concept of coupling first appeared in Martin (2000), where it was defined as the combination of ideational meanings and appraisal “at a particular point in the unfolding of a text, for the social subjects involved, at some moment in the evolution of the relevant institution” (pp. 163–164). This definition was later extended to refer to “the ways in which meanings combine, as pairs, triplets, quadruplets or any number of coordinated choices from system networks” (Martin, 2008, p. 39) within and across strata, metafunctions, ranks, simultaneous systems and modalities and at any point along the cline of instantiation, and unfolding as a logogenetic process (Zappavigna, Dwyer & Martin, 2008, 2010; Martin, 2011). Zhao (2010) defines couplings as “the linking of at least two types of relations at one point in the logogenetic unfolding” of a text (p. 206). As Martin (2008) suggests, we need to be concerned with the way various resources across systems, strata and ranks combine; this thesis will explore couplings from the perspective of the instantiation hierarchy to understand why certain meanings are coupled in undergraduate business reports and how their use affects the logogenetic unfolding of these texts. Due to the principled selection, i.e. coupling, of meanings along the instantiation hierarchy, Martin (2010) redefines instantiation as a ‘hierarchy of couplings’ (p. 19, 26).

Existing visual representations of couplings have been found in Zappavigna, Dwyer & Martin (2008), Knight (2010a) and Hood (2010)³¹. As shown in *Figure 2.41* below, Zappavigna, Dwyer & Martin (2008) use the symbol $\bigcirc\text{---}\bigcirc$ to represent couplings. This representation captures the logogenesis of texts by visualising the position of couplings in the unfolding text. For instance, the example below shows that more couplings are positioned at the beginning of the text than the end:

³¹ Intersemiotic couplings found in Caple (2008a, 2008b, 2010, 2013) are not included in this discussion, as this thesis is not concerned with couplings of images and verbiage. See also Bednarek and Martin (2010) for studies of couplings across other modalities, e.g. image and text, music, gesture and intonation.



*Figure 2.41 Visualising logogenesis of texts
(From Zappavigna, Dwyer & Martin, 2008, p. 174)*

The authors argue for the need to study couplings not only from a syntagmatic perspective on how couplings are instantiated but also from a paradigmatic perspective on where and how strongly particular meanings couple. This is further explained by defining couplings as

[...] analogue rather than digital. In other words, a coupling is not an “on/off” option and may be represented as weighted. Something is strongly coupled if it frequently co-occurs and loosely coupled if the logogenetic patterning is sparse. We cannot determine the strength of a coupling without an understanding of the co-text (Zappavigna, Dwyer & Martin, 2008, p. 174).

This representation for visualising couplings to show the logogenetic unfolding of texts is very useful and could be adapted to account for the role of couplings in scaffolding genre structures at a more abstract level. However, for the purposes of the present study to understand the grammatical differentiation of different types couplings this representation does not provide enough detail.

Another kind of visual representation of couplings was found in Knight (2010a, p. 207), where the coupling of ideational meanings with attitudinal meanings is represented as a “bound unit”. As in *Figure 2.42* below, couplings enact “bonds”, i.e. “social semiotic units by which affiliation is negotiated in the social environment”.

These bonds can only be retrieved as instantiations in texts, construed as couplings (Knight, 2010a, p. 207):

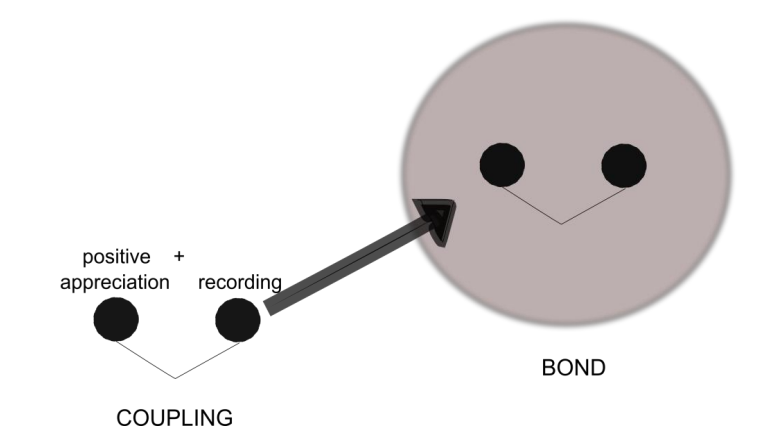


Figure 2.42 Coupling as a “bound unit” (From Knight, 2010a, p. 207)

The third type of visual representation of couplings appear in Hood (2010, pp. 143-144), where a yin-yang symbol is used to represent the combining of ideational and attitudinal meanings in the clause *His methodology showed certain other refinements*. Table 2.14 below shows that a coupling is grammatically construed around the relational process, *showed*, which relates the Target *methodology* to the attitudinal meaning inscribed in *refinements*. The arrow in the figure means that the positive value of inscribed appreciation flows to the Target *methodology*, thus the coupling is charged with positive attitude:

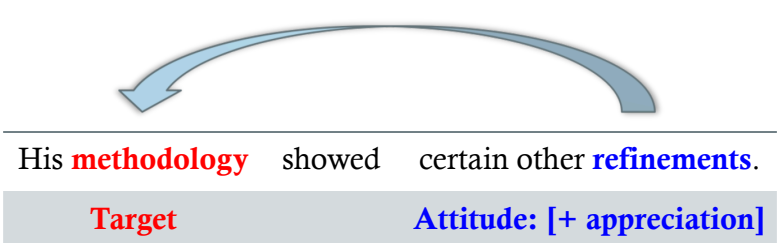


Table 2.14 Coupling of ideational and attitudinal meanings

Figure 2.43 below shows this coupling of ideational and attitudinal meaning as a yin-yang symbol as it appears in Hood (2010, p. 143):

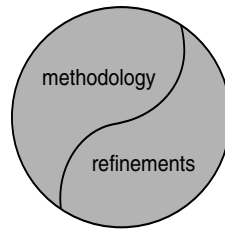


Figure 2.43 Coupling of ideational and attitudinal meanings

It is Hood's representation that this thesis will draw on to visualise couplings. As will be demonstrated in the following discussion, the yin-yang symbol lends itself to the visualisation of layers of couplings. Since I am interested in exploring couplings of ideational and interpersonal meanings in this section, I will look at realisations of attitudinal meanings and their Targets. In my adaptation of the yin-yang symbol to visualise couplings I will place the attitudinal inscription above its Target in order to show the domination of the prosodic value over ideational meanings, as shown in *Figure 2.44* below:



(From Hood 2010: 143)

Figure 2.44 Adaptation of Hood's yin-yang symbol for the purposes of this study

2.3.1.2 GRADUATION

Because of the importance of invoked and graded ideation in couplings, I will briefly review the system of GRADUATION. The resources of GRADUATION make the grading of attitudinal meanings possible (Martin & White, 2005; Hood, 2010). The resources that enable attitudinal meanings to be intensified can be selected from the GRADUATION subsystem of FORCE. The resources of FORCE often function to amplify writers' arguments and strengthen propositions (Martin & White, 2005; Hood, 2010). In **Chapter 4** I will illustrate the role they play in intensifying the attitudinal components of couplings; in **Chapter 5** their role in creating intensifying prosodies.

The resources of FORCE can also function to invoke an attitudinal reading of experiential meanings even when no explicit evaluative resources are present (Martin & White, 2005; Hood, 2010). These can be *intensifying* or *quantifying*, i.e. in terms of amount, extent or scope. When graded in terms of [extent: distance], attitudinal or experiential meanings can be quantified in terms of location. When graded in terms of [extent: scope], they can be quantified relative to spread (Hood, 2010). Both distance and spread can have further levels of delicacy: time or space.

The other GRADUATION subsystem, FOCUS, can invoke an evaluative reading of a text by *sharpening* or *softening* the boundaries around experiential meanings (Martin & White, 2005; Hood, 2010). These experiential meanings can be abstract entities or processes. Entities can be graded in terms of their *valeur*, which can be further subdivided into *authenticity* or *specificity*. Processes on the other hand can be scaled relative to *fulfilment*, further subdivided into *actualisation* or *completion* (Martin & White, 2005; Hood, 2010). Through the selection of grading resources writers of successful business reports often invite readers to align with their *pro- or anti-investment stance*. Grading resources in this data set are also important because their accumulation creates prosodies of intensification. These kinds of prosodies often appear simultaneously with prosodies of saturation and domination; this reinforces findings of previous research (cf. Hood, 2010). While the resources of GRADUATION function to strengthen writers' stance about investment potential, in order to entertain different stances the resources of ENGAGEMENT also play an important role in these business reports. I review this APPRAISAL subsystem in the following section.

2.3.1.3 ENGAGEMENT

The third subsystem of APPRAISAL is ENGAGEMENT, the system concerned with managing different voices, stances and opinions in texts (Martin & White, 2005; Martin, in press a). For the study of undergraduate business reports its resources of expansion and contraction are important for setting up different kinds of judgements

about investment potential: the ‘layperson’³² versus the ‘professional, expert judgement’.

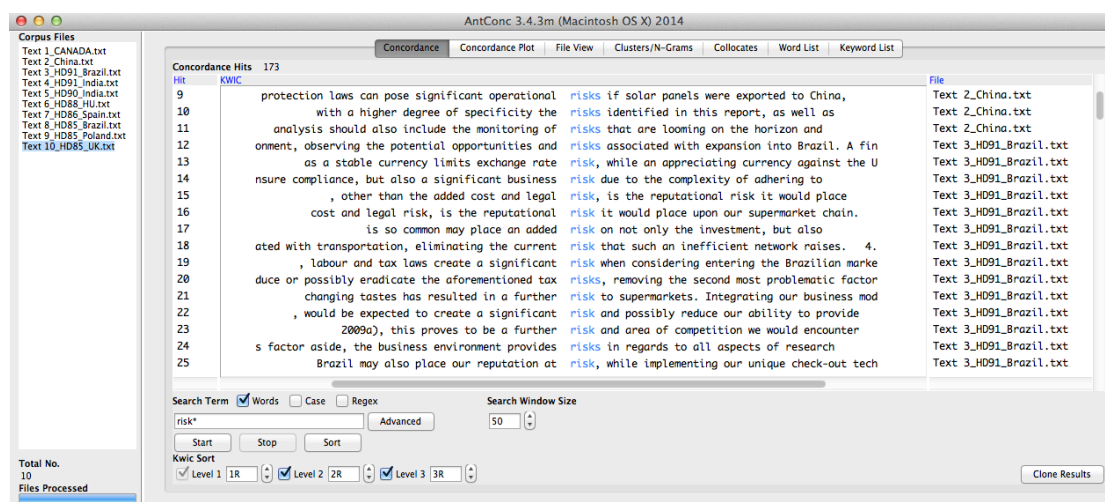
To briefly review, the resources of ENGAGEMENT function to construct the interpersonal relationship between readers and writers (or speakers and listeners) by opening up or closing down the dialogic space for negotiating propositions (Martin & White, 2005; Hood, 2010). When writers open up the dialogic space by the resources of heteroglossic *expansion*, they entertain different possibilities and alternative opinions or attribute propositions to other external voices; when writers close down the dialogic space by *contraction*, they have the option to reject other voices or dismiss alternatives (Martin & White, 2005). In the business reports studied in this thesis the readers are invited to share layperson and professional opinions as potential ‘bonds’ (Stenglin, 2004; Knight, 2010a, 2010b) to rally around.

2.3.1.4 Complementing SFL analysis: Tools from corpus linguistics

Apart from appraisal-informed analyses in SFL, evaluative language has also been studied through the use of computer softwares from a corpus-linguistic perspective (see e.g. Almutairi, 2013; Bednarek, 2006, 2008; Coffin and O’Halloran, 2006; Fuoli, 2012; Hunston, 2011, 2014; Liard  t, 2014a, 2014b, 2015; Potts, Bednarek, Caple, 2015; Su, 2016; Zappavigna, 2011, 2012). The qualitative manual SFL analyses were crucial in this study for identifying the different choices available for writers of business country reports to construe business decisions at the level of discourse semantics. I will report on these findings in **Chapters 4 and 5**. While this current study is primarily qualitative, one type of corpus tool from corpus linguistics was found useful to complement the manual SFL analyses with quantitative information. Specifically, the study will also employ the *concordancer* **AntConc 3.4.3** (Anthony, 2014; see Anthony, 2005 for a detailed introduction) in order to identify typicality and frequency of certain attitudinal choices across the data. As the study only draws on concordance analyses, a more detailed review of corpus linguistics is beyond the scope of this thesis.

³² Expression used by the business studies lecturers during the intervention describe above (Stenglin, Welch & Piggott, 2008-2011).

Due to the nature of the fine-grained SFL analyses, the data set analysed for this thesis is relatively small. The corpus for this study consists of ten undergraduate business country reports, each ranging between 3,000-3,500 words, comprising an approximately 35,000-word corpus. I will describe the data in detail in [Chapter 2](#). The qualitative manual appraisal analyses revealed frequently selected instances of attitude by writers of country reports. Based on these results, the concordancer was used to search for these pre-selected vocabulary items, i.e. *node* words (see Hunston, 2002 for a detailed introduction) to generate concordance lines. As [Chapter 5](#) will present in detail, this study will use the ‘KeyWord In Context’ (KWIC) display (Luhn, 1960), which will visualise the search item in the centre of the display within their co-text. An example of a KWIC concordance display of the search term *risk** in AntConc is provided in [Figure 2.45](#) below. The asterisk in a concordance search term in AntConc indicates a search for different word forms, e.g. in this example, searching for *risk** will result in concordance hits including both singular and plural forms of the noun.



*Figure 2.45 KWIC concordance results for the search item *risk across the business country report corpus*

Despite some of its drawbacks (e.g. the difficulty of identifying invoked or non-verbal attitude) (Feng & O’Halloran, 2012; Su, 2016; Unsworth, 2015), Su (2016) points out the usefulness of complementing SFL analyses with corpus methods: “corpus investigation does not simply add quantitative information to the description of evaluation, but more importantly, it provides linguistic evidence for supporting, challenging and refining existing frameworks of evaluation” (p. 480). Searching for

frequent occurrences of certain attitudinal expressions (for example, *corruption*, *risk*, *opportunity*) enabled the identification of the relative frequency of attitudinal choices and their typicality across the whole data set. As **Chapter 5** will present in detail, successful writers of business country reports prefer primarily APPRECIATION choices over selections from the other ATTITUDE sub-systems, JUDGEMENT and AFFECT. Thus concordance analyses enabled the identification of the most crucial attitudinal resource taken up in undergraduate country reports in order to construe business reasoning.

As I will show in **Chapter 5**, interpersonal choices from the system of APPRAISAL and ideational choices from the system of IDEATION are frequently co-selected with choices from the systems of CONJUNCTION and PERIODICITY to enact prosodies of domination and saturation. Resources of CONJUNCTION play an important role in managing couplings and scaffolding the generic structure of long business reports. The resources of PERIODICITY are crucial for organising the logogenetic unfolding of the text and setting up prosodies of domination. I review these systems below.

2.3.2 CONNEXION

Alongside the role of the linguistic resources from the systems of APPRAISAL and IDEATION, reviewed above, the resources of the discourse semantic system of CONJUNCTION (Martin, 1992a; Martin & Rose, 2007, Chapter 4) were also found to be of crucial importance for writing successful business country reports. The system of CONJUNCTION was renamed as CONNEXION by Hao (2015) to distinguish the resources of conjunction at the level of lexicogrammar from the resources of the discourse semantic system as theorised by Martin (1992a). I follow her terminology below. From a logogenetic perspective they play an important role in positioning couplings and maintaining and shifting different kinds of prosodies throughout the texts.

As opposed to Halliday and Hasan's (1976) conceptualisation of cohesive conjunction as non-structural textual resources at the level of lexicogrammar (Martin, 1992a; Martin & Rose, 2007), at the level of discourse semantics CONNEXION is theorised as a system concerned with "interconnections between processes" (Martin & Rose,

2007, p. 115). As in this thesis I am interested in looking at how texts grow bigger than a page, I will also consider what Halliday (1985) treats as the **logico-semantic relations** between clauses at the level of discourse semantics. As reviewed above, Halliday (1985) categorises logico-semantic relations as **projection**, i.e. the reporting or quoting of speech or thought, and **expansion**, i.e. relating clauses by ‘extension’ (signaled by the ‘+’ sign), ‘elaboration’ (signaled by ‘=’) and ‘enhancement’ (signaled by ‘x’) (Halliday & Matthiessen, 2004). Following this conceptualisation, Martin (1995) shows these resources to be important “strategies for expanding smaller texts into larger ones” (p. 14). The notations used to signal these relationships are mapped out by Martin (1994, 1995) as in *Figure 2.46* below:

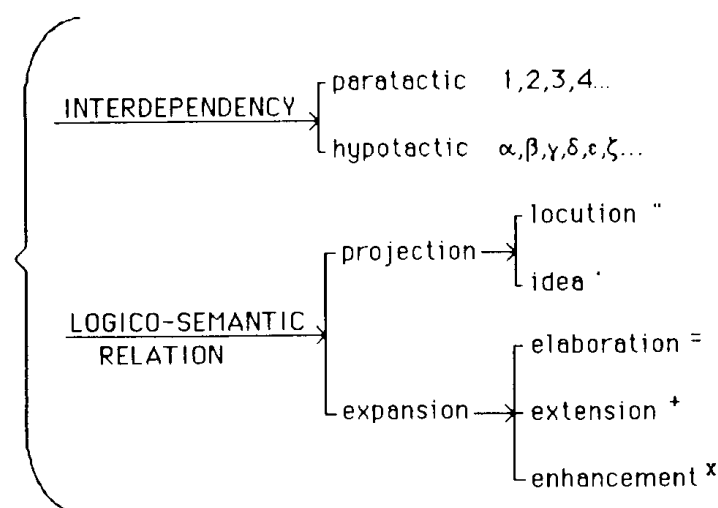


Figure 2.46 Clause complex relations (From Martin, 1995, p. 17)

CONNEXION functions in the logical, ideational as well as the textual metafunctions. Logically it is concerned with what Halliday (1985) treats as the logico-semantic relationship of interdependency between clauses at the level of discourse semantics. Ideationally, the sub-system of EXTERNAL CONNEXION contains a set of options that enable the logical organisation of field into activity sequences; in other words, relate events to the outside world. Textually, the sub-system of INTERNAL CONNEXION enables the logical organisation of texts and arguments into rhetoric; in other words, it is concerned with the text-time of scaffolding genres rather than the field-time of organising experience (Martin, 1992a; Martin & Rose, 2003/2007, Chapter 4). Both *external* and *internal* conjunctions are concerned with the same logical relations:

“**adding** units together, **comparing** them as similar or different, sequencing them in **time**, or relating them **causally** – as cause and effect, or evidence and conclusion”, termed as “**addition, comparison, time and consequence**” (Martin & Rose, 2003/2007, pp. 116-117, bold original). These can be realised implicitly or explicitly. These choices are represented as a system network in *Figure 2.47* below:

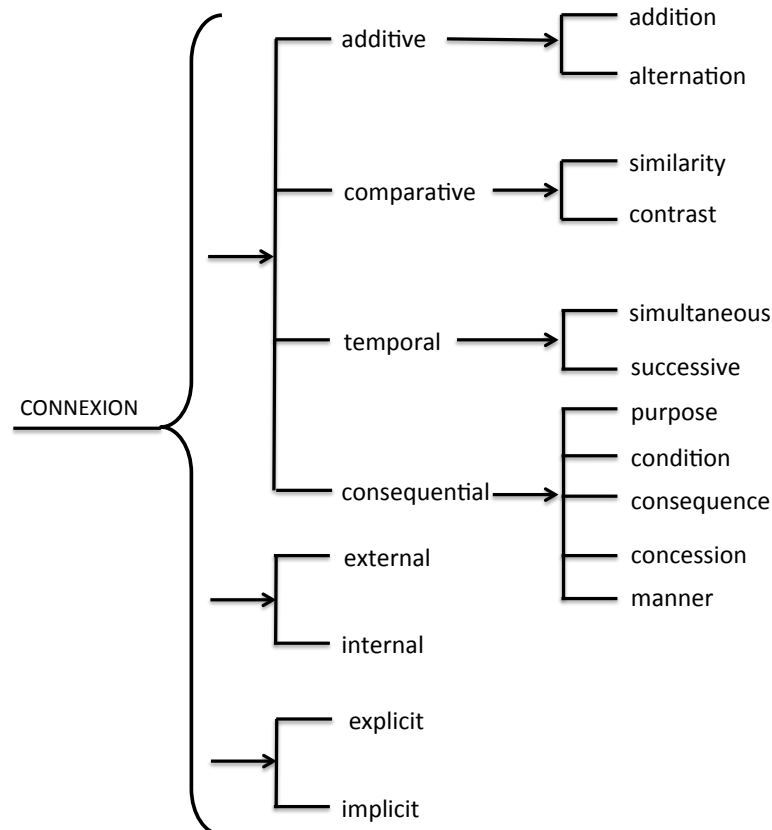


Figure 2.47 System network for resources of CONNEXION (Based on Martin, 1992a; Martin & Rose, 2003/2007)

Based on Martin (1992a, Chapter 4), conjunctive relationships in texts are conventionally represented by reticula as illustrated in *Figure 2.48* below. The figure shows the numbered clauses of the text in the centre, with *explicit* external conjunctive relationships modelled on the right hand side. If there are internal relationships, they are modelled on the left hand side. External additive relationships are modelled in the centre between the numbered clauses. *Implicit* conjunctive relationships are not usually modelled; if necessary, they can be indicated by the \emptyset symbol. Depending on whether conjunctions *presume* or *predict* messages, the direction of the arrows in the reticula can point forward or backward.

[Text 1 Canada Report]

1.1 To a firm such as ours [[seeking to market solar panels offshore]], Canada's appeal seems obvious.

2.1 Politically stable, | |

2.2 prosperous by conventional measures, | |

2.3 culturally similar to Australia, | |

2.4 **and** growing greener, | |

2.5 the business environment in Canada would certainly appear to be conducive [[to undertaking such an export venture]].

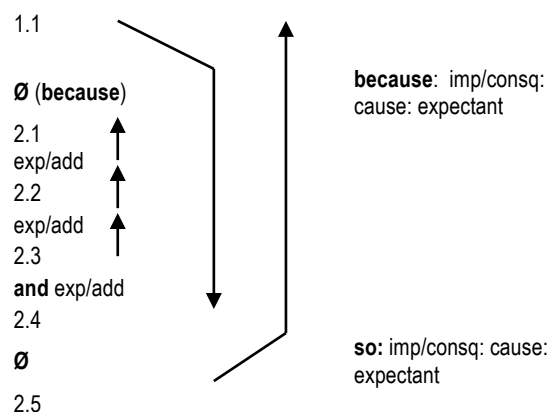


Figure 2.48 Reticula for conjunctive relations in Text 1 (example from the thesis data set)

Conjunctive relationships represented by reticula are an example of covariate structures. As mentioned in [Section 2.3.1.3](#) above, Martin (1992a) covariate structures are discourse structures (Martin, 1992a). In this kind of structure the elements are related by **semantic interdependency** (Martin, 1992a, pp. 23-26). This means that multiple elements may become mutually dependent on each other as a dependent element can itself be depended on. Martin (1992a, p. 25) illustrates this by the following examples, proportional to each other:

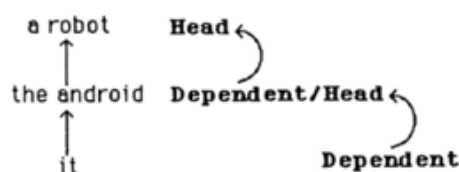
There was a robot : It looked bored ::

There was a robot : The android looked bored ::

There was a robot : This model looked bored

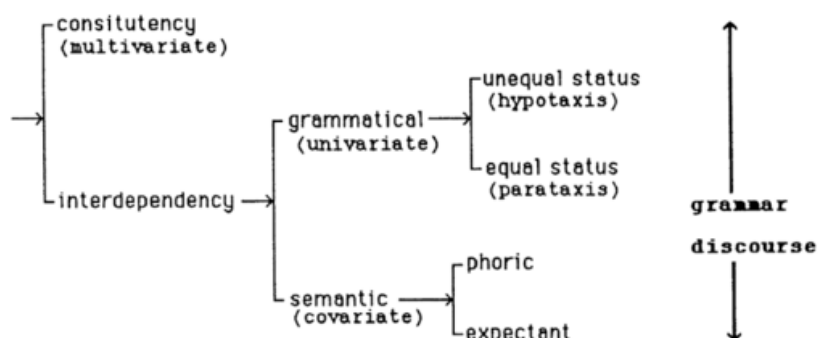
Here an opposition is set up between the participant *a robot*, whose identity is not recoverable, and the presuming elements *it*, *the android* and *this model*. These elements point back to the participant *a robot*, which takes on the function of Head on which the presuming elements become dependent. This sets up a cohesive chain in the

text, which enables a Dependent to become the Head in a potentially open-ended structure, as in *Figure 2.49* below.



*Figure 2.49 Semantic interdependency relations in a covariate structure
(From Martin, 1992a, p. 24)*

While Lemke (1988) refers to covariate structure as a “‘structuring principle’ rather than a kind of structure”, Martin (1992a) distinguishes covariate from univariate structure based on *interdependency* relationships: the *grammatical* kind is realised in univariate structure, the *semantic* kind in covariate structure (Martin, 1992a, p. 25). *Figure 2.50* contrasts interdependency structures to constituency-based multivariate structure:



*Figure 2.50 Types of grammatical and discourse structure
(From Martin, 1992a, p. 26)*

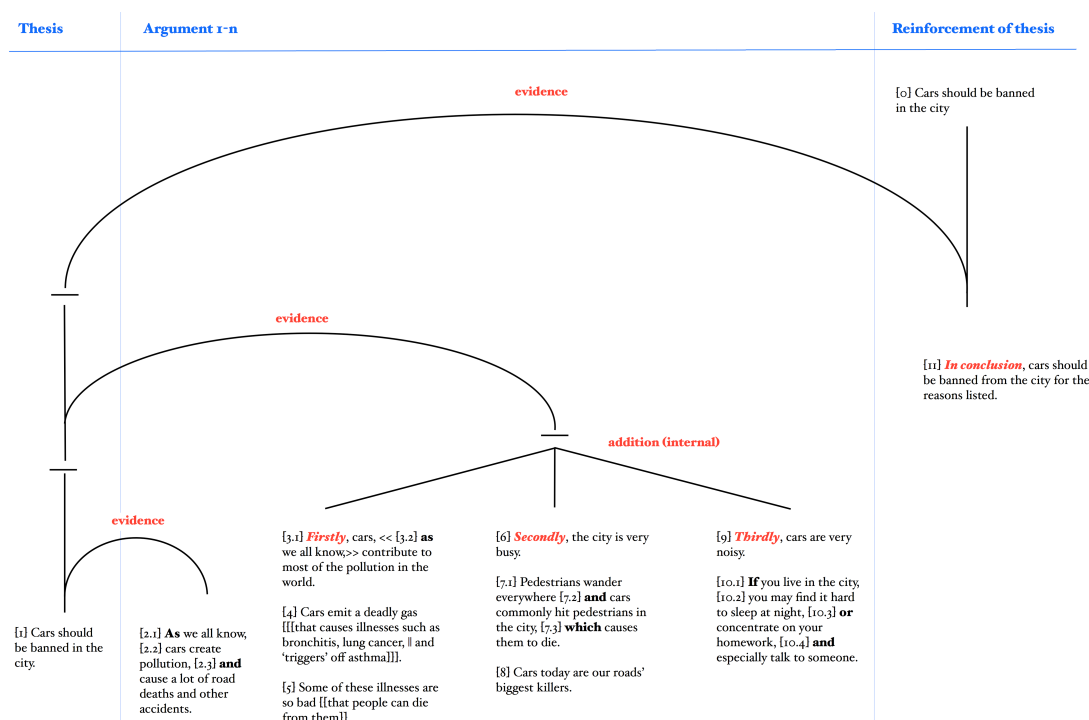
Martin (1992a) draws on covariate structures in order to theorise the discourse semantic structures of IDENTIFICATION, IDEATION and CONJUNCTION. Martin (in press a) reevaluates this work in the context of a discussion of questions arising concerning the point of origin of discourse semantic systems – making the point that covariate relations obtain between units of meaning of indefinite extent. In this thesis I model covariate relations of this kind in my description of CONNEXION in **Chapter 5**.

As an alternative approach to conjunction analysis, Rhetorical Structure Theory (RST) was developed to analyse rhetorical relations (i.e. logico-semantic relations) in texts (Mann, Matthiessen & Thompson 1992; Mann & Thompson, 1985, 1986, 1987; Matthiessen & Thompson, 1988). Matthiessen (e.g. 2014, 2015a, 2015b) has recently returned to RST for analysing rhetorical relations, having developed a ‘systemicised’ version (2014, p. 13) for describing text organisation.

RST treats texts as hierarchically organised around one (and sometimes more than one) dominant nucleus and its dependent satellites (Gruber & Muntigl, 2005). According to Mann and Thompson (1985, 1986, 1988) *a text is like ‘a hypotactic clause complex’*. Relevant to this thesis is their discussion of Nucleus-Satellite relations, which considers rhetorical relations in texts as analogous to hypotaxis in clause complexes (Martin, 1992a). More recently, Matthiessen (2015a) extends Halliday’s question to *clause complexes*:

One source of inspiration was Halliday’s (1981) question “how is a text like a clause?”. I asked the supplementary question “**how is a text like a clause complex?**”; and it seemed to me that a rhetorical-relational analysis of a text based on RST brings out the answer: **a text is a rhetorical complex** (p. 45, emphasis added).

This approach can be said to provide a snapshot of genre structure, rhetorical relations and clause complexing in a single representation. This is illustrated in *Figure 2.51* below based on the analysis of an analytical exposition genre (Matthiessen, 2014, p. 17).



*Figure 2.51 RST analysis of an analytical exposition
(From Matthiessen, 2014, p. 17)*

In terms of the complex texts which are the focus of my study, this kind of single representation does not provide sufficient detail. A more detailed critique of RST is beyond the scope of this thesis; as this thesis is concerned with different meanings distributed across different systems and strata, this study will follow Martin's stratified model of genre and discourse semantics and nuclearity principle (1996) as well as Halliday & Matthiessen's (1999) concepts of 'core' and 'peripheral' elements of text structure. In terms of orbital structure, I will explore the nature of central (i.e. nuclear) as well as peripheral elements of business country reports.

In my discussion of the co-patternings of discourse semantic systems in **Chapter 4** I will illustrate from logical and textual perspectives the role of the resources of CONNEXION in construing business decisions in and scaffolding the generic structure of undergraduate business reports. Another discourse semantic system concerned with the organisation of textual meanings is PERIODICITY, the focus of the following section.

2.3.3 PERIODICITY

Periodicity is concerned with information flow or the organisation of ideational and interpersonal meanings in texts according to points of prominence (Martin & Rose 2007, Chapter 6). These points of prominence are associated with ‘beginnings’ and ‘endings’, i.e. the ‘packaging’ of textual meanings in texts according to layers of information. Beginnings in texts are realised as higher-level Themes such as hyperThemes as macroThemes that ‘**predict**’. Endings are higher-level News such as hyperNews and macroNews that ‘**consolidate**’ and often further interpret information in a text (Martin & Rose, 2007, p. 197). The hierarchy of is illustrated in *Figure 2.52*:

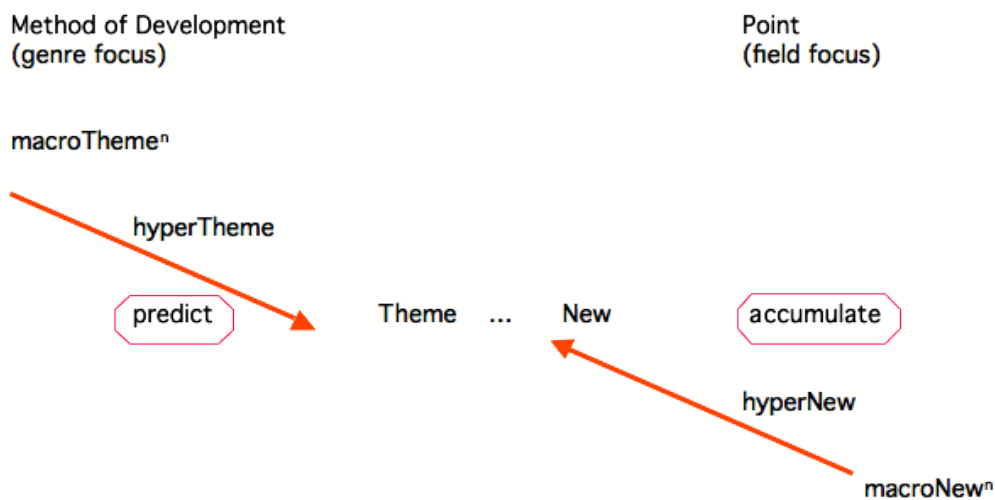


Figure 2.52 Hierarchy of PERIODICITY (From Martin, 2013)

In this thesis higher-level Themes and News are important to study as they often interact with couplings in the long business reports analysed for this project. As I will show in **Chapter 5**, higher-level Themes often predict factors from the external business environment that will form the basis of business decisions. Higher-level News on the other hand often consolidate the business reasoning presented in preceding sections of the text and contain the ‘point’, i.e. the business decision itself. As couplings often appear in higher level Themes and News, they also play a role in setting up dominating prosodies.

2.4 Exploring business reasoning in undergraduate business

The theoretical principles reviewed above helped situate this study in terms of current research in the field of SFL. Current research on business writing in higher education was examined from different disciplinary perspectives in order to identify the gaps in existing approaches. This thesis aims to build on and extend existing research and also provide a step towards filling the gaps identified above – namely, to provide a linguistic description of how business reasoning is construed through language in successful country reports – one popular assignment type – in the field of undergraduate business studies. In this section I will introduce the research questions underpinning the research and then provide a description of the data chosen for this study.

2.4.1 Research questions

As noted in **Chapter 1**, the motivation for undertaking this study stemmed from my involvement in a major business faculty intervention project (Stenglin, Welch & Piggott, 2011). The intervention was informed by the ‘Sydney School’ approach to teaching disciplinary knowledge and academically valued genres. During this intervention it became apparent that we lacked sufficient knowledge of the nature of long and complex business country reports that our second-year undergraduate students were expected to write.

Drawing on SFL as the theoretical framework for this study, in this chapter I have detailed linguistic issues related to the *analysis* and *representation* of ‘big texts’ and linguistic concerns such as the need to clarify analytical and descriptive criteria for identifying the macrogenres, elemental genres and embedded genres that make up long tertiary assignments. In particular, this thesis seeks to address the following questions:

- What is the nature of long business country reports in undergraduate business studies?

- From the perspective of particulate realisation, what kind of structure do these texts have, what kind of genres are they and how do they unfold?
- Why do writers of business reports draw on arguing genres primarily?

These questions will be answered in **Chapter 3** focusing on the generic structure of business country reports. At the level of discourse semantics, this thesis is concerned with how successful writers manage these long, complex assignments and how they demonstrate business reasoning. In studies focusing on evaluation, specifically realisations of attitude and stance, there seems to be an overwhelming focus on the study of interpersonal meanings at the expense of ideational meanings. In **Section 2.3.1.1** I pointed out the lack of sufficient focus in appraisal analyses on the study of targets; however, as **Chapter 4** will demonstrate, the study of ideational meanings is crucial for understanding how meanings are coupled and how the targets of evaluation form the basis for the study of disciplinary knowledge in undergraduate business. In this thesis I aim to build on the existing model of coupling theory in SFL in order to take the first step towards building typologies of couplings. Specifically focusing on coupling of interpersonal and ideational meanings, this thesis also seeks to explore how business report writers evaluate relevant factors from the external environments businesses operate in. The central research questions driving this query are:

- Why do successful writers draw on the resources of coupling to construe ‘business decisions’ at the level of discourse semantics in country reports? Why are certain meanings coupled and how do they construe values and business reasoning?
- Which interpersonal and ideational resources play a fundamental role in construing couplings, i.e. which specific grammatical structures construe couplings at the level of the nominal group, within the clause, the clause complex and across sentences? What set(s) of linguistic criteria can we establish to identify the different types of grammatical structure that construe couplings?
- What role do couplings play in scaffolding the generic structure of these texts? How do linguistic resources from different discourse semantic systems co-pattern into business rhetoric?

Chapter 4 will provide detailed answers to these questions, with a particular focus on couplings that provide the basis for demonstrating the process of business *decision-making* at the level of discourse semantics. Another issue to be addressed in this thesis concerns the significance of couplings in the linguistic construction of persuasive rhetoric. In **Section 2.3** of this chapter I reviewed the discourse semantic systems relevant for the purposes of this study, namely the systems of APPRAISAL, IDEATION, CONJUNCTION and PERIODICITY. As noted in **Chapter 1**, studies focusing on persuasion and rhetoric seem to privilege APPRAISAL at the expense of other discourse semantic systems. It is therefore necessary to further explore the crucial role that the co-patterning of different discourse semantic resources plays in construing rhetoric. **Chapter 5** will provide answers to the following questions in relation to this issue:

- What is the function of attitude choices in couplings? What are the *most typical* resources for the construal of business decisions and what are the implications of these selections for ‘*making a point*’ in undergraduate business?
- Why do successful writers construe different types of cause-effect relationship in business country reports? What role do couplings play in the construal of cause-effect language?
- From the perspective of prosodic structure, how do the co-patterning of discourse semantic resources interact to form arguments and construct the three major types of rhetorical move found in the business country reports?

Chapter 6 will discuss the pedagogical implication of the findings presented in the analytical chapters of this thesis.

- What are the implications of these findings from a pedagogical perspective?
- How can these findings inform future academic literacy support and business writing instruction programs?

In order to achieve the objectives of this research, I will start by exploring text structuring principles in relation to particulate realisation in the undergraduate

business country reports. I will draw on the concepts discussed in this chapter, particularly multivariate and univariate, orbital and serial structures as well as the issue of complexing versus embedding. I will then draw on the different discourse semantic systems introduced in this chapter to reveal patterns of interactions with couplings. In the following section, I comment on the texts selected for my analyses as well as the major assignment task in the unit *Business in the Global Environment*, i.e. the country report.

2.4.2 Data and text selection

The data for this project consists of student texts as well as the grades students were awarded. In order to explore the linguistic construction of business reasoning and decision-making, it was essential to select as data texts which are representative not only of the type of genre or genres valued in undergraduate business but also of the discourse semantic resources that are instantiated. As mentioned in [Section 2.2.2](#) above, the unfolding of texts is termed logogenesis, which is the shortest timeframe of semogenesis. The texts analysed in this thesis are studied from a logogenetic perspective on the instantiation hierarchy.

The texts analysed for this study were collected from a second-year undergraduate unit, *Business in the Global Environment (CISS2001)*, which was a core interdisciplinary unit within the business faculty at a large metropolitan Australian university, as introduced in [Chapter 1](#). These student texts are written responses to the major assessment task of the unit: a 3,000 to 3,500-word country report. The aim of the assignment was to assess students' problem-solving and analytical skills; as a high-stakes, complex 'real-world' assignment, the country report contributed 40% to the students' final grade.

After gaining ethics approval for the project from the Human Research Ethics Committee, 64 students consented formally to their country report assignments being collected and analysed. However, due to the time-consuming nature of fine-grained SFL-informed manual text analyses (including detailed genre and discourse semantic

analysis; see Appendices) and the length of the texts, a decision was made to narrow the data set down to only ten country reports.

Another reason for choosing these ten texts was the need to identify the complex literacy demands faced by students in writing the country report: few students seemed to possess the highly sophisticated literacy skills necessary to tackle the challenges of writing a successful country report, indicated by the high failure rate in *CISS2001*. Thus, in order to study *successful* demonstrations of business reasoning, only High Distinction (HD) undergraduate student assignments were chosen for the purposes of this thesis. Another decision had to be made with regards to the selection of particular HD texts for analysis. All grades awarded to student country reports were exported into an Excel spreadsheet and ordered from highest to lowest. The ten highest scoring assignments were then chosen for analysis. In this project I only focus on identifying the genre structure and recurring linguistic patterns of student texts that demonstrate effective business reasoning (indicated by their high grades). For this reason, all identifying details of students were removed and no distinction was made between local and international high-scoring student texts. The texts were then numbered as Texts 1 to 10 and renamed based on the name of the target market selected for analysis, e.g. Canada Report, China Report, and so on.

In the country report task, students were assigned a business scenario (see *Table 2.15*), based on which they were to select a country as a market and to research relevant aspects of this market using the PEST³³ framework, i.e. the external business environments of the selected market. After analysing both the opportunities and risk factors present in four of these environments (PEST), students were expected to prepare a formal, complex report for their company's CEO. Finally, students were expected to conclude their analyses with a logical recommendation that weighed up the opportunities and the risks. The aim of this recommendation was to justify the final business decision presented in the country report: whether to continue researching the chosen country as a promising market or to eliminate it from the company's list of potential markets to invest in.

³³ As reviewed in Chapter 1, PEST(LE) refers to the political, economic, socio-cultural and technological (and legal and ethical) external environments in which businesses operate.

This individual assessment task is based on the following scenario: you are working for an Australian manufacturer of solar panels that is currently evaluating the possibility of selling its products in offshore markets. You are part of the team that is preparing a background study and strategic plan for the company's CEO. Currently, team members are screening different foreign markets for their potential.

You have been assigned the task of preparing a report on the opportunities and the risks presented by the political, economic, social and technological environment of one country (you are free to choose which country you wish to research and write about). Your report should focus on those dimensions of the country business environment that you believe to be most relevant to a company such as yours which is in the renewable energy industry. You should conclude with a recommendation on whether your selected country should be a) further analysed by your team for its market potential or b) eliminated from the list of markets under consideration. (CISS2001 UoS 2008: p. 5).

Table 2.15 Country report scenario

2.4.3 Concluding remarks

This chapter has situated this thesis in a systemic-functional theoretical framework. In the following analytical chapters I will deploy the relevant theoretical dimensions of SFL in order to explore the nature of the long business country reports described above and the salient linguistic resources that scaffold these big text structures. As will be shown in **Chapter 3**, the genre of this complex task is an elemental analytical discussion, whose multivariate structure unfolds in stages. Further, I will show that the complexity of these texts is built through multiple layers of embedding. The exploration of discourse semantic systems will be discussed in **Chapters 4 and 5**. The results of the analyses of these successful business country reports will be especially relevant for the development of future effective pedagogical interventions. Making the basis of achievement in business studies explicit, i.e. how these 'big texts' work, is necessary for providing effective modelling and scaffolding in teaching academic literacy. The pedagogic implications of this thesis will be further discussed in **Chapter 6**.

CHAPTER 3: The generic structure of business country reports

3.0 Introduction

This chapter will investigate the generic structure of country reports in the field of business from the perspective of Halliday's types of structure (1965/1981, 1979/2002) and SFL genre theory (Christie & Martin, 1997; Martin, 1992a, 2012b; Martin & Rose, 2008). Text structuring principles and the realisation of particulate, prosodic and periodic structures will be explored by drawing parallels with the grammar of the clause at the stratum of genre. The texts analysed for this study are ten approximately 3,000 to 3,500-word country reports prepared for the second-year undergraduate core interdisciplinary unit *Business in the Global Environment (CISS2001)* at a metropolitan Australian university. The findings of this study demonstrate that despite their length these texts do not unfold in a univariate serial structure as genre complexes. Instead, they are genre simplexes whose multivariate structure unfolds in stages. This chapter will also show that embedded genres, while considered a "relatively rare phenomenon" in current SFL research (Martin, 2012b, p. 002), play a fundamental role in building the 'depth' of business country reports and enabling texts of this length to grow bigger than a page through multiple layers of embedding.

As already reviewed in **Chapter 2**, the extensive volume of SFL work on elemental genres students are required to write throughout their primary and early secondary education shows that most of these texts fit neatly on half a page to a page (Martin, 1994; Martin & Rose, 2008). However, tertiary students are generally required to write much longer texts stretching across many pages. Because writing such long assignments seems to be a challenging task for most students, as indicated by the large number of students failing the business country report (the major assessment task of *CISS2001*), it stands as an important area for research despite the significant challenges associated with re/presenting 'big texts' and the time-consuming nature of manual analysis. In order to understand the nature of these long business reports, the aim of this chapter is two-fold: 1) it will revisit Martin's question of how texts "get bigger than a page" (1994, p. 29), and 2) it will explore current understandings of the occurrence of embedded genres as "a relatively rare phenomenon" (Martin, 2012b, p.

002) by showing that these business reports build their depth by multiple layers of embedded genres in their generic stages.

This chapter is divided into three major sections. [Section 3.1](#), based on Halliday's types of structure (1965/1981, 1979/2002), will examine from an ideational perspective the **particulate structure** of the business country reports analysed in this study. As discussed earlier in [Chapter 2](#), Martin's work on approaching the analysis of 'big texts' (1994, 1995, 1996) has established that longer texts grow bigger than a page through either *complexing* or *embedding*. When texts grow bigger through *complexing*, i.e. serial expansion, they combine elemental genres into genre complexes or macrogenres (Christie, 1997, 2002; Jordens & Little, 2004; Jordens, Little, Paul & Sayers, 2001; Martin, 1994, 1995; Martin & Rose, 2008; Muntigl, 2004, 2006). These macrogenres, whose elements are linked together in a sequence by the logico-semantic relationships of expansion and projection (Halliday & Matthiessen, 2004), unfold in a univariate serial structure. However, based on the analyses of texts chosen as data in this study this chapter will argue that not all 'big texts' are macrogenres made up of elemental genre complexes. Since texts can also grow bigger through *embedding*, this thesis will explore the nature of embedded genres in building long texts. Analogising from grammar and the structure of the clause, [Section 3.1](#) will illustrate (based on analyses of High Distinction country reports) that despite their length some 'big texts' are genre simplexes whose 'depth' is built by embedding elemental genres as stages in a multivariate structure. Through examining how long business reports construe '*depth*' *through embedding* rather than building complexity through serial expansion in a univariate structure, this thesis aims to arrive at a linguistically theorised understanding of the process of decision-making in business. In this thesis I seek answers to the following questions:

- What is the nature of long business country reports in undergraduate business studies?
- From the perspective of particulate realisation, what kind of structure do these texts have, what kind of genres are they and how do they unfold?
- Why do writers of business reports draw on arguing genres primarily?

The subsequent section, **Sections 3.2**, will take Martin’s (1996) criticism of the inadequacy of constituency-based representations of particulate structures into consideration to complement the discussion with a presentation of the business country reports from a complementary **orbital** perspective on particulate realisation. This chapter will conclude in **Section 3.3** by discussing the nature of texts of the length of undergraduate business country reports -- thereby bringing these complementary text structuring principles together with a focus on **axial relations**. By complementing and extending existing research on macrogenres this chapter aims to fill the gaps in the theoretical conceptualisation of the “nature of big texts” (Martin, 1994, 1995, 1996) in Systemic Functional Linguistics.

3.1 Ideational perspective: particulate realisation

While this section will present the generic staging of the business country reports analysed for this study from an ideational perspective focusing on particulate realisation first, it is important to clarify that although genre systems are not metafunctionally organised, they are realised *through* different types of structure (Martin, 1996). As reviewed in **Chapter 2**, particulate orbital and serial structures realise ideational meanings, prosodic structures realise interpersonal meanings and periodic structures realise textual meanings (Martin, 1996), as illustrated by *Figure 3.1 below*:


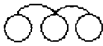


Types of structure		Mode of meaning
particulate		ideational meaning
- orbital [mono-nuclear]		- experiential
- serial [multi-nuclear]		- logical
prosodic		interpersonal meaning
periodic		textual meaning

Figure 3.1 Types of structure and modes of meaning (From Martin, 1996, p. 62)

Particulate realisation is concerned with a constituency-based perspective on text structuring principles (Martin, 1995). It is this constituency representation for experiential meanings realised by multivariate structures that is the focus of this section.

As mentioned in **Chapter 2**, two of the ten texts analysed for this thesis, the Canada Report and the China Report, were used as models of exemplary business country reports in an academic literacy intervention project in the old Bachelor of Commerce degree program at the Faculty of Economics and Business at a metropolitan Australian university (Stenglin, Welch & Piggott, 2011). According to the business lecturers and tutors involved in this intervention, the structure of the Canada Report was considered to be the ‘better’ model and therefore the preferred option for an exceptional country report (Stenglin, 2010). For this reason, the generic structures of the Canada and China Reports will be illustrated in full in **Chapter 3**, while the other eight HD texts will be reviewed from a synoptic perspective to describe overarching patterns and generic structure potential.

3.1.1 The generic structure of the Canada Report

As already argued in **Chapter 2**, not all long texts grow bigger than a page by combining elemental genres into genre complexes (i.e. macrogenres unfolding in a univariate serial structure). The following presentation aims to demonstrate by analogising from grammar and the structure of the clause that the Canada Report is a genre simplex whose ‘depth’ is built by embedding elemental genres as stages in a multivariate structure. Generically the Canada Report is an elemental analytical discussion. Its social purpose is to evaluate the viability of investment in the established Canadian solar energy market. As illustrated by the constituency representation in *Figure 3.2* below, this text achieves its social purpose by moving through seven distinct stages: the **ISSUE**¹, **BACKGROUND**, four **PERSPECTIVES** and a final **RESOLUTION**, whose sequence of realisation is represented by the caret sign (^):

¹ **Bold CAPITAL** letters will be used throughout this thesis in order to distinguish the stages of the superstructure of the country reports from the lower-order multivariate stages.

**ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^
PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION**



Figure 3.2 Constituency representation of the generic structure of the Canada Report

The opening **ISSUE** stage functions to put forward a general proposition as to whether the Canadian energy market is conducive to producing and selling solar panels for the Australian company conducting the market analysis. It also previews the various relevant factors² selected from the Canadian external business environments. These external business environments, referred to as the PEST framework in business studies (i.e. the *political, economic, socio-cultural, technological* environments that businesses operate in and are affected by), will be analysed in the subsequent **PERSPECTIVE** stages. Then, the following **BACKGROUND** stage, which occurs only in the Canada Report in this data set, functions to narrow down the scope of the market analysis by clarifying working definitions and issues particularly relevant for the company. The following **PERSPECTIVE** stages then present and weigh up or ‘resolve’ the opportunities and risks identified in the Canadian business environment. First, the *technological* environment of business is evaluated in the **PERSPECTIVE 1** stage. Relevant *technological* factors are selected and evaluated from the PEST framework to persuade the reader that despite the opportunities, the technology of Canada’s existing energy infrastructure is going to present a risk to the Australian firm because of Canada’s geographical location and the availability of inputs and net metering. In the following **PERSPECTIVE 2** stage *economic* factors are evaluated as opportunities or risks presented by the *economic* environment to argue that Canada’s economy is strong but its market structure presents a risk for the company. The **PERSPECTIVE 3** stage discusses factors in the *political* environment to suggest that there are some opportunities for investment, however, Canada’s political landscape will present a risk to the company because of federalism, taxation and bureaucracy. In the last

² In this thesis ‘factor’ in lower case will refer to components of the PEST framework to distinguish ‘Factor’ with a capital F as a stage in a factorial explanation in SFL.

PERSPECTIVE 4 stage, *social* factors are analysed from the *socio-cultural* environment of the PEST framework. This stage concludes that Canada's culture presents opportunities because of its green culture and cultural similarity, but this is undermined by Canadian's 'passion for bronze', i.e. their satisfaction with coming second or third. These analyses of opportunities and risks identified in the external business environments and presented in the four **PERSPECTIVES** are then summed up and reviewed in the canonical conclusion and recommendation section of country reports, the final **RESOLUTION** stage. As it will be shown in [Section 3.2](#) from an orbital perspective, this stage also functions as the Nucleus, i.e. the most important core functional element, of the superstructure of the Canada Report. It concludes the text with the conclusive recommendation that the company should delay investment until the risks identified in the market analysis have been eliminated. Similarly to the Position stages of traditional analytical discussions (Coffin, 1996), this final recommendation is expected to flow logically from the line of 'argumentation' that was put forward in the previous **PERSPECTIVE** stages.

From a metafunctional perspective, the description above privileges the ideational meanings created in the text by showing and naming the functionality of the 'parts' that make up the generic structure of the Canada Report. The remainder of this chapter will show that each stage of the superstructure of the Canada Report is realised by an elemental genre, which functions as a multivariate stage. Focusing on this ideational perspective then, these stages of the analytical discussion can be represented as functional constituents, or 'parts of a whole' – a realisation pattern associated with the experiential metafunction (cf. Halliday, 1979/2002; Martin, 1994, 1995, 1996). As reviewed in [Chapter 2](#), when an elemental genre is downranked to the level of a genre stage in a multivariate structure, it becomes an embedded genre (indicated by the double brackets similarly to the representation of embedded clauses). As in *Figure 3.3* below, the **ISSUE** and **RESOLUTION** stages are realised by a [[challenge]] genre, the optional **BACKGROUND** is provided by a [[descriptive report]], **PERSPECTIVE 1** is realised by an [[analytical exposition]]; the remaining three **PERSPECTIVES** are realised by [[analytical discussion]] genres:



Figure 3.3 Embedded genres realising the generic structure of the Canada Report

In **Chapter 2** I have raised the issues of *analysis* and *representation* when analysing ‘big texts’. It is the aim of this chapter to prove why an expansion reading of these long texts related to particulate structure as presented in Martin (1994, 1995) and Martin and Rose (2008) would be insufficient to understand the nature of these long business reports. An expansion reading could interpret the Canada Report for instance as a genre complex and therefore a macrogenre. Modelling along these lines we could represent the Canada Report as a complex of genres made up of various arguing genres and a report genre. If this were the case, then these genres would be in an interdependency relationship with each other, unfolding in a univariate serial structure. This means that the whole Canada Report could be represented as a sequence of genres, which are linked together by the logico-semantic relations of ‘extension’ signaled by the ‘+’ sign, ‘elaboration’ signaled by ‘=’ and ‘enhancement’ signaled by the ‘x’ sign (Halliday & Matthiessen, 2004), as shown in *Figure 3.4* below:

challenge (Introduction)

= elaboration: specifying and explaining

descriptive report (Scope and Exclusions)

+ extension: adding further arguments

analytical exposition (Technological Factors)

+ extension: adding further arguments

analytical discussion (Economic Factors)

+ extension: adding further arguments

analytical discussion (Political Factors)

+ extension: adding further arguments

analytical discussion (Social factors)

x enhancement: qualifying: conditions

challenge (Conclusion and Recommendation)

Figure 3.4 Expansion reading of the Canada Report

However, as the remainder of this chapter will argue, the stages of the Canada Report are not in a part/part relationship in the univariate serial structure of a genre complex, but rather function as parts in a part/whole relationship in a multivariate structure of a genre simplex. As the presentation below will show, in the grammar of the clause the grammatical resource that makes it possible for a ‘whole’ to become a ‘part’ is down-ranking or embedding. As reviewed in **Chapter 2**, through embedding the meaning potential of a multivariate structure can be continuously renewed or opened up. Thus, even though existing work on embedded genres has so far theorised that embedded genres are “a relatively rare phenomenon” (Martin, 2012b, p. 002), this chapter will argue that if a clause can contain several embedded clauses, then an elemental genre can also embed within itself multiple elemental genres that have been down-ranked to the level of a genre stage. As the following section will demonstrate, these stages themselves could be realised by another down-ranked elemental genre, and this

process will result in multiple layers of embedding that build the depth of genre simplexes such as the Canada Report.

3.1.2 Deconstructing the Canada report stage by stage: multivariate staging

The kind of constituency representation exemplified by the structure of the Canada Report above implies a 'whole', realised by the analytical discussion of the Canada Report that can be 'broken down' into its 'parts', or stages. As noted in **Chapter 2**, Martin's early work on macrogenres (1994, 1995) reveals that the functional segments of a genre could in fact be construed as embedded 'wholes'. In other words, a genre, which is a whole in itself, could potentially realise a stage in a genre and become one of its parts or constituents. As it will be demonstrated below, this kind of embedding happens in the business country reports analysed in this study – where, for instance, a challenge genre is made to function as a stage in an analytical discussion. The fact that this strategy of drawing on embedding as a resource makes it possible to continually renew or reopen the meaning potential of a long text is nothing new. However, in current SFL research embedded genres are still considered a “relatively rare phenomenon” (Martin, 2012b, p. 002). In fact, according to the findings of this thesis, they in fact play a fundamental role in building the 'depth' of business country reports which grow bigger than a page through multiple layers of embedded genres occurring in each of the stages of the superstructure, with some stages consisting of as many as four layers of genres. The following section will illustrate how the stages of the analytical discussion of the Canada Report draw on embedding to expand their meaning potential and achieve their social purpose (see Appendix A for the detailed genre analysis of the Canada Report).

3.1.2.1 Defeating a position: embedded *[[challenge]]* in the *ISSUE* stage of the *Canada Report*

As already introduced above, the **ISSUE** stage is concerned with the proposition as to whether the Canadian energy market is conducive for the company as far as producing and selling solar panels is concerned. This stage provides the section of the country report traditionally referred to as the introduction. As illustrated by the constituency representation shown in *Figure 3.5* below, this stage is realised by a

canonical elemental challenge genre. A challenge genre moves through three obligatory stages to achieve its social purpose: a **Position challenged**, a **Rebuttal Arguments** and an **Anti-thesis**. From a top down perspective, it is clear that these stages are ‘parts’ of a whole, and together they construe the whole of an elemental challenge genre.

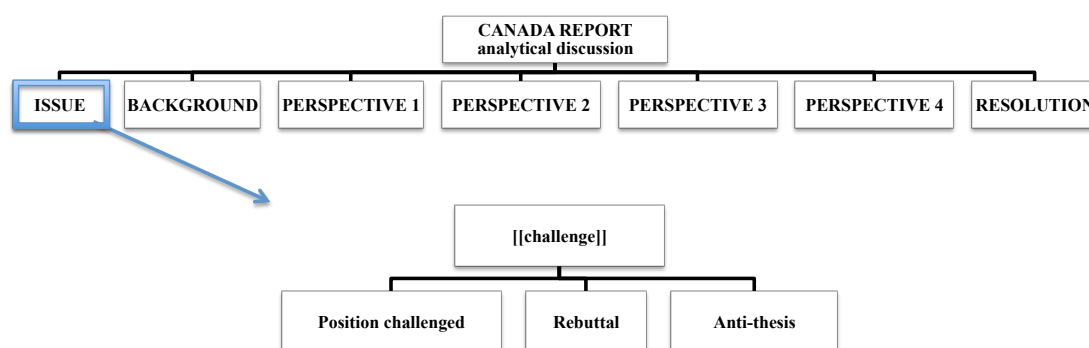


Figure 3.5 An embedded [[challenge]] providing the ISSUE stage of the Canada Report

However, it can be seen from the figure that this challenge genre does not stand on its own in a sequence of genres; rather it becomes a part of the superstructure of the whole Canada Report. By having been down-ranked to the level of a genre stage, the ‘whole’ has become a ‘part’; this means that it now functions as the **ISSUE** stage of the analytical discussion that realises the Canada Report. In other words, by taking the place of a ‘part’ it has become an embedded [[challenge]] genre functioning as a multivariate stage. *Figure 3.5* above outlines this part/whole staging as a multivariate structure where each part functions to play a different role (as signalled by the multivariate labelling). Experientially then, it can be concluded that the embedded arguing [[challenge]] genre realises the **ISSUE** stage; it develops the ‘depth’ of the stage in order make room for another layer of experiential meaning potential.

It is important to mention that compared to a canonical analytical discussion genre that moves directly through various Side or Perspective stages (Martin & Rose, 2008) to reach a final Resolution stage, the **ISSUE** stage of the Canada Report does not merely introduce an issue. After identifying potential opportunities and risks, it also previews the final recommendation by evaluating how likely the risks are; and it concludes that the barriers and limitations outweigh the opportunities. As shown in

Table 3.1 below, the **Position challenged** stage presents the initiating proposition that the Canadian market is conducive for investment. This initial position is however challenged in the following **Rebuttal Arguments** stage where a list of factors are presented and negatively evaluated by the writer. This then sets the stage for the final **Anti-thesis** stage whose aim is to persuade the reader that investment in the Canadian electricity market would present more risks to the Australian company than opportunities.

ISSUE [[challenge]]	Text 1. Introduction
Position challenged	To a firm such as ours, seeking to market solar panels offshore, Canada's appeal seems obvious. Politically stable, prosperous by conventional measures, culturally similar to Australia, and growing greener, the business environment in Canada would certainly appear to be conducive to undertaking such an export venture.
Rebuttal Arguments	In spite of the apparent strengths of the Canadian marketplace, however, further inspection reveals the difficulties our firm would face in trying to establish a significant presence there. The Canadian solar energy market is subject foremost to challenges derived from its location and existing energy infrastructure. With the Canadian electricity market dominated by hydroelectricity, this low cost source will prove the greatest impediment to the uptake of photovoltaic (PV) panels. Even if electricity were priced in a way that at best took into account negative externalities, or at a minimum generally increased prices, the differences in regional electricity markets would preclude consistent returns for marketers of PV panels. Largely driving these regional differences are a patchwork of cumbersome legislation and rules.
Anti-thesis	This report will explore the political, economic, social and technological opportunities and limitations of producing and selling PV panels in Canada, based on assumptions and limitations set out below. Its ultimate conclusion is that the market potential offered by Canada is outweighed by barriers to profitable operations in the PV industry – a function of market capture by other cheaper, renewable sources, regulation, and the bureaucratic peculiarities of Canadian federalism.

Table 3.1 The ISSUE stage in the analytical discussion of the Canada Report

Thus it is through the structure of a [[challenge]] that an initial favourable position on investment is *defeated*³ by a negative assessment of the Canadian marketplace. As the following discussion will show in more detail, setting up a 'preferred' position that will be further scaffolded throughout the **PERSPECTIVE** stages is one of the

³ The linguistic resources at play in setting up a *defeating* rhetoric will be presented in detail in **Chapter 5**.

features that all High Distinction texts in this data set share. *Table 3.2* below reviews the generic structure of this **ISSUE** stage:

GENRE STAGES	[[embedded genre stages]]
ISSUE	[[challenge]] Position challenged Rebuttal Arguments Anti-thesis

Table 3.2 A synoptic overview of the [[challenge]] providing the ISSUE stage of the Canada Report

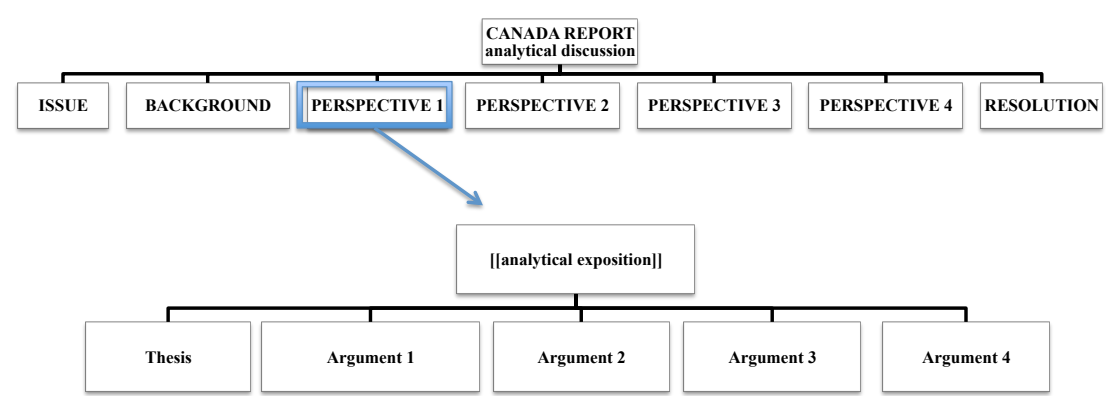
This opening **ISSUE** stage of the Canada Report is followed by a **BACKGROUND** stage, which is realised by an embedded [[descriptive report]] genre (a subtype of elemental report genre). Its social purpose is to narrow down the scope of the market analysis by clarifying working definitions and issues relevant for the company. As this non-obligatory **BACKGROUND** stage only occurs in the Canada Report, sandwiched between the **ISSUE** and the **PERSPECTIVE 1**, discussion of its role in the overall superstructure of the Canada Report will be pursued in [Section 3.3](#) below (in relation to generic structure potential).

The opening **ISSUE** and the **BACKGROUND** stages of the Canada Report are followed by four **PERSPECTIVE** stages before reaching the final **RESOLUTION**. As the discussion below will show, **PERSPECTIVE 1** is realised by an embedded [[analytical exposition]] genre, while the remaining three **PERSPECTIVE** stages in the Canada Report instantiate embedded [[analytical discussion]] genres. As reviewed in [Chapter 2](#), canonical expositions scaffold a position through a number of arguments, which may or may not be followed up by the reiteration of the thesis promoted by the exposition (Coffin, 1996; Martin & Rose, 2008). Analytical discussions on the other hand typically debate an issue from two or more points of view, which are organised into generic stages called Sides (Martin & Rose, 2007) or Perspectives (Coffin, 1996); among these one side will be typically more dominant (Martin & Rose, 2008). This study found that the **PERSPECTIVE 1** scaffolds an anti-investment position through the staging of an exposition. The generic staging of the remaining three **PERSPECTIVES** scaffolds the initial proposition put forward in the **ISSUE** and reinforced in the final **RESOLUTION** stage to ‘direct’ the reader

towards the ‘preferred’ final position – namely that the barriers presented by the Canadian external business environment outweigh the opportunities for investment. The following section will discuss in detail how the **PERSPECTIVE** stages draw on elemental arguing genres to build the depth of genre simplexes that are significantly longer than a page.

3.1.2.2 Promoting a position through multiple embedding: Building ‘depth’ in the PERSPECTIVE 1 stage of the Canada Report

As already explained above, the social purpose of the **PERSPECTIVE** stages is to discuss and weigh up the opportunities and barriers presented by the Canadian external business environment for investment. Specifically, in the first of these stages, **PERSPECTIVE 1**, a range of relevant *technological* factors selected from the PEST framework are analysed. As shown in the constituency representation in *Figure 3.6* below, this stage is realised by an embedded *[[analytical exposition]]* genre, which moves through five multivariate stages to achieve its social purpose (a **Thesis** and four **Argument** stages):



*Figure 3.6 An *[[analytical exposition]]* providing the P1 stage of the Canada Report*

As in *Table 3.3* below, the analysis of technological factors shows that despite the opportunities presented by the Canadian solar energy market, the technology of Canada’s existing energy infrastructure, far north geographical location and the availability of inputs and net metering are going to present risks for investment. This position is put forward in the opening **Thesis** stage of **PERSPECTIVE 1**. The subsequent four **Argument** stages promote the writer’s anti-investment stance on the

viability of investment potential in the Canadian solar energy market. **Argument 1** shows the negative impact of the lack of sunlight on the Australian company's entry into the Canadian solar energy market. **Argument 2** argues that there will be limited market potential for PV because of an abundance of natural resources, which will prove to be an even greater risk for the Australian company's operations than Canada's geographical location. **Argument 3** highlights the problem that despite Canada's high quality workforce, the requirement for a specialised engineering license will be a risk for the company. The final stage, **Argument 4**, supports the position against investment by arguing that the potential for PV afforded by net metering would be outweighed by the prohibitive costs of installing additional meters.

analytical exposition	Text 3. Technological factors
Thesis	despite the opportunities, the technology of Canada's existing energy infrastructure is a risk because of geography and availability of inputs and net metering
Argument 1	there will be limited market potential for PV because of Canada's far north location
Argument 2	there will be limited market potential for PV because there is an abundance of natural resources, which will prove to be an even greater risk
Argument 3	despite Canada's high quality workforce, the requirement for a specialised license will be a risk for the company
Argument 4	the potential for PV afforded by net metering is outweighed by prohibitive costs

Table 3.3 The PERSPECTIVE 1 stage of the Canada Report: an analytical exposition

In the following sections, a closer look at each **Argument** stage will show that they are in fact construed by elemental arguing genres. **Argument 1** is realised by an analytical discussion genre, which achieves its social purpose by moving through three stages, an Issue and two Perspectives:

Issue ^ Perspective 1 ^ Perspective 2

By functioning as 'parts', the three multivariate stages introduced above construe the 'whole' of an elemental analytical discussion genre – as captured by the constituency

representation in *Figure 3.7* below. Accordingly, following the convention of representing embedded clauses with double brackets in grammar, the embedded arguing genres at the bottom layer that provide the **Argument** stages are represented as [[[[analytical discussion]]]] for instance; and, the analytical exposition realising the **PERSPECTIVE 1** is represented as [[analytical exposition]]. Thus, this double bracketing indicates the status of each embedded genre in the overall superstructure: the more brackets, the lower the order of the genre in the overall multivariate superstructure. Perspective 1 discussed above then is a second-order embedded [[[[analytical discussion]]]].

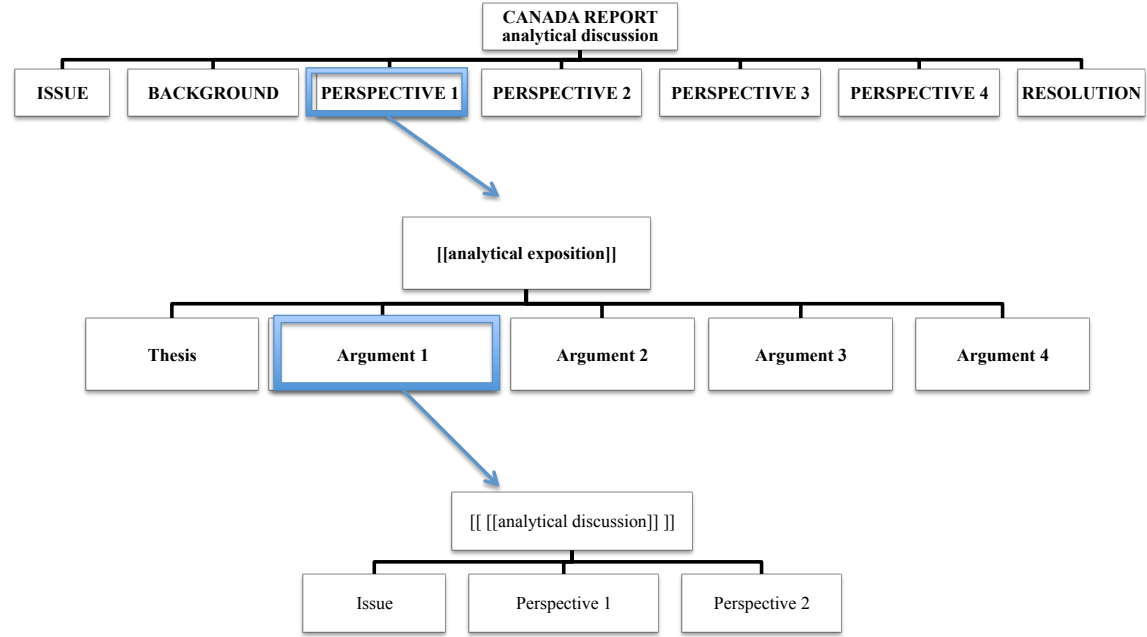


Figure 3.7 An [[[[analytical discussion]]]] functioning as Argument 1 of PERSPECTIVE 1

The opening Issue stage puts forward the proposition that Canada’s far north location limits the integration of PV into Canada’s energy grid network. This is followed by two Perspective stages that examine this proposition from a canonical ‘for and against’ position. Drawing on technical data to show that there is minimal potential for solar power, the Perspective 1 stage reinforces the proposition introduced in the Issue. The Perspective 2 on the other hand investigates this issue from a different point of view to argue that there is potential for PV in provinces of higher population density. *Table 3.4* below illustrates how the staging of this analytical discussion functions to ‘direct’ the reader towards this ‘favourable’ position about minimal

market potential for solar energy. By taking on the function of an **Argument** in the text explored above, this arguing genre functions as an embedded genre -- as indicated by the double brackets [...] in *Table 3.4* below:

PERSPECTIVE 1 Argument 1 [[[[analytical discussion]]]]	Text 3.1 Geography 3.1.1 Availability of Sunlight
Issue	Canada's far north location severely limits where PV cells may be economically integrated into the grid.
Perspective 1	Natural Resources Canada (2007) has calculated the PV potential during summer (July), winter (January), and total annual potential. These calculations show that there is minimal potential for solar to play a large role in providing electricity to Canada – especially as electricity demand is anticipated to expand from 530 TWh in 2003 to 730 TWh in 2020 (CEA 2006, p.11).
Perspective 2	However, that is not to say that entering the Canadian market is not worthwhile for the company. There are tracts of land that would be suitable for power generation, especially the centre of the country and south towards the US border. These are also the areas of highest population density. Since much of the areas with PV potential have higher population density, individual rather than large-scale installations would be the norm.

Table 3.4 The staging of Argument 1 of the PERSPECTIVE 1 stage of the Canada Report

Argument 2 is concerned with another factor that will have a negative impact on investment: Canada's resource endowments. Similar to **Argument 1**, it is a second-order embedded [[[[analytical discussion]]]] genre that moves through five multivariate stages to achieve its social purpose: an Issue stage, a Background stage, two Perspective stages and a final Resolution stage:

Issue ^ Background ^ Perspective 1 ^ Perspective 2 ^ Resolution

Figure 3.8 below outlines the stages of this embedded discussion genre.

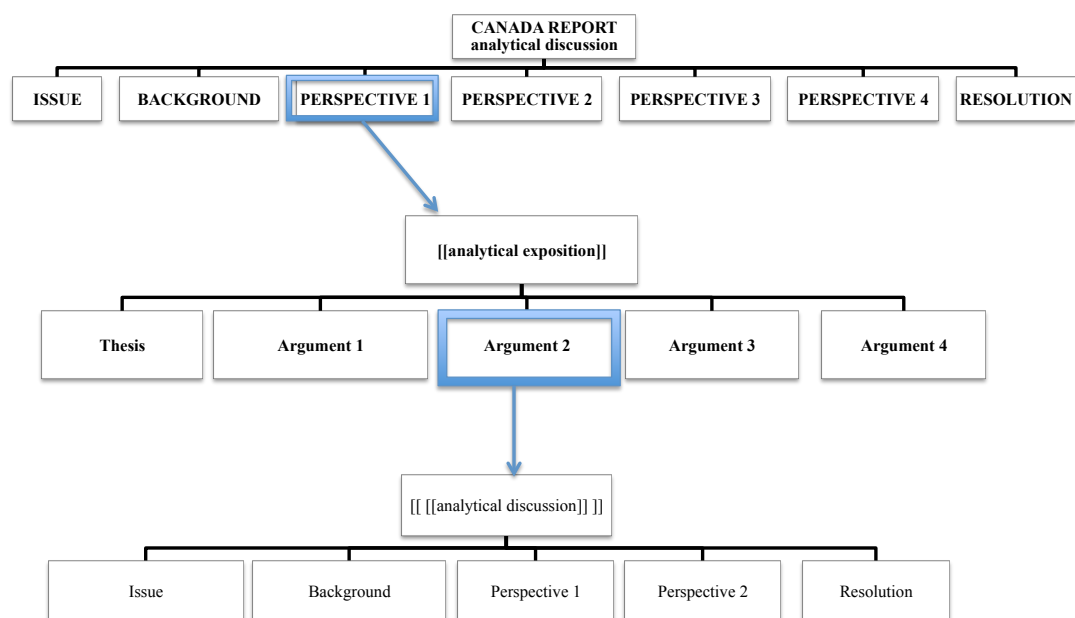


Figure 3.8 An [[[[analytical discussion]]]] functioning as Argument 2 of PERSPECTIVE 1

Table 3.5 below shows the staging of this [[[[analytical discussion]]]] taking on the function of the **Argument 2** stage of **PERSPECTIVE 1** to direct the reader towards the position against investment.

PERSPECTIVE 1 Argument 2 [[[[analytical discussion]]]]	Text 3.1.2 – Resource Endowment
Issue	Canada’s natural resource endowments place an even greater limitation on the viability of producing and marketing solar energy.
Background	Renewable energy, in the form of hydroelectricity, has very much captured the Canadian electricity market. Since the first hydroelectric generator was constructed in 1886, Canada has been utilising natural resources in its electricity generation (CEA 2006, p.5). Hydroelectric generation provides 18% of the nation’s electricity, dwarfing coal (19%), nuclear (12%) and natural gas (6%) (CEA 2006) – although, as already discussed, there are considerable variations in electricity sources across Canada’s provinces.
Perspective 1	From these figures, two conclusions may be drawn pertaining to market potential. Firstly, that in a country dominated by cheap hydro, there is a severely limited potential for a PV cell firm to capture an all but marginal segment of the electricity market.
Perspective 2	A slightly more optimistic conclusion is that as current fossil fuel plants in provinces such as Alberta, Saskatchewan and Nova Scotia age, there is a potential for solar energy to be utilised there as the former are decommissioned. Alternatively, in such provinces the panels may be utilised as part of an aggressive switch to greener energy.
Resolution	Ultimately, however, it is the very presence of such abundant renewable energy sources that threatens the profitability of any export venture of PV panels to Canadian provinces.

Table 3.5 The staging of Argument 2 of the PERSPECTIVE 1 stage of the Canada Report

The third stage, **Argument 3**, is concerned with the factor of labour availability. This text also realises an embedded [[[[analytical discussion]]]] genre. The three multivariate stages of this [[[[analytical discussion]]]] (an Issue stage and two Perspective stages) are shown in *Figure 3.9* below:

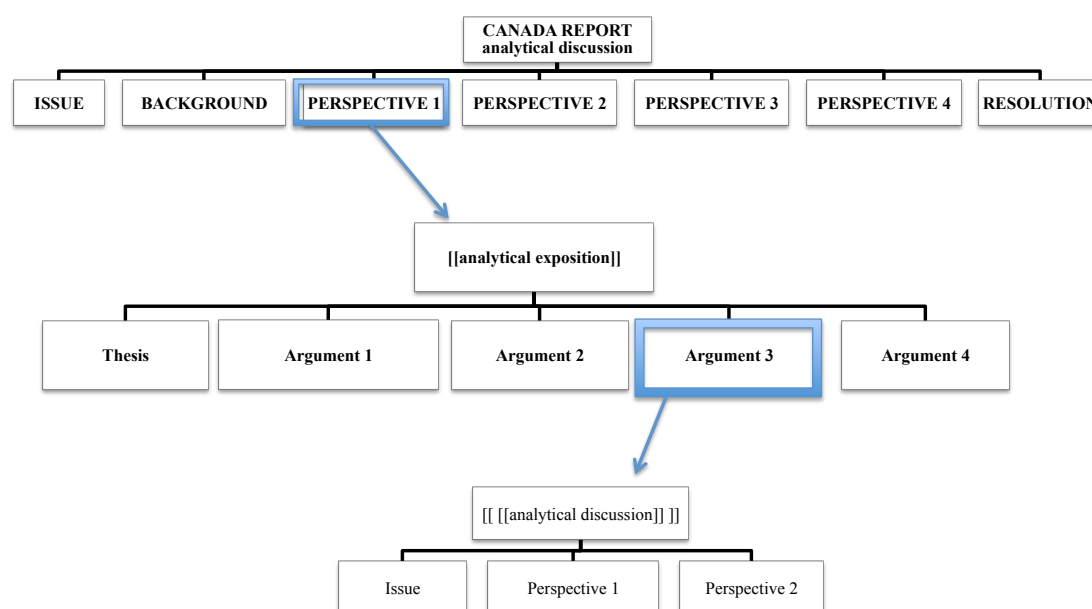


Figure 3.9 An [[[[analytical discussion]]]] functioning as Argument 3 of PERSPECTIVE 1

Table 3.6 below shows the staging of the [[[[analytical discussion]]]] that functions as the **Argument 3** stage of **PERSPECTIVE 1**.

PERSPECTIVE 1 Argument 3 [[[[analytical discussion]]]]	Text 3.2 Labour Availability
Issue	To the extent that PV panels are high-tech products, it is clear that their production requires the availability of highly skilled individuals. Above all, chemical engineers are necessary in the design and production process, and in project management.
Perspective 1	Canada's engineers are notable for their additional accreditation (a P.Eng) and accountability to a peak licensing body, and together with standardised education and stringent qualifications (Professional Engineers, 2008) these qualities make for a workforce of a reliably high quality. Some 160,000 engineers are licensed in Canada, and 10.6% of these are qualified chemical engineers (ibid).
Perspective 2	Despite Canada's availability of labour, and the intellectual capital it implies, the fact that only an engineer with a P.Eng may work in Canada constitutes a barrier to entry, complicating the operation of an Australian managed production facility when that time comes.

Table 3.6 The staging of an analytical discussion genre in the PERSPECTIVE 1 stage of the Canada Report

While the first three **Arguments** are [[[[analytical discussions]]]], the final extract that will be discussed from the **PERSPECTIVE 1** stage instantiates an embedded [[[[challenge]]]] genre in order to scaffold the writer's point of view on the issue of net metering. *Figure 3.10* below outlines the three stages of the [[[[challenge]]]] (a Position challenged, Rebuttal Arguments and an Anti-Thesis); the *Rebuttal Arguments* includes a *reservation phase*:

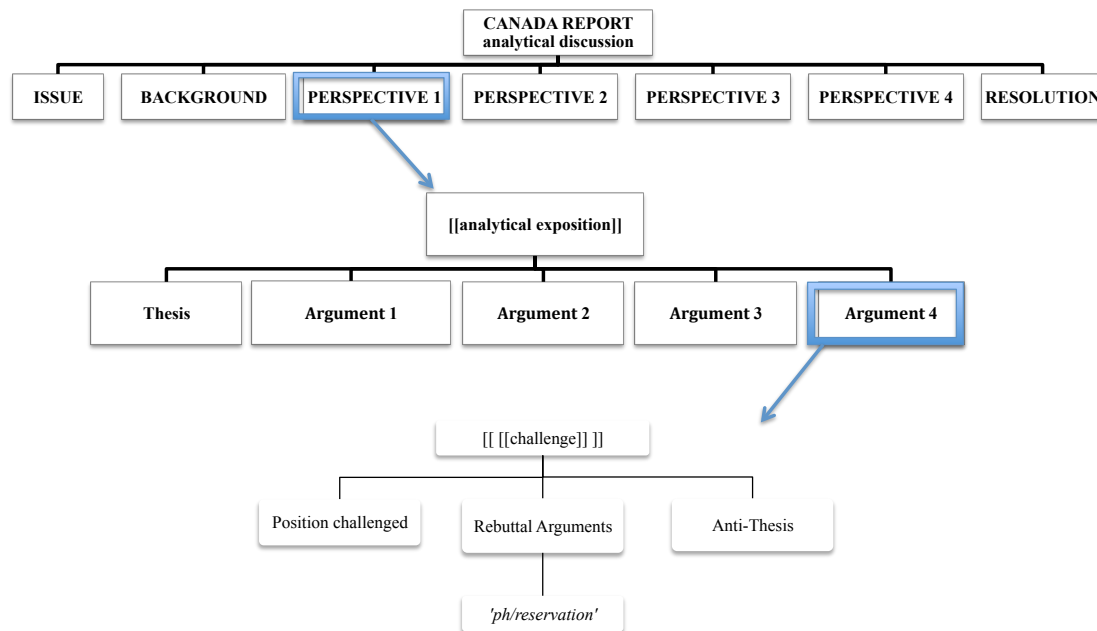


Figure 3.10 A [[[[challenge]]]] functioning as Argument 4 of PERSPECTIVE 1

The Position challenged stage introduces the initial proposition in favour of investment in the Canadian solar energy market – namely that there is potential for PV because of the availability of net metering, which allows households and industry to sell excess electricity back to the grid. However, this position is challenged in the subsequent Rebuttal Arguments stage, which suggests that the unavailability of net metering in some provinces will eliminate this potential. This stage also includes a *'reservation' phase* in order to allow for a more positive evaluation of the market potential made available in some provinces by net metering, which will prove to be an opportunity for the company. Similar phases have been identified in this data set; mostly in Argument stages of analytical expositions. Their function and the question of distinguishing these from genre stages will be opened up in **Chapter 6**. The final Anti-Thesis stage however dismisses this more positive evaluation by providing the

information that even if there is net metering in some provinces, the costs of installing extra meters are prohibitive; this would therefore prove to be a risk for investment. The staging of this [[[[challenge]]]] genre that argues against investment potential is shown in *Table 3.7* below:

PERSPECTIVE 1 Argument 4 [[[[challenge]]]]	Text 3.3 Net Metering
Position challenged	One incentive for households or industry to install PV is that they may on-sell excess electricity generated to the grid.
Rebuttal Arguments <i>'ph-reservation'</i>	Without this incentive, it is reasonable to assume that the uptake of residential or industrial-sited PV will be limited. Industry Canada (2003, p.35) goes so far as to argue that 'where net metering is not allowed, this all but eliminates the opportunity for PV'. Consequently sales would be virtually non-existent in Alberta (<i>ibid.</i>), <i>but have potential in provinces such as British Columbia, Ontario, the Yukon, Nova Scotia (ibid.) and Saskatchewan (SaskPower 2007).</i>
Anti-Thesis	However, even if net metering is available in a given province, individuals must bear the additional cost of secondary meters being fitted or even replaced. At \$C200 for residents, and \$C6000 for commercial bi-directional metering (Industry Canada 2003, p.38), installing PV panels may prove so uneconomical as to deter potential customers.

Table 3.7 The staging of Argument 4 of the PERSPECTIVE 1 stage of the Canada Report

In order to provide a full view of how depth is constructed in **PERSPECTIVE 1**, *Table 3.8* below shows the full generic staging of the two layers of embedded genres that have been identified in this stage.

PERSPECTIVE 1 [[analytical exposition]]	Text 3. Technological Factors
Thesis	despite the opportunities, the technology of Canada's existing energy infrastructure is a risk because of geography and availability of inputs and net metering
Argument 1 [[[[analytical discussion]]]]	3.1 Geography 3.1.1 Availability of Sunlight
Issue	Canada's far north location limits the use of PV.
Perspective 1	there is minimal potential for solar
Perspective 2	but there is potential in some areas
Argument 2 [[[[analytical discussion]]]]	3.1.2 – Resource Endowment
Issue	Canada's natural resource endowments are an even greater risk
Background	Canada's already captured by renewable energy variations in electricity sources across Canada's provinces.
Perspective 1	there's limited potential for PV because of cheap hydroelectricity
Perspective 2	in some provinces PV might replace fossil fuel
Resolution	the presence of abundant renewable energy is still a great risk
Argument 3 [[[[analytical discussion]]]]	3.2 Labour Availability
Issue	the company needs highly skilled chemical engineers
Perspective 1	Canada has a high quality workforce
Perspective 2	but engineers need a Canadian license, which is a risk for the company
Argument 4 [[[[challenge]]]]	3.3 Net Metering
Position challenged	there's potential for PV because of net metering
Rebuttal Arguments 'ph-reservation'	unavailability of net metering eliminates this potential <i>but there's potential in some provinces</i>
Anti-Thesis	even if there's net metering, its costs will be prohibitive

Table 3.8 Embedded arguing genres functioning as multivariate stages to build the depth of the PERSPECTIVE 1 stage of the China Report

Thus the writer's overall position about the risk factors provided by the technology of Canada's existing energy infrastructure has been staged as an embedded [[analytical exposition]] genre, which unfolds through five multivariate stages. When considering the function of these stages in relation to each other this section has demonstrated the

crucial role they play in building ‘depth’ in the superstructure of the genre simplex of the Canada Report. This is consolidated in the synoptic overview in *Table 3.9* below; a snapshot of the **PERSPECTIVE 1** stage as construed by two layers of embedded genres:

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
PERSPECTIVE 1	[[analytical exposition]]	
	Thesis	
	Argument 1	[[[[analytical discussion]]]]
	Argument 2	[[[[analytical discussion]]]]
	Argument 3	[[[[analytical discussion]]]]
	Argument 4	[[[[challenge]]]]

Table 3.9 Synoptic view of the generic structure of the [[analytical exposition]] realising the PERSPECTIVE 1 stage of the Canada Report

The synoptic overview above shows the **Argument** stages of **PERSPECTIVE 1** as construed by two types of arguing genre: three analytical discussions and a challenge. As noted in **Chapter 2**, discussions are typically concerned with multiple views and positions on an issue; challenges are typically one-sided in marshalling arguments to counter a position on an issue (Coffin, 1996; Martin & Rose, 2008). Why highly successful student writers embed these arguing genres as stages rather than present them in a sequence is an important question to ask. In order to answer this question, the various factors discussed at each level of genre staging and embedding have been mapped out in *Table 3.10* below. The identification of the environment within which the company operates is provided in the **Thesis** stage of **PERSPECTIVE 1**. In this section (titled Technological Factors) the technological environment is first evaluated as a whole. This opening stage functions to preview the factors that will have a significant negative impact on the company’s operations. Each previewed factor is further broken down into sub-factors to become Targets of evaluation in the subsequent **Argument** stages. As Targets, these factors will thus represent the knowledge base for the process of decision-making student writers have to demonstrate in their assignments. This decision-making is achieved by the analysis of the PEST factors through embedding second-order analytical discussions and a challenge.

Analysing each factor through the staging of an arguing genre that considers multiple views enables the businessperson preparing the strategic report to consider them as *both* opportunities and threats. *Table 3.10* highlights factors in green when presented as opportunities and in red when presented as risks. In the [[[[discussions]]]] analysed above treating a factor as an opportunity provides one Perspective stage, while treating it as a risk provides the alternative view in another Perspective stage. Each of these discussions scaffolds the more ‘favourable’ position against investment. The final [[[[challenge]]]] acknowledges the existing potential for investment only to ‘demolish’ this view to scaffold the anti-investment stance of the preceding stages realised by embedded arguing genres. This evaluation of factors as opportunities and threats through the staging of arguing genres will then direct the reader towards the final proposal: the company is advised against investment. An important point to note here is that these second-order genres are made to function as **Arguments** in an [[exposition]]: they get organised into *promoting* the same *anti-investment position* flagged in the **ISSUE** (the introduction to the country report) which will be reinforced the **RESOLUTION** (the final recommendation).

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]	'phase'
PERSPECTIVE 1 3. Technological Factors	[[analytical exposition]] Issue the technology of Canada's existing energy infrastructure <ul style="list-style-type: none"> the nation's geographical features inputs (i.e. labour) net metering 		
	Argument 1 3.1 Geography 3.1.1 Availability of Sunlight	[[[[analytical discussion]]]] Issue: Canada's far north location Perspective 1: total annual potential Perspective 2: <ul style="list-style-type: none"> tracts of land (centre +south of country) areas of highest population density 	
	Argument 2 3.1.2 Resource Endowment	[[[[analytical discussion]]]] Issue: Canada's natural resource endowments Background: renewable energy (hydroelectricity) hydroelectric generation Perspective 1: <ul style="list-style-type: none"> hydro renewable energy sources Perspective 2: Current fossil fuel plants in <ul style="list-style-type: none"> Alberta Saskatchewan Nova Scotia 	
	Argument 3 3.2 Labour Availability	[[[[analytical discussion]]]] Issue: availability of highly skilled chemical engineers Perspective 1: Canada's engineers Perspective 2: engineers with P.Eng	
	Argument 4 3.3 Net metering	[[[[challenge]]]] Position challenged: availability of net metering Rebuttal Arguments: areas where net metering is not allowed Anti-Thesis: cost of secondary meters	'ph/reservation' net metering allowed in <ul style="list-style-type: none"> BC Ontario The Yukon Nova Scotia Saskatchewan

Table 3.10 Mapping PEST factors on the staging on PERSPECTIVE 1

Looking at the second-order discussion and challenge genres again from a 'bottom-up' perspective, we can see that they are made to function as **Arguments** in the exposition genre that realises **PERSPECTIVE 1**. Thus these genres are organised into promoting essentially the same anti-investment position that was previewed in the **ISSUE** stage and will be reinforced in the **RESOLUTION** stage of the Canada Report. The stages of these second-order embedded arguing genres thus correspond to various factors and sub-factors selected from the PEST framework. The mapping of these factors on the generic structure in the Table above makes it apparent that a part/whole composition taxonomy is constructed in **PERSPECTIVE 1**. The structure of the PEST framework thus lends itself to embedding rather than sequencing genres, reflected by the part/whole multivariate structure of the **PERSPECTIVE 1** stage. This embedding of genres also indicates that PEST factors are not independent of each other. Mapping these factors on the genre staging enables us to arrive at a

linguistic understanding of what the process of decision-making in an undergraduate business country report might comprise.

The following section will present a synoptic overview of the generic structure of the following stage, **PERSPECTIVE 2**. It is realised by an *[[analytical discussion]]* and one of its stages will be shown to embed a second-order *[[[[challenge]]]]* genre.

3.1.2.3 Resolving and defeating positions: two layers of embedding in the PERSPECTIVE 2 stage of the Canada Report

PERSPECTIVE 2 (the section of the Canada Report that is titled Economic Factors) evaluates the opportunities and risks presented by the *economic* environment. The constituency representation in *Figure 3.11* below shows that it is an *[[analytical discussion]]*, another embedded ‘whole’, which moves through five multivariate stages: an **Issue** stage followed by three **Perspective** stages and a final **Resolution** stage. One of these stages, **Perspective 3**, is realised by a second-order *[[[[challenge]]]]* genre.

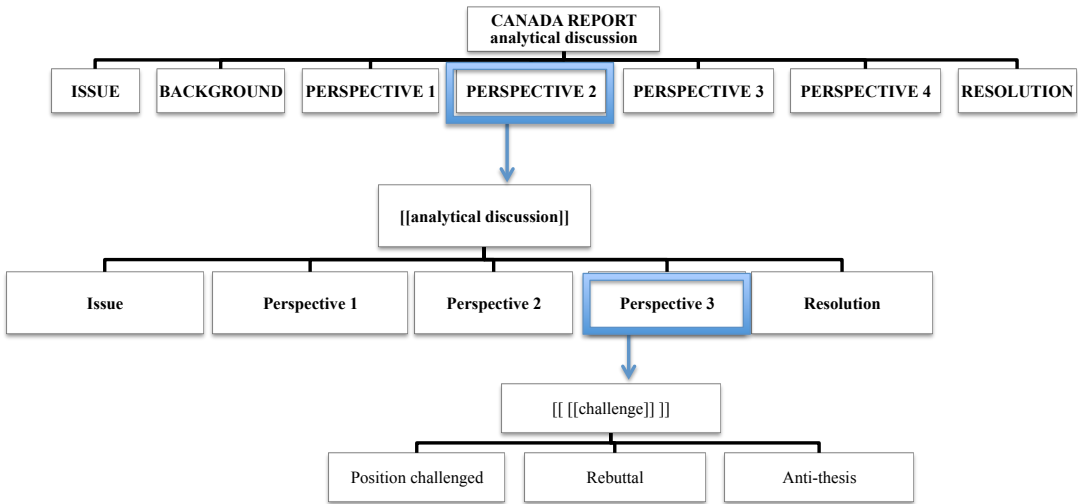


Figure 3.11 A [[[[challenge]]]] functioning as *Perspective 3 of PERSPECTIVE 2 of the Canada Report*

As *Table 3.11* below shows, the staging of the second-order *[[[[challenge]]]]* functions to scaffold the overall proposition that despite its strong economy, Canada’s market structure will prevent the company from making PV viable in Canada.

PERSPECTIVE 2 [[analytical discussion]]	Text 4. Economic Factors
Issue	despite Canada's strong economy, its market structure is a risk
Perspective 1	4.1 Energy Market 4.1.1 Demand due to substantial demand for energy there is potential for PV as long as it remains affordable
Perspective 2	4.1.2 Supply electricity prices in Canada are low so PV would be marginal
Perspective 3 [[[[challenge]]]]	4.2 Economic Performance
Position challenged	Canada has strong economic foundations due to its economic indicators such as low unemployment and inflation, and high GDP per capita
Rebuttal Arguments	but the recent fall in consumer confidence and its vulnerability to US economy are risks
Anti-Thesis	because the Canadian economy is strongly influenced by the downturn of the US economy, GDP growth will slow
Resolution	despite Canada's strong economy, slowing economic growth is currently a risk for the company

Table 3.11 Embedded [[challenge]] genre functioning as a multivariate stage to build the depth of the PERSPECTIVE 2 stage of the Canada Report

The synoptic overview of the generic structuring of **Perspective 3** in *Table 3.12* below shows the 'depth' of the stage as construed by two layers of embedded arguing genres.

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
PERSPECTIVE 2	[[analytical discussion]] Issue Perspective 1 Perspective 2 Perspective 3 Resolution	[[[[challenge]]]]

Table 3.12 Synoptic view of the generic structure of the [[analytical discussion]] realising the PERSPECTIVE 2 stage of the Canada Report

The discussion above has shown that the **PERSPECTIVE 2** stage has embedded arguing genres similar to **PERSPECTIVE 1**: a first order [[analytical discussion]]

and a second-order [[[[challenge]]]] genre. In the first two stages of the [[analytical discussion]] the writer discusses the factor of electricity demand as an opportunity (**Perspective 1**) and the factor of cheap electricity as a risk (**Perspective 2**). In contrast to the stages of **PERSPECTIVE 1**, neither of these factors is further broken down into sub-factors and neither stage contains further lower-order embeddings. However, **Perspective 3** introduces several sub-factors related to the factor of economic performance – the overarching factor the stage is concerned with. Here the stage begins with a list of factors presented as opportunities (low unemployment, low inflation, high GDP per capita). These opportunities are then outweighed by a list of risk factors (*fall in consumer confidence, vulnerable economy, downturn of US economy, slow cross-border trade*, etc.). As these factors are summed up as one overarching risk factor (forecast of *slowing GDP growth*) at the end of the stage, a *defeating* position is scaffolded through the staging of the analysis of economic performance and its sub-factors as the second-order [[[[challenge]]]] genre introduced above. These factors are then summarised in the final **Resolution of PERSPECTIVE 2** as an overall risk (*slowing economic growth*). This functions to resolve the issue of the viability of investment with a final anti-investment proposition.

Therefore, based on the analyses of both the **PERSPECTIVE 1** and **PERSPECTIVE 2** stages of the Canada Report, the following argument can be made. When a PEST factor needs to be further broken down into sub-factors, successful writers draw on embedded genres to analyse these as opportunities or risks, i.e. their predicted impact on the company's operations. So far the analyses have found these lower level, second-order embedded genres to be discussions and challenges. In the following **PERSPECTIVE 3** stage the third type of arguing genre, an analytical exposition, appears as a second-order embedded genre. This will be the focus of the following section.

3.1.2.4 Arguing for a position: second-order embedding in the PERSPECTIVE 3 stage of the Canada Report

Similarly to **PERSPECTIVE 2**, **PERSPECTIVE 3** also instantiates an embedded [[analytical discussion]] which functions to 'direct' the reader towards the 'preferred'

position against investment that will be reinforced in the closing **RESOLUTION** stage of the Canada Report. More specifically, the social purpose of **PERSPECTIVE 3** (the stage of the Canada Report titled Political Factors) is to discuss factors in the *political* environment. It aims to resolve the issue that Canada’s political landscape presents opportunities, however, these are outweighed by risks such as federalism, taxation and bureaucracy. *Figure 3.12* below shows that it moves through five multivariate stages – an **Issue** stage followed by four **Perspective** stages without a final Resolution. A closer analysis of the **Perspective 2** stage of the [[analytical discussion]] reveals a second-order embedded [[[[analytical exposition]]]] genre:

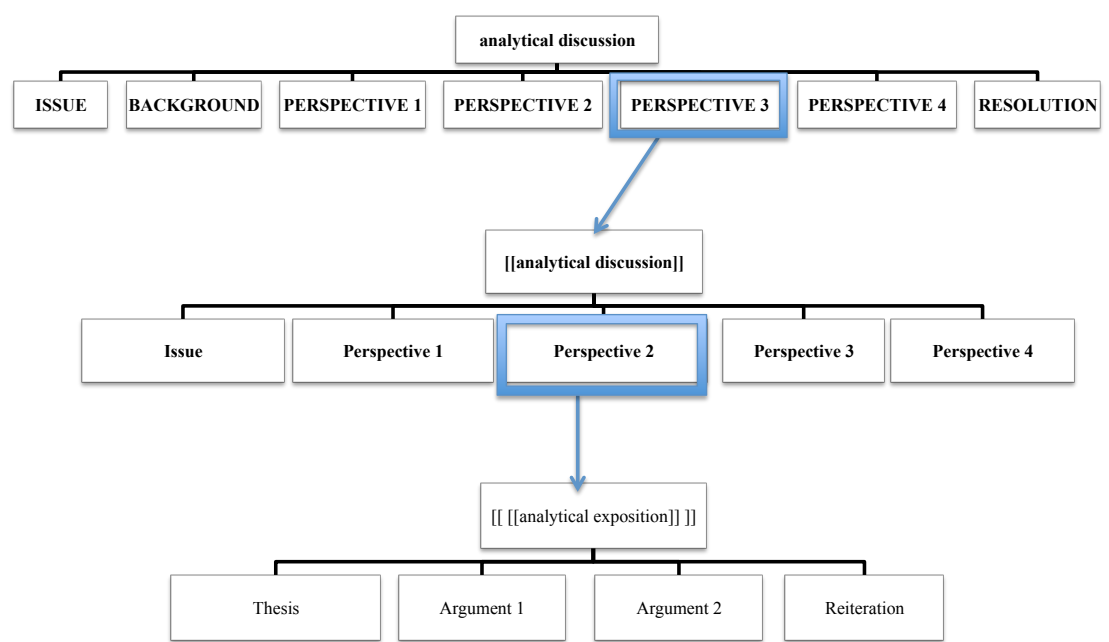


Figure 3.xxx A [[[[analytical exposition]]]] functioning as **Perspective 2** of **PERSPECTIVE 3** of the Canada Report

*Figure 3.12 An [[[[analytical exposition]]]] functioning as **Perspective 2** of **PERSPECTIVE 3** of the Canada Report*

Perspective 2 moves through four multivariate stages to achieve its social purpose. Its Thesis stage introduces the proposition that the Canadian government will be slow to introduce necessary reforms to make PV competitive. This proposition is then supported by two Argument stages: Argument 1 posits that the federal system is dysfunctional and Argument 2 extends this by showing the tense relations between the provinces. The final Reiteration of Thesis stage reinforces the proposition put forward in the Thesis that due to the arguments marshalled, reforms to make PV

competitive will not dominate the political agenda, which is evaluated as a potential risk for investment. The generic staging of this second-order [[[[analytical exposition]]]] is illustrated by *Table 3.13* below:

PERSPECTIVE 3 [[analytical discussion]]	5. Political Factors
Issue	Canada's political landscape presents opportunities, however, these are outweighed by risks such as federalism, taxation and bureaucracy.
Perspective 1	5.1 Federalism 5.1.1 Multiple Regulatory Authorities the Canadian tax system will present a risk to the company
Perspective 2 [[[[analytical exposition]]]]	5.1 Federalism 5.1.2 Weak Federal Centre
Thesis	The Canadian government will be slow to introduce reforms to make PV competitive ...
Argument 1	... because the federal system is dysfunctional and
Argument 2	... because the relations between provinces are tense
Reiteration	therefore reforms to make PV competitive will not dominate the political agenda
Perspective 3	5.2 Policies and Regulations affecting Electricity Industry 5.2.1 Kyoto Obligations Canada never implemented the Kyoto Protocol, which is an opportunity for the firm
Perspective 4	5.2.2 Lack of Market Reform in Electricity Industry electricity prices are too low because of political influence but the provinces will not introduce reforms, which will prevent PV from being competitive

Table 3.13 Embedded [[[[analytical exposition]]]] genre functioning as a multivariate stage to build the depth of the PERSPECTIVE 3 stage of the Canada Report

The synoptic overview of the generic structuring of **PERSPECTIVE 3** in *Table 3.14* below shows the 'depth' of the stage (as construed by two layers of embedded arguing genres):

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
PERSPECTIVE 3	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
	Perspective 4	

Table 3.14 Synoptic view of the generic structure of the [[analytical discussion]] realising the PERSPECTIVE 3 stage of the Canada Report

The unfolding of this multivariate structure in stages whose ‘depth’ is built through two layers of embedded genres demonstrates again that the **PERSPECTIVE 3** is not a step in a univariate serial structure, but functions as a ‘part’ in a multivariate genre simplex (i.e. as a stage in the analytical discussion that realises the Canada Report). Similar to **PERSPECTIVE 2** it instantiates first and second-order embedded genres (an [[analytical discussion]] and an [[[[analytical exposition]]]]). The issue to be debated here is to do with the *political* environment from the dimensions of the PEST framework. The opening **Issue** stage previews each political factor that will impact on investment potential. Its first two **Perspective** stages are concerned with the factor of *federalism*. **Perspective 1** presents a sub-factor of federalism (*Canada’s tax system governed by multiple regulatory authorities*) as a risk without embedding lower-order genres. **Perspective 2** presents another sub-factor of federalism (*the weak federal centre*) as a risk. In contrast to **Perspective 1**, however, the writer promotes this position through the staging of a second-order [[[[analytical exposition]]]]. Here the sub-factors related to the overarching factor of weak federal centre are all presented as risk factors (*nature of government, dysfunctional system, slow decision-making, party disarray, tense relations*) in the Argument stages. The final Reiteration stage concerned with the overall risk of the unlikely deregulation of electricity markets feeds into promoting a final anti-investment proposition. The last two **Perspectives** of **PERSPECTIVE 3** are concerned with the factor of policies and regulations that impact the Canadian electricity industry. **Perspective 3** discusses the factor of the Kyoto protocol: the fact that Canada has never implemented this is presented as an opportunity. The final **Perspective 4** presents the lack of necessary reforms as a risk.

In **PERSPECTIVE 3** while only one **Perspective** presents a factor as an opportunity, three **Perspectives** concerned with risk factors that all serve to scaffold an overall anti-investment position were found. One of these **Perspectives**, **Perspective 2**, promotes this position through the stages of a second-order exposition. In the second-order discussions presented above factors were analysed as *both* opportunities *and* threats; and in challenges one seemingly obvious position is outweighed by a more carefully considered position. It seems however that the structure of an exposition lends itself to presenting a factor *either* as an opportunity *or* a risk. In the following section the final **PERSPECTIVE** stage of the Canada Report, **PERSPECTIVE 4**, will be shown to embed all three types of arguing genre: a first order [[analytical discussion]] and second-order embedded genres, a [[[[challenge]]]] and an [[[[analytical exposition]]]].

3.1.2.5 Defeating and promoting positions: second-order embeddings in the PERSPECTIVE 4 stage of the Canada Report

PERSPECTIVE 4 presents the final point of view on the initial proposition put forward in the **ISSUE** stage that the barriers presented by the Canadian external business environment outweigh the opportunities for investment. It analyses *social* factors to conclude that Canada's green culture and cultural similarity present opportunities, but this is undermined by Canadians' 'passion for bronze'. The constituency representation in *Figure 3.13* below shows the generic staging of **PERSPECTIVE 4** as unfolding through four multivariate stages of an embedded [[analytical discussion]] genre. Its **Perspective 1** is a second-order embedded [[[[challenge]]]] and its **Perspective 2** an [[[[analytical exposition]]]].

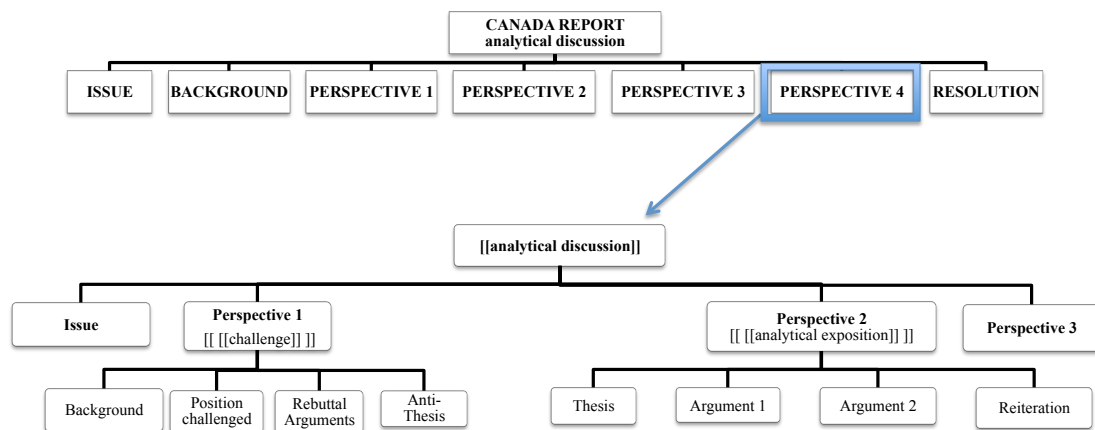


Figure 3.13 The generic structure of the [[analytical discussion]] providing the PERSPECTIVE 4 stage of the Canada Report

These two arguing genres were found to be the only second-order embedded genres in **PERSPECTIVE 4**. As in *Table 3.15* below, the [[[[challenge]]]] genre realising **Perspective 1** scaffolds the proposition that despite Canada’s growing green culture, the Australian firm is a latecomer to the established Canadian renewable energy market. The [[[[analytical exposition]]]] that provides **Perspective 2** argues that despite this growing green culture, Canadian cultural values would undermine the potential for PV.

PERSPECTIVE 4 [[analytical discussion]]	Text 6. Social Factors
Issue	The cultural opportunities provided by Canada's green culture and cultural similarity to Australia are undermined Canadians' 'passion for bronze'
Perspective 1 [[[[challenge]]]]	6.1 Green Values and Politics
Background	Canada's sociocultural environment has potential because the culture is becoming greener
Position challenged	Canada's green movement provides strong market potential for the firm
Rebuttal Arguments	but despite the green movement hydroelectricity is already dominant
Anti-Thesis	therefore the firm cannot take advantage of this potential
Perspective 2 [[[[analytical exposition]]]]	6.2 'Passion for Bronze'
Thesis	Canada's value set will hinder potential to take advantage of the green movement wave
Argument 1	the nation's complacent attitude will hinder the necessary changes to make PV a more dominant source of energy
Argument 2	Canadian's 'passion for bronze' has resulted in a weak competitive climate
Reiteration of Thesis	despite the green culture, the firm would need to overcome this national inertia for viable changes in the PV market
Perspective 3	6.3 Hofstede's Cultural Dimensions the cultural similarity and value alignment between Australia and Canada would provide market potential

Table 3.15 Embedded arguing genres functioning as multivariate stages in the PERSPECTIVE 4 stage of the Canada Report

The synoptic overview of **PERSPECTIVE 4** in *Table 3.16* below shows the 'depth' of the stage as construed by two layers of embedded arguing genres.

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
PERSPECTIVE 4	[[analytical discussion]]	
	Issue	
	Perspective 1	[[[[challenge]]]]
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	

Table 3.16 Synoptic view of the generic structure of the [[analytical discussion]] realising the PERSPECTIVE 4 stage of the Canada Report

The synoptic overview above shows that **PERSPECTIVE 4** (titled Social Factors) instantiates a first order [[analytical discussion]] genre in order to *resolve* the issue of whether Canada's *socio-cultural* environment will present mostly opportunities or risks for the company. It previews two factors as opportunities (*Canada's growing green culture and its cultural similarity to Australia*) and one factor (*a passion for bronze*) as a potential risk. Two of the three **Perspective** stages concerned with these social factors are construed by two types of arguing genre: a [[[[challenge]]]] and an [[[[analytical exposition]]]]. The [[[[challenge]]]] realising **Perspective 1** functions to demolish a pro-investment position by dismissing a list of factors evaluated as opportunities (*growing green culture, improved polling for the Green Party, green policies*); it argues that the risk factor '*dominance of hydroelectricity*' points to a lack of market potential. What is interesting to observe is that the factor '*growing green culture*' is previewed in the **Issue** stage as an opportunity. However, this factor is broken down into sub-factors to be evaluated as opportunities only to be dismissed in the **Perspective 1** through the staging of a [[[[challenge]]]] genre. The writer here draws on a second-order embedded challenge to show that factors appearing to be opportunities at first observation are in fact evaluated as risk factors after careful consideration. This strategy seems rather common in this text especially when certain factors become loaded with values particular to a specific culture. This point will be taken up in **Chapter 6** along with a discussion of the value of conducting analyses of *axiological condensation*, a term from Legitimation Code Theory.

The other second-order genre (the [[[[analytical exposition]]]] realising **Perspective 2** of **PERSPECTIVE 4** *promotes* a one-sided anti-investment position. Its Thesis evaluates Canada's values as a risk factor. The Arguments expand these values as sub-factors of complacency and a passion for bronze to culminate the exposition with one overarching risk factor in the Reiteration: a national inertia will hinder market potential for PV.

The final **Perspective 3** stage presents the factor '*Canada's cultural similarity*' as an opportunity without embedding any genres. Factors listed here (*uncertainty avoidance, masculinity, long-term outlook*) are evaluated as evidence of 'value alignment' between the two countries and thus an '*operational advantage*'. It seems then that the writer does not need to further analyse whether these factors are

opportunities or risks; the stage is concerned with presenting ‘*cultural similarity*’ as an opportunity only.

To sum up, the genre analysis found that **PERSPECTIVE 1** is realised by an embedded [[analytical exposition]] while the following three **PERSPECTIVES** in the Canada Report are realised by embedded [[analytical discussion]] genres. When down-ranked to the level of a genre stage, these arguing genres unfold as multivariate stages function as ‘parts’ in the part/whole experiential multivariate superstructure of the genre simplex of the Canada Report.

3.1.2.6 Reinforcing a position through defeating: framing the Canada Report with an embedded [[challenge]] in the RESOLUTION

The final **RESOLUTION** stage is the traditional Conclusion and Recommendation section of the Canada Report. In terms of its generic structure, similarly to the opening **ISSUE** stage of the Canada Report, the final **RESOLUTION** stage is also realised by an embedded [[challenge]] genre. *Figure 3.14 shows the stages of the [[challenge]] moving through three obligatory stages (the **Position challenged**, **Rebuttal Arguments** and an **Anti-thesis**).*

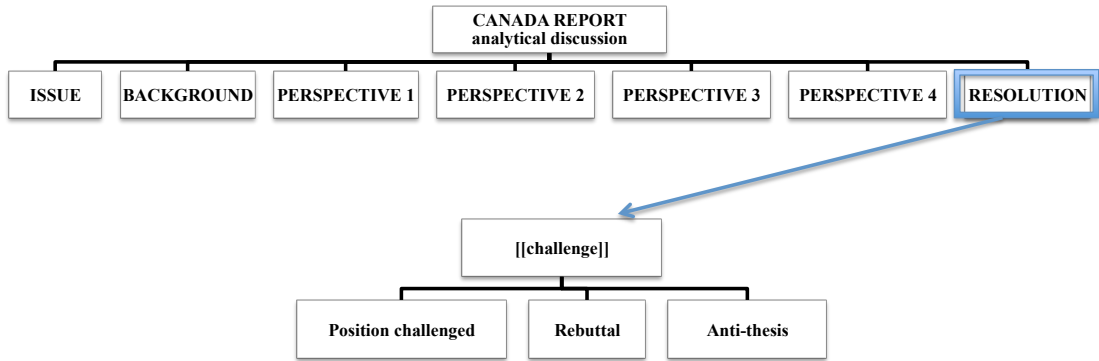


Figure 3.14 The generic structure of the [[challenge]] realising the RESOLUTION stage of the Canada Report

As in *Table 3.17* below, the **RESOLUTION** is concerned with distilling the most salient *sociocultural* opportunities and mostly *technological, economic* and *political* risk factors identified in the preceding **PERSPECTIVE** stages. It presents the final

concluding proposal that the company should wait with investment until these risks are eliminated.

RESOLUTION [[challenge]]	Text 7. Conclusion and Recommendation
Position challenged	Canada provides a business environment favourable to Australian firms by virtue of its cultural similarities and the ease of doing business there.
Rebuttal Arguments	This would be sufficient justification for this firm to export there but for the fact that the firm is selling overpriced renewable energy to a market in which hydroelectricity is already dominant. With electricity so regulated and cheap, and generated in the main by abundant renewable resources, export or even production in Canada is simply uneconomical. Moreover, the softening of the economy, taxation and the ‘ambition for bronze’ outweigh the potential created by the rise of green values.
Anti-thesis	Ultimately, we should place Canada on an indefinite wait list until an energy market is established, economic growth is again on track and the government responds to its post-Kyoto obligations more aggressively.

Table 3.17 The staging of the RESOLUTION stage in the analytical discussion of the Canada Report

A synoptic view of the generic structure of the **RESOLUTION** stage is shown in Table 3.18 below:

GENRE STAGES	[[embedded genre stages]]
RESOLUTION	[[challenge]] Position challenged Rebuttal Arguments Anti-Thesis

Table 3.18 Synoptic view of the generic structure of the [[challenge]] realising the RESOLUTION stage of the Canada Report

Table 3.19 below provides a synoptic snapshot of the layers of the two layers of embedded arguing genres that build the depth of the whole text of the Canada Report.

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
ISSUE	[[challenge]]	
BACKGROUND	[[report]]	
PERSPECTIVE 1	[[analytical exposition]]	
	Thesis	
	Argument 1	[[[[analytical discussion]]]]
	Argument 2	[[[[analytical discussion]]]]
	Argument 3	[[[[analytical discussion]]]]
	Argument 4	[[[[challenge]]]]
PERSPECTIVE 2	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	
	Perspective 3	[[[[challenge]]]]
	Resolution	
PERSPECTIVE 3	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
	Perspective 4	
PERSPECTIVE 4	[[analytical discussion]]	
	Issue	
	Perspective 1	[[[[challenge]]]]
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
RESOLUTION	[[challenge]]	

Table 3.19 Synoptic view of the generic structure of the analytical discussion realising the Canada Report

In summary, the two layers of embedded arguing genres illustrated above were found to play a significant role in the process by which texts of the length of the Canada Report “grow bigger than a page” (Martin, 1994, 1995, 1996). The second-order arguing genres that were identified in the above analyses all appeared in the four **PERSPECTIVE** stages of the Canada Report but not in the other stages. Each **PERSPECTIVE** discusses factors from only one environment of the PEST framework. Each factor is broken down into sub-factors to be evaluated as *both* an opportunity *and* a risk. Since this functions to ‘direct’ the reader towards an anti-investment position, three **PERSPECTIVES** are realised by first order [[analytical discussion]] genres to suit this social purpose of *resolving* two contrasting positions. **PERSPECTIVE 1** on the other hand scaffolds the writer’s anti-investment position

through the staging of an [[analytical exposition]] genre to suit the social purpose of *promoting* the same position.

Further, while each **PERSPECTIVE** represents one PEST environment, the stages of the *second-order* arguing genres embedded in these stages correspond to the various factors and sub-factors evaluated as opportunities and risks. Thus, the analysis of the PEST factors referred to as *decision-making* in business studies in the Canada Report is organised according to the part/whole composition taxonomy construed in the PEST framework. Mapped onto the generic staging of the Canada Report this structure is considered the ‘preferred’ choice according to the business lecturers rather than the different structure that will be discussed below in [Section 3.1.3](#). In other words, business *decision-making* in the Canada Report is overall achieved by *resolving* multiple positions, *defeating* unfavourable positions and *promoting* a one-sided position through the embedding of first and second-order discussion, challenge and exposition genres. The linguistic resources at play in scaffolding these structures will be presented in detail in [Chapter 5](#).

The generic structure and the patterns identified in the Canada Report presented above will be compared to those found in the China Report, the other model HD business country report used as an exemplar in the above-mentioned Faculty intervention. The following section aims to show that its ‘depth’ is built by *three* layers of embeddings unlike the two layers of arguing genres found in the Canada Report.

3.1.3 Construing depth through three layers of embedding: The generic structure of the China Report

Similarly to the Canada Report, the social purpose of the China Report is also to evaluate market potential and make a proposal about whether the Australian company should enter the emerging market of China to export solar panels. While generically this text is also an elemental analytical discussion, it achieves its social purpose by moving through only four, rather than the seven distinct stages identified in the Canada Report: an **ISSUE**, two **PERSPECTIVES** and a final **RESOLUTION** stage:

ISSUE ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ RESOLUTION

While the China Report also instantiates an analytical discussion, these stages instantiate different embedded genres than the Canada Report, except for the opening **ISSUE** stage. Similarly to the Canada Report analysed above, the **ISSUE**, realised by a [[challenge]], also functions to ‘direct’ the reader towards the final proposal to be reinforced in the closing **RESOLUTION** stage: that the company should wait with investment until further research is conducted. However, contrary to the **PERSPECTIVE** stages of the Canada Report, which discuss both the opportunities and risks identified in the Canadian business environment in order to ‘direct’ the reader towards a preferred position, each of the two **PERSPECTIVE** stages of the China Report promotes the same position on investment potential in the Chinese solar energy market throughout their respective stages. The **PERSPECTIVE 1** puts forward a proposition in favour of investment (or a canonical ‘argument for’) to prove throughout the stage that the *economic, political, technological* and *socio-cultural* environments of China provide opportunities for the Australian firm conducting this market analysis. These opportunities include PEST factors such as market size, economic growth, government policies that support the renewable energy industry and China’s collectivist culture. The **PERSPECTIVE 2** stage on the other hand is concerned with an analysis of risk factors selected from PESTLE⁴. It functions to promote the proposition (or a canonical ‘argument against’) that poverty and economic inequality, domestic competition and protectionism, a weak legal framework, corruption and Confucianism, and weak IPR laws present *economic, technological, political, legal* and *socio-cultural* risks for investment. The final **RESOLUTION** stage (the canonical conclusion and recommendation section of country reports), weighs up the *economic* opportunities and *political* and *legal* risks presented by the external business environments of China. It presents the conclusive recommendation that instead of eliminating the Chinese market from the list of viable markets to export solar panels to, the firm should continue further research. The constituency representation in *Figure 3.15* below illustrates each of these stages as realised by embedded elemental genres. The **ISSUE** stage is realised by a

⁴ While the assignment instructed students to analyse PEST factors specifically, the writer of the China Report inserted an analysis of the Chinese legal environment into the analysis of the political environment. Therefore, where relevant I will refer to the framework as PESTLE in this section.

[[challenge]]; both **PERSPECTIVES** and the final **RESOLUTION** are realised by [[analytical exposition]] genres.

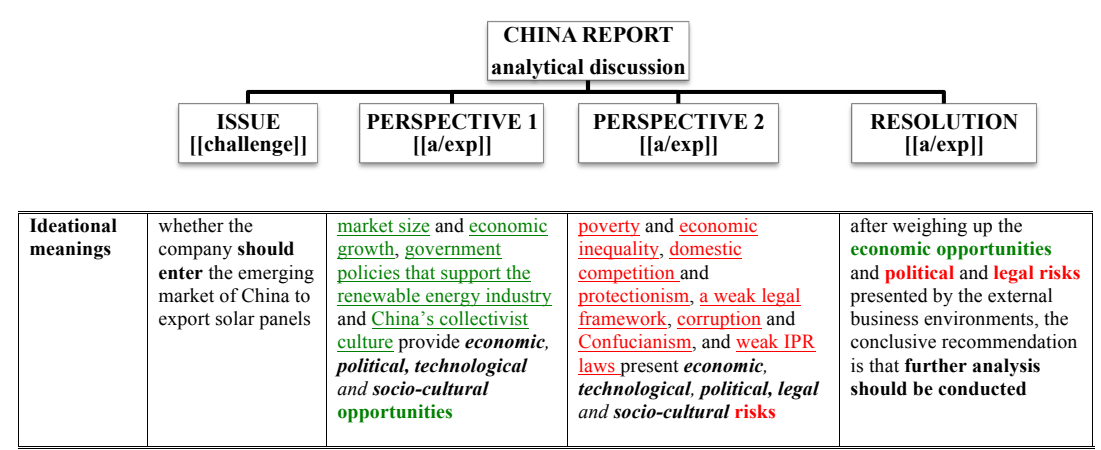


Figure 3.15 Constituency representation of the generic structure of the China Report

3.1.3.1 Defeating a position: embedded [[challenge]] in the ISSUE stage of the China Report

The **ISSUE** stage of the China Report also instantiates an embedded [[challenge]], similarly to the same stage of the Canada Report. One difference found was that this [[challenge]] moves through three obligatory stages (a **Position challenged**, a **Rebuttal Arguments** and an **Anti-thesis**) and an optional **Background** stage, as illustrated by the constituency representation in Figure 3.16 below.

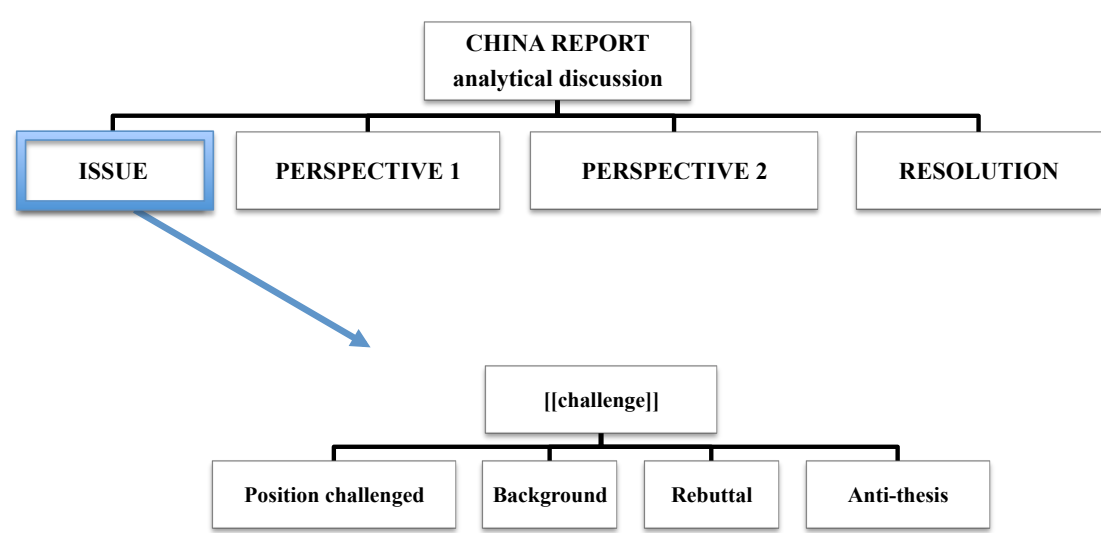


Figure 3.16 Constituency representation of the generic structure of the China Report

As shown in *Table 3.20* below, the generic staging of the **ISSUE** lends itself to demolishing the initiating proposition that the Chinese market is attractive for investment. Similar to the Canada Report, through embedding a *[[challenge]]* this **ISSUE** also functions to set up the final proposal that the largely *political* risks would negatively impact the company's operations:

ISSUE <i>[[challenge]]</i>	Text INTRODUCTION
Position challenged	The Chinese market seems attractive.
Background	China is the world's 4 th largest economy, which led to increased consumption of energy and an environmental crisis, so it urgently needs renewable energy solutions.
Rebuttal Arguments	Despite economic opportunities, there are significant political risks.
Anti-thesis	We should continue research before entering the Chinese market.

Table 3.20 The ISSUE stage of the analytical discussion of the China Report

Table 3.21 below provides a synoptic overview of the generic structure of this **ISSUE** stage.

GENRE STAGES	<i>[[embedded genre stages]]</i>
ISSUE	<i>[[challenge]]</i> Position challenged Background Rebuttal Arguments Anti-thesis

*Table 3.21 A synoptic overview of the *[[challenge]]* providing the ISSUE stage of the China Report*

In the following discussion the two **PERSPECTIVE** stages following the **ISSUE** will be shown to promote one particular position each to arrive at the final recommendation.

*3.1.3.2 Promoting a position: embedded *[[exposition]]* realising the PERSPECTIVE 1 stage of the China Report*

The **PERSPECTIVE 1** stage promotes a position *in favour of* investment in the Chinese solar energy market. It instantiates an embedded *[[analytical exposition]]* genre that moves through four stages. Its **Thesis** that China's market size, economic

growth and the government’s economic policies provide mainly *economic* opportunities for investment are supported by three **Arguments**. The constituency representation in *Figure 3.17* below shows that (similarly to the **PERSPECTIVE** stages of the Canada Report) the four multivariate stages of **PERSPECTIVE 1** also expand their meaning potential through two layers of embedded genres. **Argument 1** and **3** are both second-order [[[[analytical exposition]]]] genres.

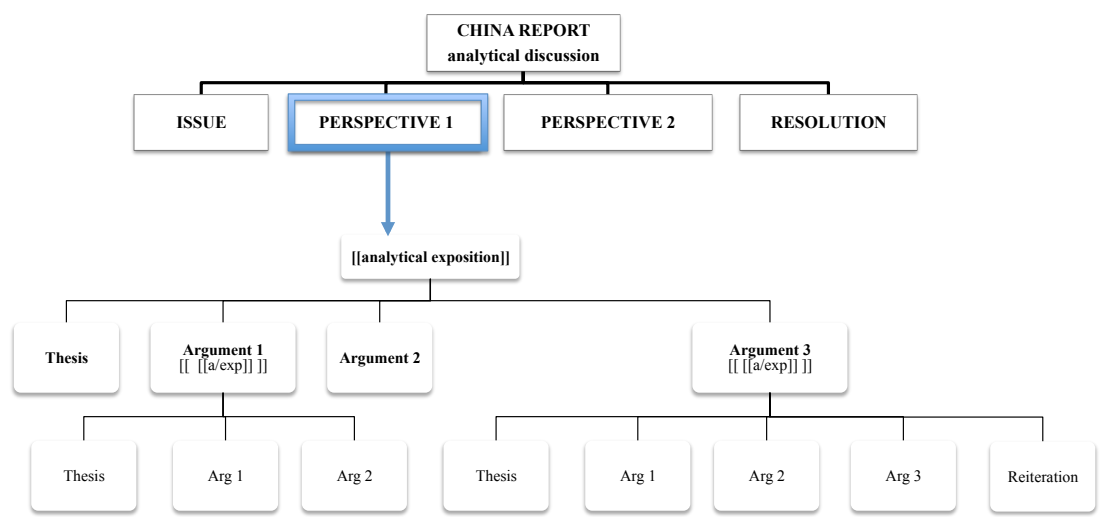


Figure 3.17 Two layers of embedded arguing genres in the PERSPECTIVE 1 stage of the China Report

The two expositions are the only second-order embedded genres in **PERSPECTIVE 1**. As in *Table 3.22* below, **Argument 1** promotes the proposition that the government’s economic reforms and increased government spending on social services have resulted in increasing economic prosperity. Through the staging of an [[[[analytical exposition]]]] these economic sub-factors are evaluated as indicators of market potential for solar energy. This position is further supported in **Argument 2** by a discussion of potentially increased demand for solar energy, due to the environmental crisis caused by China’s economic growth together with low energy efficiency. The [[[[analytical exposition]]]] realising **Argument 3** promotes the position that China’s collectivist culture is compatible with a potential green movement. It marshalls three Arguments to conclude that greater community awareness of the environmental crisis could lead to changes in energy consumption

habits; this signals market potential for the Australian firm trying to export solar panels to the Chinese energy market.

PERSPECTIVE 1 [[analytical exposition]]	Text OPPORTUNITIES
Thesis	China's market size, economic growth and the government's economic reforms present economic opportunities for investment
Argument 1 [[[[analytical exposition]]]]	<u>Market Size & Growth</u>
Thesis	despite concerns that economic growth may slow down, China's economy is expected to remain stable due to increasing economic prosperity brought about by new economic reforms
Argument 1	the market potential of China is signaled by growing purchasing power parity (PPP) and the rise in private consumption and disposable incomes
Argument 2	increased government spending on social services has resulted in a stronger social safety net, which provides market potential for renewable energy due to greater spending power
Argument 2	<u>Political and Cultural Support for Renewable Energy Options</u> China's economic growth together with low energy efficiency has resulted in an environmental crisis, which will drive an increased demand for solar energy
Argument 3 [[[[analytical exposition]]]]	
Thesis	China's collectivist culture would be compatible with a green movement...
Argument 1	... because the needs of the wider community are considered before the individual,
Argument 2	... because social harmony is achieved by social commitment and hierarchy,
Argument 3	... because cultural practices can impact consumption patterns
Reiteration of Thesis	... because despite the cost of solar energy community awareness about the environmental crisis should encourage change in energy consumption habits

Table 3.22 Embedded arguing genres functioning as multivariate stages to build the depth of the PERSPECTIVE 1 stage of the China Report

The synoptic overview of **PERSPECTIVE 1** in *Table 3.23* below illustrates the depth of its stages as construed by two layers of embedded arguing genres.

GENRE STAGES	[[embedding]]	[[[[embedding]]]]
PERSPECTIVE 1	[[analytical exposition]]	
	Thesis	
	Argument 1	[[[[analytical exposition]]]]
	Argument 2	
	Argument 3	[[[[analytical exposition]]]]

Table 3.23 Synoptic view of the generic structure of the [[analytical exposition]] realising the PERSPECTIVE 1 stage of the China Report

It is the **PERSPECTIVE 2** stage of the China Report where the most layers of embeddings were found in this data set. The following section will show how the depth of this stage is built through three layers of embedded arguing genres, such as challenges, analytical discussions and expositions and an explaining genre, a consequential explanation.

3.1.3.3 Promoting a position: Building ‘depth’ through three layers of embedding in the PERSPECTIVE 2 stage of the China Report

The **PERSPECTIVE 2** stage analyses the *economic, technological, political, legal* and *socio-cultural* external business environments of the Chinese solar energy market. The constituency representation in *Figure 3.18* below shows that generically it is an embedded [[analytical exposition]]. Its **Thesis** contra investment is scaffolded through a series of four **Argument** stages (without a final **Reiteration** stage). Three of these **Arguments** (1, 3 and 4) are second-order [[[[analytical exposition]]]] genres (highlighted in blue in the figure below).

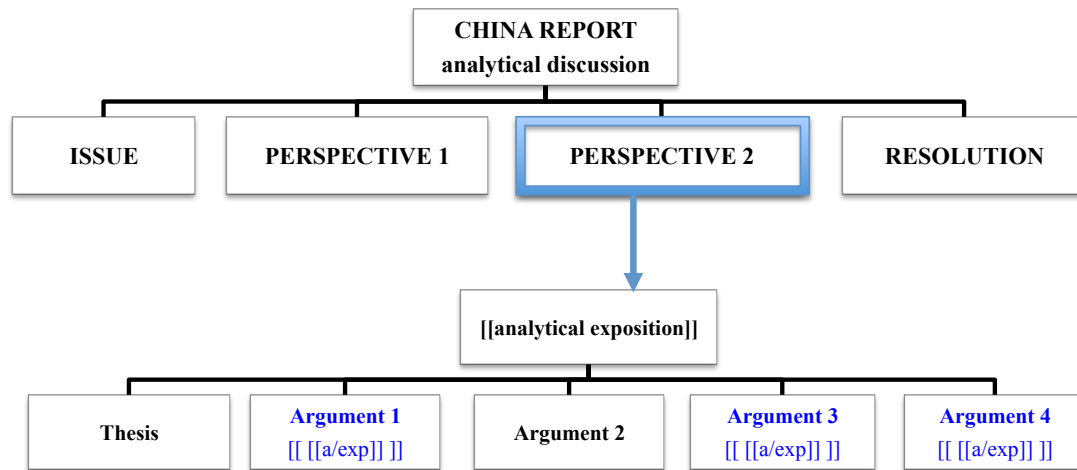


Figure 3.18 Second order [[analytical expositions]] realising Arguments in the PERSPECTIVE 2 stage of the China Report

Table 3.24 below shows the generic staging of **PERSPECTIVE 2**. Each of the four **Argument** stages that scaffold the **Thesis** is concerned with PESTLE factors selected from the *economic, political and legal* environments. These factors (*poverty and economic inequality, domestic competition and protectionism, a weak legal framework, corruption and Confucianism, and weak IPR laws*) are all evaluated as potential risk factors for investing in solar power in China through the staging of first and second-order embedded [[[[analytical expositions]]]].

PERSPECTIVE 2 [[analytical exposition]]	Text RISKS
Thesis	risks such as the rise in inequality, social unrest and political instability; protectionism, the absence of the rule of law and insufficient intellectual property protection may present our company with prohibitive costs and barriers
Argument 1 [[[[analytical exposition]]]]	<u>Poverty and Economic Inequality</u>
Thesis	the risks associated with economic disparity place a limit on market size and growth
Argument 1	economic development has resulted in growing income inequality, especially between coastal and rural regions
Argument 2	extreme poverty and the prohibitive cost of solar energy limit China's consumer market size
Argument 3	poverty brings the threat of social unrest, which may erode the country's political stability
Reiteration of Thesis	growing economic inequality among regions and the rising unemployment in cities may create a challenging environment for foreign businesses
Argument 2	<u>Domestic Competition and Protectionism</u> due to more than 150 Chinese producers of photovoltaic cells, intense local competition may present a risk to the company
Argument 3 [[[[analytical exposition]]]]	<u>Weak Legal Framework and Corruption</u>
Thesis	market-based economic development is undermined by corruption still prevalent in many business transactions
Argument 1	corruption is a deeply embedded practice which could only be eradicated by fundamental political reform, due to the lack of any independent system of accountability
Argument 2	China's cultural practices arising out of Confucianism could make difficult for the company to deal with bribery
Argument 3	despite the government's attempts to eradicate corruption, a lack of transparency and conflicting regulations could pose a risk to the company
Argument 4	corruption is a result of the weak legal system, which is tied to political influence
Reiteration of Thesis	the weak legal system and absence of rule of law pose a serious threat to the company
Argument 4 [[[[analytical exposition]]]]	<u>Weak Intellectual Property Rights</u>
Thesis	local protectionism and weak law enforcement has resulted in serious intellectual property rights (IPR) infringements
Argument 1	the government's attempts to combat intellectual property crime are insufficient
Argument 2	China's cultural and political practices and weak IPR protection laws can pose significant operational risk to the company

Table 3.24 Second order embedded arguing genres functioning as multivariate stages to build the depth of the PERSPECTIVE 2 stage of the China Report

The presentation so far has shown that two layers of embedded arguing genres construe the depth of some Argument stages in the China Report, similar to some Perspective stages in the Canada Report. I will now take a closer look at the **Argument** stages realised by second-order [[[[exposition]]]] genres. The analysis found that these genres further embed third-order genres made to function as their Argument stages. The following sections will discuss third-order [[[[[[exposition]]]]]] and [[[[[[challenge]]]]]] genres that construe a further layer of meaning potential in the China Report. It will also show that apart from these arguing genres, a fourth text type was identified from the family of explaining genres: a third-order [[[[[[consequential explanation]]]]]].

*3.1.3.3.1 Promoting a position through a third-order [[[[[[analytical exposition]]]]]] in the **PERSPECTIVE 2** stage of the China Report*

As mentioned above, the **Argument 1** stage of **PERSPECTIVE 2** is a second-order [[[[analytical exposition]]]] analysing the *economic* factors of poverty and economic inequality. The genre analysis found that its Argument 2 (highlighted in blue in *Figure 3.19* below) stage is realised by an elemental analytical exposition genre. It is concerned with the *economic* sub-factor ‘*market size [for solar panels]*’, which is restricted by widespread poverty and the prohibitive costs of solar energy in China. The constituency representation in *Figure 3.19* illustrates the generic staging of the text (highlighted in blue) moving through four multivariate stages, a Thesis, two Arguments and the Reiteration.

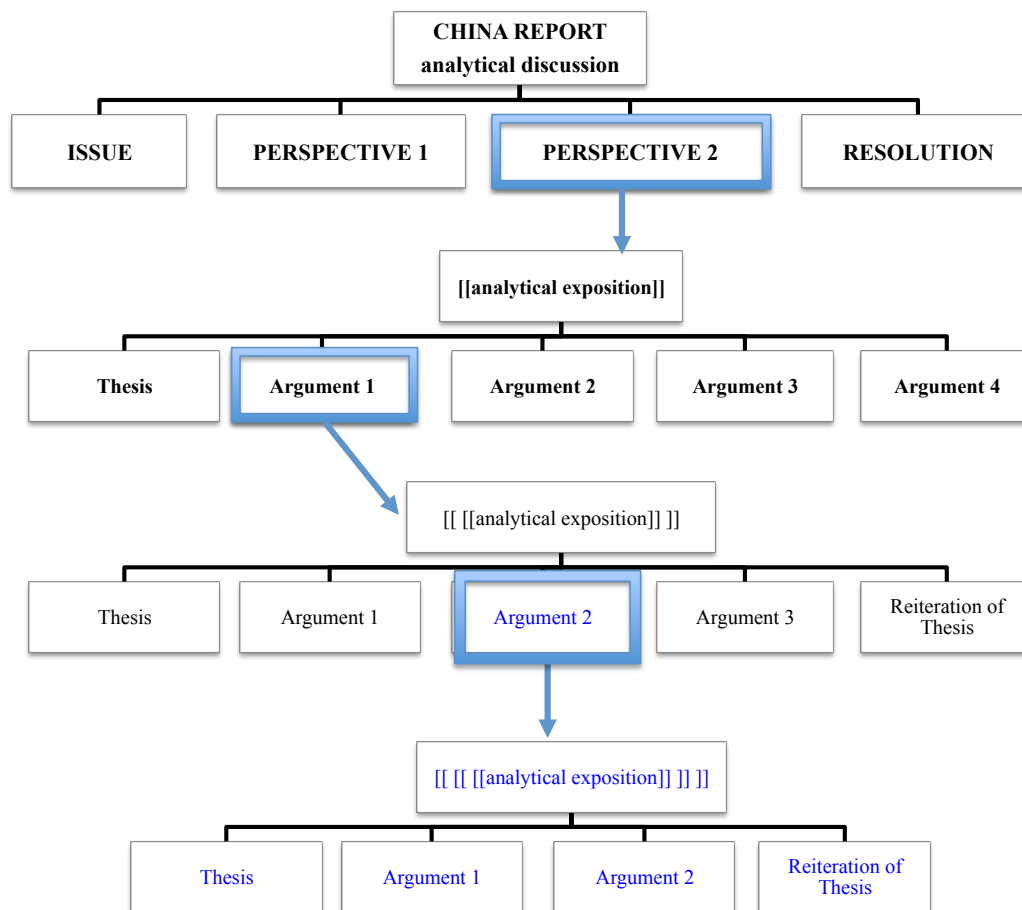


Figure 3.19 A third-order [[[[[[analytical exposition]]]]]] providing Argument 2 of Argument 1 of the PERSPECTIVE 2 stage of the China Report

The opening Thesis stage of this [[[[[[exposition]]]]]] presents the position that the Australian firm would only have a limited consumer market for solar panels. This Thesis is followed by two Arguments in favour of this position: the Argument 1 stage cites some statistics on millions living in extreme poverty in China's rural areas, which would significantly limit market size for solar panels. Argument 2 supports the Thesis by pointing out that coal is still a much cheaper source of electricity than solar energy. The final Reiteration concludes that the cost of solar is prohibitive which would limit consumer demand. *Table 3.25* below illustrates how the staging of this [[[[[[analytical exposition]]]]]] scaffolds this position about limited market potential by evaluating a sub-factor of an economic factor (*poverty*) selected from PEST as a threat. By taking on the function of Argument 2 in the second-order [[[[analytical exposition]]]] realising **Argument 1**, its status in the overall superstructure becomes

a *third-order* embedded genre. This is indicated by the triple bracketing in *Table 3.25* below.

PERSPECTIVE 2 Argument 1 Argument 2 [[[[[[analytical exposition]]]]]]	Text <u>Poverty and Economic Inequality</u>
Thesis	Certainly, at the moment the consumer market for solar energy would appear to be confined to China's largely urban middle class, estimated to be approximately 587 million (Cavusgil, Knight & Riesenberger 2008, p.269). This means that the bulk of China's population would be unlikely to purchase solar cells, unless they were installed by the government in the form of rural electrification projects.
Argument 1	Extreme poverty has not been eradicated in China: 21.5 million rural dwellers live below the official "absolute poverty" line of approximately \$90 per year and an additional 35.5 million are above this line but below the official "low income" threshold of \$125 per year (CIA World Factbook 2008). These poverty rates need to be factored in when calculating the market size for solar power.
Argument 2	Even China's middle class will need encouragement to buy solar power, since costs are still higher than electricity generated from coal, which is still by far the cheapest source of electricity (Dorsch 2008).
Reiteration of Thesis	Currently, the cost of solar energy is still prohibitive, which is why the bulk of domestic consumption is still composed of government rural electrification schemes. Doubts have been expressed as to whether the Renewable Energy Law contains sufficient incentives to stimulate consumer demand for solar panels.

Table 3.25 The staging of a third-order [[[[[[exposition]]]]]] genre in the PERSPECTIVE 2 stage of the China Report

So far the above analyses of second and third-order genres in both the Canada and the China Report have shown that each is a type of arguing genre, i.e. a challenge, a discussion or an exposition. A closer analysis of **Argument 1** of the **PERSPECTIVE 2** stage of the China Report reveals an instance of a consequential explanation from the genre family of explanations. This text type will be the focus of the following section.

3.1.3.3.2 Explaining a position: third-order

[[[[[[consequential explanation]]]]]] in the **PERSPECTIVE 2** stage of the China Report

Argument 2 is not the only stage in **Argument 1** that was found to embed a third-order genre. It established from an *economic* point of view through the structure of an [[[[[[exposition]]]]]] that poverty and economic inequality will negatively impact the market size for solar. The following Argument 3 stage of **Argument 1** investigates the same economic factors from a *political* perspective to prove that the threat of social unrest will have a negative impact on investment. The constituency representation in *Figure 3.20* below illustrates the generic staging of the text (highlighted in blue). It is realised by a third-order text type, a [[[[[[consequential explanation]]]]]] that moves through four multivariate stages, a Phenomenon, two Consequences and a Reinforcement of Consequences stage.

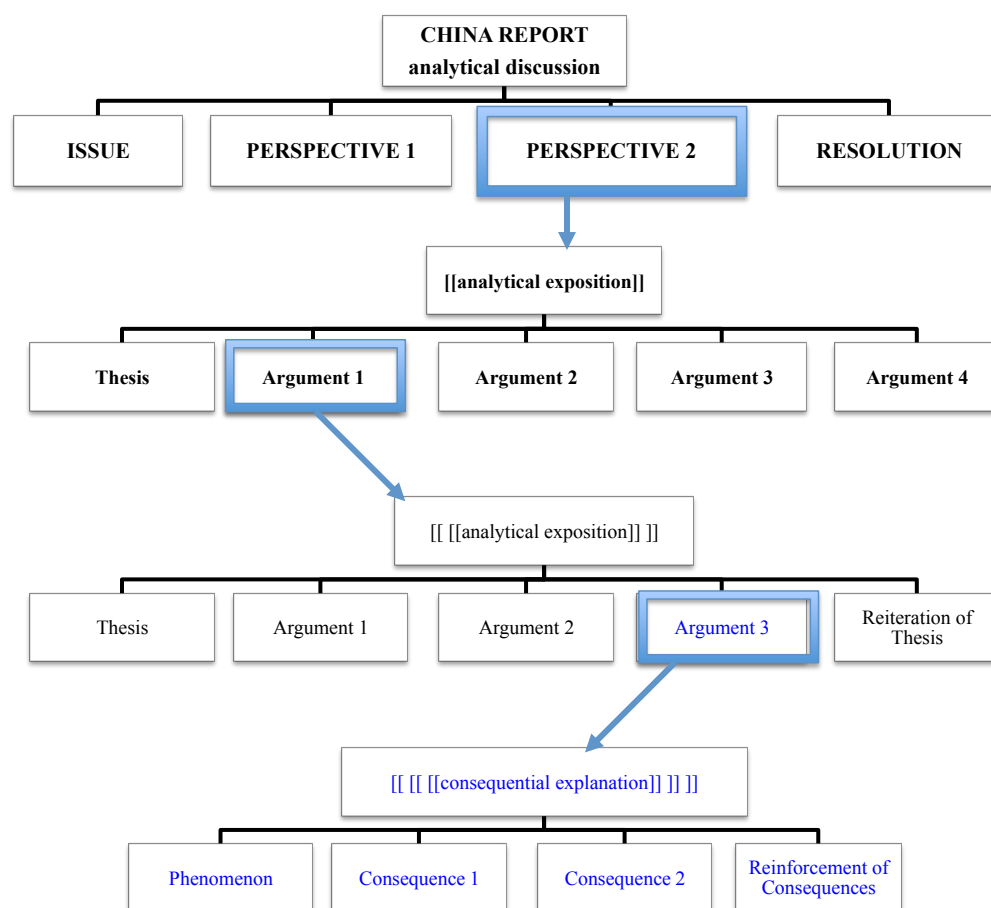


Figure 3.20 A third-order [[[[[[consequential explanation]]]]]] providing Argument 3 of Argument 1 of the PERSPECTIVE 2 stage of the China Report

As noted in **Chapter 2**, canonical consequential explanations unfold through several Effect or Consequence stages in order to explain the impacts and consequences of various factors or phenomena. A similarity these text types share with arguing genres is that they unfold rhetorically rather than chronologically, i.e. they are organised by text time rather than field time (Coffin, 2006; Martin & Rose, 2008). The opening obligatory stage of a consequential explanation is termed *Input* in the Disadvantaged School Program materials (Coffin, 1996) and *Input* or *Phenomenon* in Martin & Rose (2008). In the China Report this stage was called *Phenomenon* since it introduces the economic factor of poverty as an already existing significant risk for investment. This stage sets up the *result* of widespread poverty (*the threat of social unrest*) as a risk. This is followed by two Consequence stages that elaborate this Phenomenon: the Consequence 1 stage explains that this threat resulted in the government's attempts to reduce poverty in rural areas. Consequence 2 shows urban poverty as another negative reason for social unrest. The final Reinforcement of Consequences stage concludes that these effects will reduce market potential if social unrest is a threat to China's political stability. It is worth pointing out here that the evaluation of social unrest as a threat is achieved in this stage tacitly rather than overtly. The factor '*political stability*' is considered the basis for development, a necessary condition for a company aiming to invest in China. While the nominal group '*political stability*' contains a Classifier signalling which PEST environment the factor is chosen from, the Classifier '*economic*' is missing from the nominal group realising the factor of '*development*'. Even though the writer does not try to convince the reader through the structure of an arguing genre that the lack of '*political stability*' is an investment risk, *Table 3.26* below illustrates how the staging of this third-order

[[[[[[consequential explanation]]]]]] scaffolds an anti-investment position from a *political* perspective that poverty would result in social unrest. The writer's analysis of an *economic* factor (*poverty*) is linked to other *political* factors, i.e. factors from another PEST environment (*social unrest*, *political stability*). Thus through the staging of a [[[[[[consequential explanation]]]]]] different factors from different PEST environments are related to each other in terms of their negative impact on investment. This text becomes a *third-order* embedded genre by taking on the function of the Argument in the second-order [[[[analytical exposition]]]] realising **Argument 1**. Its status in the overall superstructure is indicated by the triple bracketing in *Table 3.26*.

PERSPECTIVE 2 Argument 1 Argument 3 [[[[[[consequential explanation]]]]]]	Text <u>Poverty and Economic Inequality</u>
Phenomenon	As well as constraining the size of the market, poverty brings with it the threat of social unrest.
Consequence 1	This has been acknowledged by the government's measures to redress rural poverty, which include an end to arbitrary taxes, the securing of farmers' land rights, and improved health and education (Batson 2008).
Consequence 2	Social unrest has also affected urban areas, where the restructuring of state-owned enterprises has led to large-scale redundancies and subsequent feelings of resentment towards the Government (Rosenberger 2007).
Reinforcement of Consequences	In the long term, inequality may erode the country's political stability, which until now has been the basis for China's development.

Table 3.26 The staging of a third-order [[[[[[consequential explanation]]]]] in the PERSPECTIVE 1 stage of the Spain Report

The choice of evaluating economic factors through the structure of a [[[[[[consequential explanation]]]]] is an interesting one. Rather than setting up a position about limited investment potential through the structure of an exposition, the writer seems to take the business analysis one step further: the negative valuation of the *economic* factor is set up as a given in the Phenomenon stage (*constraining market size*) so its *effects* rather than the factor itself are evaluated with regards to the viability of investment. *Promoting* the view *that* this particular factor is going to be a risk does not seem to be necessary: the writer is more concerned with the consequences associated with negatively evaluated risk factors as 'news' (*erosion of political stability*)⁵.

To conclude, both these two third-order embedded genres on two potential negative effects of the factor '*poverty*' on investment potential function as Arguments in a

⁵ A similar pattern was found in Text 9 (the Spain Report), where the 'given' in the Phenomenon stage, an *economic* factor (*the severity of the GFC*), is also negatively evaluated. Its effects are then linked to investment potential in the subsequent Consequence stages. These consequences are evaluated negatively in terms of what these mean for investment (e.g. *negative indicator*, *negative effect*, etc.). This leads to the final Reinforcement of Consequences stage, which concludes that these negative effects will reduce market potential. Together with the [[[[[[consequential explanation]]]]] found in the China Report, these texts were the only two instances of embedded genres from the explanation genre family across this data set.

series of positions. As highlighted in blue in *Table 3.27* below, they promote the Thesis of **Argument 1** that the risks associated with economic disparity place a limit on market size and growth. This is reinforced in a final Reiteration stage.

PERSPECTIVE 2 Argument 1 [[[[analytical exposition]]]]	Text <u>Poverty and Economic Inequality</u>
Thesis	the risks associated with economic disparity place a limit on market size and growth
Argument 1	economic development has resulted in growing income inequality, especially between coastal and rural regions
Argument 2 [[[[[[analytical exposition]]]]]]	extreme poverty and the prohibitive cost of solar energy limit China's consumer market size
Argument 3 [[[[[[consequential explanation]]]]]]	poverty brings the threat of social unrest, which may erode the country's political stability
Reiteration of Thesis	growing economic inequality among regions and the rising unemployment in cities may create a challenging environment for foreign businesses

Table 3.27 Third order genres functioning as Arguments in Argument 1 of P2 in the China Report

Apart from the promoting and explaining rhetoric scaffolded by the structure of third-order expositions and explanations, the analysis found an instance of defeating rhetoric scaffolded by a third-order challenge in **Argument 3** of **PERSPECTIVE 2**.

3.1.3.3.3 Defeating a position: third-order [[[[[[challenge]]]]] in the PERSPECTIVE 2 stage of the China Report

Argument 3 marshalls four Arguments in order to prove its Thesis that the prevalence of corruption in conducting business in China makes market-based economic growth difficult for foreign companies. The four Argument stages following this Thesis support this position by arguing that 1) corruption is deeply embedded due to the lack of accountability of corrupt officials, 2) China's cultural practices would make it difficult for a foreign company to handle bribery, 3) the government's attempts to tackle corruption remain futile because of a lack of transparency and conflicting regulations and 4) the weak legal system, intertwined with the political system, is to blame for corruption. These Arguments are then distilled in the final Reiteration stage, which reinforces the Thesis by citing the weak

legal system and absence of rule of law as potential significant risk factors to the company.

When examining each stage more closely, the analysis found that the Argument 3 stage of this second-order exposition is realised by a challenge genre (highlighted in blue in *Figure 3.21* below). It moves through three obligatory stages to achieve its social purpose: a Position challenge, a Rebuttal Arguments and an Anti-Thesis to argue that the government’s attempts to eradicate corruption remain unsuccessful due to a lack of transparency and conflicting regulations.

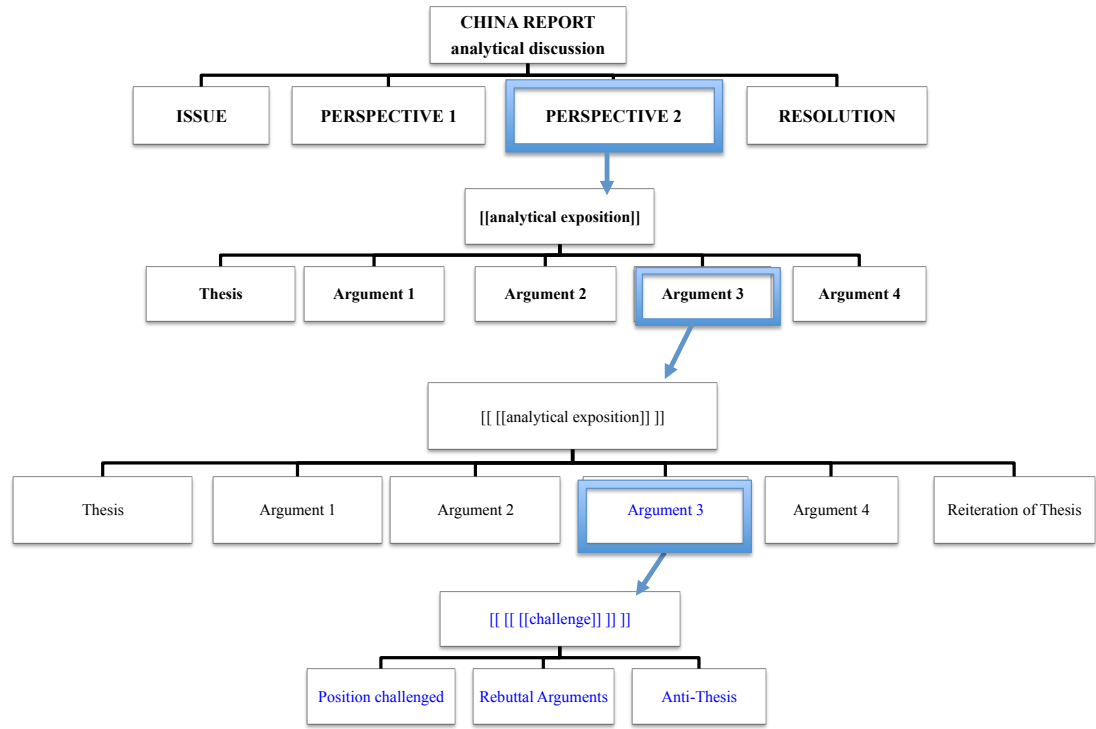


Figure 3.21 A third-order [[[[challenge]]]] providing Argument 3 of Argument 3 of the PERSPECTIVE 2 stage of the China Report

Thus this challenge becomes a third-order embedded genre. Its status in the overall superstructure is indicated by triple bracketing in *Table 3.28* below, which shows the staging of Argument 3.

PERSPECTIVE 2 Argument 3 [[[[[[challenge]]]]]]	Text <u>Weak Legal Framework and Corruption</u>
Position challenged	China has currently adopted a top-down approach to tackling corruption where deterrence is created through the high-profile trials and sentencing of several high-ranking officials. In 2006, Chinese prosecutors investigated 9582 commercial bribery cases worth US\$193.8 million (Kirk 2007).
Rebuttal Arguments	Although the central government in Beijing has constantly come up with new laws and initiatives to battle corruption, there is a lack of transparency regarding operational procedures within the Central Commission of Discipline Inspection (Pei 2007). This further complicates the problem, leaving it unclear how allegedly corrupt officials are effectively disciplined and punished.
Anti-Thesis	The consistent application and transparency of laws is further questionable given that central and local government regulations often conflict, leaving local lawmakers and officials to interpret and implement laws according to their own political interests (<i>The Economist</i> 4 August 2007).

Table 3.28 The staging of a third-order [[[[[[challenge]]]]]] genre in the PERSPECTIVE 2 stage of the China Report

3.1.3.3.4 Promoting a position: third-order [[[[[[analytical exposition]]]]]] in the PERSPECTIVE 2 stage of the China Report

The final third-order embedded genre was found in **Argument 4** of the **PERSPECTIVE 2** stage. **Argument 4** is concerned with the unacceptably high level of intellectual property rights violations in China due to insufficient IPR protection by the Chinese legal system. As shown in *Figure 3.22* below, it is a second-order [[[[analytical exposition]]]]. Similarly to Argument 2 and 3 of **Argument 1**, the Argument 2 stage of **Argument 4** was found to embed a third-order arguing genre. This Argument 2 also scaffolds a promoting rhetoric through the structure of an [[[[[[analytical exposition]]]]]], which moves through a Thesis and two Argument stages.

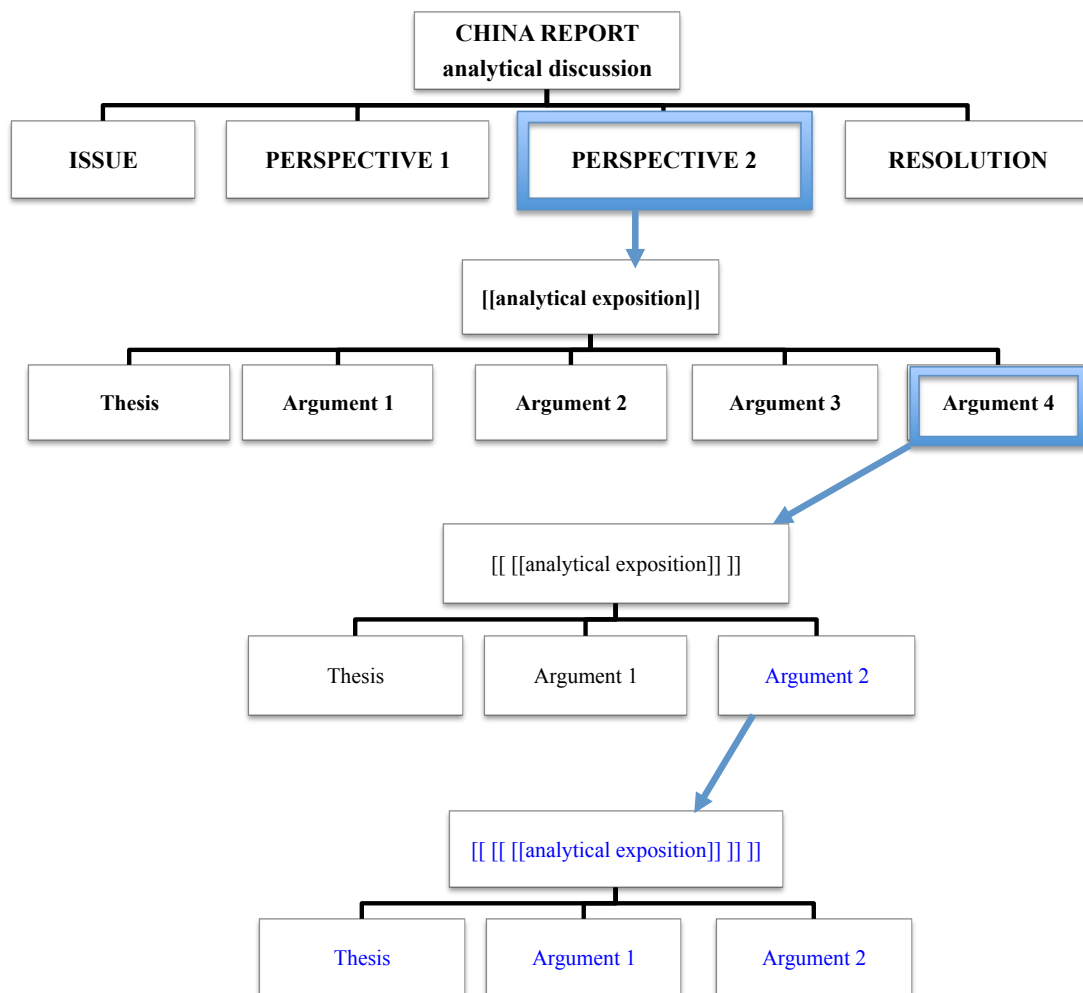


Figure 3.22 A third-order [[[[[[analytical exposition]]]]] providing Argument 2 of Argument 4 of the PERSPECTIVE 2 stage of the China Report

This third-order [[[[[[analytical exposition]]]]] promotes the position that the government's attempts to tackle IPR violations fail because of China's cultural and social associations of intellectual property with communal property. *Table 3.29* below shows how this promoting rhetoric is scaffolded through embedding another layer of meaning potential.

PERSPECTIVE 2 Argument 4 Argument 2 [[[[[[analytical exposition]]]]]]	Text <u>Weak Intellectual Property Rights</u>
Thesis	The government's attempts to strengthen IPR and introduce international norms face an uphill battle, as it goes against Chinese culture and political traditions.
Argument 1	Copying and imitation were traditionally viewed as effective ways of learning; in the Confucian tradition, intellectual property was perceived as a communal good (Yang 2005, p.286). This was reinforced by Communist rule, which sought to eradicate private property and resources were owned by the State. Such ingrained social perceptions of IP as available for public use must be changed through improved enforcement and clarity in IPR laws before they reach the IPR protection in industrialised countries.
Argument 2 'ph/reservation'	<i>There are arguments that, as China develops its own critical mass of patents, it may step up its enforcement capabilities (EIU Viewswire 2008).</i> This is supported by the granting of 351,782 patents to companies in 2007 which is a rise of 31.3% from 2006, according to the State Intellectual Property Office (EIU Viewswire 2008). However, the currently weak IPR protection laws can pose significant operational risks if solar panels were exported to China, as the market could be flooded with cheaper, fake imitations. Therefore, any technological advantage may be eroded due to weak IPR protection.

Table 3.29 The staging of a third-order [[[[[[analytical exposition]]]]]] in the PERSPECTIVE 2 stage of the China Report

Table 3.30 below highlights the four third-order embedded arguing and explaining genres (two expositions, a challenge and an explanation) that take on the function of Argument stages in higher order [[[[analytical exposition]]]] genres. These second-order expositions also function as **Arguments** in the [[analytical exposition]] realising **PERSPECTIVE 2**.

PERSPECTIVE 2 [[analytical exposition]]	Text RISKS
Thesis	risks such as the rise in inequality, social unrest and political instability; protectionism, the absence of the rule of law and insufficient intellectual property protection may present our company with prohibitive costs and barriers
Argument 1 [[[[analytical exposition]]]]	<u>Poverty and Economic Inequality</u>
Thesis	the risks associated with economic disparity place a limit on market size and growth
Argument 1	economic development has resulted in growing income inequality, especially between coastal and rural regions
Argument 2 [[[[[[analytical exposition]]]]]]	extreme poverty and the prohibitive cost of solar energy limit China's consumer market size
Argument 3 [[[[[[consequential explanation]]]]]]	poverty brings the threat of social unrest, which may erode the country's political stability
Reiteration of Thesis	growing economic inequality among regions and the rising unemployment in cities may create a challenging environment for foreign businesses
Argument 2	<u>Domestic Competition and Protectionism</u> due to more than 150 Chinese producers of photovoltaic cells, intense local competition may present a risk to the company
Argument 3 [[[[analytical exposition]]]]	<u>Weak Legal Framework and Corruption</u>
Thesis	market-based economic development is undermined by corruption still prevalent in many business transactions
Argument 1	corruption is a deeply embedded practice which could only be eradicated by fundamental political reform, due to the lack of any independent system of accountability
Argument 2	China's cultural practices arising out of Confucianism could make difficult for the company to deal with bribery
Argument 3 [[[[[[challenge]]]]]]	despite the government's attempts to eradicate corruption, a lack of transparency and conflicting regulations could pose a risk to the company
Argument 4	corruption is a result of the weak legal system, which is tied to political influence
Reiteration of Thesis	the weak legal system and absence of rule of law pose a serious threat to the company
Argument 4 [[[[analytical exposition]]]]	<u>Weak Intellectual Property Rights</u>
Thesis	local protectionism and weak law enforcement has resulted in serious intellectual property rights (IPR) infringements
Argument 1	the government's attempts to combat intellectual property crime are insufficient
Argument 2 [[[[[[analytical exposition]]]]]]	China's cultural and political practices and weak IPR protection laws can pose significant operational risk to the company

Table 3.30 Embedded arguing genres functioning as multivariate stages to build the depth of the PERSPECTIVE 2 stage of the China Report

The synoptic overview of **PERSPECTIVE 2** in *Table 3.31* below highlights the depth of this stage construed by three layers of embedded arguing and explaining genres; with its **Argument 1** containing the most layers of embedding:

GENRE STAGES	[[embedding]]	[[[[embedding]]]]	[[[[[[embedding]]]]]]
PERSPECTIVE 2	[[analytical exposition]]		
Thesis			
Argument 1		[[[[analytical exposition]]]]	
		Argument 2	[[[[[[analytical exposition]]]]]]
		Argument 3	[[[[[[consequential explanation]]]]]]
Argument 2			
Argument 3		[[[[analytical exposition]]]]	
		Argument 3	[[[[[[challenge]]]]]]
Argument 4		[[[[analytical exposition]]]]	
		Argument 2	[[[[[[analytical exposition]]]]]]

Table 3.31 Synoptic view of the generic structure of the [[analytical exposition]] realising the PERSPECTIVE 2 stage of the China Report

The presentation of the generic structure of the **PERSPECTIVE** stages of the China Report has shown how depth is construed by embedding multiple layers of genres as multivariate stages. One noticeable difference between the Canada and the China Report is the number of **PERSPECTIVE** stages instantiated in the superstructure. While the **ISSUE** stage of the Canada Report is followed by a non-obligatory **BACKGROUND** and *four PERSPECTIVES*, the opening **ISSUE** stage of the China Report is followed by only *two PERSPECTIVE* stages before reaching the final **RESOLUTION**. Another difference found between the two model texts is that three of the four **PERSPECTIVES** of the Canada Report are realised by embedded [[analytical discussions]] and only one by an [[analytical exposition]]; the two **PERSPECTIVES** of the China Report both instantiate embedded [[analytical exposition]] genres. By moving through obligatory stages of a *Thesis*, at least two *Argument* stages and an optional *Reiteration* stage, each **PERSPECTIVE** promotes only one proposition with regards to investment in the Chinese energy market.

A closer look at the **PERSPECTIVES** in both texts revealed further differences. The Canada Report instantiates four **PERSPECTIVE** stages that open up meaning potential through *two* layers of embedded genres. However, in the China Report only two **PERSPECTIVES** were found but *three* layers of embeddings. Its

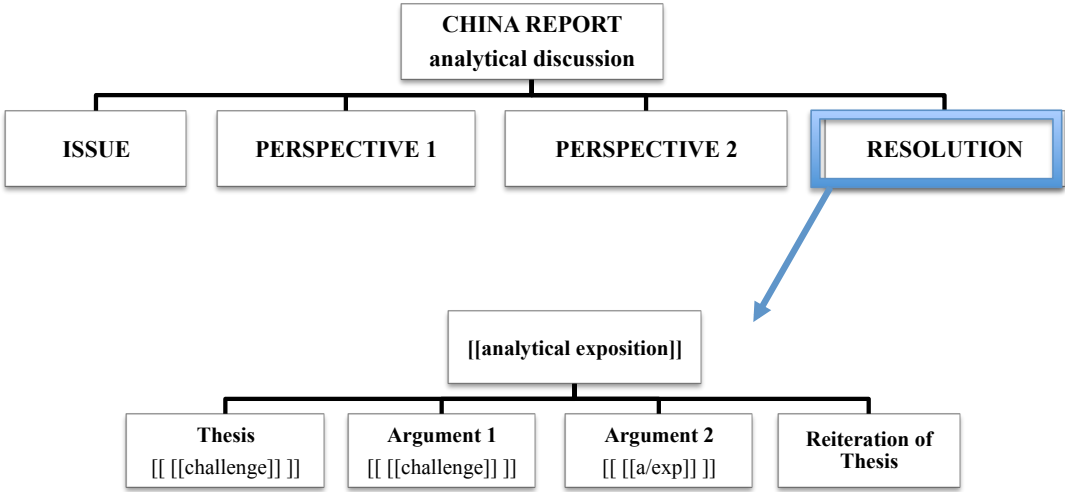
PERSPECTIVE 1 builds its depth by embedding two layers of arguing genres to scaffold an overarching proposition *in favour of* investment: that market size, economic growth, and government reform supporting the renewable energy industry provide mostly *economic* opportunities for export. However, **PERSPECTIVE 2** contains *three layers* of arguing and explaining genres to scaffold an *anti-investment* position: that poverty and economic inequality, domestic competition and protectionism, a weak legal framework, corruption, and weak IPR laws present largely *political* risks to the Australian company.

As discussed above, in the Canada Report PEST factors are broken down into sub-factors to become Targets of evaluation. Through the staging of primarily second-order embedded analytical discussions these factors are evaluated as *both* opportunities *and* threats. However, no instances of discussion genres were identified in the **PERSPECTIVES** of the China Report. PESTLE factors are promoted *either* as an opportunity *or* a risk primarily through embedding first, second and third-order exposition genres in order to construe a *promoting* rhetoric. Apart from this choice of rhetoric, the single instances of a third-order challenge and an explanation found in this analysis indicate that *defeating* and *resolving* rhetoric also play a role in analysing PESTLE factors. This point from the perspective of discourse semantic resources realising these different types of rhetoric will be taken up again in **Chapter 5**. Before discussing when successful writers stop arguing that a factor presents either an opportunity or a risk to the company, i.e. the point of delicacy at which the embedding of genres stops, the discussion will first turn to the final **RESOLUTION** stage that follows the two **PERSPECTIVES** of the China Report.

3.1.3.4 Defeating and promoting positions in the RESOLUTION stage of the China Report

After weighing up the relevant *economic* opportunities and mostly *political* risks presented by the external business environment of China in the preceding two **PERSPECTIVE** stages, the China Report concludes with a final, obligatory stage: the **RESOLUTION**. It is the traditional Conclusion and Recommendation section of business reports. It provides the conclusive recommendation that instead of eliminating China as a potential solar panel export market, the firm should delay

investment until further research is conducted. This **RESOLUTION** is different from the Canada Report as it contains two layers of embedding to build the ‘depth’ of the stage. While the **RESOLUTION** of the Canada Report is an embedded `[[challenge]]`, this **RESOLUTION** in the China Report is realised by an embedded `[[analytical exposition]]`. It moves through a **Thesis**, two **Arguments** and a **Reiteration** stage. Its first three stages are second-order embedded genres as shown by the double bracketing in *Figure 3.23* below.



*Figure 3.23 An embedded `[[analytical exposition]]` providing the **RESOLUTION** stage of the China Report*

Table 3.32 below shows the staging of the **RESOLUTION** with its two layers of embedded arguing genres. By dismissing the *economic* opportunities provided by the Chinese solar energy market (e.g. *population* and *unprecedented economic growth*), the first second-order `[[[[challenge]]]]` genre provides the **Thesis** of the **RESOLUTION**. It puts forward the position that these economic opportunities are outweighed by the risk factors presented by the *political* and *legal* environments of PESTLE (such as a *weak legal system* and *IPR protection*), which would hinder the operations of the Australian company. The second `[[[[challenge]]]]` provides the **Argument 1** stage. By dismissing the position that there is increased domestic demand and government support for solar energy and renewables, it establishes that a rapidly emerging domestic solar industry could be a potential deterrent for foreign competition. **Argument 2** is an `[[[[analytical exposition]]]]`. It promotes a proposal for the need for further research on market potential in order to consider foreseeable

risks in the short and medium term. These include potential negative effects on investment such as slowing economic growth and uneven implementation of environmental, social welfare and legal reforms. These arguments are then distilled into a **Reiteration** stage. This presents the final proposal that instead of eliminating the Chinese market from the list of potential markets under consideration for investment, further, more detailed research is necessary before exporting solar panels to China.

RESOLUTION [[analytical exposition]]	Text RECOMMENDATION AND CONCLUSION
Thesis [[[[challenge]]]] Position challenged	China's economic growth provides an attractive business environment
Rebuttal Arguments	its political and legal environments due to a lack of political reform present potential risks for foreign companies
Anti-Thesis	the economic opportunities provided by China's economy are outweighed by the weak legal system and IP protection, which provide risks for foreign companies
Argument 1 [[[[challenge]]]] Position challenged	due to the environmental crisis, government support for renewable solutions stimulates domestic demand for solar energy
Rebuttal Arguments	it is too early to applaud the effectiveness and sustainability of these government initiatives
Anti-Thesis	government support of a rapidly emerging domestic solar industry could be a deterrent for foreign competition
Argument 2 [[[[analytical exposition]]]] Thesis	due to increasing government support for renewable energy further analysis should be conducted on market potential
Argument 1	this analysis should further specify the risks, and forecast total market demand
Argument 2	future analysis should consider the negative effects of foreseeable risks such as slowing economic growth and uneven implementation of environmental, social welfare and legal reforms
Reiteration	before market entry to China further, more detailed analysis is necessary

Table 3.32 Second order embedded arguing genres functioning as multivariate stages of the RESOLUTION stage of the China Report

The synoptic overview of the **RESOLUTION** in *Table 3.33* below illustrates its depth as construed by two layers of embedded arguing genres:

GENRE STAGES	[[embedding]]	[[[[embedding]]]]
RESOLUTION	[[analytical exposition]]	
	Thesis	[[[[challenge]]]]
	Argument 1	[[[[challenge]]]]
	Argument 2	[[[[analytical exposition]]]]
	Reiteration	

Table 3.33 A synoptic overview of the [[analytical exposition]] providing the RESOLUTION stage of the China Report

The discussion of the generic staging of the China Report above illustrated how the text used embedding to expand its meaning potential and build the ‘depth’ of each stage to achieve its social purpose. Similarly to the same stage of the Canada Report, its opening **ISSUE** stage is realised by a [[challenge]] genre. It previews the objective of the whole business report, i.e. whether to export solar panels to the emerging market of China. This market analysis will be conducted based on the evaluation of relevant PESTLE factors in the subsequent **PERSPECTIVE** stages. The **PERSPECTIVE** stages of the Canada Report were shown above to discuss both the opportunities and risks identified in the Canadian business environment in order to ‘direct’ the reader towards a preferred position. Therefore they are mostly⁶ realised by [[analytical discussion]] genres to suit this social purpose. In contrast, each of the two **PERSPECTIVE** stages of the China Report scaffolds the *same* position on investment potential in the Chinese solar energy market. For this reason, it is not very surprising that both **PERSPECTIVE** stages instantiate [[analytical exposition]] genres in order to achieve their social purpose of promoting one position throughout their respective stages. **PERSPECTIVE 2** is the stage that was demonstrated to contain the most layers of embedding, in other words, to construe its depth through three layers of embedded genres. Finally, unlike the same stage of the Canada Report realised by a [[challenge]], the final **RESOLUTION** stage of the China Report is realised by an [[analytical discussion]]. Another difference found is that this text instantiates a further layer of embedded arguing genres: its **Issue** and **Perspective 1** stages are realised by a second-order [[[[challenge]]]] genre and its **Perspective 3** by an [[[[analytical exposition]]]]. In comparison to the two layers found in the Canada

⁶ Except for **PERSPECTIVE 1**, which is an [[analytical exposition]] but still embeds primarily analytical discussions as second-order genres to achieve this social purpose.

Report, the China Report construes its depth through three layers of embedded genres, as shown in *Table 3.34* below.

GENRE STAGES	[[embedding]]	[[[[embedding]]]]	[[[[[[embedding]]]]]]
ISSUE	[[challenge]]		
PERSPECTIVE 1	[[analytical exposition]]		
	Thesis		
	Argument 1	[[[[analytical exposition]]]]	
	Argument 2		
	Argument 3	[[[[analytical exposition]]]]	
PERSPECTIVE 2	[[analytical exposition]]		
	Thesis		
	Argument 1	[[[[analytical exposition]]]]	
		Argument 2	[[[[[[analytical exposition]]]]]]
		Argument 3	[[[[[[consequential explanation]]]]]]
	Argument 2		
	Argument 3	[[[[analytical exposition]]]]	
		Argument 3	[[[[[[challenge]]]]]]
	Argument 4	[[[[analytical exposition]]]]	
		Argument 2	[[[[[[analytical exposition]]]]]]
RESOLUTION	[[analytical exposition]]		
	Thesis	[[[[challenge]]]]	
	Argument 1	[[[[challenge]]]]	
	Argument 2	[[[[analytical exposition]]]]	
	Reiteration		

Table 3.34 Synoptic view of the generic structure of the analytical discussion realising the China Report

I can now return to the questions posed at the beginning of this chapter. The understandings gained so far about the nature of analysing PESTLE factors through embedded arguing and explaining genres open up further questions and problems. When is a stage construed by two layers of embedded genres? When does a stage embed three layers of genres? At what point of delicacy does the business analyst stop embedding genres? When do they arrive at the final point in this process of decision-making? In terms of positioning the reader what assumptions can we make about the need for more layers of embedding? How much support does each argument need?

To answer these questions, *Table 3.35* below provides a snapshot of the differences between the two texts. It highlights that the most significant difference between the two structures lies in the staging of the **PERSPECTIVES**. Foregrounding the discussion genre, the Canada Report is more *balanced*; foregrounding the exposition

genre, the China Report is more *one-sided*. The reasons for this have to do with the organisation of the **PERSPECTIVES** with regards to the PESTLE framework and the factors selected for evaluation from each of its environments.

As shown in the table, each **PERSPECTIVE** in the Canada Report is concerned with the analysis of factors from *one* PEST environment only. Each factor and sub-factor is analysed as *both* an opportunity (O) *and* a risk (R) and thus two voices are being constantly negotiated. This creates a canonical ‘pro-con’ or ‘for-and-against’ rhetorical organisation. Also, since the Canada Report has four **PERSPECTIVES**, it only needs two layers of embedded genres, mostly discussions, to keep in line with the *resolving* nature of the text.

In contrast, the **PERSPECTIVES** in the China Report evaluate factors from *different* PESTLE environments. Rather than breaking factors down into sub-factors, factors are linked to other relevant factors from the same or a different environment. These factors are evaluated as *either* an opportunity *or* a risk in terms of their impact on investment potential. This *promoting* of a one-sided position thus necessitates the staging of the writer’s arguments through exposition genres. Since there are only two contrasting voices, one pro-investment and an anti-investment voice, the China Report only needs two **PERSPECTIVES**: one concerned with promoting factors as opportunities only and the other concerned with promoting factors as risks only. Because there are only two **PERSPECTIVES**, the text needs to build more depth through three layers of embedded genres.

CANADA REPORT	CHINA REPORT
4 PERSPECTIVES: 3 [[a/disc]] & 1 [[a/exp]]	2 PERSPECTIVES: each [[a/exp]]
<i>2 layers</i> of embedding: <i>mostly a/disc</i>	<i>3 layers</i> of embedding: <i>mostly a/exp</i>
factors from <i>one</i> PESTLE environment	factors from <i>different</i> PESTLE environments
organized based on PESTLE: evaluating a factor as <i>both</i> O/R	organized based on O/R: evaluating a factor as <i>either</i> O/R
pro & con: <i>resolving</i> 2 positions	pro OR con: <i>promoting</i> 1 position

Table 3.35 Two types of structure: two choices

To fully understand when business analysts arrive at a business decision requires a linguistic understanding of when the embedding of genres stops in a text. For this purpose we need to look at the genre stages where no more embeddings were found. On the other hand, it is also necessary to investigate the dependence and interdependence among factors and sub-factors of the various PESTLE environments to see not only how they are evaluated but also how they are related to the company's objectives, i.e. its investment goals. For instance, when the factor of 'geography' from the technological environment of PEST is analysed, one of its sub-factors such as '*availability of sunlight*' is evaluated in terms of both investment potential and investment risk. I have already explained in detail in [Section 3.1.2.2](#) above that in the Canada Report the various factors and sub-factors can be mapped onto the staging of the second-order embedded arguing genres realising the **PERSPECTIVES** (see [Table 3.10](#)). [Table 3.36](#) below provides examples of how a part/whole composition taxonomy is being construed in the Canada Report.

[Table 3.36](#) below also shows the patterns found in the China Report. As mentioned above, instead of analysing factors and their sub-factors from one PESTLE environment, this text is organised based on grouping corresponding PESTLE factors selected from different environments as opportunities or risks. From the perspective of business decision-making, the writer is evaluating whether an economic factor *affecting* a political factor will turn out to be investment potential or investment risk.

For instance, an *economic* factor, e.g. ‘*consumption habits*’ is analysed *in relation to* another *economic* factor, ‘*spending power*’. It is evaluated through the staging of a second-order [[[[analytical exposition]]]] to function as an Argument. What is significant about staging the evaluation of these economic factors as an exposition genre is that these can then be linked to the company objective: “*increased spending on renewable energy products*” means investment potential, i.e. the writer is promoting these factors from the *economic* environment as opportunities. Similarly, in a lower-order explaining text type, a third-order [[[[[[consequential explanation]]]] an *economic* factor, ‘*poverty*’ is linked to *political* factors from another PESTLE environment: ‘*social unrest*’ and ‘*political stability*’. Again, by showing how an economic factor affecting political factors would result in reduced market potential with regards to the company’s objective, the student writer is able to demonstrate the kind of reasoning that is academically valued in business country reports in relation to decision-making. Reasoning from a linguistic perspective, it seems that simply evaluating PESTLE factors positively or negatively is not sufficient for demonstrating a conclusive business decision: these evaluations must be clearly linked to the company’s objectives. I will expand on this point in more detail in the following section.

Canada Report	factors: sub-factors, e.g.
technological environment	geography: <i>availability of sunlight</i>
economic environment	energy market: <i>supply</i>
China Report	factor affecting factor, e.g.
economic environment – economic environment	poverty → market size
economic environment – political environment	poverty → <i>social</i> unrest
political environment – political environment	<i>social</i> unrest → <i>political</i> stability

Table 3.36 The organisation of PESTLE factors in the two structures

3.1.4 Where the embedding stops: reaching a business decision

To understand when business analysts stop embedding genres requires taking a look at recurring patterns in genre stages that contain no further embeddings. I will provide brief examples of such stages found in both superstructures. For instance, the first two stages of the first-order [[analytical discussion]] providing **PERSPECTIVE 2** of the Canada Report (the section titled Economic Factors) analyse two different economic factors without breaking them further down into sub-factors. While **Perspective 1** discusses the factor of ‘*electricity demand*’ as an opportunity, **Perspective 2** evaluates the factor of ‘*low electricity prices*’ as a risk. Neither stage contains further, lower-order embeddings. What we find however is an explicit link between evaluations of PEST factors as opportunities and risks and the company’s objectives.

Another similar pattern was revealed in the Argument 2 of **Argument 4** in the China Report. This third-order [[[[[[analytical exposition]]]]] analyses the legal factor of ‘*intellectual property rights (IPR) protection*’ from PESTLE. It is evaluated as an ‘*uphill battle*’, i.e. a risk, because of China’s cultural and social associations of intellectual property with communal property; however, simply evaluating these factors as risks does not mean a business decision has been made. What is also necessary is turning the evaluation encoded in ‘*uphill battle*’ into ‘*significant operational risks*’, i.e. a point made *in relation to* the company’s objectives and goals. This is then reinforced in Argument 2, the last stage of the third-order [[[[[[analytical exposition]]]]] as “*any technological advantage may be eroded due to weak IPR protection*”. After making this point there is no need for further embeddings, the business decision has been reached by explicitly linking the company’s objectives to the couplings of factors as risks. Thus the further embedding of lower-order genres seems to stop when the objectives of the firm are linked to PESTLE factors to build economic reasoning. These objectives can be signalled by a range of linguistic resources at the levels of discourse semantics and lexicogrammar, which will be shown in detail in **Chapters 4** and **5**. Examples of company objectives include *export*, *market capture*, *market entry*, *investment*, *etc.* to mention but a few. **Chapter 4** will show in detail how these objectives become Targets of evaluation in business country reports.

It is worth commenting here on the role of Process types at the level of lexicogrammar in linking a company's goals to evaluating PESTLE factors. Evaluated PESTLE factors often appear together with the creative and transformative types.

Table 3.37 below summarises the most common [creative: general] and [transformative: extending] and [elaborating] types (Halliday & Matthiessen, 2004, pp. 187-188), e.g. [creative: general] Process types are common when referring to the goals of a company, e.g. *set up a business*; [possession], [operation], [size] and [amount] of the transformative types are often used to signal the ultimate goals of a company in relation to expansion into a market, increasing profits and reducing investment risks.

material Process types			
creative:	<i>general</i>		<i>develop, grow, set up</i>
transformative:	<i>extending:</i>	possession	<i>invest, supply, buy, sell, purchase</i>
		operation	<i>operate</i>
	<i>elaborating:</i>	size	<i>expand, grow, reduce,</i>
		amount	<i>increase, reduce, strengthen, weaken, constrain, limit</i>

Table 3.37 Salient Process types signalling company objectives in undergraduate country reports

These findings of salient Process types are similar to the findings of Weekes' (2014) study of successful HSC responses in business studies at high school level in an Australian context. However, there are some important differences between business studies writing at high school and university level. While in this study only two instances of consequential explanations were found, the business studies HSC assignments value mostly consequential and factorial explanation genres rather than the arguing genres found in the undergraduate country reports. Another difference that was found concerns how explicit writers make businesses' ultimate goals. While the links between profits and company objectives are not made explicit in the HSC texts nor in the syllabus documents, in business country reports at tertiary level an explicit link must be made between viability or profitability of investment and the evaluation of PESTLE factors. Thus to refine the arguments made in previous sections, simply analysing whether PESTLE factors need to be further broken down

into sub-factors or not is not sufficient to provide an answer to the questions explored in this chapter. Evaluating PESTLE factors through Argument or Perspective stages (e.g. *Canada's engineers are highly qualified* as one Perspective of an Issue) is also insufficient: what we are looking for is whether these Arguments/Perspectives are linked to the company's objectives, i.e. evaluated in terms of their predicted *impact* on the company's operations in relation to making a viable or profitable investment. Specifically, successful writers construe evaluated PESTLE factors as either *business opportunities* or *business risks*. This 'point' is often made explicit in the final stages of arguing genres: i.e. in the *Resolution*, *Reiteration of Thesis* and *Anti-Thesis* stages, as illustrated throughout this chapter. Once 'the point' is made explicitly, genre embedding stops, i.e. business analysts stop arguing or discussing.

Section 3.1 of this chapter was concerned with particulate realisation, i.e. a constituency-based perspective on text structuring principles (Martin, 1994, 1995). More specifically, I focused on constituency representation for experiential meanings realised by multivariate part/whole structures. The following section will address Martin's (1996, p. 63) criticism of the inadequacy of constituency-based representations of particulate structures as a "structurally reductive" way of looking at texts. **Section 3.2** will explore the **orbital** structure of the undergraduate business reports studied in this research.

3.2 A complementary orbital perspective on undergraduate business country reports: Nucleus-Satellite relations

The constituency-based multivariate interpretation of text structure offered in [Section 3.1](#) above on the analysis of generic structure, as pointed out in Martin (1996), is only one way of looking at text structuring principles but it does not account for the relative status of each stage of the Canada Report. In order to complement this limited view of how these texts work still considering a particulate perspective, this section will explore the **orbital structure** of the undergraduate business reports. This orbital perspective, based on analyses of directives in administrative discourse and news stories in media discourse, was taken up to provide a complementary view on generic structure in SFL (ledema, 1994, 1997; Martin, 1996; White, 1997, 1998). Following Martin (1992a, 1994) and Halliday (1979/2002) this section will argue that if a ‘text is like a clause’ (Halliday, 1979/2002) and macrogenres are like clause complexes (Martin, 1994, p. 34), then the final RESOLUTION stages of these country reports could also be conceived of as the Nucleus to the clause:

RESOLUTION: country report ::

Nucleus: clause

The aim of this section is to identify the elements whose nature is nuclear and other elements that are more peripheral rather than central to the activity represented by investment in a particular market in the business country reports. As the following presentation is concerned with the centrality of different elements of the business reports, we are interested in the ‘core’ activity (Halliday & Matthiessen, 1999) that these texts revolve around.

The **RESOLUTION** was identified as the most important stage in the analytical discussion that provides the Canada Report. Without this stage the whole Canada Report would be ‘frustrated’ and the intended reader’s expectations would remain unfulfilled: this is the section which would be of most interest to the reader considering making a business decision about investment in the market under investigation. *Figure 3.24* below captures the **RESOLUTION** as the core, i.e. the Nucleus of the Canada Report. This **RESOLUTION** is nuclear to the **ISSUE** stage,

which represents the business decision to be made about investment. The following section will show that **the ISSUE** is nuclear to the Satellites formed by the **BACKGROUND** and the four **PERSPECTIVES**.

If the Canada Report were to be interpreted as a genre complex instead of a genre simplex, one criterion for this interpretation would be that the individual stages realised by embedded genres should be able to ‘stand’ on their own in a part/part univariate serial structure. We could take, for example, the **PERSPECTIVE 3** stage (titled as *Political Factors*) and find that technically it could stand alone from the perspective of achieving their social purpose by moving through the stages of analytical discussions. However, this ‘standalone’ text would not make much sense from the perspective of the field of business. As argued earlier, the PESTLE framework is a composition taxonomy. Thus there is a part/whole relationship between the framework (the whole) and the external business environments (the ‘parts’). From an industry perspective, presenting a report on the impact of risk factors on investment in the *political* environment would mean that this one external business environment is separated from the whole of the PESTLE framework. This would result in an incomplete market analysis and a final recommendation that is not sufficiently justified. For this reason, the Satellites formed by the **PERSPECTIVE** stages have been illustrated as dependent on the **ISSUE** stage:

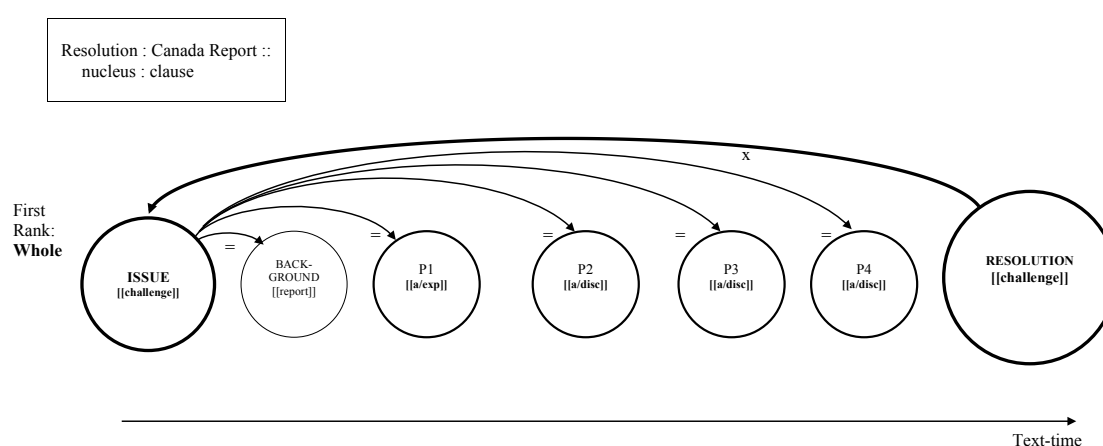


Figure 3.24 The orbital structure of the Canada Report

3.3 Summary: An axial perspective on country reports

In this concluding section of this chapter we are interested in questions about the superstructures of these business reports realised by analytical discussion genre simplexes. What elements of structure are obligatory in order for these texts to be considered complete in their social and cultural context? In what order do they occur? And what elements are optional and where would they occur? In order to answer these questions, it is necessary to examine the generic structure of all ten High Distinction texts analysed for the purposes of this research. As summarised in *Table 3.38* below, the genre analyses found that all undergraduate country reports are realised by analytical discussion genre simplexes from the genre family of arguing genres:

Texts	Staging of the analytical discussions realising undergraduate business reports
Text 1 Canada	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 2 China	ISSUE ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ RESOLUTION
Text 3 Brazil	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 4 India	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 5 India	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 6 Hungary	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 7 Spain	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 8 Brazil	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 9 Poland	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION
Text 10 U.K.	ISSUE ^ BACKGROUND ^ PERSPECTIVE 1 ^ PERSPECTIVE 2 ^ PERSPECTIVE 3 ^ PERSPECTIVE 4 ^ RESOLUTION

Table 3.38 Undergraduate business country reports staged as analytical discussion genre simplexes

The table above shows that nine out of the ten texts contain an **ISSUE**, four **PERSPECTIVES** and a **RESOLUTION** stage. One of these texts, Text 1 or the Canada Report, contains an additional **BACKGROUND** stage sandwiched between the **ISSUE** and the first **PERSPECTIVE** stage. Only one text, Text 2 or the China Report, contains only two **PERSPECTIVE** stages following the **ISSUE** and preceding the **RESOLUTION**. Thus, we can identify the **ISSUE**, a minimum of two **PERSPECTIVE** stages and the final **RESOLUTION** stage as *obligatory* elements in the texts' structure. An additional *optional* **BACKGROUND** stage following the **ISSUE** and two optional **PERSPECTIVE** stages following the first two **PERSPECTIVES** may also occur, represented by the brackets signalling this optionality in the expected sequence of these stages:

**ISSUE ^ (BACKGROUND ^) PERSPECTIVE 1 ^ PERSPECTIVE 2 ^
(PERSPECTIVE 3 ^ PERSPECTIVE 4 ^) RESOLUTION**

This sequencing of these stages in analytical discussions realising business country reports then shows that these texts move through four *obligatory* stages to achieve their social purpose, and can include three *additional* stages. From the perspective of *ideational* meanings, the opening obligatory **ISSUE** stage functions to put forward the topic under market analysis: whether the external business environment of the target country is conducive for the company to invest in and expand into. From an *interpersonal* perspective, this can be formulated as the proposition '*Should* our company invest in the target country?'. Further, an optional **BACKGROUND** stage might occur immediately after the **ISSUE** and before the **PERSPECTIVE 1** to narrow down the scope of the market analysis. *Interpersonally*, this stage is a proposal: 'Before conducting the market analysis the company *needs* to clarify the scope of investment'. This optional **BACKGROUND** is then followed by **PERSPECTIVE** stages.

As [Section 3.1](#) presented above, the most significant difference between the two model country reports was found in the staging of their **PERSPECTIVES**. An interesting finding is that none of the texts analysed in this data set contained, for instance, three or more than four **PERSPECTIVES**. On the one hand, if there are

only two **PERSPECTIVE** stages (as seen in the China Report), then each will evaluate factors from *different* PESTLE environments. These factors will then be linked to other relevant factors from the same or a different environment. The **PERSPECTIVE 1** stage will function to argue that a number of relevant factors selected from the PESTLE framework will represent opportunities for investment. The subsequent **PERSPECTIVE 2** stage will then promote the different point of view that certain factors chosen from the PESTLE, corresponding to the opportunities introduced in the **PERSPECTIVE 1**, will represent risks for market potential. Ideationally speaking, both **PERSPECTIVE** stages represent the *whole* of the PESTLE, and interpersonally, one **PERSPECTIVE** will discuss the opportunities and the other will discuss the corresponding risks. Thus the China Report, the only text in this data set with two **PERSPECTIVES**, is more *one-sided*: promoting the same position throughout lends itself to foregrounding the exposition genre.

On the other hand, if four **PERSPECTIVE** stages occur in a text, each will present relevant factors corresponding only to *one* particular external environment of the PESTLE model. Ideationally speaking, for example, the political environment as a *part* of the *whole*, i.e. the PESTLE, will be shown *overall* to represent either as a risk or an opportunity to the company's operations in the target country. Interpersonally speaking, each factor and sub-factor in one environment is analysed as *both* an opportunity *and* a risk through the stages of lower-order arguing genres (mostly discussions) to constantly negotiate two voices. Each of the four **PERSPECTIVE** stages represents one part of the PESTLE ideationally, and either an opportunity or a risk interpersonally, directing the analytical discussion towards the final **RESOLUTION** stage. Thus nine of the ten texts containing four **PERSPECTIVES** present a more *balanced* analysis of the external business environments, which lends itself to foregrounding the discussion genre.

Finally, the last obligatory **RESOLUTION** stage, the canonical conclusion and recommendation section of country reports, functions to weigh up the analyses of opportunities and risks presented by the external business environments in order to state one of the two possible conclusive recommendations: 1) further research into the target market about the possibility of future expansion is necessary or 2) market potential is limited because the risks identified in the external business environments

outweigh the opportunities for investment. Interpersonally these two choices for making a recommendation both represent proposals: the businessperson preparing the country report can suggest that the company *should* either conduct further research into the target market about the possibility of future expansion; or that the country under consideration *should* be eliminated for now and investment reconsidered in the future when certain risk factors identified in the analysis of target market have been eliminated. *Table 3.39* below summarises these ideational and interpersonal choices that writers of business country reports have for analysing market potential in the external business environment of a country other than the company conducting the market research operates in:

	ISSUE	(BACKGROUND)	PERSPECTIVE 1	PERSPECTIVE 2	(PERSPECTIVE 3)	(PERSPECTIVE 4)	RESOLUTION
Ideational meanings	whether the external business environment of the target country is conducive for the company to invest in/expand into	(before conducting the market analysis, the company needs to consider the scope of analysis)	Choice 1: If only 2 Ps				after weighing up the opportunities and risks presented by the external business environments, the conclusive recommendation is that <ul style="list-style-type: none">• further research into the target market is necessary about the possibility of future expansion• market potential is limited because the risks identified in the external business environments outweigh the opportunities for investment
			x number of factors from PESTLE are opportunities	x number of factors from PESTLE are risks			
			Choice 2: If 4 Ps				
			despite the opportunities/risks, one environment from PESTLE e.g. P is a risk/opportunity	there are opportunities/risks, however, one environment from PESTLE e.g. P is a risk/opportunity	there are opportunities/risks, however, one environment from PESTLE e.g. P is a risk/opportunity	there are opportunities/risks, however, one environment from PESTLE e.g. P is a risk/opportunity	
Inter-personal meanings	proposition: Should the company invest in the target country?	(proposal: The company needs to clarify the scope of investment.	proposition:	proposition:	proposition:	proposition:	proposal: <ul style="list-style-type: none">• the company should conduct further research into the target market about the possibility of future expansion• the company should eliminate the country under consideration until certain risks are eliminated
			Choice 1: If only 2 Ps				
			x number of factors from PESTLE are going to be opportunities	x number of factors from PESTLE are going to be risks			
			Choice 2: If 4 Ps				
			one environment from PESTLE e.g. P is going to be an opportunity/risk	one environment from PESTLE e.g. E is going to be an opportunity/risk	one environment from PESTLE e.g. S is going to be an opportunity/risk	one environment from PESTLE e.g. T is going to be an opportunity/risk	

Table 3.39 Ideational and interpersonal choices for analysing market potential in undergraduate business country reports

The discussion above has shown that all ten texts analysed in this study are analytical discussions. It was also found that each stage of this superstructure is realised by embedded genres. The obligatory **ISSUE** stage may be realised by three types of arguing genre: an embedded [[challenge]], an [[analytical discussion]] or an [[analytical exposition]]. The optional **BACKGROUND**, only present in the Canada Report, is realised by an embedded [[descriptive report]] genre. Furthermore, both the obligatory and the optional **PERSPECTIVE** stages in each text can instantiate either an [[analytical discussion]] or an [[analytical exposition]]. Finally, similarly to the opening **ISSUE** stage, the last obligatory stage, the **RESOLUTION**, can also be realised by the arguing [[challenge]], [[discussion]] or [[exposition]] genres. *Table 3.40* below aims to illustrate what type of embedded genres stand in as multivariate stages of the analytical discussion genres realising the ten country reports analysed for this study:

stages of a/disc	ISSUE	(BG)	P1	P2	(P3)	(P4)	RES
Text 1 Canada	[[ch]]	[[report]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[ch]]
Text 2 China	[[ch]]		[[a/exp]]	[[a/exp]]			[[a/exp]]
Text 3 Brazil	[[ch]]		[[a/disc]]	[[a/exp]]	[[a/disc]]	[[a/exp]]	[[a/exp]]
Text 4 India	[[ch]]		[[a/exp]]	[[a/exp]]	[[a/disc]]	[[a/disc]]	[[a/disc]]
Text 5 India	[[a/disc]]		[[a/disc]]	[[a/exp]]	[[a/disc]]	[[a/exp]]	[[a/disc]]
Text 6 Hungary	[[a/exp]]		[[a/exp]]	[[a/disc]]	[[a/exp]]	[[a/disc]]	[[ch]]
Text 7 Spain	[[ch]]		[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/exp]]	[[a/disc]]
Text 8 Brazil	[[a/disc]]		[[a/disc]]	[[a/disc]]	[[a/exp]]	[[a/disc]]	[[a/exp]]
Text 9 Poland	[[a/disc]]		[[a/exp]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[ch]]
Text 10 U.K.	[[a/disc]]		[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/exp]]

Key:

BG = **BACKGROUND**

P = **PERSPECTIVE**

RES = **RESOLUTION**

[[ch]] = [[challenge]]

[[a/exp]] = [[analytical exposition]]

[[a/disc]] = [[analytical discussion]]

Table 3.40 Embedded arguing genres as multivariate stages of the superstructure of the analytical discussion realising undergraduate business reports

This can be formalised as a system network as shown in *Figure 3.25* below.

Following Martin (2013b), it shows that in order for a business country report to receive a high score, the option of a discussion genre must be chosen from the family of arguing genres. The realisation statements for structuring this discussion are indicated by the downward arrow next to the feature [discussion]. The function $+Issue; I: ch, exp, disc$ means that the Issue stage of this discussion must be realised by an embedded challenge, an exposition or a discussion genre. As indicated by $+Perspectives; P: exp/disc$ the Perspective stages must be realised by either exposition or discussion genres. Finally, inserting the function $+Resolution; R: ch, exp, disc$ means that the Resolution must be realised by a challenge, an exposition or a discussion genre.

While both the Issue and Resolution stages of business country reports can be realised by the same structures, the obligatory Perspectives can be realised by two different structures and the Background is a non-obligatory choice. These choices are introduced into the system as simultaneous systems by the right facing curly bracket that have the feature [discussion] as their entry condition. These systems represent the different choices writers have when structuring the obligatory Perspective stages and the non-obligatory Background stage.

The system network at the top formalises the options available to organise the Perspectives. Its two features are [oppositional] and [perspectival]. Choosing the feature [oppositional] means that the discussion realising the country report has to include two Perspective stages. That one of these Perspectives must promote a *pro*-investment rhetoric and the other an *anti*-investment rhetoric is indicated by the functions $+P^+$; $+P^-$. The realisation statement $P^+ \cdot P^-$ means that these Perspectives can be sequenced or presented in any order. Finally, both these Perspectives must be realised by exposition genres as indicated by $P: exp$. In this data set, structuring the Perspectives based on these choices was taken up only in the China Report. The second feature in this system, [perspectival], refers to the option available to structure the country report with four Perspective stages. This choice is indicated by inserting the function $+P^4$. The following realisation statement $P: exp/disc$ means that each of the four Perspectives can be realised by either exposition or discussion genres. Apart

from the China Report, all texts in this data set, i.e. nine out of ten, took up the option of including four Perspective stages.

The system network at the bottom shows that writers have the option of including a non-obligatory stage that presents the scope of the market analysis. This choice is indicated by drawing it as an optional system with the feature [scope] and the dash (–) to show that this option may or may not be taken up. If the writer includes a Background stage, it must be realised by a descriptive report as per the realisation rule *+Background; B: report*. In this data set, this non-obligatory Background stage was only found in the Canada Report. I will return to the discussion of this stage in some more detail in [Chapter 6](#).

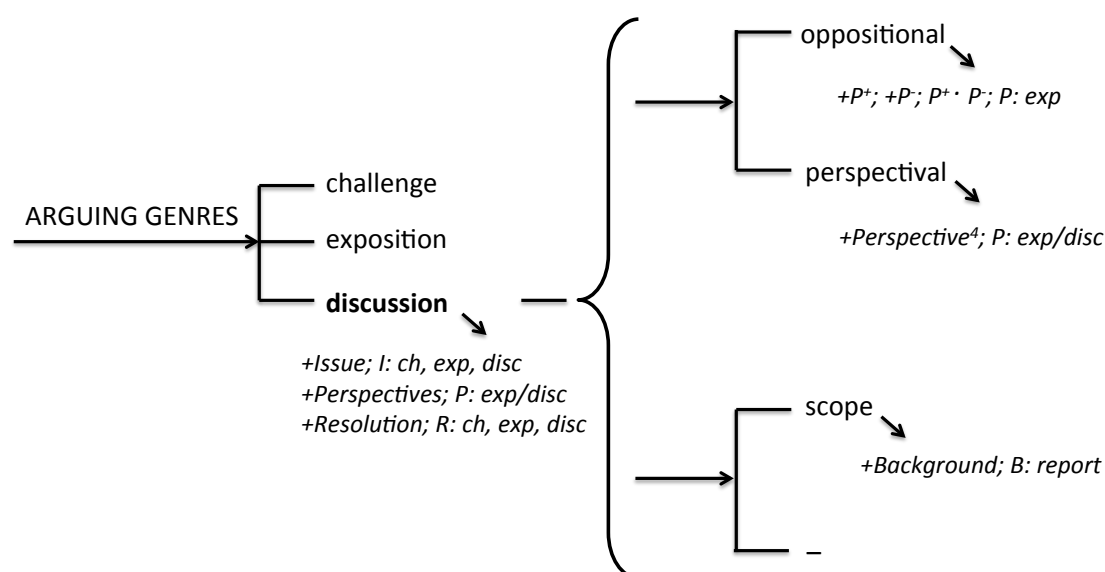


Figure 3.25 The system network proposed for undergraduate business Country Reports

The system network explained above illustrates the choices of genres available to structure the individual obligatory and non-obligatory stages of the superstructure that realises a business country report, i.e. a discussion genre. Based on the review of genre families in [Chapter 2](#), we can distinguish these options as choices from the *arguing* genre family for staging the obligatory stages of the country reports and from the family of *reporting* genres for the non-obligatory Background stage. From a theoretical point of view, the presentation in this chapter has also shown in detail that the analyses of lower-order embedded genres in these texts should provide sufficient evidence that they play a fundamental role in expanding these undergraduate business

reports into ‘big texts’. A discussion of the implications of these findings for pedagogy will be pursued in **Chapter 6**.

3.4 Concluding remarks

In this chapter I have explored the generic structure of long undergraduate business country reports. In order to do this, I have built on Halliday’s (1961/1982; 1979/2002) Martin’s (1996) work on types of structure and Martin’s early work on macrogenres and embedded genres (1994, 1995). This chapter set out to find answers to the following questions: “What is the nature of long business country reports in undergraduate business studies?” and “From the perspective of particulate realisation, what kind of structure do these texts have, what kind of genres are they and how do they unfold?” From a particulate perspective on text structuring principles I have clarified that the undergraduate business reports studied for this thesis are not macrogenres but elemental genres that grow bigger than a page, i.e. build their ‘depth’ through two or three layers of embedded genres. Based on the exploration of the phenomenon of embedding genres in big texts, I have clarified the criteria for identifying genre complexing versus genre embedding. I found that the business reports analysed for this study are genre simplexes that draw on predominantly arguing genres. These arguing genres are preferred over, for example, explanation genres, because in order to be successful, business country report writers need to make a point by *resolving*, *promoting* or *defeating* a position. This is often made explicit in the final *Resolution*, *Reiteration of Thesis* and *Anti-Thesis* stages of arguing genres. Once ‘the point’ is made explicit through construing evaluated PESTLE factors as either business opportunities or business risks, business analysts can stop genre embedding.

Responding to Martin’s (1996) critique of the inadequacy of constituency-based representations of particulate structures, the constituency perspective provided in this chapter is also complemented with an orbital perspective on particulate realisation. I found that the final **RESOLUTION** stages of country reports realise the most important element, i.e. the ‘core’ or the Nucleus of these long texts. Without the **RESOLUTION**, the canonical recommendation stage, the business country report would be an incomplete text from an industry perspective.

Finally, focusing on axial relations, I found that the genre simplexes realising the business reports can be organised into two different superstructures. The options available to writers of country reports were presented as a system network in *Figure 3.26* above. By filling the gaps in the theoretical conceptualisation of the “nature of big texts” (Martin, 1994, 1995, 1996) in SFL, this chapter contributes to existing research on macrogenres, elemental genres and embedded genres. I will now turn to **Chapter 4** to present in detail the wide range of linguistic resources at play in construing couplings of meanings. I will show specifically how couplings form the basis for the linguistic construction of *business decision-making* at the level of discourse semantics in undergraduate business country reports.

CHAPTER 4

Making a business decision at the level of discourse semantics: Construing couplings and recouplings

4.0 Introduction

The presentation of the orbital structure of the country reports above illustrated that from a particulate perspective both the Canada and the China Reports are realised by analytical discussions. While the Canada Report moves through an **ISSUE**, a **BACKGROUND**, four **PERSPECTIVE** stages and a **RESOLUTION** stage, the China Report consists of an **ISSUE**, only two **PERSPECTIVE** stages and a final **RESOLUTION** stage. Alongside an analysis of particulate structures however, prosodic and periodic perspectives need to be taken into consideration in order to better understand the nature of elemental genres. This chapter focuses particularly on the interpersonal meanings that play a fundamental role in construing ‘business decisions’ at the level of discourse semantics. While a detailed exploration of textual meanings that create periodic structures is beyond the scope of this thesis, I will briefly illustrate in **Chapter 5** the role of these resources in scaffolding the superstructure of undergraduate business country reports.

Turning to an **interpersonal perspective** on macrogenres, Martin’s early work shows that apart from expansion afforded by logico-semantic relations smaller texts may get bigger than a page “through interpersonally oriented repetition, whose function is to adjust the volume of the proposals, propositions, probabilities, usualities, obligations, inclinations, abilities, attitudes and polarities under negotiation”; these resources have an amplifying effect (1994, p. 33; 1995, p. 13). As reviewed in **Chapter 2**, a **prosodic perspective** on text structure is concerned with the way interpersonal meanings are realised in discourse (Martin, 1994, 1995, 1996). **Prosodic structures** tend to spread interpersonal meanings in a text across clauses, phases and generic stages, “coloring the units as a whole” (Martin, 1994, p. 31; 1995, p. 10). The interpersonal meanings realising prosodic structures are not restricted by the boundaries particulate structures construe (Halliday, 1979/2002; Martin, 1996). Building on existing work in coupling theory, this chapter will explore the construal of couplings through different

grammatical structures at the level of the nominal group, within the clause, the clause complex and across sentences. I conclude the chapter by showing the different choices of couplings available to writers of undergraduate business reports through which business reasoning is construed, thus transcending the particulate boundaries mentioned above.

Before exploring the role of couplings in construing business decisions in undergraduate business reports, it is useful to review again some key definitions, which have been discussed in detail in **Chapter 2**. The first definition of coupling in Martin (2000) refers to the combination of ideational meanings and appraisal “at a particular point in the unfolding of a text, for the social subjects involved, at some moment in the evolution of the relevant institution” (pp. 163-164). The extended definition refers to “the ways in which meanings combine, as pairs, triplets, quadruplets or any number of coordinated choices from system networks” (Martin, 2008, p. 39) within and across strata, metafunctions, ranks, simultaneous systems and modalities and at any point along the cline of instantiation, and unfolding as a logogenetic process (Zappavigna, Dwyer & Martin, 2008, 2010; Martin, 2011). As Martin (2008) suggests, we need to be concerned with the way various resources across systems, strata and ranks combine; this thesis will explore couplings from the perspective of the instantiation hierarchy to understand why certain meanings are coupled in undergraduate business reports and how their use affects the logogenetic unfolding of these texts.

To motivate the following discussion on why couplings are important to study, it is worth stopping to consider a common practice of coding appraisal. It is often seen in presentations and publications that appraising items are highlighted and the instances are counted in long stretches of text. This common practice is exemplified in *Table 4.1* below, which shows the occurrence of all appraising items found in the Introduction stage of the Canada Report of this data set:

Text:
(Introduction to the Canada Report)

To a firm such as ours, seeking to market solar panels offshore, Canada's **appeal** [+ reac: qual] seems obvious. Politically **stable** [+ comp: bal], **prosperous** [+ val] by conventional measures, **culturally similar** [invoked + comp: bal] to Australia, and **growing greener** [invoked + val], the business environment in Canada would certainly appear to be **conducive** [+ val] to undertaking such an export venture. In spite of the apparent **strengths** [+ val] of the Canadian marketplace, however, further inspection reveals the **difficulties** [- val] our firm would face in trying to establish a significant presence there. The Canadian solar energy market is subject foremost to **challenges** [- val] derived from its location and existing energy infrastructure. With the Canadian electricity market **dominated** [- val] by hydroelectricity, this low cost source will prove the greatest **impediment** [- val] to the uptake of photovoltaic (PV) panels. Even if electricity were priced in a way that at best took into account **negative** [- val] externalities, or at a minimum generally increased prices, the differences in regional electricity markets would **preclude** [- val] **consistent** [+ comp: bal] returns for marketers of PV panels. Largely driving these regional differences are a **patchwork** [+ comp: bal] of **cumbersome** [+ comp: bal] legislation and rules.

This report will explore the political, economic, social and technological **opportunities** [+ val] and **limitations** [- val] of producing and selling PV panels in Canada, based on assumptions and **limitations** [- val] set out below. Its ultimate conclusion is that the market **potential** offered by Canada is **outweighed** [- val] by **barriers** [- val] to **profitable** [+ val] operations in the PV industry – a function of market **capture** [- val] by other cheaper, renewable sources, regulation, and the **bureaucratic peculiarities** [- val] of Canadian federalism.

Table 4.1 Highlighting appraising items in the Introduction of the Canada Report

By highlighting all instances of **appreciation** we learn that this option from the system of ATTITUDE is valued over the resources of JUDGEMENT or AFFECT. We could then count the number of instances to learn that in this text there is more negative **appreciation** than positive and more inscribed attitude than invoked, as per *Table 4.2* below:

instances of appreciation in UG business reports	
positive	negative
11 inscribed	20 inscribed
2 invoked	3 invoked
13 total	23 total

Table 4.2 Counting the number of appraising items in a text

However, according to Martin and White (2005, p. 59), “the source and target of evaluation are also criterial”, thus in coding appraisal it is necessary to understand *what* is being evaluated; highlighting the appraising items only is insufficient. *Table 4.3* below provides an example of coding appraisal as initially theorised by Martin (2000) in his seminal paper, *Beyond exchange: Appraisal systems in English*. It can be seen from the table that a full appraisal analysis provides not only the instances of appraising items taken up from the sub-systems of ATTITUDE, but also the appraiser as well as the Targets of evaluation:

TABLE 8.11. *cont.*

Instantiation	Appraiser	APPRECIATION	JUDGEMENT	AFFECT	Appraised
stuck-up idiots	Rita		veracity: bogus		masses
(not) their fault	Rita		-[propriety]		masses
hate	Rita			antipathy	masses
love this room	Rita			care	this room
love that window	Rita			care	the window
do you like it?	Rita? Frank			care	the window
bleedin' mad, aren't y'?	Rita		capacity: insane		Frank
D' y' mind?	Rita? Frank			disquiet	talking at him
Don't laugh at me	Rita "Frank			-[cheer]	Rita
gettin' the rhyme wrong	Rita	composition: balance	capacity: incompetent		assonance . . . poets
a fantastic book	Rita	reaction: quality			Rubyfruit Jungle
dead serious	Rita			engagement	Rita
take the piss	Rita		veracity: joker		Rita
not, y' know, confident	Rita			-[confidence]	Rita
honest	Rita		veracity: honest		Rita

Table 4.3 Coding appraisal (From Martin, 2000, p. 170)

Highlighting this example of appraisal analysis by Martin (2000) aims to draw attention to the following problems if Targets in appraisal analyses are not accounted for: 1) the *field* of a text, i.e. *what* is being evaluated remains obscure, 2) we would be unable to establish what *couplings* are construed, and 3) we would be unable to understand what kinds of meanings and values get '*recoupled*' in a text.

Ignoring Targets in this data set would also be misleading for several reasons. As the remainder of this chapter will show, studying Targets in undergraduate business country reports is crucial in enabling us to understand how and why certain meanings

are coupled, how couplings are construed grammatically and how they scaffold the generic structure of these texts. Furthermore, accounting for the Targets of evaluation reveals that they realise PESTLE factors construed as *opportunities* and *risks*, as exemplified in *Table 4.4* below. Although it is beyond the scope of this research, analysing Targets has also served as the basis for building an entity classification for business reports in order to see how disciplinary knowledge in the field of business is construed.

[[embedded genre stages]]
[[challenge]]
Position challenged the business environment in Canada
Rebuttal Arguments location existing energy infrastructure: <ul style="list-style-type: none"> • hydroelectricity • generally increased prices • differences in regional electricity markets legislation and rules
Anti-Thesis <ul style="list-style-type: none"> • other cheaper, renewable sources • regulation • bureaucratic peculiarities of Canadian federalism

Table 4.4 Construing Targets of evaluation, i.e. PESTLE factors, as opportunities and risks in an embedded [[challenge]] in the Canada Report

Following Martin and White (2005) and Hood (2010), in this thesis attitudinal meanings will be analysed as inscribed if they explicitly encode gradable positive or negative values. Attitudinal inscriptions of appreciation, i.e. the evaluation of entities or things, will be colour-coded in **blue bold** font and their Targets will be highlighted in **red bold font**. But ideational meanings do not always take on the function of Targets at the level of discourse semantics. Therefore, in contrast to the existing convention of labelling them in lower case font, I will use the capitalised label ‘Target’ to indicate its use as a function label. Implicit or *invoked* attitudinal meanings instantiated through the resources of graduation will be coded in **black bold italics**.

Ideational meanings that do not become Targets but appear together with resources of grading to invoke attitudinal meanings will be coded in **black bold font**. The coding choices selected for data analysis in this thesis (see Appendix B for the detailed appraisal analysis) are shown in *Figure 4.1* below:

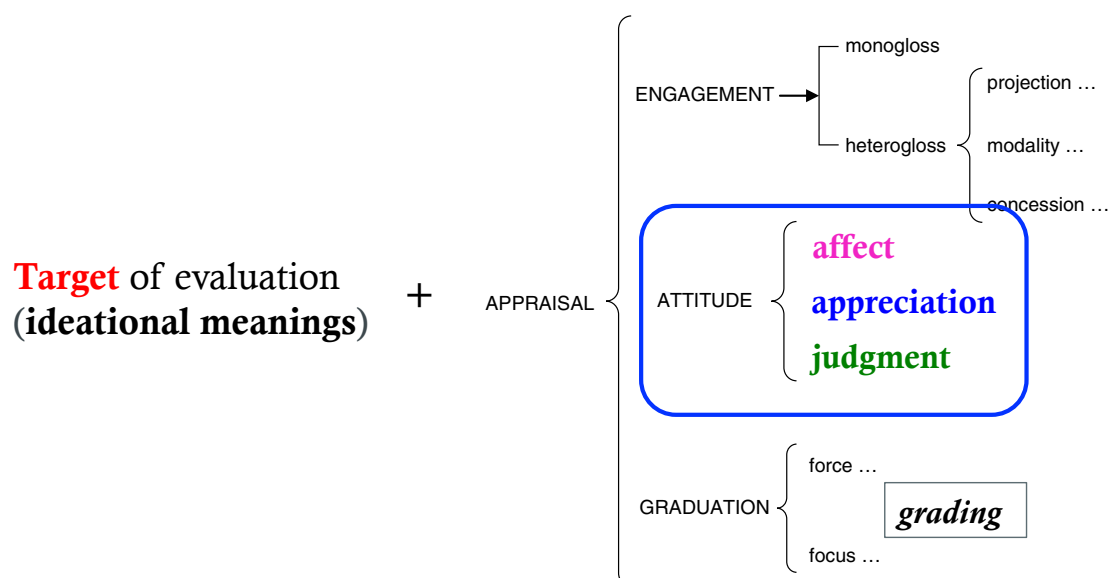


Figure 4.1 Coding attitudinal meanings and their Targets

The following section will explore from the perspective of the instantiation hierarchy how the resources of couplings are construed in successful undergraduate business country reports. First, drawing on examples from all ten texts in this data set, [Section 4.1](#) will illustrate in detail the structures through which couplings can be grammatically differentiated. The presentation in [Section 4.2](#) will then turn to an analysis of couplings to establish criteria for distinguishing them grammatically. [Section 4.3](#) will discuss how combining different choices from different subsystems of attitude and grammatical resources can create additional types of coupling. The ultimate goal of this chapter is to establish a set of criteria for identifying the different types of grammatical structure that construe couplings. I will show throughout this thesis that these couplings will provide the basis for skillful writers to demonstrate the process of business *decision-making* at the level of discourse semantics.

4.1 Evaluating business factors through grammaticalised couplings

4.1.1 Inscribed couplings of appreciation and ideation

The following section will focus on the linguistic choices from the discourse semantic systems of APPRAISAL, specifically the subsystems of ATTITUDE, and resources of IDEATION that function as the Targets of evaluation to construe couplings in the ten texts in this data set. To begin, I will investigate inscribed couplings in detail to understand how they are construed through grammatical structures in the structure of the clause and the structure of the nominal group.

I begin by examining how an inscribed coupling is construed through the structure of the clause. The first example is found in Text 6 (the Hungary Report):

[Text 6] **Changing consumer preferences** present a **risk** for any producer entering a product market.

As indicated by the arrow in *Table 4.5* below, an instance of inscribed negative [appreciation: valuation] (*risk*) is used to provide an evaluation of the Target *changing consumer preferences*. The clause *Changing consumer preferences present a risk for any producer entering a product market* is structured as a relational identifying relationship between the Token *changing consumer preferences* and the Value *risk*. More specifically, the [identifying: role] Process type realised by *present* binds together the ideational and interpersonal meanings; thus this clause structure establishes a coupling.

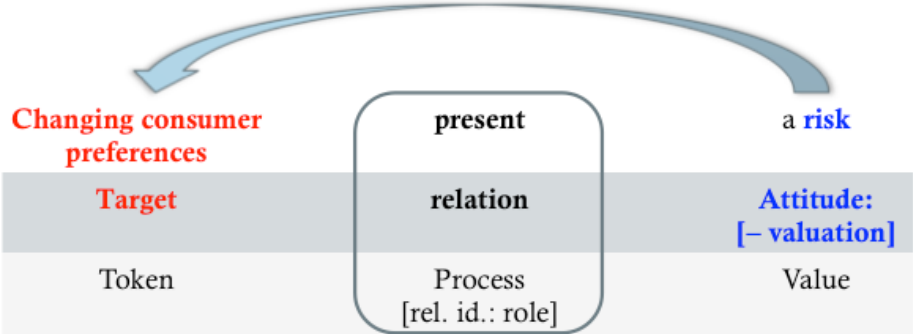


Table 4.5 An inscribed coupling of ideational and interpersonal meanings construed through the structure of the clause

Figure 4.2 below shows this coupling as a yin-yang symbol. The visual representation that will be used in subsequent examples captures the coupling of attitudes with their trigger or Target.

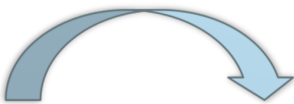


Figure 4.2 An inscribed coupling of [–appreciation] and IDEATION

I will now show how an inscribed coupling is construed through the structure of the nominal group. The next example is found Text 1 (the Canada Report), where an instance of inscribed positive [appreciation: valuation] (*profitable*) is used to provide an evaluation of the Target *operations [in the PV industry]*:

[Text 1] **profitable operations in the PV industry**

To begin, the nominal group *profitable operations in the PV industry* will be examined. The Epithet *profitable* in the nominal group structure spreads positive prosodic value over the Thing *operations* followed by its Qualifier *in the PV industry*, which is realised by a prepositional phrase. This realisation could be unpacked more and reconfigured as the clause *operations in the PV industry are profitable*, structured as a relational attributive relationship between the Carrier *operations in the PV industry* and the Attribute *profitable*. Unpacking the nominal group as a clause makes it visible how the Epithet^Thing structure shown in Table 4.6 thus establishes a coupling of ideational and interpersonal meanings:



profitable	operations	[in the PV industry]
Attitude: [+ appreciation: valuation]	Target	
Epithet	Thing	Qualifier

Table 4.6 An inscribed coupling of ideational and interpersonal meanings


Figure 4.3 below shows this coupling as a yin-yang symbol again. In representations of couplings ideational elaborations such as Qualifiers (in the current example *[in the PV industry]*) will be left off as in the figure below:



Figure 4.3 An inscribed coupling of [+appreciation] and IDEATION

It was shown so far that instances of inscribed attitude couple with experiential meanings to set up a positive or negative evaluation of their Targets. Apart from coupling linguistic choices from the systems of APPRAISAL and IDEATION, another set of linguistic resources, the resources of GRADUATION, were also found to play an important role in construing couplings. Hereafter the grading resources found in the data will be highlighted in ***bold italics***. As I will show in the next example, the grading of force enables attitudinal meanings to be amplified or intensified to strengthen writers' arguments (Martin & White, 2005; Hood, 2010). In Text 7 (the Spain Report) the writer is evaluating characteristics of the Spanish political environment. As shown in Table 4.7 below, Spain is evaluated as a *very attractive*

location for investment through the structure of a nominal group. The arrow in the table indicates that the Epithet *attractive* inscribes [+ appreciation: reaction: impact] and spreads positive prosodic value over the Thing *location*, which functions as the Target of this evaluation. The Post-Deictic *very* preceding the Epithet realises an instance of [force: intensification] at level of discourse semantics and functions to amplify the attitudinal meaning encoded in the Epithet *attractive*. Figure 4.4 below shows this resource of force coupling with its Target as intensifying a quality.



a	<i>very</i>	<i>attractive</i>	<i>location</i>
	[force: intensifying]	Attitude: [+ appreciation: reaction: impact]	Target
Deictic	Post-Deictic	Epithet	Thing

Table 4.7 Adding grading to an inscribed coupling: intensifying a quality




Figure 4.4 Grading an inscribed coupling: intensifying a quality

The presentation so far has shown examples of inscribed couplings construed through the structure of the clause and the nominal group. As mentioned above, the resources of grading play an important role in amplifying the attitudinal meanings encoded in these couplings. Apart from intensifying inscribed attitudinal meanings, the resources of grading can also function to *invoke* a positive or negative attitudinal reading of experiential meanings. Thus the following section will show that these resources are crucial in the construal of *invoked* couplings, another type of coupling found across this data set.

4.1.2 Invoked couplings of force and ideation

One example of an invoked coupling was found in Text 1 (the Canada Report). The invoked coupling was construed through the nominal group structure *the additional cost [of secondary meters [[being fitted || or even replaced]]]* shown in Table 4.8 below. The technological factor chosen by the writer from the PEST framework here is the *cost of secondary meters*. While there is no explicit attitudinal inscription in this nominal group to evaluate this factor, the Post-Deictic *additional* realises an instance of [force: amount] at the level of discourse semantics. This grading of force as [amount] functions to quantify the ideational meaning realised by the Thing *cost*. Together the instance of graded ideation *additional cost* invokes negative [appreciation: valuation] of the Target realised by the Qualifier *[of secondary meters [[being fitted || or even replaced]]]*. This invoked valuation achieved through the resources of grading is referred to as ‘flagging’, which functions to invite the reader to notice evaluation in the non-attitudinal meanings and therefore to align with the writer’s stance (Martin & White, 2005), (in this example, with the negative evaluation of a technological factor). The arrow in the table indicates that it is *graded* ideation that invokes the negative valuation of the Target:



the	<i>additional</i>	<i>cost</i>	<i>[of secondary meters [[being fitted or even replaced]]]</i>
	[force: amount + ideation] invoking Attitude: [– appreciation: valuation]		Target
Deictic	Post-Deictic	Thing	Qualifier

Table 4.8 Grading ideation as [force: amount] invoking attitude

Figure 4.5 below illustrates that the resource of graded ideation invoking negative attitude establishes an *invoked* coupling with its Target. These kinds of couplings will be represented by a yin-yang with a white background, with the invoked value highlighted in blue:

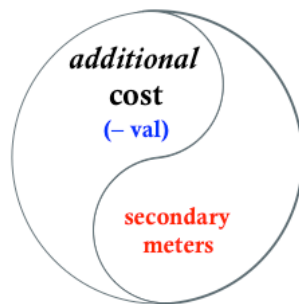


Figure 4.5 An invoked coupling of graded ideation and its Target

The analysis above focused on the grammatical construal of both inscribed and invoked couplings through the structure of the clause and the nominal group. I have shown how linguistic resources selected from the system of ATTITUDE couple with experiential meanings functioning as Targets to construe *inscribed* couplings. I have also examined the role of grading as intensification and amount to see how PESTLE factors can be established in undergraduate business reports through the construal of *invoked* couplings. I will now turn to the types of grammatical structure in the clause and the nominal group that not only construe couplings but also construe couplings of couplings.

4.2 Towards construing a *business decision*: grammaticalised *recouplings*


4.2.1 Type 1: Value-Token recoupling

4.2.1.1 Subtype 1: *Recoupling an inscribed coupling in the clause: reinforcing prosodic value*

In order to understand how an **inscribed** coupling can become recoupled within a clause, I begin with an example from Text 8 (the Brazil Report). I will first examine the inscribed coupling set up within the nominal group structure highlighted in the following clause below:

[Text 8] The **vibrant Brazilian agricultural industry** represents a considerable opportunity for creating a global supply chain for U-Save's US operations.

Table 4.9 below shows that the nominal group structure *vibrant Brazilian agricultural industry* sets up a coupling. As indicated by the arrow, the Epithet *vibrant* spreads positive attitudinal values over the Target *Brazilian agricultural industry* realised by a Classifier^Classifier^Thing structure:



vibrant	Brazilian	agricultural	industry
Attitude: [+ reaction: impact]	Target		
Epithet	Classifier	Classifier	Thing

Table 4.9 An example of inscribed coupling in Text 5: Target of appreciation


To make it clear how this nominal group construes an inscribed coupling, we could unpack and reconfigure it as the clause *the Brazilian agricultural industry is vibrant*. This clause is structured as a relational attributive relationship between the Carrier *the Brazilian agricultural industry* (functioning as the Target) and the Attribute *vibrant* encoding an instance of positive [appreciation: reaction: impact]. Figure 4.6 below represents this inscribed coupling of ideational and interpersonal meanings:



Figure 4.6 Coupling of field and appreciation

I will now take a closer look at the whole clause from Text 8. The analysis found that the coupling *vibrant Brazilian agricultural industry* itself is further appreciated as an *opportunity* by an instance of inscribed positive [appreciation: valuation]. The arrow in Table 4.10 below means that this inscribed coupling *vibrant Brazilian agricultural*

industry has become the Target of the [+valuation] encoded by the instance *opportunity*:




The vibrant Brazilian agricultural industry	represents	a considerable opportunity
Target	relation	Attitude: [+ valuation]

Table 4.10 Coupling becoming Target of [+appreciation: valuation] in the clause

The grammatical structure of the clause will now be examined. Table 4.11 shows that the clause is structured as a relational identifying relationship between the Token *vibrant Brazilian agricultural industry* and the Value *a considerable opportunity*. This means that the inscribed coupling takes on the function of the Token and the attitudinal meaning inscribed in *opportunity* functions as the Value. It was shown in Section 4.1.1 above that attitudinal meanings can be amplified or intensified. The Post-Deictic *considerable* in the nominal group structure that realises the Value functions as an instance of [force: amount] at level of discourse semantics. This grading of force as amount in the Value thus functions to intensify a quality, i.e. the attitudinal meaning encoded in the Thing.

The table also highlights that the relational identifying Process *represents*, more specifically, the [identifying: role] Process type binds together the ideational and interpersonal meanings; this clause structure thus establishes a coupling:



The vibrant Brazilian agricultural industry	represents	a considerable opportunity
Target	relation	Attitude: [+ valuation]
Token	Process [rel. id.: significance]	Value

Table 4.11 Coupling becoming Target of appreciation in the clause through a Token-Value structure

Since the inscribed coupling is now the Target of evaluation, we need to extend our notation of coupling. The extra layer coloured in grey in *Figure 4.7* below functions to make explicit that it is the coupling *vibrant Brazilian agricultural industry* that is an *opportunity* for the American company's plans to expand into the Brazilian supermarket sector. I will thus term the evaluation of a coupling '*recoupling*', which will be represented with a two-layered yin-yang symbol to capture the attitudinal value colouring coupling of a 'lower order'.



Figure 4.7 Recoupling an inscribed coupling in the structure of the clause: reinforcing [+appreciation] as [+appreciation]

In the example above a positive inscribed coupling is recoupled by an intensified positive value. Recoupling the prosodic value realised by [+appreciation: valuation] as [+appreciation: valuation] serves to reinforce the writer's positive evaluation inscribed in the lower-order coupling, which realises the economic factor *vibrant Brazilian agricultural industry* selected from the PESTLE framework.

Similarly, the exploration of recouplings across the data set found that writers of these undergraduate business reports also have the option of recoupling a inscribed negative coupling by a negative value in order to reinforce a negative evaluation inscribed in a lower-order coupling. *Table 4.12* below offers an example of this choice from Text 7 (the Spain Report), where a lower-order coupling inscribing [–appreciation: valuation] (*inflexible labour laws*) is recoupled as [–appreciation: composition: balance] (*flaw*):

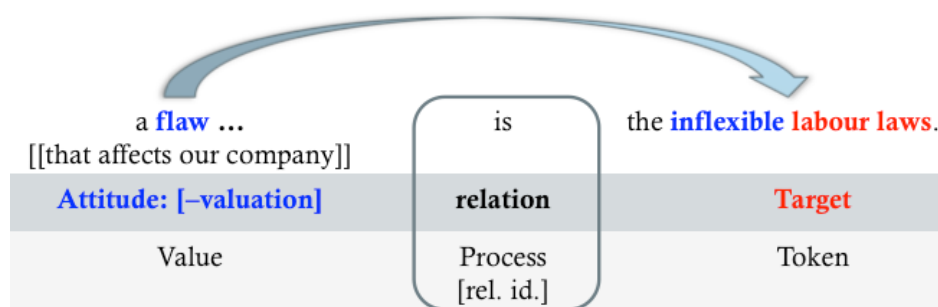


Table 4.12 Recoupling an inscribed coupling through a Value-Token structure

Figure 4.8 below illustrates this as a recoupling construed through a Value-Token structure in the clause, whose function is to reinforce [-appreciation] as [-appreciation]:

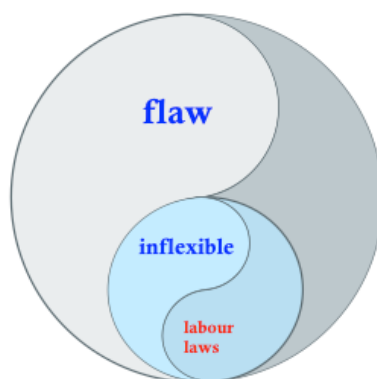


Figure 4.8 Recoupling reinforcing [-appreciation] as [-appreciation]

These findings can now be generalised to distinguish the first type of recoupling found in this data set. I have shown above that a recoupling can be grammaticalised through the structure of the clause. As represented by Figure 4.9 below, the outer layer of this recoupling is dominated by a Value, which can be optionally graded. This is indicated by the brackets in the figure below. The Value is shown to subsume a Token, which takes on the function of the Target, realised by an inscribed coupling of an attitudinal value and experiential meanings. The relationship that enables an attitudinal value to subsume an inscribed coupling is grammaticalised in the structure of the clause through a relational identifying relationship. This functions as the ‘glue’ between the Value and the subsumed Token, in other words, it binds the attitudinal meaning encoded in the Value to the inscribed coupling encoded in the Token. I will thus term this kind of recoupling ‘**Value-Token recoupling**’.

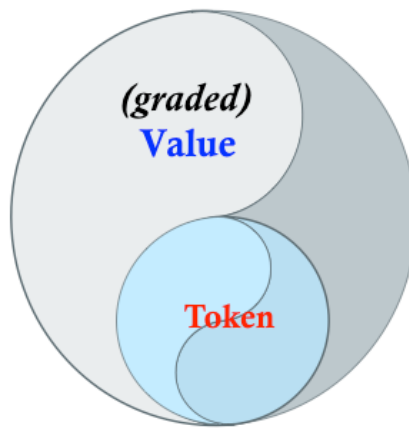


Figure 4.9 Grammatically differentiated recoupling: Value-Token structure

This inscribed Value-Token recoupling is one *typical* example of how a business decision is construed through recoupling values. I have shown how both positive and negative prosodic values inscribed in lower-order couplings can be reinforced through Value-Token structures in the clause. The analysis found that *invoked* couplings can also be recoupled in order to reinforce their prosodic values. I now turn to the Value-Token recoupling of invoked couplings in a clause.

4.2.1.2 Subtype 2: Recoupling an invoked coupling in the clause: reinforcing prosodic value

The clause I examine to illustrate the grammatical construction of the second type of Value-Token recoupling of an invoked coupling was found in Text 8 (the Brazil Report); the two nominal groups highlighted in the example below will be first analysed:

[Text 8] With a population of approximately 192 million and a GNI per capita (PPP) of US\$10,070 (World Bank, 2009a), **the sheer size of the consumer market** and level of individual wealth in Brazil represents **a potential opportunity** for U-Save to increase global sales.

I begin by analysing the nominal group *the sheer size [of the consumer market [in Brazil]]*. As shown in Table 4.13 below, the Thing *size* is followed by the Qualifier *[of the consumer market [in Brazil]]* in the structure of this nominal group. Together

they realise an economic factor selected from the PESTLE framework. There is no explicit attitudinal inscription in the nominal group that realises this factor. The ideational meaning realised by the Thing *size* is graded by the Post-Deictic *sheer*, which realises an instance of [force: intensifying] at the level of discourse semantics. As indicated by the arrow in the table below, this instance of graded ideation *sheer size* invokes positive [appreciation: valuation] of the Target realised by the Qualifier [*of the consumer market [in Brazil]]*.

the	<i>sheer</i>	<i>size</i>	[of the consumer market ... [in Brazil]]
	[force: intensifying] + ideation invoking Attitude: [+ appreciation: valuation]		Target
Deictic	Post-Deictic	Thing	Qualifier

Table 4.13 Grading ideation as [force: intensification] invoking positive attitude

As presented in Section 4.1.2 above, when graded ideation invokes positive or negative attitude of a Target in the structure of the nominal group, an invoked coupling is construed. Figure 4.10 below illustrates this invoked coupling of graded ideation invoking positive attitude (highlighted in blue in brackets) as a white yin-yang symbol:

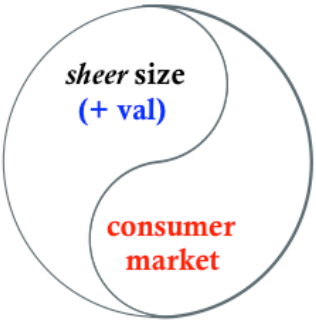


Figure 4.10 Invoked coupling of graded ideation and Target

Table 4.14 below shows the position of this invoked coupling in the clause structure. A closer examination of this clause found that the invoked coupling *the sheer size of the consumer market* itself is evaluated as a *potential opportunity* by an instance of

inscribed positive [appreciation: valuation]. This instance of positive valuation is further graded as [force: intensifying] by the Post-Deictic *potential*. The arrow in the table shows that this instance of intensified valuation spreads positive prosodic value over the invoked coupling, which has now become the Target of evaluation. The invoked coupling functioning as the Target is linked to the attitudinal meaning inscribed in the nominal group *a potential opportunity* by the relational process *represents*. This relational Process of the [identifying: significance] type thus enables the invoked coupling to take on the function of Token and the attitudinal meanings to function as Value in the grammatical structure of the clause:


		
<div> <div>the <i>sheer size</i> of the <i>consumer market</i></div> <div>Target</div> <div>Token</div> </div>	<div> <div>represents</div> <div>relation</div> <div>Process [rel. id.: significance]</div> </div>	<div> <div>a <i>potential opportunity</i></div> <div>[force: intensifying] Attitude: [+ valuation]</div> <div>Value</div> </div>

Table 4.14 Invoked coupling becoming Target of Appreciation in the clause through a Value-Token structure

Figure 4.11 below represents the recoupling of an invoked coupling with a two-layered yin-yang symbol, where the Value dominating the outer layer is shown to subsume the Token realised by the invoked coupling, represented by the yin-yang with the white background:



Figure 4.11 Recoupling an invoked coupling: Value-Token structure in the clause

Similarly to the recoupling of an inscribed coupling in the clause, the positive value invoked in a lower-order coupling can also be recoupled by another positive value. In the example above the grading of ideation as [force: intensification] invokes [+appreciation: valuation] and thus construes an invoked lower-order coupling. This positive invoked coupling is recoupled by an intensified positive value (*potential opportunity*).

An example of recoupling an *invoked* negative coupling by a *negative* value is shown below in *Figure 4.12*. This example appears in Text 2 (the China Report), where the graded ideation in the lower-order coupling invoking [–appreciation: valuation] (*rising rate of inflation*) is recoupled as [–appreciation: valuation] (*risk*). This serves to reinforce the negative prosodic value in this invoked Value-Token coupling:

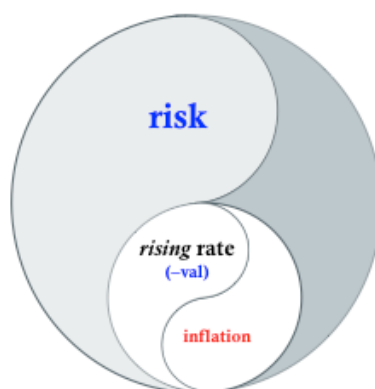


Figure 4.12 Recoupling an invoked coupling through a Value-Token structure: reinforcing [–appreciation] as [–appreciation]

The presentation so far has provided examples of Value-Token recouplings in the clause, where the prosodic values of both positive and negative inscribed and invoked couplings have been reinforced. I will now show the third subtype of Value-Token recoupling found across this data set. In the next section I will examine how *a coupling recouples another coupling* through this Value-Token structure.


4.2.1.3 Subtype 3: A coupling recoupling an inscribed coupling in the clause

The next type of coupling identified in the data was found in Text 5 (the India Report). The clause I will examine contains two nominal groups construing couplings of graded ideation invoking valuation of their Targets (*high growth [in the industry]*

and an *emerging middle class*) and one inscribed coupling (*cheap labour*). I will focus on the *inscribed* coupling first.

[Text 5] *High growth* [in the industry], an *emerging middle class* and *cheap labour* suggest favourable future prospects.

As shown in *Table 4.15* below, the nominal group structure *cheap labour* sets up a coupling through an Epithet^Thing structure, where the Epithet *cheap* encoding an instance of inscribed [appreciation: valuation] spreads positive evaluation over the Thing *labour*. *Figure 4.13* below shows this as a coupling of ideational and interpersonal meanings.



cheap	labour
Attitude: [+ valuation]	Target
Epithet	Thing

Table 4.15 Coupling set up through Epithet^Thing structure

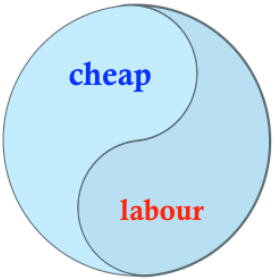


Figure 4.13 Coupling of [+valuation] with its Target

Before we study this coupling, in order to see what function it takes on in the clause shown above, other inscribed couplings need to be identified. *Table 4.16* shows another similar inscribed coupling found in the clause, set up again through an Epithet^Thing structure. In this second coupling the Epithet *favourable* encoding an

instance of inscribed [appreciation: valuation] spreads positive evaluation over the Classifier and Thing *future prospects*, as represented by *Figure 4.14* below.

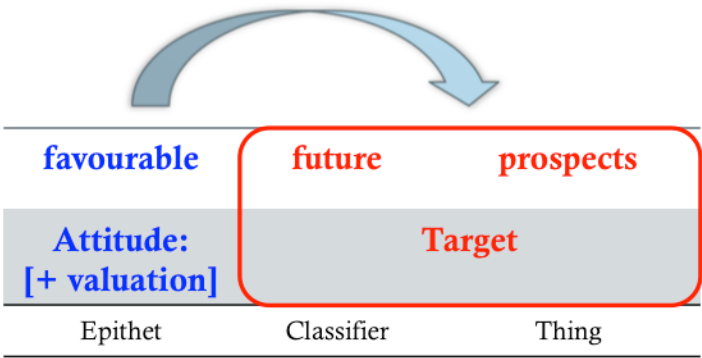


Table 4.16 Coupling set up through an Epithet^Thing structure in the nominal group



Figure 4.14 Coupling of [+valuation] with its Target

Table 4.17 below shows both these inscribed couplings, set up through Epithet^Thing nominal group structures:

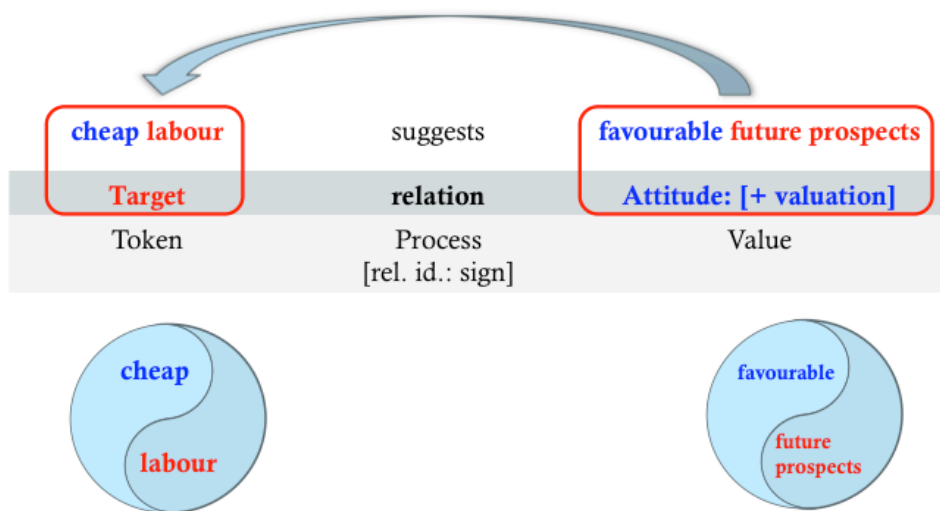


Table 4.17 Two inscribed couplings set up in nominal group structures

When we take a look at the configuration of the whole clause, we can see that these two couplings are in a relational identifying relationship, established through the relational [identifying: sign] Process type *suggests*. The arrow in *Table 4.18* below indicates that since the second coupling *favourable future prospects* functions as the Value it evaluates the first coupling *cheap labour* functioning as the Token. This process of a coupling recoupling another inscribed coupling is thus established through a relational identifying relationship in the grammar of the clause:

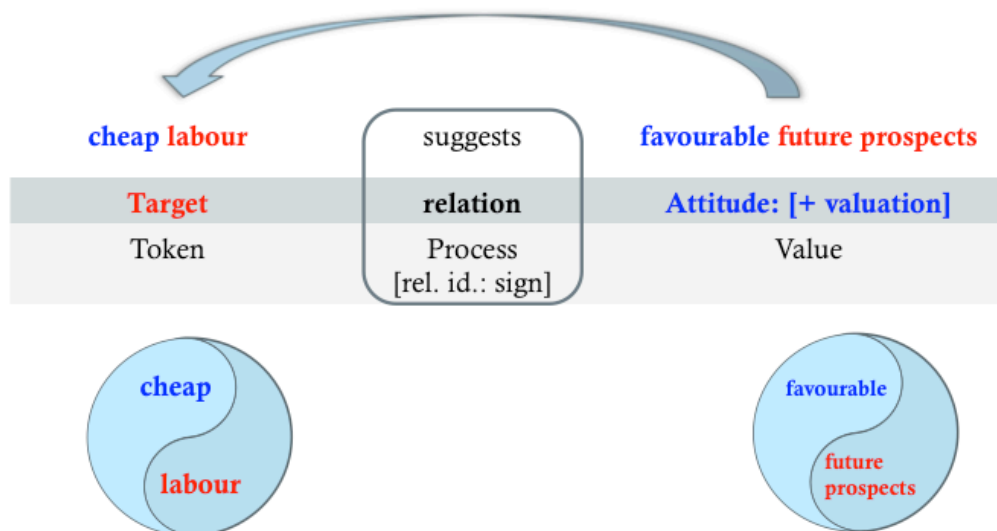
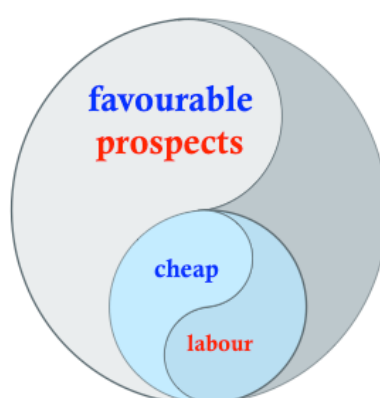


Table 4.18 Coupling becoming Target of another coupling in the clause through a Token-Value structure

Figure 4.15 below illustrates this coupling recoupling another coupling with the two-layered yin-yang symbol, similarly to the previous example of recoupling an inscribed coupling in the clause presented in Section 4.2.1.1 above. I will use the same notation of recoupling used for the Type 1 Value-Token recoupling since the grammatical relationship that enables a coupling to recouple another coupling is still a Value-Token one. But we need to show that in this instance the Value is realised by a coupling, not only an instance of inscribed appreciation. Therefore, this will be indicated by coding the attitudinal value of the coupling in **bold blue font** and its Target in **red bold font** in the outer grey layer of the yin-yang symbol:



*Figure 4.15 Coupling recoupling another inscribed coupling:
Token-Value structure*

I will now show that apart from inscribed couplings invoked couplings can also become the Target of another coupling. This is the fourth and final subtype of Value-Token recoupling identified across the data set.

4.2.1.4 Subtype 4: A coupling recoupling an invoked coupling in the clause

The example shown in Figure 4.16 below is from Text 3 (the Brazil Report). Here an *invoked* negative coupling is realised by the nominal group structure *quite low profit margins*, where the graded ideation *quite low* invokes and spreads negative [appreciation: valuation] over the Target *profit margins*. This invoked negative coupling is recoupled by another inscribed negative coupling realised through the nominal group structure *few profitable prospects*. The figure below shows that the inscribed couplings spreads intensified negative [appreciation: valuation] over the

invoked lower-order coupling. The grammatical structure that binds these two couplings together in a relationship of recoupling is a Value-Token one, with an intensified and inscribed negative prosodic value reinforcing an already intensified negative prosodic value:



*Figure 4.16 Coupling recoupling another invoked coupling:
Token-Value structure*

I will conclude this section by making the criteria for deciding whether a coupling is recoupling another coupling in a clause explicit. If there are two couplings identified in a clause, in order for one coupling to recouple the other the couplings have to establish a relational identifying relationship with one another. The coupling that functions as the Target of evaluation must take on the function of Token and the coupling that evaluates a Target must take on the function of Value in the grammatical structure of the clause. By establishing this grammatical relationship it is possible for a Value realised by a coupling to subsume the Token realised by another coupling. If we are unable to retrieve this Value-Token relationship between two couplings, then they are not in a relationship of this type of recoupling.

The presentation so far has illustrated four subtypes of Value-Token recoupling found across the data set, each construed through clause grammar:

- i. recoupling an inscribed coupling;
- ii. recoupling an invoked coupling;
- iii. a coupling recoupling an inscribed coupling, and
- iv. a coupling recoupling an invoked coupling.

What is common in these examples is that in each instance either a *positive* attitudinal value is recoupled as *positive* attitudinal value (for instance, we have seen [+appreciation] recoupled as [+appreciation]) or a *negative* attitudinal value is recoupled as *negative* attitudinal value (for instance, [–appreciation] recoupled as [–appreciation]). I will refer to these kinds of recoupling as **reinforcing recoupling**. In the following section I focus on *shifting prosodic values* by showing how a *positive* attitudinal value can get recoupled as a *negative* attitudinal value in the structure of the clause.

4.2.1.5 Recoupling an invoked coupling in the clause: shifting prosodic values

I now turn to another variable that was found to play a role in the construction of Value-Token recouplings: the shifting of prosodic values. The discussion below will show that the prosodic value *invoked* in one coupling will shift by the recoupling of its *positive* value as *negative*. However, the analyses have not found any instance of an inscribed coupling whose prosodic value would shift to an opposing value that was construed through a Value-Token recoupling in the clause. Such instances construed through a Thing^Qualifier structure were, however, found *in the nominal group*. I will discuss these kinds of recouplings in [Section 4.2.4](#) below.

The next example of recoupling was found in Text 1 (the Canada Report). I will first look at how positive evaluation is invoked by graded ideation in the nominal group structure highlighted in clause 5.2 below:

[Text 1]

5.1 With the Canadian electricity market dominated by hydroelectricity,||

5.2 **this low cost source** will prove the greatest impediment to the uptake of photovoltaic (PV) panels.

Table 4.19 below shows that the Classifier *low cost* is another example of graded ideation. This functions as an instance of grading force as [quantifying: amount] and invokes positive [appreciation: valuation] to evaluate the Thing *source*, which functions as its Target. This Target in fact refers to *hydroelectricity* (signalled by the

Deictic of the nominal group, which realises anaphoric reference and refers back to the preceding clause 5.1).

this	<div>lowcost</div>	source = hydro
	<div>[force: quantifying: amount] + ideation invoking Attitude: [+ appreciation: valuation]</div>	Target
Deictic	Classifier	Thing

Table 4.19 Graded ideation invoking positive appreciation

Figure 4.17 below represents the graded ideation *low cost* spreading positive [appreciation: valuation] over the Target *source* as an invoked coupling:

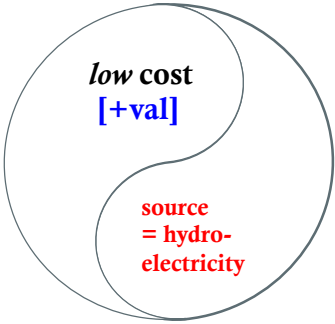



Figure 4.17 Graded ideation forming an invoked coupling with it Target

As mentioned above, this invoked coupling was found in clause 5.2 in Text 1. A closer look at clause 5.2 shows that it is structured around the relational identifying Process type *will prove*. This Process relates the invoked coupling *this low cost source* to the nominal group *the greatest impediment [to the uptake [of photovoltaic (PV) panels]]*, highlighted in Table 4.20 below. As shown by the direction of the arrow in the table below, through this relational identifying relationship this invoked coupling takes on the function of Token. This makes the invoked coupling the Target of evaluation by another nominal group. In the grammatical structure of the clause this nominal group functions as the Value. At the level of discourse semantics the

Head noun of this nominal group (*impediment*) encodes an instance of inscribed negative [appreciation: valuation] and is intensified by force.



5.2 this low cost source = hydroelectricity	will prove	the greatest impediment [to the uptake [of photovoltaic (PV) panels]].
Target	relation	Attitude: – val [force: intensifying: isolating: relative]
Token	Pr: rel. id.	Value

Table 4.20 Invoked coupling becoming Target of appreciation to function as Token

Interestingly, the prosodic value of the invoked positive coupling has become re-evaluated as negative by the discourse semantic resource of recoupling. This means that the negative evaluation inscribed in the Value subsumes the positive evaluation invoked in the Token. More specifically, the recoupling of invoked [+valuation] as inscribed [–valuation] functions to construe a *business decision* about investment potential. I will term this kind of recoupling whose prosodic value shifts to an *opposing* value **inverting recoupling**. Thus considering the purposes of the company conducting market analysis, in Text 1 a positive coupling is evaluated as the most significant risk factor as far as investment potential is concerned. This is represented by the two-layered yin-yang symbol in *Figure 4.18* below:

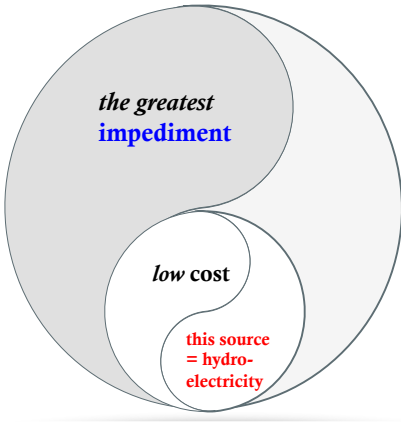


Figure 4.18 Shifting prosodic value: inverting recoupling of invoked [+valuation] as inscribed [–valuation]

The evaluation afforded by the grading of force as amount is made explicit by the inscribed negative attitude found in the outer layer of the recoupling. The importance of the resource of recoupling is thus demonstrated by the positive value of the invoked coupling shifting to negative: as it represents a risk factor for this particular company, it becomes subsumed by a negative value. This shifting of prosodic values via the resource of recoupling is indicative of the fact that this afforded invocation is not sarcastic; it is made in order to construct a business decision in relation to investment potential.

4.2.1.6 Summary

To summarise, this section has illustrated that the Value-Token type recouplings across this data set can be sub-categorised into four main grammatically differentiated subtypes according to their construction in the clause:

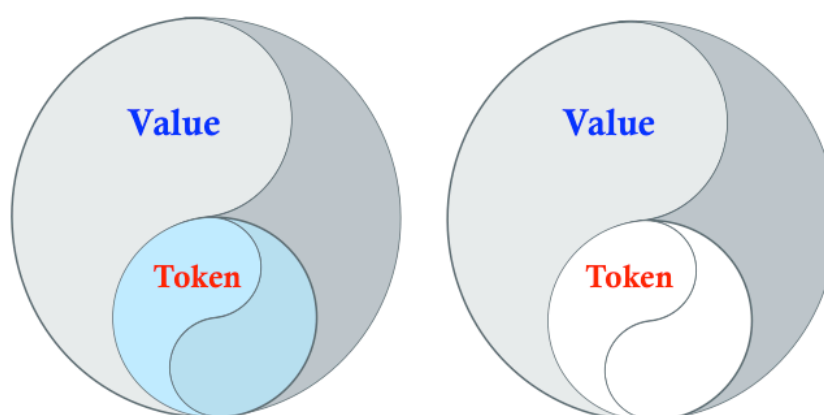
- i-ii) recoupling an inscribed/invoked coupling, and
- iii-iv) a coupling recoupling another inscribed/invoked coupling.

These findings can now be generalised to create a more abstract representation of inscribed and invoked Value-Token recouplings. The Targets in each subtype must be realised by lower-order *inscribed* or *invoked* couplings. I have shown in [Section 4.1](#) above that these can be construed grammatically through the structure of the clause and the nominal group. In *inscribed* couplings resources selected from the system of ATTITUDE couple with experiential meanings; in *invoked* couplings the grading of force as intensification and amount function to invoke the attitudinal meanings. These lower-order inscribed and invoked couplings were shown to construe different kinds of factors chosen from a PESTLE environment, e.g. technological or economic factors in undergraduate business reports. In the Value-Token recouplings lower-order couplings must function as the Tokens. In this resource then the Values subsume the Tokens in order to construe couplings of couplings.

With regards to the *function* of Value-Token recouplings, writers of undergraduate business reports have two further choices. When writers opt for *reinforcing* the

positive or negative evaluation inscribed in a lower order coupling, which realises a PESTLE factor, they have the option to draw on either subtype of Value-Token recoupling (i.e. recoupling an inscribed or invoked coupling *or* recoupling another inscribed or invoked coupling). On the other hand, when writers opt for *shifting prosodic values* by recoupling positive attitudinal value as negative or vice versa, they may analyse a particular PESTLE factor as an opportunity or a risk on its own, but these factors can be reevaluated in terms of profitability or viability of investment for the investment purposes of a particular company. It can be argued then that opting for *reinforcing* or *inverting* Value-Token recouplings is one way a business decision can be made explicit in the undergraduate business reports analysed in this study. I will take this point up again in **Chapter 5** when I look at construing ‘impact’ in business reports in more detail.

The Value-Token recoupling type was found to be by far the ***most typical*** way of construing a business decision through coupling and recoupling values in this data set. *Figure 4.19* below extends our previous representation of the Value-Token recoupling. The two-layered yin-yang symbol on the left will be used for *inscribed* Value-Token recouplings; the one on the right will be used for *invoked* Value-Token recouplings. Because the resources of grading are optional rather than obligatory, they have been left out of the generalised representation below:



*Figure 4.19 Grammatically differentiated recoupling:
Type 1: Value subsuming Token as Target*

At this point in the chapter, it needs to be commented on why the Value-Token type recoupling was found to be successful student writers’ most typical choice across the

data set. If PESTLE factors were congruently evaluated (e.g. *favourable*), it would be obvious that the relationship construing the coupling is through an *attributive* Process type. However, because these factors are *typically* evaluated as opportunities or risks, i.e. through nominalisations, there is a need to comment on analysing the relationship construing Value-Token recouplings as *identifying*. In order to do this, I have drawn on the criteria (or probes) for distinguishing identifying Process types from attributive Processes as proposed by Halliday and Matthiessen (2004, pp. 215-238). These include the probes of *class membership* and *reversibility*; we also consider *subtype identification*.

Table 4.21 below illustrates several examples of manifestations of business opportunities and risks as Tokens across the data. In terms of class membership, these examples (and similar ones across the data) can be rephrased as ‘*X factor is an example of an opportunity/risk*’. This means that the Tokens are *examples* of the Values, e.g. one factor is an example of one member of the general class construed as economic risks/economic opportunities, for example. In fact, since the Target of evaluation represents a factor from the PESTLE framework, we could always insert a Classifier in front of opportunity/risk: political, economic, legal, and so on. This can be explained through one example from the table below: *a resilient and steadily appreciating Brazilian economy is one example of a strong economic opportunity* – but there are other factors. This is consistent with the findings presented in **Chapter 3** in relation to generic structure that the PESTLE framework is essentially a composition taxonomy. The building of this composition taxonomy in these business reports is thus also reflected in the construction of resources of recouplings at the level of discourse semantics.

Further, the analyses of the grammatical relationships construing these recouplings as relational *identifying* relationships is also justified through the probe of reversibility. All the clauses in these examples were tested through this probe and were found to be reversible, which is another indication of identifying rather than attributive relationships. Finally, this was confirmed through *subtype identification*: all the verbs were found to realise identifying Process subtypes (e.g. the verb *represent* realising the subtype of ‘significance’). Consequently, the PESTLE factors functioning as Tokens represent examples of Values such as ‘opportunity’ or ‘risk’, which means

they are construed as recouplings through relational identifying relationships as *indications of, symptoms of or manifestations of* business investment opportunities or risks.

Token	Process	Value
Changing consumer preferences	present [rel. id.: role]	a risk
The vibrant Brazilian agricultural industry	represents [rel. id.: significance]	a <i>considerable</i> opportunity
the <i>sheer size</i> of the consumer market	represents [rel. id.: significance]	a <i>potential</i> opportunity
their embracement [of the fair trade concept]	provide [rel. id.: significance]	a <i>major</i> selling opportunity
A transparent government and strong regulatory environment	provide [rel. id.: significance]	a <i>major</i> manufacturing incentive
Value	Process	Token
A strong opportunity [[created by the sound investment climate]]	is [rel. id.]	a resilient and <i>steadily</i> appreciating Brazilian currency.
a flaw in the legal system [[that affects our company]]	is [rel. id.]	the inflexible labour laws.

Table 4.21 Manifestations of business opportunities and risks as Tokens

The next section will present more types of recoupling found across this data set. I will illustrate in detail how these different types of recoupling will be distinguished from one another by showing how they are grammaticalised. [Section 4.2.1](#) above focused on the construal of recouplings through relational identifying relationships in the structure of the clause. I will now focus on the second main type of recoupling found in this data set: recouplings construed through relational attributive relationships.

4.2.2 Type 2: Attribute-Carrier recoupling

The previous section presented in detail how Value-Token recouplings and their subtypes are realised in the structure of the clause. This type of recoupling was found to be the *most typical* across my data set. This exploration of recoupling types construed through lexicogrammatical structures revealed other types of recoupling. The next section will illustrate in detail how the second type of recouplings, the Attribute-Carrier type will be distinguished at the level of clause grammar. As the following examples will show, even though this type of recoupling was not found to be the most typical, it is the type that can be congruently mapped onto the structure of the clause.


I will now explore the grammatical realisation of an Attribute-Carrier type of recoupling found in Text 8 (the Brazil Report). This recoupling is found in an embedded clause realising the Value in the structure of the clause shown in *Table 4.22* below:

A final recommendation in this report		will indicate	[[that the overall bright economic future [of Brazil] is insufficient in overcoming the target market's level of development to provide a profitable venture]].
Token	Process [rel. id.: sign]	Value	

Table 4.22 Exploring the Value of a clause to find couplings and recouplings

To begin, the nominal group *the overall bright economic future [of Brazil]* will be examined. *Table 4.23* below illustrates that this nominal group is realised by a Deictic ^ Post-Deictic ^ Epithet ^ Classifier ^ Thing ^ Qualifier structure. The arrow in the table indicated that the Post-Deictic ^ Epithet together realise attitudinal meanings (*overall bright*) and spread [+appreciation: valuation] over the Classifier ^ Thing ^ Qualifier (*economic future [of Brazil]*), which realise the Target of this evaluation. To make this coupling of ideational and interpersonal meanings explicit, this nominal group structure could be reconfigured as the clause *the economic future [of Brazil] is*

overall bright, structured as a relational attributive relationship between the Carrier *the economic future [of Brazil]* and the Attribute *overall bright*.



the	<i>overall</i>	<i>bright</i>	<i>economic</i>	<i>future</i>	<i>[of Brazil]</i>
Attitude: [+ valuation]			Target		
Deictic	Post-Deictic	Epithet	Classifier	Thing	Qualifier

Table 4.23 A graded inscribed coupling of field and [+appreciation: valuation]

The nominal group structure thus establishes an inscribed coupling of graded [+appreciation: valuation] and its Target. This is shown as a yin-yang symbol in *Figure 4.20* below, with the experiential elaboration of the nominal group, i.e. the Qualifier *[of Brazil]* left off:



Figure 4.20 A graded inscribed coupling of field and [+appreciation: valuation]

A closer look at the clause this inscribed coupling was found in shows that the coupling *the overall bright economic future [of Brazil]* itself is further appreciated as *insufficient* by an instance of inscribed negative [appreciation: valuation]. The arrow in *Table 4.24* below indicates that this instance spreads negative valuation over the coupling that takes on the function of the Target in the clause:

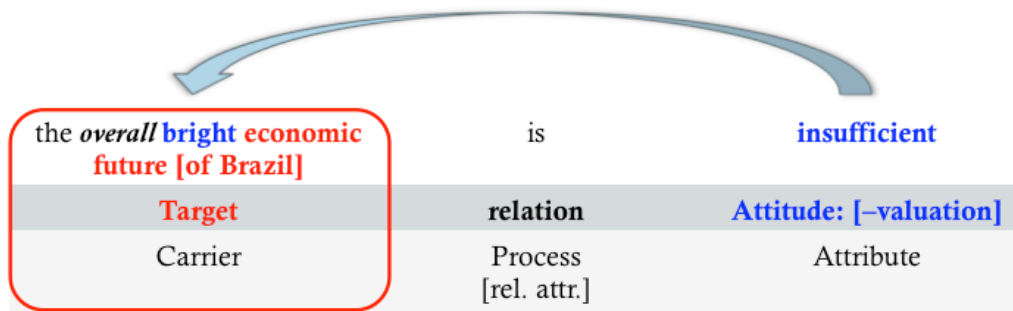


Table 4.24 The inscribed coupling becoming Target of –Appreciation in the clause

In the grammatical structure of the clause this coupling functions as the Carrier and the attitudinal meaning inscribed in *insufficient* functions as the Attribute, thus establishing another coupling through the relational attributive process *is*. This makes the coupling the Target of evaluation as shown in Table 4.25 below:

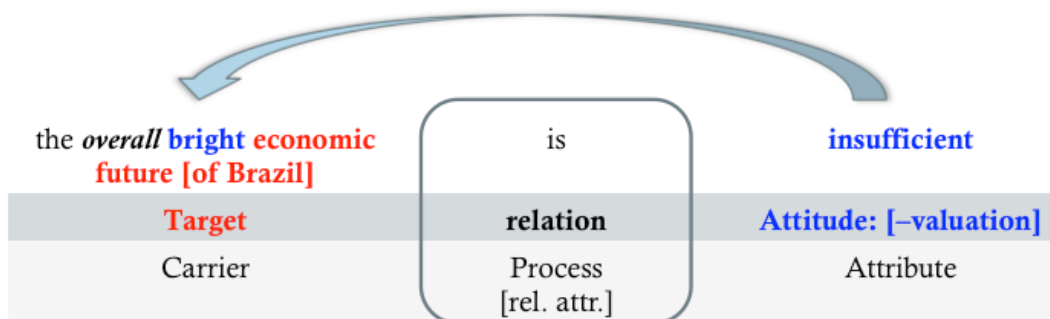


Table 4.25 Coupling becoming Target of Appreciation in the clause through a Carrier-Attribute structure

Figure 4.21 below illustrates that the positive graded inscribed coupling has become the Target of evaluation whose positive value is recoupled by a negative value. This negative value dominates the lower-order coupling as indicated by the outer layer of the recoupling coloured in grey. Thus the coupling *the overall bright economic future [of Brazil]* that realises an economic factor selected from the PESTLE framework is evaluated as *insufficient* by the writer who is investigating the viability of their company's expansion into the Brazilian supermarket sector. This is another instance of an inverting recoupling, where a positive inscribed coupling is recoupled as negative:

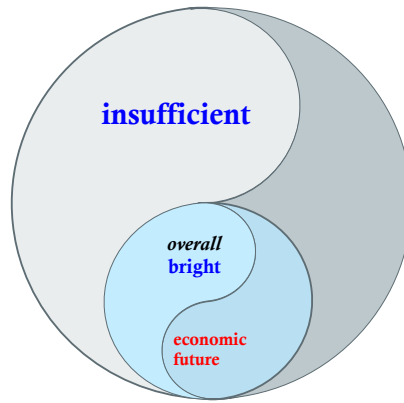
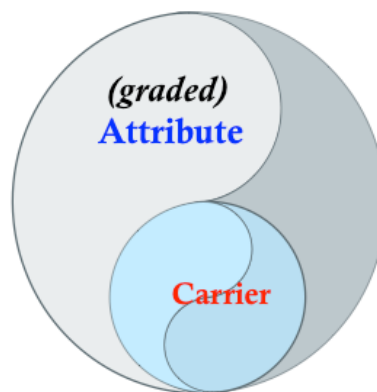


Figure 4.21 Recoupling +appreciation as –appreciation: Carrier-Attribute structure

I will now attempt to generalise these findings to distinguish the second type of recoupling from the other types found in this data set. I term this type of recoupling **‘Attribute-Carrier recoupling’**, which was shown to be grammaticalised through the structure of a relational attributive clause. This is the relationship that enables an attitudinal value to subsume an inscribed coupling. As represented by *Figure 4.22* below, the outer layer of this recoupling must be dominated by an Attribute, which similarly to Value-Token recouplings can also be optionally graded. The Target of this Attribute must take on the function of a Carrier at the level of the clause. The two-layered yin-yang symbol below represents the Attribute encoding the attitudinal meaning and its subsumed Carrier, realised by an inscribed coupling of an attitudinal value and experiential meanings.



*Figure 4.22 Grammatically differentiated recoupling:
Type 2: Attribute subsuming Carrier as Target*

In this type of coupling the Attribute is congruently realised by an adjective. Since most attitudinal inscriptions in the recouplings are nominalised in this data set (e.g. *an opportunity*), the Attribute-Carrier recoupling is a ***less typical*** example of how a business decision is construed through recoupling values.

The recouplings instantiated in the undergraduate business reports presented above are all construed through relational process types, i.e. identifying and attributive processes. In the next section I will turn to a third type of recoupling construed through material process types revealed in my data: a Medium-Agent structure.

4.2.3 Type 3: Medium-Agent recoupling

I will now turn to the exploration of recouplings construed through material processes. I will present the criteria for distinguishing these types from the recouplings presented above based on the following example from Text 8 (the Brazil Report). I start by highlighting the first coupling found in the clause below, *burdensome taxation*:

[Text 8] **Burdensome taxation** and bureaucratic concerns create political risks [[that may act || to undermine profitability]].

It can be seen from *Table 4.26* that this coupling is construed through an Epithet^Thing structure in the nominal group. The arrow indicates that an instance of inscribed [appreciation: valuation] encoded in the Epithet (*burdensome*) spreads negative value over the Target realised by the Thing (*taxation*). I represent this coupling in *Figure 4.23* below.

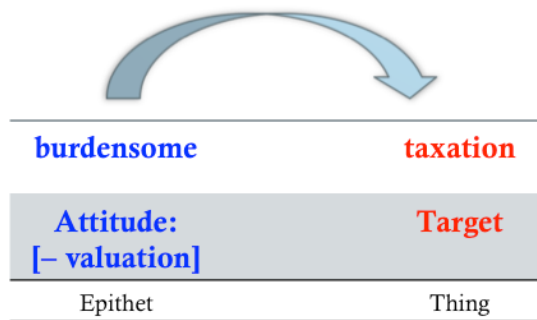


Table 4.26 An inscribed coupling of field and [-appreciation: valuation]

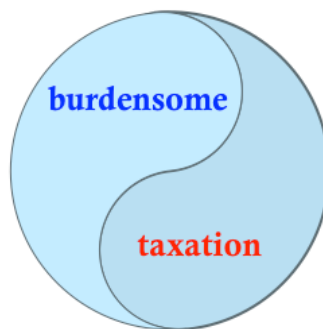


Figure 4.23 An inscribed coupling of field and [-appreciation: valuation]

To see where this coupling is positioned and what function it takes on, the structure of the clause it appears in needs to be analysed. A closer look at this clause shows that the coupling *burdensome taxation* is further appreciated as risks by an instance of inscribed negative [appreciation: valuation]. Table 4.27 below shows that the coupling has become the Target of evaluation:

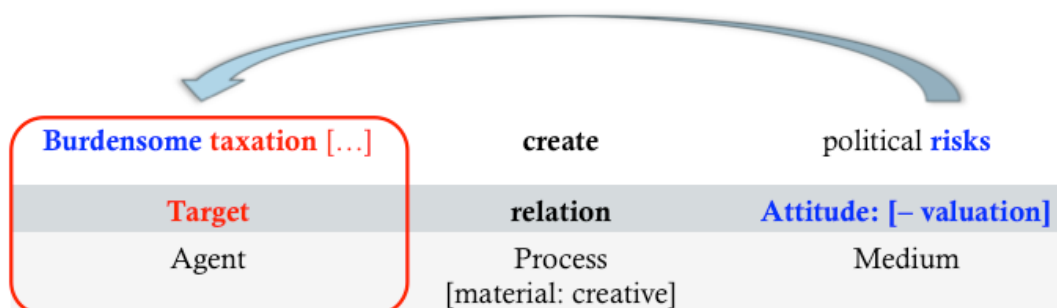


Table 4.27 The inscribed coupling becoming Target of [-appreciation] in the clause

As the Target of evaluation, in the grammatical structure of the clause this coupling now functions as the Agent. Table 4.28 below shows that this Agent is linked to the

attitudinal meanings inscribed in the nominal group (*political risks* [[...]]) through the [material: creative] process *create*. Thus the structure of the clause establishes a reinforcing recoupling:

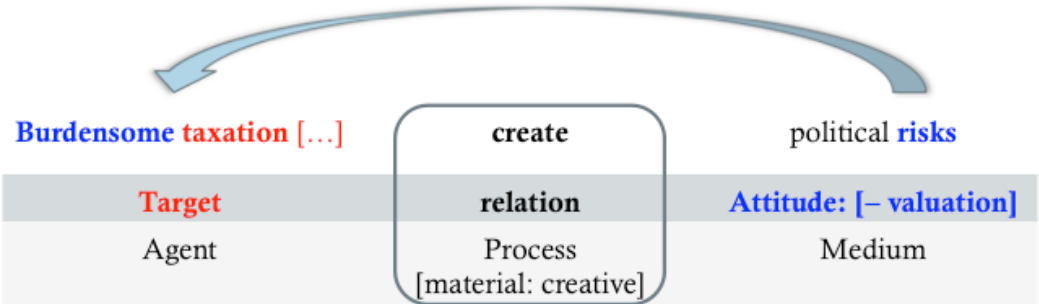


Table 4.28 Coupling becoming Target of Appreciation in the clause through an Agent-Medium structure

Figure 4.24 below represents the Agent of the clause, *burdensome taxation*, as the Target of evaluation. It also shows that the Medium *risks* subsumes the lower-order coupling realising this Agent:

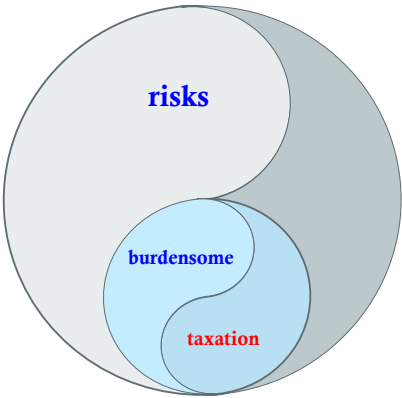
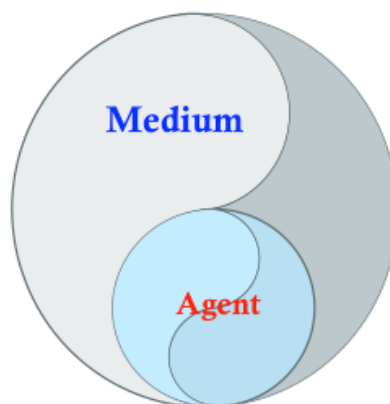


Figure 4.24 Recoupling [-appreciation] as [-appreciation]: Medium-Agent structure

This is the third type of recoupling found in this data set that is construed at the level of clause grammar. I will term this type of recoupling, in which the Agent is realised by a lower-order coupling that brings about the Medium, ‘**Medium-Agent recoupling**’. Without the Medium, the “core participant” in the process “there would be no process” (Halliday & Matthiessen, 2004, p. 288). Other participants might also be involved in the process: one of these is the Agent, which “instigates the process, which affects the Medium” (Martin & Rose, 2003/2007, p. 91). Although the

Medium-Agent type recoupling has been found to be the *least typical* example of how a business decision is construed in undergraduate business reports, knowledge of its use is still significant for students in order to become successful writers. What this means for undergraduate business reports more specifically is that the coupling realising a specific PESTLE factor, functioning as an Agent ‘*does*’ rather than ‘*acts as*’ as in Value-Token types, or ‘*assigns*’ a quality as in Attribute-Carrier types. For instance, in the recoupling example below the coupling *burdensome taxation* acts as a Participant, it takes on a sense of ‘agency’ functioning as ‘Agent’ in the clause, which brings about the Medium of *risks*, i.e. the outcome of the process *creates*. This grammaticalised construction of Medium-Agent type recouplings is significant for business reports as it enables writers conducting market analyses to link lower-order couplings that realise evaluated PESTLE factors (e.g. negative evaluation of the economic factor *taxation* as *burdensome*) to an expert judgement in terms of profitability or viability of investment, realised as the Medium (*risk*).

Thus what really matters in the Medium-Agent type of recoupling is that 1) it construes a kind of causal relation and 2) the Agent realised by the lower-order coupling represents what Halliday and Matthiessen (2004, p. 289) refer to as ‘external cause’. I will generalise this type of recoupling with the two-layered yin-yang symbol shown in *Figure 4.25* below:



*Figure 4.25 Grammatically differentiated recoupling:
Type 3: Medium subsuming Agent as Target*

So far in this chapter I have explored the realisations of recouplings in clause grammar. I have found three types of recoupling construed through the structure of the clause: Value-Token, Attribute-Carrier and Medium-Agent type recouplings. The analysis of the data set revealed one other type of recoupling construed through the structure of the nominal group. This type is the focus of the following section.

4.2.4 Type 4: Recoupling an inscribed coupling in the nominal group: Thing-Qualifier recoupling

I begin by returning to the first example of an inscribed coupling from Text 1 (the Canada Report) presented in [Section 4.1.1](#) above. *Table 4.29* provides the analysis of this nominal group and the representation of the lower-order inscribed coupling of positive [appreciation: valuation] (*profitable*) and its Target *operations [in the PV industry]*:

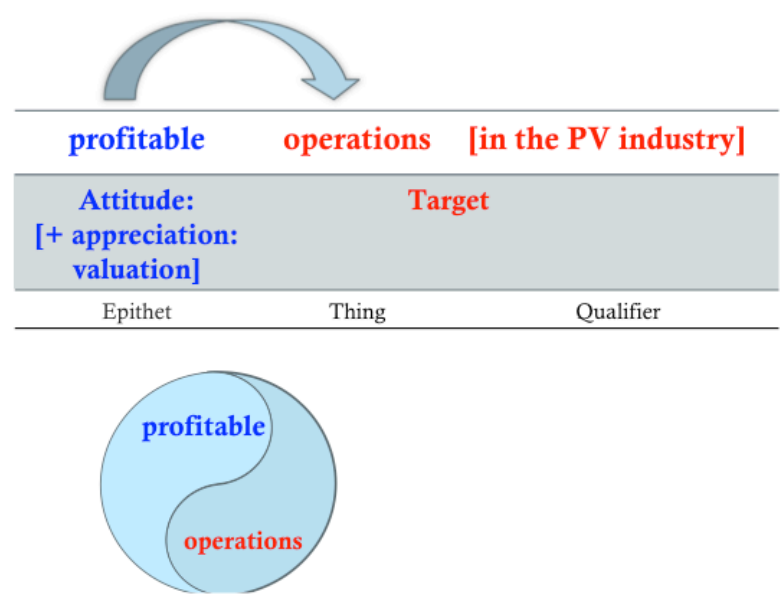


Table 4.29 Inscribed coupling of [+appreciation] and ideation from Text 1

This nominal group was found in the Qualifier of another nominal group: *barriers [to profitable operations [in the PV industry]]*. As *Table 4.30* below shows, the instance *barrier* functioning as the Thing in the experiential structure of the nominal group spreads inscribed negative [appreciation: valuation] over the Target, *[to profitable operations [in the PV industry]]*, which appears in the Qualifier realised by a

prepositional phrase. This makes the coupling in the Qualifier the Target of evaluation as shown by the direction of the arrow in the table below:

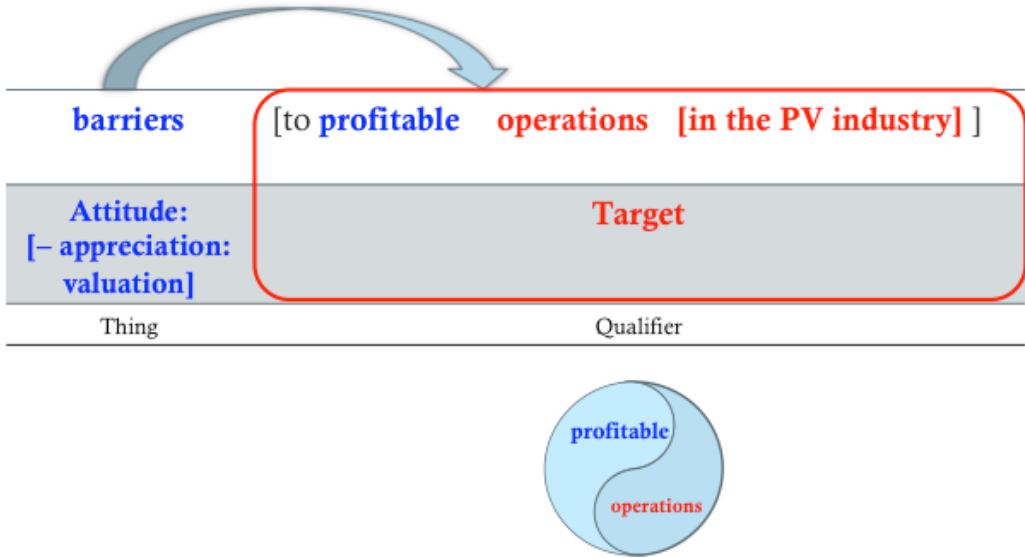


Table 4.30 Inscribed coupling becoming Target of [–valuation] in the nominal group

Figure 4.26 represents this as a two-layered yin-yang symbol. It highlights the recoupling of a positive prosodic value as a negative value. The positive value is realised by a coupling of a ‘lower-order’ and the negative value appears in the outer layers of the yin-yang symbol to indicate that it is the dominating and thus more important value in the recoupling. More specifically, the coupling *profitable operations* encoding a prosodic value of positive [appreciation: valuation] has become re-evaluated by the prosodic value of the negative [appreciation: valuation] encoded in *barriers*. Section 4.2.1.4 above presented in detail the recoupling of an invoked coupling by shifting prosodic values in a Value-Token recoupling. The figure below shows a recoupling of an inscribed coupling by an opposing value, where positive appreciation is reevaluated as negative appreciation. Thus another example of an inverting recoupling has been found in this data set, construed through a Thing^Qualifier structure in the nominal group:

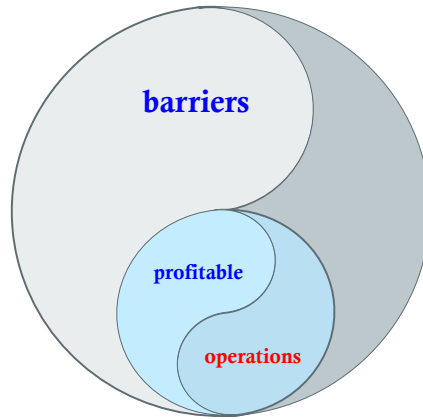
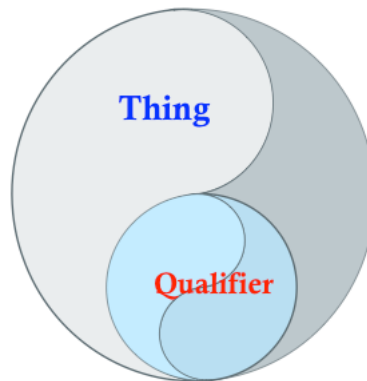


Figure 4.26 Recoupling [+appreciation] as [-appreciation]: Thing-Qualifier structure

This Thing^Qualifier structure is the only grammatical configuration found across the data through which a recoupling is construed at *group rank*. This means that the Thing element encoding the dominant attitudinal value subsumes the Qualifier, where the Target realised by a lower-order coupling appears. This can be generalised by the two-layered recoupling symbol shown in *Figure 4.27* below, which I will term ‘**Thing-Qualifier recoupling**’. This type of recoupling is another *very typical* example of how a business decision is construed in undergraduate business reports.



*Figure 4.27 Grammatically differentiated recoupling:
Thing subsuming Qualifier as Target in the nominal group*

So far the discussion has considered four types of recoupling, where all the attitudinal choices were selected from the APPRECIATION subsystem of the system of ATTITUDE. I will now turn to the discussion of other types of coupling and recoupling, where the attitudinal values are selected from the subsystems of JUDGEMENT or AFFECT. I will

also show how some recouplings combine selections from different subsystems. This will be the focus of the following section.

4.3 More types of coupling: combining choices from the subsystems of ATTITUDE

4.3.1 Couplings of inscribed judgement and ideation

The couplings and recouplings revealed in this data set so far were construed through ideational meanings coupling with choices selected from the appraisal subsystem of APPRECIATION. While the experiential meanings that take on the function of Targets in the examples above were appreciated as “semiotic and natural phenomena” (Martin & White, 2005, p. 43), the analysis revealed that ideational meanings can also couple with attitudinal choices selected from the subsystem of JUDGEMENT, which involves evaluations of human character and behavior (Martin & White, 2005, p. 52).

Couplings of ideation and inscribed judgement will be the focus of the following section.

The first example of a coupling of ideation and judgement was found in Text 6, the Hungary Report. Attitudinal inscriptions of judgement will be colour-coded in **green bold** font. I start by discussing the construal of a coupling through the nominal group structure highlighted in clause 2 below:


[Text 6]

1. The Corruption Perceptions Index has ranked Hungary 46th in terms of the legitimacy of bureaucratic process (Transparency International 2009) ||
2. and **the inherent corruption [of political processes]** may present a risk for foreign businesses [[lacking familiarity [with local authorities]]].

Table 4.31 below shows that the Epithet^Thing structure in the nominal group *inherent corruption* spreads negative prosodic value over the Qualifier [*of political processes*]. This realisation could be reconfigured as the clause *political processes are inherently corrupt*, structured as a relational attributive relationship between the Carrier *political processes* and the Attribute *inherently corrupt*. This unpacking of the

nominal group as a clause makes the coupling of ideational and interpersonal meanings explicit: the Attribute *inherently corrupt* at the level of discourse semantics realises inscribed negative [judgement: propriety]. In the nominal group structure the quality inscribed in the Thing *corruption* is construed as an abstract entity, in other words, a grammatical metaphor.

As explained in **Chapter 2**, the resources of FORCE, one of the two subsystems of GRADUATION, enable attitudinal meanings to be amplified or intensified to strengthen writers’ arguments (Martin & White, 2005; Hood, 2010). As I will show in the next example, the resources of FOCUS on the other hand can invoke an attitudinal reading by strengthening or softening the boundaries around experiential meanings such as entities or processes (Martin & White, 2005). Abstract entities can be scaled or graded according to their valeur (i.e. authenticity or specificity), and processes can be graded in terms of fulfilment (i.e. actualisation or completion) (Martin & White, 2005; Hood, 2010). The writer of Text 6 could have chosen only the attitudinal resource to evaluate the political environment of Hungary; however, as shown in the table below, the quality encoded in the grammatical metaphor *corruption* has been further sharpened by an instance of grading focus as [valeur: specificity] (*inherent*) (Hood, 2010). This ‘sharpened specificity’ contributes to a more negative evaluation of a political factor selected from the PESTLE framework.



the	<i>inherent</i>	corruption	[of political processes]
	[focus: valeur: specificity]	Attitude: [– judgment: propriety]	Target
Deictic	Epithet	Thing	Qualifier

Table 4.31 An inscribed coupling of field and sharpened [–judgement]

Thus a coupling of inscribed negative judgement and experiential meanings is construed in the nominal group through a Thing^Qualifier structure. *Figure 4.28*

below shows the attitudinal value in this coupling realised by a graded, more specifically, sharpened nominalised evaluation inscribed in a grammatical metaphor. As this chapter shows, most attitudinal values that couple with ideational meanings to construe couplings in the undergraduate business reports are nominalised.

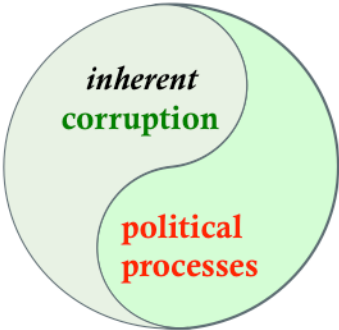


Figure 4.28 Coupling of [-judgement] and field through a Thing-Qualifier structure

Table 4.32 below shows that the coupling *the inherent corruption [of political processes]* becomes the Target of evaluation and is further appreciated as a *risk* by an instance of inscribed negative [appreciation: valuation].

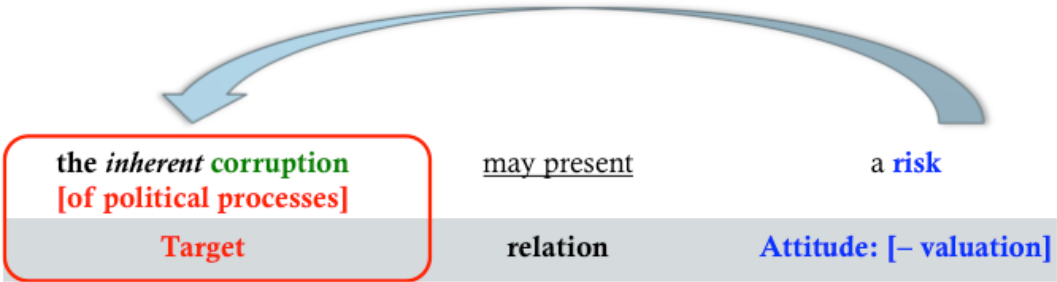


Table 4.32 Coupling becoming Target of [-valuation] in the clause

In the grammatical structure of the clause this coupling takes on the function of the Token and the attitudinal meaning inscribed in *risk* functions as the Value. Thus a Value-Token recoupling is established through the relational identifying process (*may*) *present*, as shown in Table 4.33 below:

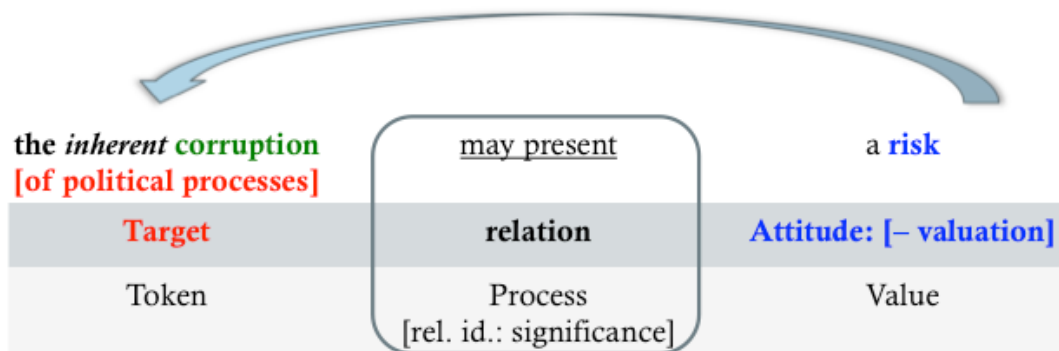


Table 4.33 Coupling becoming Target of [-valuation] in a Value-Token recoupling

This example reveals that writers of undergraduate business reports have the option of selecting attitudinal values from different subsystems of ATTITUDE. In this recoupling the value negative [judgement: propriety] inscribed in the lower-order coupling is recoupled as inscribed negative [appreciation: valuation]. *Figure 4.29* shows that it is thus possible for Value-Token recouplings to combine different attitudinal values selected from the subsystems of JUDGEMENT and APPRECIATION:

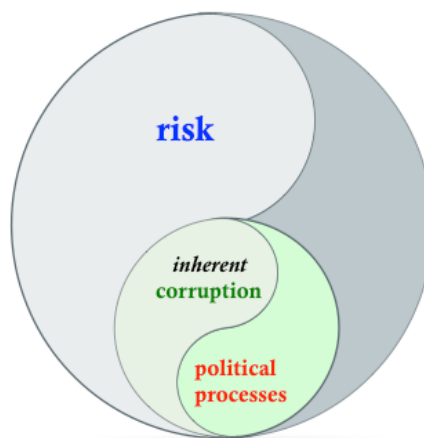


Figure 4.29 Recoupling [-judgement] as [-appreciation] in a Value-Token structure

I have shown in the above example how judgement can be recoupled as appreciation through a Value-Token structure in the clause. In a recoupling such as this the evaluation of human behavior, i.e. judgement, has been turned into an evaluation of abstract phenomena, i.e. appreciation. In the Hungary Report this was construed by the evaluation of one factor selected from the *political* environment of the PESTLE framework businesses operate in. Further analyses found that this kind of recoupling

that combines selections from the two subsystems works both ways: appreciation can also be recoupled as judgement, which dominates the outer layer of the recoupling and thus its Target, the lower-level coupling. I will now show an example where appreciation is recoupled as judgement in a Thing-Qualifier recoupling structure in the nominal group.

The Thing-Qualifier recoupling where appreciation is recoupled as judgement is shown below in *Figure 4.30*. This example appears in Text 2 (the China Report), where an instance of graded positive [appreciation: valuation] in the lower-order coupling (*several high-ranking officials*) is recoupled as [-judgement: propriety]¹ (*sentencing*). We could code the instance *sentencing* as an ideational “token of judgement”, i.e. an “indirect invocation” (Martin & White, 2005, p. 168), which *invokes* rather than *inscribes* social sanctioning of unethical behaviour. The nominal group this legal technical term appears in (*the sentencing of several high-ranking officials*) could be unpacked as *several high-ranking officials were found guilty* to make the inscribed judgement explicit. This Thing-Qualifier recoupling thus also shifts the positive prosodic value inscribed in the lower level coupling to negative:

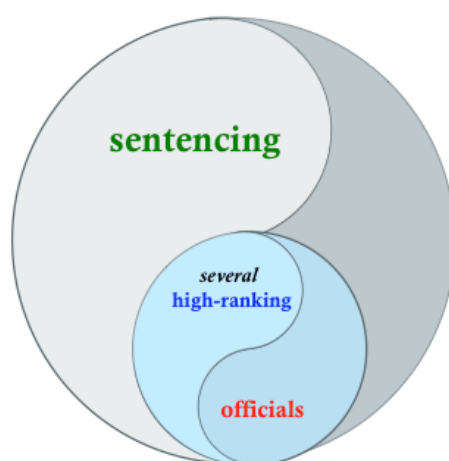


Figure 4.30 Recoupling [+appreciation] as [-judgement] through a Thing-Qualifier structure

¹ The process of grammatical metaphor in this instance functions to move the *commonsense* meaning into the *uncommonsense* discourse of legal jargon, i.e. ‘axi-tech’ (Martin, personal communication). As mentioned in Chapter 2, this thesis treats these axiologically charged tokens, whose definitions would include inscribed attitude, as instances of *inscribed* rather than *invoked* attitude in order to make explicit the evaluation of particular PESTLE factors in these business reports.

I will now show that selecting attitudinal values from the third subsystem of ATTITUDE is also possible in the undergraduate business reports studied in this research. Couplings of ideation and inscribed affect will be the focus of the following section.

4.3.2 Couplings of inscribed affect and ideation


While attitudinal choices from the subsystem of APPRECIATION far outweigh choices from the other two subsystems of ATTITUDE in the undergraduate business reports, I also found writers drawing on resources of AFFECT. As noted in **Chapter 2**, the selection of attitudinal values from the subsystem of AFFECT involves linguistic resources which signal positive and negative feelings, emotions and reactions, such as dis/inclination, un/happiness, in/security or dis/satisfaction (Martin & White, 2005, pp. 48-49). Inscribed expressions of affect often involve a conscious participant who experiences a particular emotion, termed as Emoter, while the Trigger is what brings about that emotion. In the analyses of couplings and recouplings I am most interested in the values encoded in instances of affect and their Trigger, which function as Targets. The construal of couplings that involve expressions of emotion and their Targets will be the focus of the following section.

An example of a coupling of ideation and affect was found in Text 2, the China Report. Attitudinal inscriptions of judgement will be colour-coded in **pink bold** font. The Qualifier of the nominal group highlighted in the example below will be unpacked in order to identify the first coupling:

[Text 2] Social unrest has also affected urban areas, where the restructuring of state-owned enterprises has led to large-scale redundancies and **subsequent feelings [of resentment [towards the Government]]** (Rosenberger 2007).

Table 4.34 below shows that the head noun of the nominal group functioning as Thing (*resentment*) in the structure of the nominal group spreads negative prosodic value over the Qualifier [*towards the Government*]. The attitudinal value inscribed in *resentment* at the level of discourse semantics realises negative [dissatisfaction: displeasure]. Affect in this instance is realised as an abstract nominalised quality and

the Trigger of this negative emotion is the Chinese government, shown as the Target of affect in the table below:



resentment	[towards the Government]
Attitude: [-dissatisfaction: displeasure]	Target
Thing	Qualifier

Table 4.34 Coupling of [-dissatisfaction] and field in the nominal group

This Thing-Qualifier coupling of inscribed negative affect and its Trigger construed in the nominal group is shown in *Figure 4.31* below:

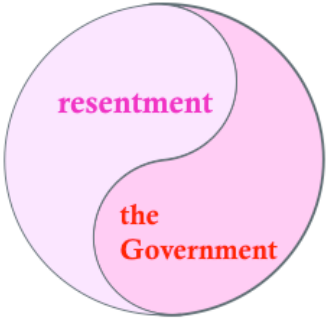


Figure 4.31 Coupling of [-affect] and ideation through a Thing-Qualifier structure

I will now show in the next example that similarly to couplings of judgement and ideation, a coupling of inscribed affect and ideation can also become a Target of evaluation and reevaluated by appreciation. This example is from Text 10, the UK Report. I will consider the Value-Token recoupling construed through clause grammar, highlighted in the sentence below:

[Text 10] The socially aware culture of the population and **their embracement [of the fair trade concept]** provide a *major selling opportunity* for fair trade domestically, whilst it's membership in the EU and strong commitment to free trade act as selling opportunities when facilitating neighbouring countries.

Similarly to previous examples of Thing-Qualifier couplings construed through the nominal group structure, *Table 4.35* shows the representation of the lower-order inscribed coupling of positive [happiness: affection] (*embracement*) and its Target *the fair trade concept*:

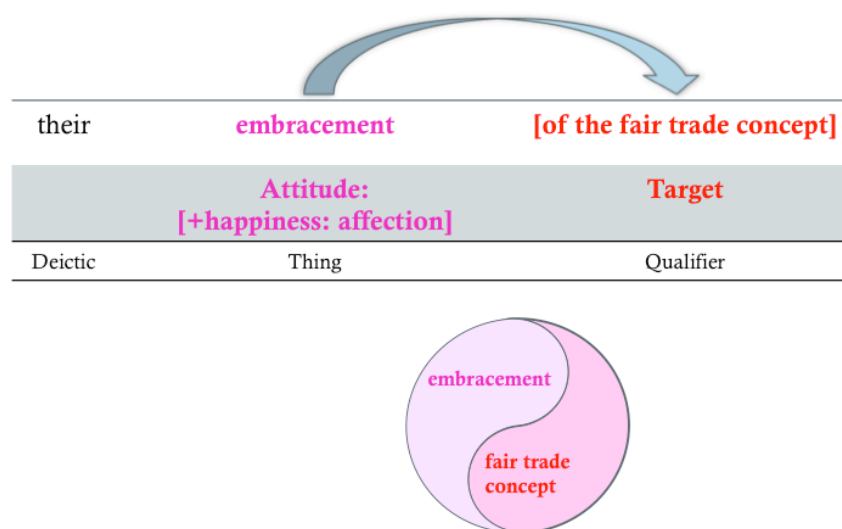


Table 4.35 Incribed coupling of [+happiness] and field in the nominal group

This Thing-Qualifier coupling was found to function as a Token in a clause. As *Table 4.36* below shows, the instance *a major selling opportunity* functioning as the Value in the experiential structure of the clause spreads inscribed intensified positive [appreciation: valuation] over this lower-order coupling. This makes the coupling the Target of evaluation as shown by the direction of the arrow in the table below. Thus a Value-Token recoupling is established in the grammatical structure of the clause through the relational attributive process *provide*²:

² I have analysed the Process *provide* above as a relational process of the [identifying: significance] type. Since its meaning does not refer to 'providing somebody with something', it is not a material process but rather an identifying one; I interpret its meaning as '*present*': *their embracement [of the fair trade concept] provide/present a major selling opportunity*.

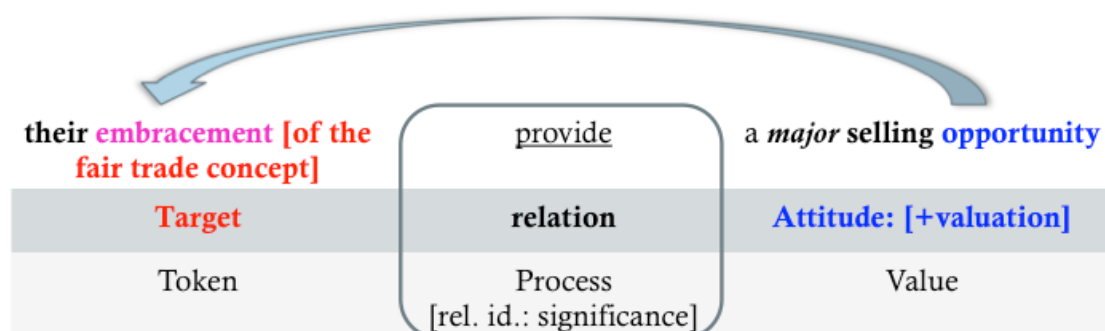


Table 4.36 Coupling becoming Target of [+valuation] in the clause through a Value-Token structure

Figure 4.32 shows this as a Value-Token recoupling combining different attitudinal values selected from the subsystems of AFFECT and APPRECIATION. Specifically, it highlights the recoupling of [+happiness: affection] as [+valuation], which functions to reinforce the positive prosodic value inscribed in the lower-order coupling:

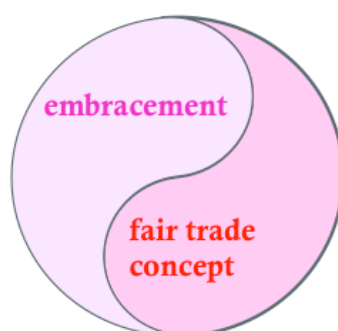


Figure 4.32 Recoupling [+affect] as [+appreciation] through a Value-Token structure

In the example above I presented a Value-Token recoupling where affect was reevaluated as appreciation. Further analysis of the data revealed a Thing-Qualifier recoupling where appreciation is recoupled as affect. This recoupling appears in Text 3, the Brazil Report, construed in the nominal group highlighted below:

[Text 3] Results such as these build **confidence** [in **Brazil's long term growth potential**], a positive sign from a long-term investment perspective.

This recoupling of appreciation as affect is represented in Figure 4.33 below, where an instance of graded positive [appreciation: valuation] in the lower-order coupling

(*long term growth potential*) is recoupled as [+affect: security] (*confidence*). Similarly to the Value-Token recoupling above, this Thing-Qualifier recoupling also reinforces the positive prosodic value inscribed in the lower level coupling:



Figure 4.33 Recoupling [+appreciation] as [+affect] through a Thing-Qualifier structure

The presentation above demonstrated that the recouplings studied in the undergraduate business reports can combine different attitudinal choices selected from each of the three subsystems of ATTITUDE: AFFECT, JUDGEMENT and APPRECIATION. To conclude this section, I will now discuss the reasons why writers favour appreciation over judgement and affect, and in what circumstances they might opt for the latter two when evaluating PESTLE factors in terms of investment potential.

4.3.3 Combining different values from different subsystems of ATTITUDE and grammatical resources: Recoupling a coupling in the clause complex

4.3.3.1 Recouplings in paratactic clause complexes

In the previous sections of this chapter I have presented examples of recouplings construed at clause rank and group rank. The biggest grammatical unit through which recouplings were construed was the clause. While no new *types* of recoupling have been found in this data set, it is important to observe that recouplings can occur over *more than one clause*; in fact, they can *reappear* in a new clause, sentence or

paragraph. I will now turn to the grammatical resources that allow us to identify recouplings in the structure of *clause complexes*.

The first recoupling found in this section is in a paratactic clause complex from Text 8 (the Brazil Report). The clauses are in a relationship of paratactic extension:

- [Text 8]
- 1

The complex system [of state legislature and slow reform] is particularly pronounced in the area of taxation ||
- +2

and forms the principal political risk for a potential U-Save investment.

The lower-order coupling that will become the Target of evaluation in the recoupling is found in the primary clause of the clause complex. *Table 4.37* below shows that this coupling of inscribed negative [appreciation: composition: complexity] (*complex*) and its Target *system* is construed through an Epithet^Thing structure in the nominal group. Even though it forms part of the Target, the Qualifier [*of state legislature and slow reform*], i.e. the ideational elaborations of the head noun *system*, will be left off the yin-yang symbol again to reduce visual clutter.

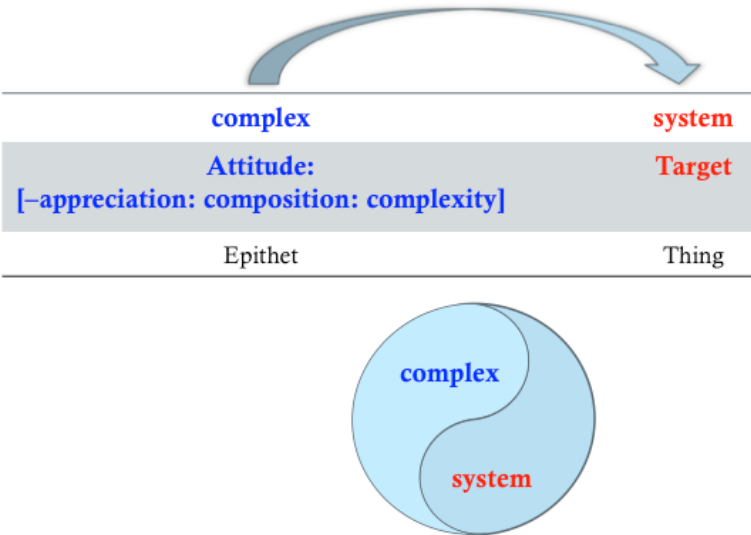


Table 4.37 Coupling of [-complexity] and Target construed through an Epithet^Thing structure

In previous examples of recouplings a lower-order coupling is reevaluated by an attitudinal value in the structure of the same clause. The question we are seeking to

answer is whether recoupling can be construed at the rank of the clause complex. Table 4.38 below shows that in this example the lower-order coupling was found in the *primary* clause and an attitudinal value in the *secondary* clause. The table shows that the secondary clause has an ellipsed Subject. If we reinstated this ellipsed Subject, we would use the anaphoric reference item *it*, which we indicate in the secondary clause below using the conventional notation [Ø: it] from Halliday and Matthiessen (2004, p. 364). This means that recoupling relies on Subject ellipsis involving reference to turn the lower-order coupling *complex system* into a Target in clause 2 of this clause complex. As shown in the table below, this Target encoding negative [appreciation: composition: complexity] is reevaluated by an instance of an intensified inscribed negative [appreciation: valuation] (*principal political risk*). The Target functions as the Agent and the recoupling value functions as the Medium, linked through the [material: creative] process *forms*. Thus a Medium-Agent type recoupling is construed in clause 2 of the clause complex:

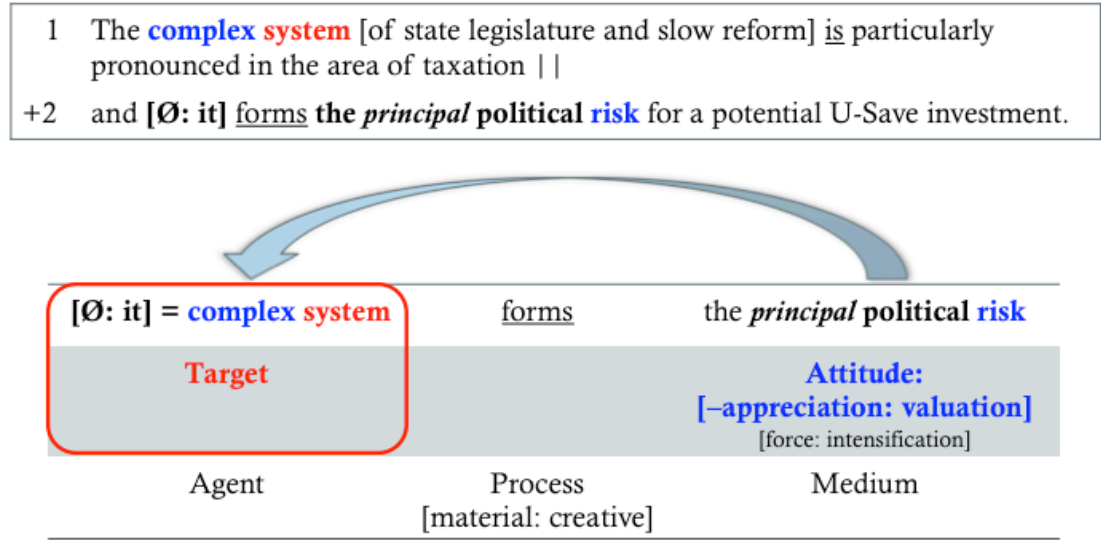


Table 4.38 Medium-Agent recoupling enabled by Subject ellipsis involving reference in a clause complex

Figure 4.34 below represents the Medium *principal political risk* to subsume the Agent, i.e. the Target of evaluation realised by the lower-order coupling *complex system*. This Medium-Agent recoupling functions to reinforce the negative prosody inscribed in the Agent by recoupling negative complexity as negative valuation.

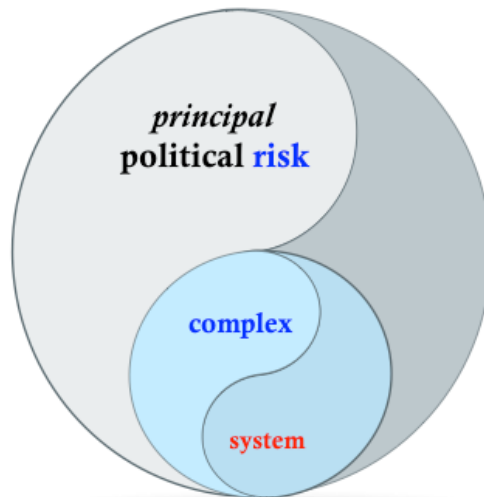


Figure 4.34 Recoupling [–complexity] as [–valuation] in a reinforcing Medium-Agent recoupling

The criteria for identifying recoupling in clause complexes can now be established. Let us consider the following scenario. We are analysing a clause complex where we have identified a lower-order coupling in one clause and an attitudinal value in another clause. In this case we have to be able to retrieve the grammatical resources that turn the coupling into a Target in the *same* clause where the attitudinal value is found in order for them to enter into a relationship of recoupling. Based on the example illustrated above, we can argue that in a clause complex anaphoric reference and Subject ellipsis are both grammatical resources that allow us to retrieve the grammatical relationship construing the recoupling in clause grammar. In other words, the clause complex itself does not recouple; the recoupling is in clause 2 but not in clause 1 *and* clause 2. The recoupling occurs at *clause rank*: it is thus the *clause grammar* that construes the recoupling.

While in the previous example [–appreciation] is recoupled as [–appreciation], in the following example [+appreciation] is recoupled as [+appreciation]. I will now show couplings and recouplings construed in a paratactic clause complex found in Text 10 (the UK Report). I first focus on the primary clause, where two inscribed positive couplings were found, both construed through Epithet^Thing structures in the nominal group complex *transparent government* and *strong regulatory environment*:

- 1 A **transparent government** and **strong regulatory environment** facilitate the ease of doing business there ||
- +2 and thus provide a major manufacturing incentive for the firm to establish a production base in the UK.

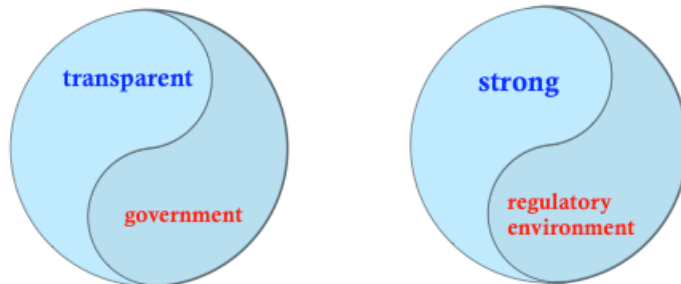


Table 4.39 Inscribed couplings of [+appreciation] and field

In this clause complex the lower-order couplings inscribing [+appreciation: valuation] have become Target of [+appreciation: valuation] via Subject ellipsis involving reference in clause 2, the secondary clause. This is indicated by [Ø: they] in Table 4.40 below. These lower-order couplings functioning as Targets take on the functions of the Token and the inscribed attitudinal value functions as the Value. Thus a Value-Token type recoupling is construed in clause 2 through the [relational: identifying] process *provide*:

1. A **transparent government** and **strong regulatory environment** facilitate the ease of doing business there ||
2. and [Ø: they] thus provide a **major manufacturing incentive** for the firm to establish a production base in the UK.

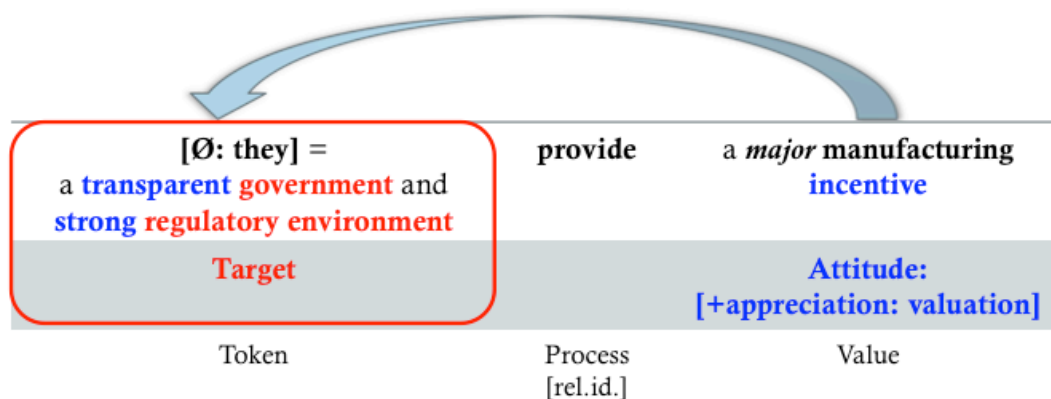


Table 4.40 Construing Value-Token recoupling in the secondary clause of a clause complex

I will represent the recoupling of this ellipsed Target by two yin-yang symbols to account for the Target being realised by a nominal group complex retrievable from clause 1, which contains the two lower-order couplings (see *Figure 4.35*). These Value-Token recouplings were also found to be the *reinforcing* types by recoupling positive appreciation as positive appreciation:

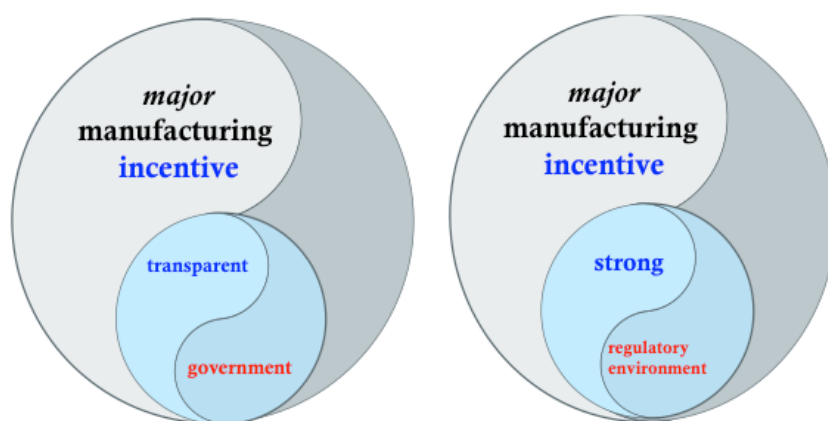


Figure 4.35 Recoupling reinforcing [+appreciation] as [+appreciation]

The two examples presented above illustrated how reinforcing recouplings can be construed in *secondary* clauses of paratactic clause complexes. We have learnt that apart from drawing on the grammatical configurations presented in previous sections of this chapter (such as Value-Token or Medium-Agent structures) in order to turn a coupling into a Target recouplings that occur over clause complexes rely on

- 1) anaphoric reference when Subjects are present in the clause and
- 2) *both* Subject ellipsis *and* anaphoric reference when Subjects are omitted.

The following examples will demonstrate recouplings construed in *hypotactic* clause complexes.

4.3.3.2 Recouplings in hypotactic clause complexes

The presentation above illustrated the grammatical resources that enable recouplings reappear in secondary clauses of paratactic clause complexes. We are also interested in examining the kind of resources that grab the meanings of lower-order couplings in order to form recouplings in the structure of hypotactic clause complexes. The

hypotactic clause complex studied in this section, whose clauses are in a relationship of hypotactic extension, is from Text 7 (the Spain Report):

[Text 7]

- α** Thus, it can be seen [[that rigid labour laws have made the employment process difficult]], ||
- = β** which is a prominent concern for a manufacturer [[who relies heavily on human capital]].

A lower-order coupling of the Target *employment process* and negative [appreciation: valuation] inscribed in the instance *difficult* was found in clause α , shown in *Figure 4.36* below:

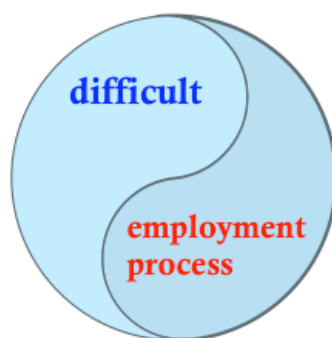


Figure 4.36 Coupling of [–appreciation: valuation] with its Target

Table 4.41 shows that this lower-order coupling reappears in clause β , a non-defining relative clause, through the relative pronoun *which*. This *wh*-element (Halliday & Matthiessen, 2004, p. 399) functions to pick up the meaning of the coupling and turn it into a Target. The inscribed negative value, [–appreciation: valuation], of this coupling is then recoupled as intensified negative [affect: security: disquiet] (*a prominent concern*) in clause β . According to Halliday & Matthiessen (2004, pp. 399-400), in hypotactic clause complexes secondary clauses, whose Subjects are relative *wh*-elements, “[provide] a further characterisation of one [element] that is already there”. The recoupling formed in the secondary clause of this hypotactic clause complex is construed as a relational identifying relationship. This makes explicit the lower-order coupling *difficult employment process* being an *example* of a number of other significant economic concerns.

α	Thus, it can be seen that rigid labour laws have made the employment process difficult ,
$= \beta$	<u>which</u> is a prominent concern for a manufacturer [[who relies heavily on human capital]].

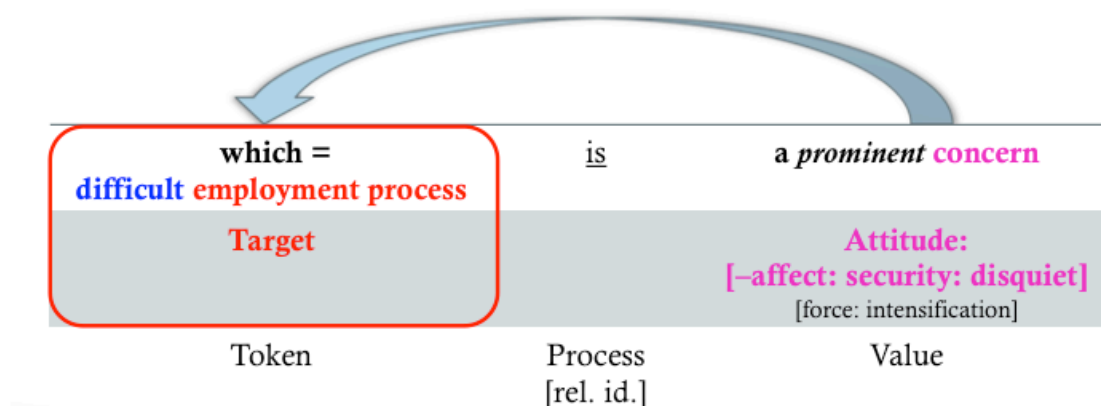


Table 4.41 Construing Value-Token recoupling in the secondary clause of a hypotactic clause complex

Figure 4.37 below shows this reinforcing Value-Token recoupling, where the Value subsumes the Token, i.e. the Target of evaluation realised by the lower-order coupling.

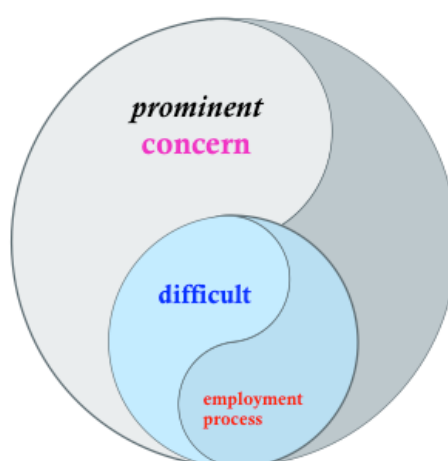


Figure 4.37 Recoupling reinforcing [-appreciation] as [-affect]

The examples above have illustrated how couplings can occur over more than one clause to construe recouplings with attitudinal values in adjacent clauses. As the

following example from Text 4 (the India Report) will show, in longer clause complexes not only couplings but also recouplings may form new recouplings. I will now examine the hypotactic clause complex below:

- [Text 4]
- α Firstly, the political instability [[created by the Maoist insurgency]] is a chief cause for concern, ||
 - $x\beta$ <<as they “have repeatedly targeted India’s cities” (Euromonitor International 2009b, pp.4), >>||
 - $=\beta$ [Ø: which is] clearly a barrier to the success of our firm
 - $x\beta$ if expanding to this location.

In the primary clause α a Value-Token recoupling formed through a relational Process between the coupling *political instability* and the intensified attitudinal value inscribed in *a chief cause for concern* was found (see Table 4.42).

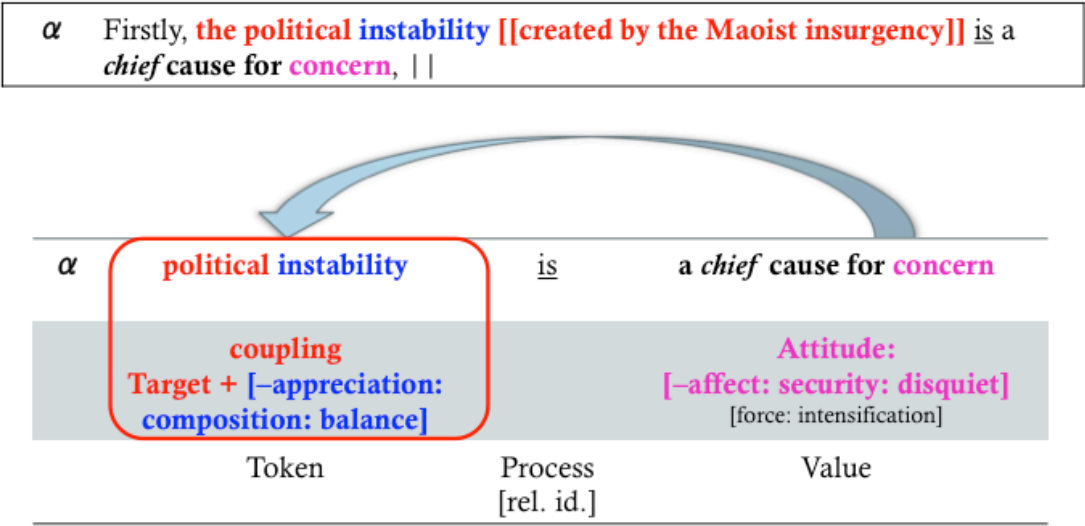


Table 4.42 Construing Value-Token recoupling in the primary clause

Figure 4.38 illustrates this recoupling as the reinforcing type: here [-appreciation: composition: balance] is recoupled as [-affect: security: disquiet]:

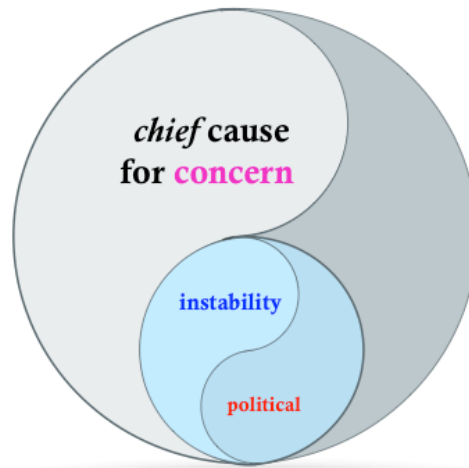


Figure 4.38 Recoupling [–appreciation] as [–affect]

It was shown in previous examples that it is *clause grammar* that construes the recoupling in the *same* clause in a clause complex. The grammatical resources found so far that enable the construal of recouplings at clause rank were anaphoric reference, Subject ellipsis and the relative pronoun *which*. I will now take a closer look at the recoupling found in the primary clause (clause α) and the attitudinal value appearing in the third clause, a hypotactic extending clause (indicated by the notation $=\beta$ in Table 4.43 below). The enhancing clauses (notated as $x\beta$) were not found to play a role in forming recouplings in this clause complex.

The table below shows that the extending secondary clause has an ellipsed Subject and an ellipsed relational Process, both of which can be reinstated with the reference pronoun *which* and the relational process *it*, notated as [\emptyset : which is]. Thus the grammatical resources found to play a role in construing a recoupling in this hypotactic clause complex are similar to those found in previous examples. An important difference found in this example is that not only a coupling but also a recoupling can be further evaluated by an attitudinal value. The direction of the arrow in the table indicates that the recoupling has been turned into a Target and has now become a *lower-order recoupling*. This recoupling is reevaluated by an instance of inscribed negative [appreciation: valuation] (*barrier*). The Target realised by the recoupling functions as the Token and the attitudinal value functions as the Value, linked through the ellipsed relational identifying process *is*. Thus a Value-Token type

recoupling is construed in the structure of the extending clause ($=\beta$) of the clause complex:

α	Firstly, the political instability [[created by the Maoist insurgency]] <u>is</u> a chief cause for concern ,		
$\times \beta$	<<as they “have repeatedly targeted India’s cities” (Euromonitor International 2009b, pp.4), >>		
$= \beta$	[Ø: which is] clearly a barrier to the success of our firm		
$\times \beta$	if expanding to this location.		

$= \beta$	[Ø: which the political instability is a chief cause for concern Target]	$= \text{is}$	a barrier
	Token	Process [rel. id.]	Value Attitude: [-appreciation: valuation]

Table 4.43 Construing Value-Token recoupling in a hypotactic clause complex

Since the Target of evaluation in this recoupling is realised by the lower-order recoupling, we need extend our recoupling symbol. We now need an additional layer in Figure 4.39 below to represents the Value *barrier* subsuming the Token, which is represented by a two-layered yin-yang symbol. The reevaluation of a recoupling will thus be represented as a *three-layered recoupling*. In this three-layered recoupling the grammatical structures that afford the construal of recouplings are Value-Token structures in both instances. If, for instance, the outer layer had the instance *risky* inscribed, the recoupling would be an Attribute-Carrier recoupling, while the lower-order recoupling would be a Value-Token recoupling. This means that any possibility a clause complex structure affords in grammar is also possible in three-layered recouplings. Similarly to examples illustrated above, attitudinal values may also be selected from the different subsystems of ATTITUDE and freely combined. In this three-layered recoupling this possibility is indicated by the different colours of the inscribed attitude, appreciation and affect respectively. This three-layered Value-

Token recoupling is of the *reinforcing* type as it functions to reinforce the negative prosody inscribed in the Token.

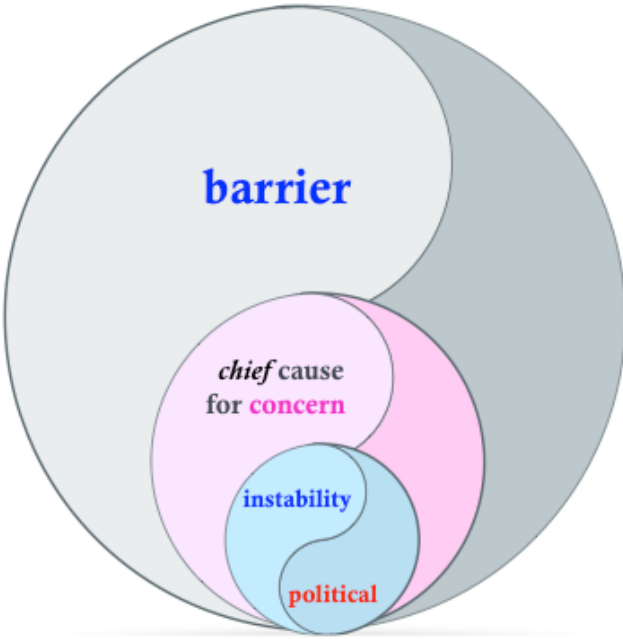


Figure 4.39 Construing a three-layered Value-Token recoupling in a hypotactic clause complex

As this three-layered recoupling is still construed at clause rank, this finding appears to confirm the previous argument that it is the clause grammar that construes the recoupling. So far I have shown that recouplings can occur over more than one clause: in the previous section I have presented examples of recouplings occurring in clauses of both paratactic and hypotactic clause complexes.

This finding now raises the question whether recouplings can occur not only over long clause complexes but also *adjacent sentences*. In fact, recouplings were also found in adjacent sentences in the data set, drawing on the same grammatical strategies identified above. Due to space constraints, I will show only one example for illustrative purposes, a three-layered recoupling found in Text 8 (the Brazil Report). Table 4.44 below highlights a two-layered Value-Token recoupling in clause 1. This recoupling is picked up by the anaphoric reference in the primary clause of clause 2 as *this risk*, which allows the recoupling to be nominalised and its meaning condensed. The arrow in the table shows that the recoupling has been turned into Target in clause

2 α by the anaphoric condensation. This allows the recoupling to be reevaluated by an attitudinal value inscribing intensified negative [affect: security: disquiet]:

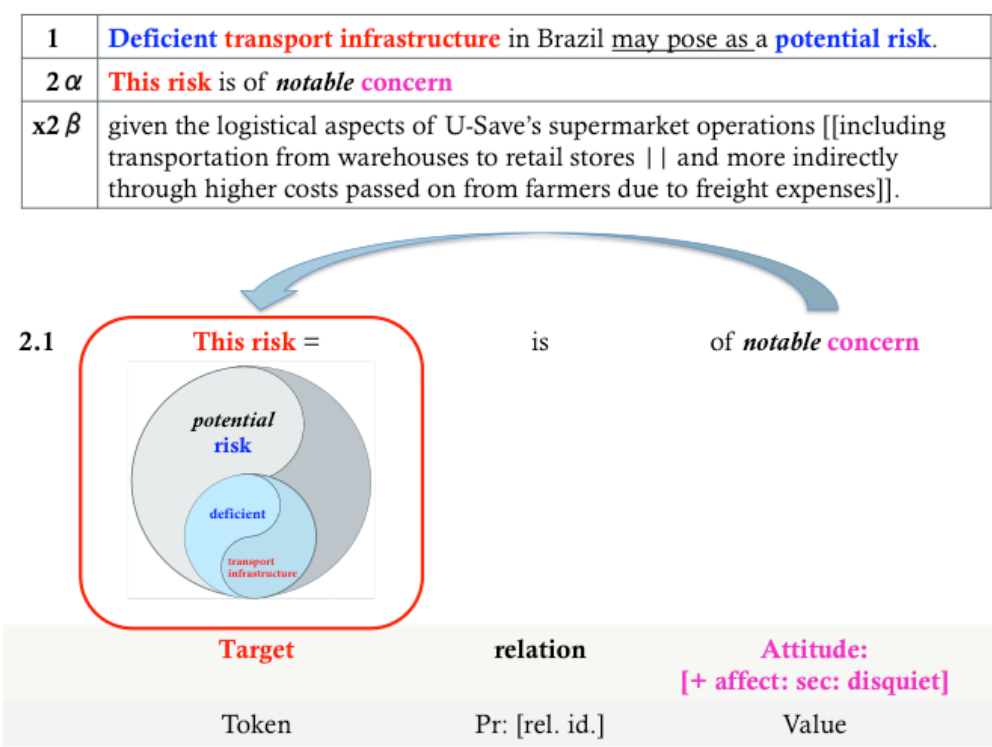


Table 4.44 Construing a three-layered recoupling over adjacent sentences

Figure 4.40 below represents the reevaluation of this recoupling as a *three-layered recoupling*, where negative appreciation is first reinforced as negative appreciation, then reevaluated as negative affect. As the negative prosody inscribed at each layer is reinforced, this three-layered recoupling is a reinforcing recoupling where the Value *notable concern* subsumes the Token realised by the recoupling represented by the two-layered yin-yang symbol below:

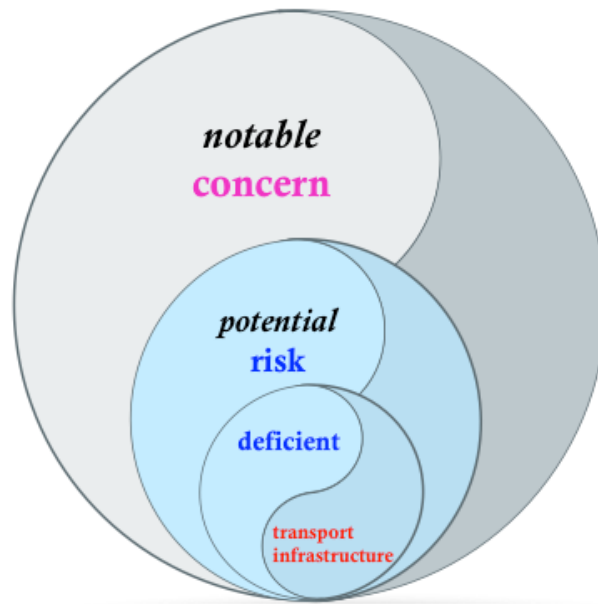


Figure 4.40 Construing a reinforcing three-layered recoupling over adjacent sentences

Thus, as the grammatical structures that afford the construal of this three-layered recoupling were also found to operate at clause rank as in previous examples, the argument that **recouplings**, whether two- or three-layered, **are construed as clause grammar** can be further confirmed. Since no new types of recoupling have been found across this data set, the set of *criteria* proposed for distinguishing different types of coupling and recoupling will now be summarised, based on the grammatical structures identified in this chapter. This will be the focus of the following section.

4.4 Summary: Towards building a typology for couplings and recouplings in business reports

Based on the findings presented in this chapter, the proposed representation of lower-order couplings found in this project will now be presented. I propose that couplings of ideational meanings and inscriptions from the three ATTITUDE sub-systems be represented by the following yin-yang symbols:

- blue for appreciation,
- green for judgement, and
- pink for affect.

This thesis will also propose that white yin-yang symbols should represent couplings of ideational meanings with graded ideation invoking attitude. These proposed representations for these choices are summarised in *Figure 4.41* below:

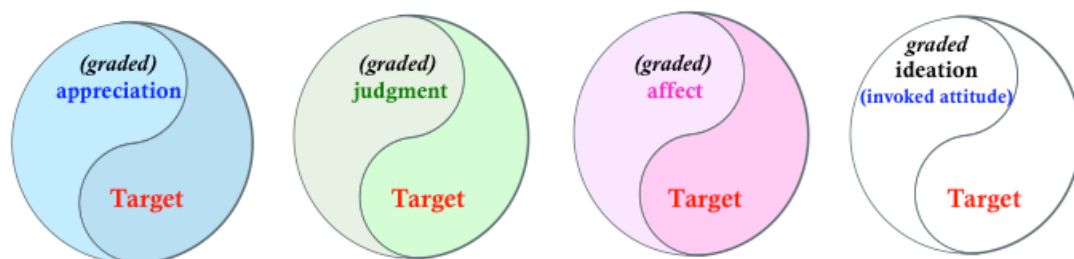


Figure 4.41 Proposed representation for couplings found in this thesis

As presented above, the lower-order couplings found in this thesis realise evaluated PESTLE factors that form the basis of business decisions in undergraduate business country reports. The analyses found that the business decisions realising *investment opportunities* or *investment risks* are construed by four types of grammatically differentiated recoupling. *Figure 4.42* below illustrates these four types by ordering them from most typical to least typical choices taken up in the business reports. According to the figure, the Value-Token type recoupling is the **most typical** example of how a business decision is construed in undergraduate business reports. The second most typical choice is the Thing-Qualifier type, followed by the Attribute-Carrier type. Finally, the Medium-Agent type recoupling was found to be the **least typical** example. As I have named the four types of recoupling after the grammatical ‘glue’ retrievable between their layers (whether two- or three-layered), existing *functions* from lexicogrammar will be assigned to each type of configuration: Value-Token recouplings ‘*act as*’, Thing-Qualifier types ‘*qualify*’, Attribute-Carrier types ‘*assign*’ and Medium-Agent types ‘*do*’. What this means for undergraduate business reports more specifically is that the lower-order coupling realising a specific evaluated PESTLE factor takes on different functions in the clause, as shown in previous sections of this chapter. *Figure 4.42* illustrates lower-order couplings realised as inscribed couplings; *Figure 4.43* below shows the same grammatical configurations, with the lower-order coupling realised as invoked couplings.

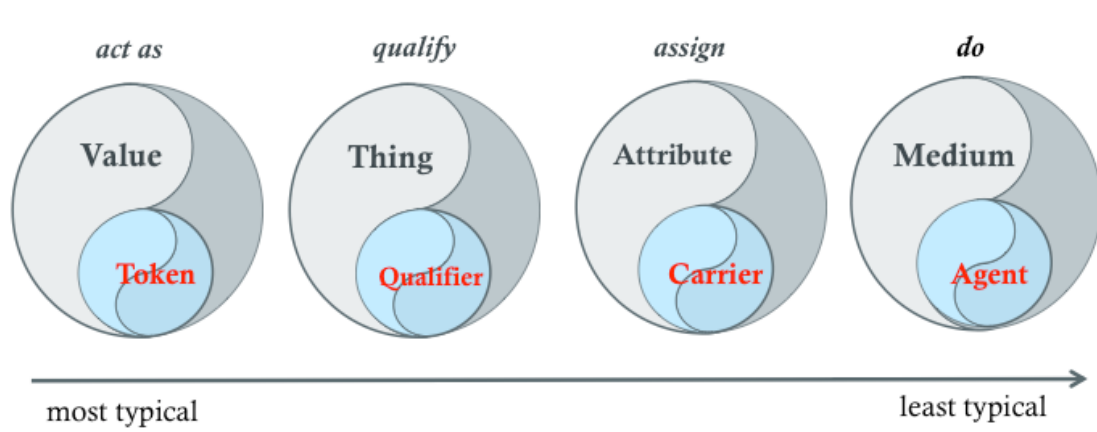


Figure 4.42 Four types of grammatically differentiated inscribed recoupling

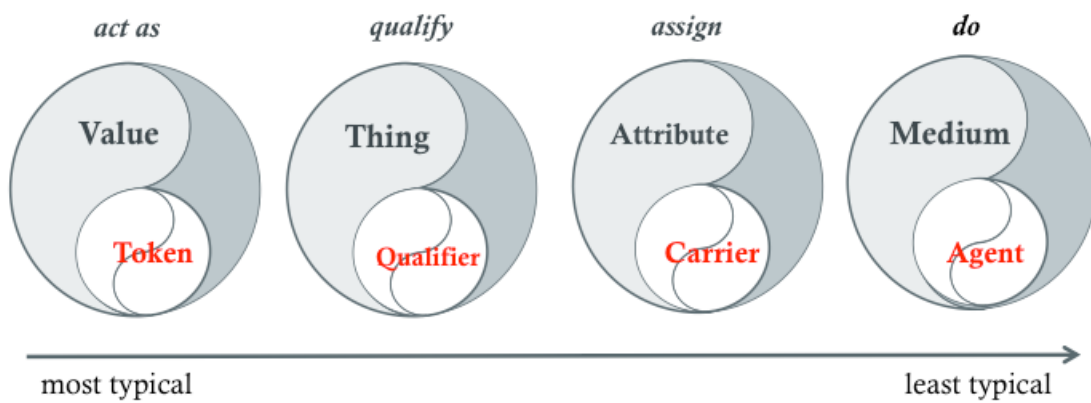


Figure 4.43 Four types of grammatically differentiated invoked recoupling

Examples to illustrate these four types of grammatically differentiated recoupling found in this thesis are provided in Figures 4.44 and 4.45 below.

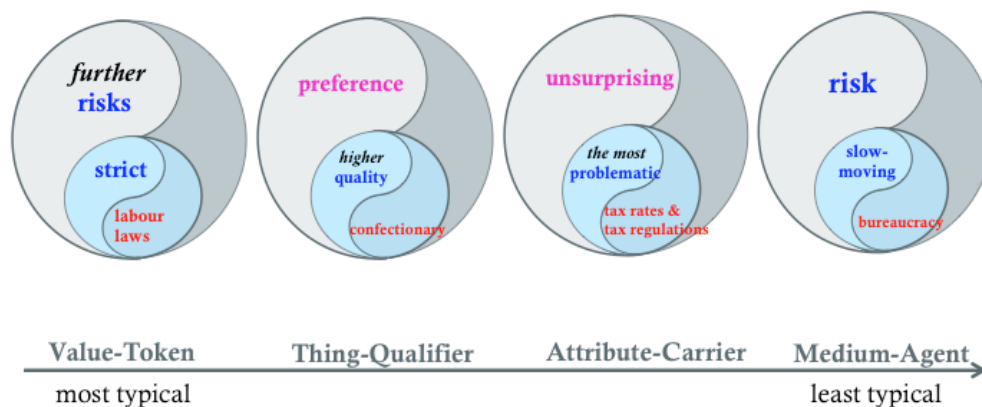


Figure 4.44 Examples of the four types of grammatically differentiated inscribed recoupling

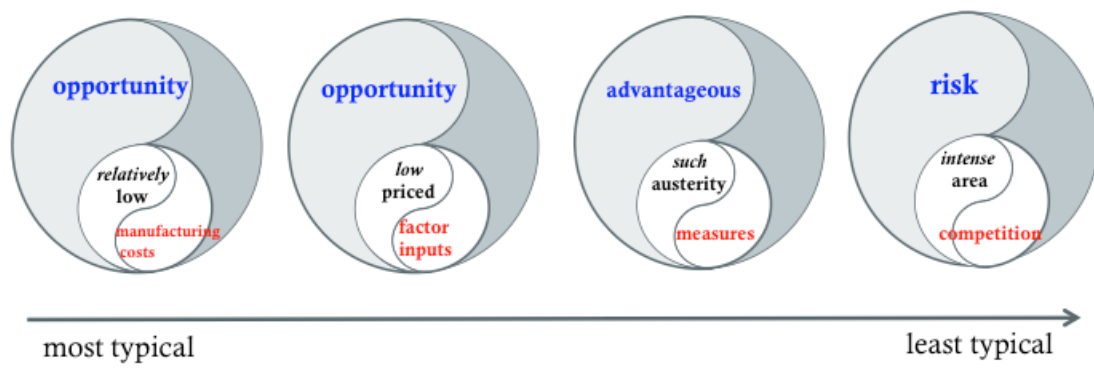


Figure 4.45 Examples of the four types of grammatically differentiated invoked recoupling

To sum up, in this chapter I have argued that recouplings must be construed at the level of clause grammar including clause complexing. Apart from the four possible grammatical configurations summed up above, I have also found four possible combinations of selecting attitudinal choices to construe recouplings. From an attitudinal perspective, recouplings can be either reinforcing or inverting. In *reinforcing recouplings*, positive choices must couple with positive and negative choices must couple with negative choices. In *inverting recouplings*, positive choices must couple with negative and negative choices must couple with positive choices. Figure 4.46 below illustrates these choices available to writers of undergraduate business reports.

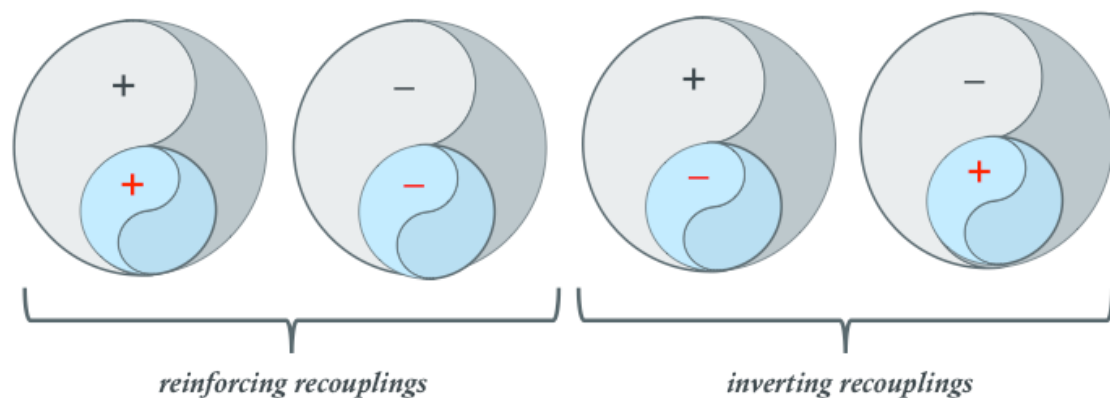


Figure 4.46 Construing reinforcing and inverting recouplings:
Four configurations of recoupling attitude

As I will discuss it in more detail in **Chapter 6**, further study on inverting recouplings in undergraduate business reports is worth pursuing. Whether positive or negative, the subsuming value will always be the dominant value, resulting in the change of the prosodic value inscribed or invoked in the lower-order coupling. While the analyses have not found any evidence that these are more significant than the reinforcing types, unexpected evaluations of *low cost hydro as the greatest threat* for investment in Canada or *poor infrastructure as a major opportunity* for a company expanding into India are nevertheless interesting examples to study further. *Figure 4.47* illustrates examples of reinforcing versus inverting recouplings:

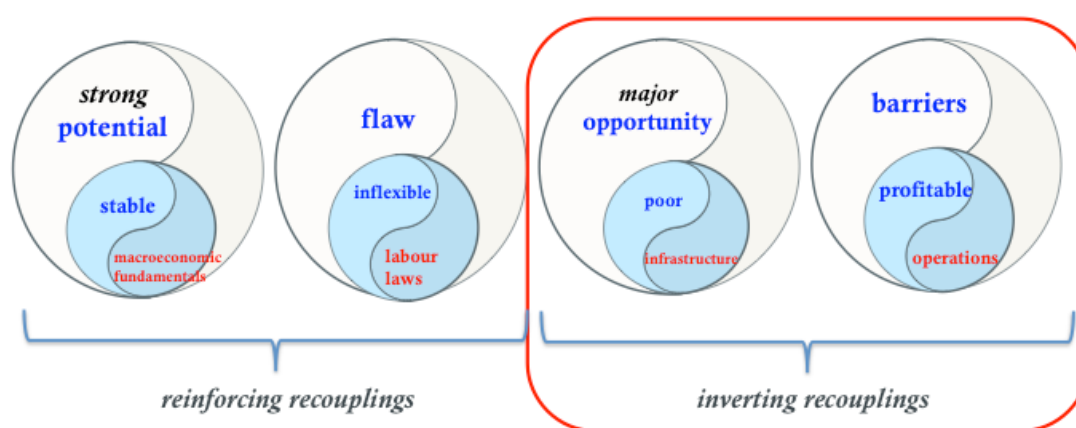


Figure 4.47 Most interesting in business reports: shifting prosodic values

These choices will be formalised as the system network shown in *Figure 4.48* below. This system network shows that in the business country reports studied in this thesis *four types of grammaticalised recoupling* were identified. These recouplings may be realised as either *reinforcing* or *inverting* recouplings. These choices are introduced into the system as simultaneous systems by the right facing brace (or curly bracket) that share RECOUPLING as their entry condition. These systems represent the different choices writers have when construing recouplings at group or clause rank.

The system network at the top formalises the options available to grammaticalise recouplings. Its four features are [Value-Token], [Thing-Qualifier], [Attribute-Carrier] and [Medium-Agent]. The realisation statements for grammaticalising the four types of recoupling are indicated by the downward arrow next to each feature.

The function *+Value; V: inscribed* means that in the recoupling the Value must be realised by an instance of inscribed attitudinal value, while inserting the function *+Token; T: inscribed/invoked* indicates that the Token can be realised by either an inscribed or an invoked attitudinal value. After introducing these functions into the realisation statements, we now want to indicate their position in the structure to construe the **subsumption** of the Token by the Value. As seen in the recouplings presented in this chapter, these options are not in a sequential relationship with one another; they cannot precede or follow each other. Taking Martin (2013b) as the latest existing representation of systemic probabilities in system networks and their symbols, we do not yet have a symbol that represents the option of *subsumption* in systemic functional theory. Therefore we need to extend the list of general realisation statements in Martin (2013b) and introduce a new symbol into our existing repertoire. Using the symbol $\langle \dots \rangle$, this kind of statement will be formalised as **F<F>** to indicate one function subsuming another function. Thus, to return to our first feature in the top system, [Value-Token], the realisation statement *+Value <Token>* means that the Value must subsume the Token.

The second feature in the top system is [Thing-Qualifier]. The function *+Thing; T: inscribed* indicates that in this type of recoupling the Thing must be realised by an instance of inscribed attitudinal value, while the attitudinal value of the Qualifier can be inscribed or invoked. This choice is indicated by the function *+Qualifier; Q: inscribed/invoked*. Finally, the realisation statement *+Thing <Qualifier>* means that in Thing-Qualifier recouplings the Thing must subsume the Qualifier.

The realisation statements for the third feature in the top system, [Attribute-Carrier] include *+Attribute; A: inscribed* and *+Carrier; C: inscribed/invoked*. Similarly to the first two features explained above, the function Attribute must be realised by inscribed attitude, but the Carrier can be realised by inscribed as well as invoked attitude. In this type of recoupling the Attribute must subsume the Carrier; this is indicated by the realisation statement *+Attribute <Carrier>*.

The final, fourth feature in the top system is [Medium-Agent]. Inserting the functions *+Medium; M: inscribed* and *+Agent; A: inscribed/invoked* indicate the same choices

explained above: the only option for the realisation of the Medium is inscribed attitude; for the realisation of the Agent both inscribed and invoked options are available. The realisation statement $+Medium<Agent>$ indicates that in this type of recoupling the Medium must subsume the Agent.

The system network at the bottom shows that writers of undergraduate business reports have the option of recoupling a lower-order coupling by either the *same* or an *opposing* prosodic value. These options can be represented by drawing an obligatory system with the two features [reinforcing] and [inverting]. This means that one of these options must be taken up by the writers of business reports. Choosing the feature [reinforcing] means recoupling *either* a positive value by a positive value *or* a negative value by a negative value in order to *reinforce* the prosodic value inscribed or invoked in a lower-order coupling. The option of positive reinforcement is indicated by the function $+value^+$ and the option of negative reinforcement is indicated by the function $+value^-$. After inserting these functions, we can now complete the proposed realisation statements for reinforcing recouplings: the subsumption of positive prosodic value by another positive prosodic value is indicated by the realisation statement $+value^+<value^+>$ and the subsumption of negative prosodic value by another negative prosodic value is indicated by $+value^-<value^->$.

The second feature in this system, [inverting] refers to the option available to writers of undergraduate business reports to shift the prosodic value of a lower-order coupling to an opposing value. The grammaticalisation of these types of *inverting* recoupling relies on the functions of both positive and negative attitudinal values as indicated by the functions $+value^+$ and $+value^-$. Thus the realisation statements of inverting recouplings can be formalised as $+value^+<value^->$ and $+value^-<value^+>$, which means that the prosodic value of a positive lower-order coupling can become re-evaluated as negative and the prosodic value of a negative lower-order coupling can become re-evaluated as positive. *Figure 4.48* below formalises our proposed system network for the choices available to grammaticalise recouplings in clause or group grammar.

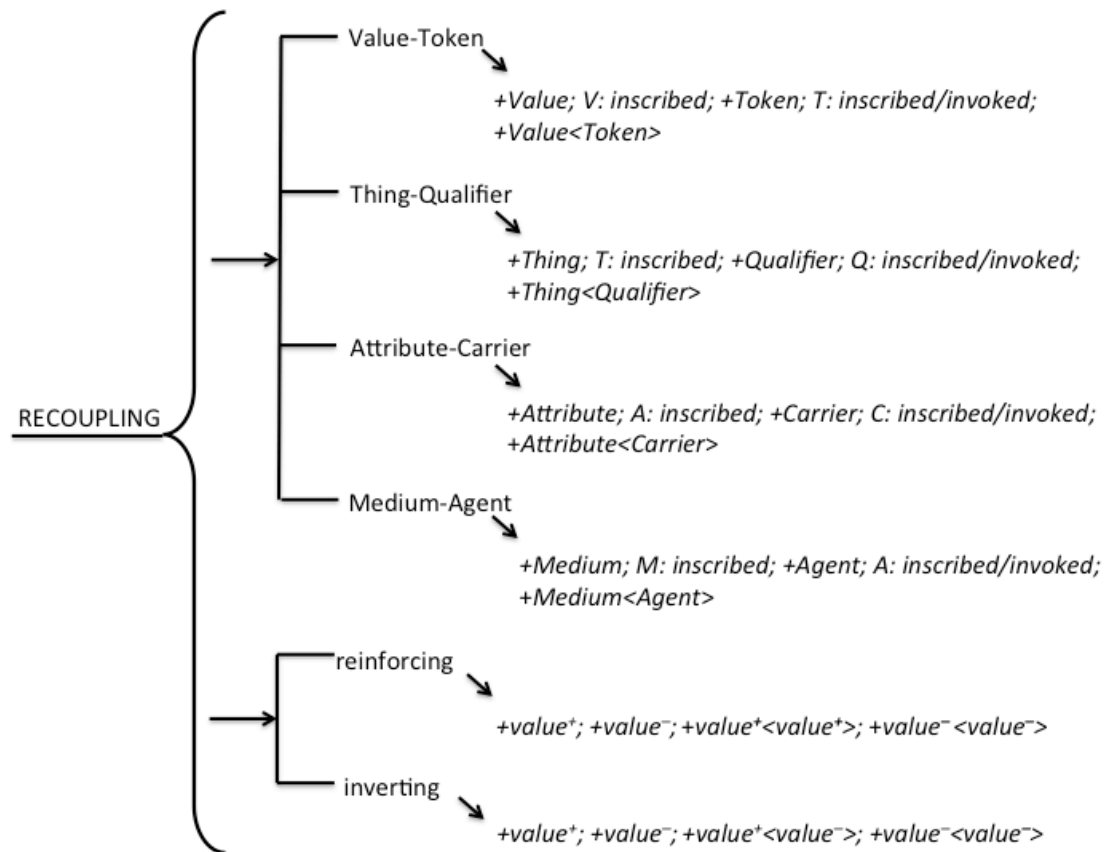


Figure 4.48 The system network proposed for recouplings

4.5 Concluding remarks

In this chapter, I set out to explore couplings from the perspective of the instantiation hierarchy to understand how certain meanings are coupled in undergraduate business reports. In order to do so, I have drawn on existing work in coupling theory as well as the discourse semantic systems of APPRAISAL and IDEATION to explore the construal of couplings through a range of grammatical structures at level of the nominal group, within clauses, clause complexes and across sentences.

Using the discourse semantic system of IDEATION and subsystems of ATTITUDE, I have first identified four types of lower-order coupling in the data set. More specifically, these lower-order coupling can be differentiated by identifying the *inscribed* attitudinal values selected from the subsystems of APPRECIATION, JUDGEMENT and AFFECT or the *invoked* values construed by graded ideation. Lower-order couplings were found to realise evaluated PESTLE factors. The fact that they constitute the

basis of demonstrating business decisions makes them a significant resource for undergraduate business country reports.

After differentiating the lower-order couplings found across the data set, I then identified the various types of structure through which couplings can be further recoupled by attitudinal values. Specifically, four types of grammatically differentiated recoupling have been revealed across the data. I have modelled the criteria for distinguishing between the four types of recoupling by explicitly identifying the grammatical structures that construe recouplings in clause grammar. These four types of structure as summarised in *Figures 4.42 and 43* above include:

- 1) Value-Token recouplings, which has four subtypes:
 - i) recoupling an inscribed coupling;
 - ii) recoupling an invoked coupling;
 - iii) a coupling recoupling an inscribed coupling; and
 - iv) a coupling recoupling an invoked coupling;
- 2) Attribute-Carrier recouplings;
- 3) Medium-Agent recouplings and
- 4) Thing-Qualifier recouplings.

Another variable found significant in the construction of recouplings is the combination of positive and negative attitudinal values, which resulted in four possible combinations. I termed the recoupling of *positive* values as *positive* and the recoupling of *negative* values as *negative values reinforcing recouplings*; the recoupling of *positive* values as *negative* and the recoupling of *negative* values as *positive values inverting recouplings*. Successful demonstration of business decisions realising *investment opportunities* or *investment risks* in successful country reports was found to be dependent on the construction of these four types of grammatically differentiated reinforcing or inverting recoupling.

Finally, I have also shown that recouplings can also occur over more than one clause: in clauses of both paratactic and hypotactic clause complexes as well as adjacent sentences. I established the distinguishing criteria for identifying recouplings across these structures that are larger than the clause. However, it is important to emphasise

that the discourse semantic resource of recoupling must occur at *clause rank*: it is thus the *clause grammar* that construes the recoupling. Further, in longer clause complexes not only couplings but also recouplings may be reevaluted and thus form new, potentially multi-layered, recouplings. In principle, there can be an unlimited number of recouplings and each recoupling can choose from any resource; in other words, every layer has a free choice of recoupling strategies presented in this chapter.

Couplings and recouplings were found to play a crucial role in construing business decisions at the level of discourse semantics. Formalising the options available for construing the different types of recoupling identified in this study as a system network (as shown above in *Figure 4.48*) represents the first step towards building a typology for couplings in business country reports. In the next chapter I turn to the discussion of the *significance* of couplings in ‘making a point’ and the construal of different types of cause-effect relationship in business country reports. I will then present how the co-patternings of discourse semantic resources play a role in forming arguments; this has implications for the construction of business rhetoric.

CHAPTER 5

Making a business decision at the level of discourse semantics: The significance of couplings and recouplings

5.0 Introduction

This chapter will present the significance of couplings in construing business decisions: the linguistic realisations for ‘making a point’ in undergraduate business and the construal of different types of cause-effect relationship. More specifically, **Section 5.1** will discuss the significance of the *most typical* attitudinal choices in couplings and recouplings. I will present from a synoptic perspective the function of choices of affect, judgement and appreciation and the implication these selections have for construing business decisions. **Section 5.2** will illustrate from a more dynamic perspective how couplings and recouplings are positioned to construct different types of cause-effect relationship in the business reports studied in this thesis. Finally, through the generic staging of the embedded [[challenge]] realising the **ISSUE** stage of the Canada Report **Section 5.3** will illustrate how the positioning of couplings and recouplings affects the logogenetic unfolding of these texts. I will conclude the chapter by illustrating how the co-patternings of discourse semantic resources interact to form arguments and construct one of three major types of rhetorical move in business country reports.

5.1 Significance of couplings and recouplings in business reports: Choices for construing ‘impact’

5.1.1 Functions of affect choices in business reports

In the undergraduate business reports studied in this thesis choices from the ATTITUDE sub-system of APPRECIATION to evaluate PESTLE factors seem to be the preferred attitudinal resource: they far outweigh choices selected from the other two sub-systems, JUDGEMENT and AFFECT. AFFECT choices were found to be the **least typical**, JUDGEMENT choices **more typical**, and APPRECIATION choices the **most typical** across the data. This section will now discuss why and when writers of undergraduate

business reports choose options from these three sub-systems to construe couplings and recouplings and their significance for making business decisions about investment potential.

As noted in **Chapter 2**, while this research is a qualitative study due to the nature of the fine-grained analyses of a small corpus, the concordancer AntConc (Anthony, 2014) was used in order to understand the relative frequency of attitudinal choices and their typicality across the whole data set. In **Chapter 4 (Section 4.3.2)** I have shown how couplings of ideation and inscribed affect are construed grammatically. Most typical affect choices include [inclination: desire], [security: confidence] and [insecurity: disquiet]. Searches for patterns of [inclination: desire] found ‘*preference*’, an example of a mental process realised as abstract nominalised affect the most common instance. A concordance search of ‘preference*’¹ in AntConc found 15 hits across the ten texts analysed for this thesis. In the examples shown in *Table 5.1* below, *consumers* realised as Deictics or ellipsed Classifiers (indicated by the symbol Ø in the table) in the nominal group structure take on the function of the Emoters. The Triggers of the emotion function as Targets in the couplings of ideation and inscribed affect listed in the table:

hit	Emoter	[+incl: des]	Target/Trigger	Text
3	consumers’	preference for	convenience	3 Brazil
3	consumers’	preference for	customer service	3 Brazil
4	consumers’	preference for	small stalls	4 India
4	consumers’	preference for	kiosks	4 India
5	Ø: consumer	preference for	international brands	4 India
6	Ø: consumer	preference for	small shops	4 India
7	Ø: consumer	preference for	street stalls	4 India
9	Ø: Hungarian consumers	preference for	higher quality confectionary	6 Hungary
15	Ø: consumer	preferences	high quality customer service	8 Brazil

Table 5.1 Couplings of [+inclination: desire] and Target functioning to construe analyses of current trends

These couplings listed above however are not linguistic realisations of business decisions. A lower-order coupling, such as *consumer preference for international brands* (Text 4 India Report), does not indicate what this current trend means for the investment goals of a firm. Thus the role of [inclination: desire] in all the instances

¹ The asterisk indicates a search for different word forms, e.g. in this example, searching for preference* will result in concordance hits including both singular and plural forms of the noun.

shown above is to construe evaluations of *existing* consumer preferences when analysing *current* trends in a market. The analysis of current trends is only the first step before construing consumers as *potential* future consumers of a product – the product the company is attempting to sell in the target market analysed in the country reports. In order to persuade readers whether existing trends are beneficial for a company or not, writers of these business reports must evaluate these lower-order couplings of ideation and inscribed affect as investment *opportunities* or *risks*. Linguistically this is realised as recouplings of affect as appreciation as listed in *Table 5.2* below.

hit	Couplings of [+inclination: desire] + Target		recoupled as [+/-appreciation]	Text
9	changing consumer	preferences	present a risk	6 Hungary
10	changing consumer	preferences	negatively influencing demand	6 Hungary
11	Western consumer	preferences toward quality customer service	present a great opportunity	8 Brazil
12	changing	preferences	–	8 Brazil
13	Brazilian consumer	preferences	further opportunities	8 Brazil
14	occidental	preferences	increased demand for fast-food and frozen foods	8 Brazil
15	high quality customer service	preferences	socio-cultural opportunities	8 Brazil

Table 5.2 Couplings of [+inclination: desire] and Target recoupled as opportunities or risks

After choices of [inclination: desire], couplings of [security: confidence] and ideation were found to be another common pattern in the data set. The instance with the most number of concordance hits, 11 across the ten texts, was found to be ‘*promising*’. If we also take a look at the Targets triggering this feeling of confidence, we can see that all instances are used to evaluate whole target markets as potential investment locations. The close analyses of the data set from a textual perspective found that this pattern most typically appears in higher level Themes and News. More specifically, it appears either in hyperThemes at the beginning of longer sections to provide an overall assessment of the target market, or in macroNews, i.e. the final Recommendation sections of the business reports, to consolidate the business analyst’s overall judgement presented throughout the business report. This pattern of *promising* + *target market* is shown in *Table 5.3* below: the lower-order couplings of ideation and inscribed positive [security: confidence] function to provide an overall evaluation of investment location:

hit	[+sec: conf]	Target/Trigger	Text
2	promising	location	4 India
3	promising	developments within the industry	5 India
4	promising	factors	5 India
5	promising	landscape for doing business	5 India
6	promising	country	5 India
7	promising	confectionary market	7 Spain
9	promising	retail consumer market	8 Brazil
10	promising	retail consumer market	8 Brazil
11	promising	emerging market	9 Poland

Table 5.3 Couplings of [+security: confidence] and Target construing evaluations of investment location

Finally, choices of the affect variable [insecurity: disquiet] also appear in the data set to express writers' negative assessment of specific PESTLE factors as nominalised feelings of anxiety about investment potential. Searches for patterns of affect functions so far have shown that appreciation may be used to recouple affect, e.g. *changing consumer preferences* can be re-evaluated as an opportunity or a risk. Concordance searches of *concern** have found few instantiations of lower-order couplings. Most instances of [insecurity: disquiet] (9 out of 16 concordance hits) however have been found to recouple values of appreciation and judgement, as listed in Table 5.4 below:

hit	Couplings of [appreciation] or [judgment]	+ Target	recoupled as [–security: disquiet]	Text
4	weak	legal system	a serious concern	2 China
5	the political instability	created by the Maoist insurgency	chief cause for concern	4 India
9	difficult	employment process	prominent concern	7 Spain
10	weak	infrastructure	concerns	8 Brazil
11	deficient	transport infrastructure	notable concern	8 Brazil
12	woefully inadequate and obsolete	infrastructure	this concern	8 Brazil
13	an uneducated	workforce	concerns	8 Brazil
15	skill deficiencies	in the Brazilian labour force	noteworthy concern	8 Brazil
16	burdensome	taxation	concerns	8 Brazil

Table 5.4 Recoupling appreciation and judgement as [–security: disquiet] to construe investment anxiety

The table above also shows that instances of [insecurity: disquiet] are often graded by force (examples include *notable*, *noteworthy*, *prominent*, *major*, *serious*). From the perspective of the business analyst, the varying strength of intensification seems to

construe different levels of *investment anxiety*, ranging from more moderate to more severe. I will show in [Section 5.1.5](#) below that the resources of grading play a fundamental role in the ‘scaling of ‘impact’ in business decisions.

The final result of the concordance search for instantiations of affect in the data is worth mentioning because they construe lower-order couplings that form the basis for recouplings enacting investment risks. While there are only seven concordance hits of the instances *tense/tension(s)* across the data set, they construe political risks realised by couplings of [insecurity: disquiet] and their Targets. As shown in *Table 5.5* below, these lower-order couplings become political risks through the recoupling of negative affect as negative appreciation.

hit	couplings of [–security: disquiet]	+ Target	recoupled as [–appreciation]	Text
1	tense	relations between the provinces	undermining the possibility of incentives	1 Canada
3	tensions	between Russia and Georgia	a high risk factor	9 Poland
4	tensions	between the two countries	a high risk factor	9 Poland
5	tension	within the coalition government	a high risk factor	9 Poland
6	tension	growing within government	political inefficiency	9 Poland
7	tension	growing governmental corruption and	conducting international business in Poland is inefficient	9 Poland

Table 5.5 Recoupling [–security: disquiet] as negative appreciation to construe political risks

To sum up, while AFFECT choices are the **least typical** in undergraduate business reports, they serve important functions in construing business reasoning. Grammatically all instances are realised as abstract nominalised affect. Instantiations of [inclination: desire] in lower-order couplings construe evaluations of *existing* trends; in recouplings they enact *predictions* of *future* trends. When business analysts opt for instances of [security: confidence], they evaluate entire target markets as *potential* investment locations. Finally, the use of [insecurity: disquiet] was found to have two important functions in recouplings: 1) together with intensification it re-evaluates appreciation and judgement as affect to construe different levels of *investment anxiety* and 2) construes lower-order couplings which will be recoupled as *investment risks*. The trigger or Target of affect is typically a factor chosen from the PESTLE framework. It was also found that affect in these business reports is never undirected: its use must be what Bednarek (2008) refers to as directed, ‘overt affect’

(p. 95). I will now turn to a discussion of the function of the resources of judgement, attitude choices that are more typical than choices of affect but less typical than those of appreciation.

5.1.2 Functions of judgement choices in business reports

Choices from the ATTITUDE sub-system of JUDGEMENT were found **more typical** than choices of AFFECT. The most salient patterns of the use of judgement in the data were construed by couplings and recouplings inscribing [–propriety] and [+/-capacity]. With 62 concordance hits across the ten texts, the single most common instance of inscribed negative propriety to evaluate unethical behavior is realised by *corruption*, an instance of nominalised legal ‘axi-tech’ (Martin, personal communication). The only instance where a lower-order coupling is construed congruently with conscious participants whose behavior is the target of [–propriety] was *corrupt officials*; all other instantiations are grammatical metaphors. When coupled with Targets such as political or business systems, corruption is typically evaluated as a *political* factor; when coupled with social norms or practices, it is evaluated as a socio-cultural factor.

The analyses found that instances of *corruption* rarely occur in isolation from other appraisal resources: not only is unethical behaviour evaluated by inscribed negative judgement but also quantified by the resources of grading force and focus. Relative to *spread* (Hood, 2010) we also learn *how widespread* corruption is; relative to *specificity* we learn *how ingrained* it is in the political or social environment. This pattern of [–propriety] frequently co-occurring with instances of grading force as [extent: scope] and focus as [valeur: specificity] is shown in *Table 5.6* below.

hit	[–propriety]	[extent: scope]	Text
2	corruption	prevalent	2 China
14	corruption	widespread	3 Brazil
17	corruption	so common	3 Brazil
21	corruption	prevalence	4 India
33	corruption	commonplace	5 India
47	corruption	particularly prevalent	8 Brazil
53	corruption	common	9 Poland
hit	[–propriety]	[extent: scope]	Text
4	corruption	a deeply embedded practice	2 China
43	corruption	inherent	6 Hungary

Table 5.6 Intensifying and specifying [–propriety] by grading force and focus

Another common pattern found was the recoupling of negative judgement as negative appreciation. *Table 5.7* below lists all the instances from the data where *corruption* functions as the Target of negative [appreciation: valuation]. When taking on the function of Target in lower-order couplings, it is always evaluated as an *investment risk*:

hit	[-propriety]	recoupled as [-appreciation]	Text
9	corruption	problem	2 China
10	corrupt	–	3 Brazil
11	corruption	–	3 Brazil
16	corruption	one of the most problematic factors	3 Brazil
19	corruption	challenges	4 India
27	corruption	a serious problem	4 India
29	corruption	still an issue	4 India
31	corruption	a challenging setting	5 India
34	corruption	one obstacle	5 India
50	corruption	inefficiency	8 Brazil

Table 5.7 Recoupling [-propriety] as investment risk

Other less salient instances of nominalised legalised ‘axi-tech’ inscribing negative propriety include *bribery*, *crime* and *vandalism* – all evaluated as factors in relation to political systems and sociocultural norms or trends. Their role in business reports is important in construing investment risks.

The other variable from the sub-system of JUDGEMENT that was found to occur in several texts across the data is [capacity]. Positive and negative inscriptions such as *highly skilled* versus *under-skilled* or *qualified* versus *lack of ambition* were found to couple with Targets such as *individuals*, *worker* or *labour*. Thus resources of capacity are used to evaluate factors from the *economic* or *socio-cultural* environments of businesses as investment opportunities or risks. One such example is an inverted recoupling in Text 9, the Poland Report, where a negatively evaluated factor is recoupled as an investment opportunity: an *unskilled labour market* as *an attractive option*.

Thus writers of undergraduate business reports use resources of judgement to evaluate factors from the *political*, *socio-cultural* and *economic* environments of the target countries they are conducting their market analyses on. Negative propriety is the

preferred choice to evaluate the governments, political systems and sociocultural norms of target markets, whilst within these environments positive or negative capacity is used to evaluate their labour markets.

The discussion so far has shown how affect and judgement choices in lower-order couplings and recouplings construe writers’ business reasoning. The following section will focus on the role of appreciation: the function of construing PESTLE factors as *values*. According to Martin and White (2005), this variable is related to the evaluation of ‘things’ as “concrete or abstract, material or semiotic” (p. 36) and this evaluation is dependent on the *field* of study. Thus we are interested in the use of appreciation resources in the field of business studies: what phenomena are valued for what purpose in business country reports?

5.1.3 Functions of appreciation choices in business reports

Examining appreciation choices at a greater level of delicacy, the analyses have found [appreciation: reaction] *the least typical* choice, [appreciation: composition] *more typical*, and [appreciation: valuation] *the most typical*. I comment here on the use of reaction and composition, and will focus mainly on the use of the most typical variable, valuation.

Few choices of [appreciation: reaction] were found across the data as shown in *Table 5.8* below. Two instances that occur several times are *attractive* (20 hits) and *appealing* (5 hits). All these instances construe lower-order couplings with common Targets such as *destination*, *location*, *region*, *investment option* and *place*. These positive reaction choices in these texts seem to function similarly to instances of [+security: confidence] discussed above: to positively evaluate the target countries as investment locations. This is perhaps not surprising as [appreciation: reaction] is the most closely related to affect choices (Martin & White, 2005).

hit	[appreciation: reaction]	common Targets
20	attractive	destination, location,
5	appealing	region, investment option, place

Table 5.8 Positive evaluation of investment location as [appreciation: reaction]

Instantiations of the appreciation variable [composition] were more common than choices of reaction. As reaction is closest to affect and valuation is closest to judgement, composition is the most central variable of appreciation (Martin & White, 2005; Hood, 2010). It is used to evaluate *order* by its two sub-categories, balance and complexity. In the undergraduate business reports, choices of positive [composition: balance] and negative [composition: complexity] are the most common; *Table 5.9* below illustrates the occurrence of these resources by providing a snapshot of the concordance search results:

hit	[+composition: balance]	hit	[–composition: balance]
29	stable/stability	13	unstable/instability
11	standard/ised		
9	integrated		
8	consistent		
3	solid		
60		13	
hit	[+composition: complexity]	hit	[–composition: complexity]
9	transparent/cy	26	difficult/y
		24	complex/ity (ies)
		12	complicated/ion(s)
		11	bureaucracy/tic
		5	disparity
		2	opaque
9		80	

Table 5.9 Most typical instances of positive and negative composition

With 80 total concordance hits across the data, couplings encoding [–composition: complexity] were found to be the most common composition choice from this sub-category of appreciation. *Table 5.10* below lists the most typical Targets of composition choices for its most commonly occurring realisations. For example, the most common instantiation of negative complexity, *difficult/y* couples with Targets that have to do with *economic* factors related to setting up a business and *political* factors related to various labour laws such as contract enforcement or recruitment laws. More similar examples are shown in the table below. Negative complexity therefore was found to realise primarily two functions: to negatively evaluate 1) *overall* expansion potential into the target markets from an *economic* perspective and 2) *specific* factors from a *legal* perspective.

After choices of negative complexity, with 60 total hits positive [composition: balance] was found to be the next preferred choice of business country report writers. Lower order couplings of [+composition: balance] with their Targets were found to evaluate the *economic* environments of target countries. Instances such as *stable* and *stability* were found to only couple with Classifiers such as *political* and *economic* and entities such as *currency* and *democracy*. The most common instantiation of negative [composition: balance], *instability*, was found to couple with only two Targets: the Classifiers *political* or the Qualifiers in nominal groups such as *instability [in the political environment]*. Couplings inscribing positive and negative balance thus provide evaluations of both *specific* political and *economic* PESTLE factors as well as *overall* positive or negative evaluations of the political and economic environments of the target markets.

Finally, the relatively few instantiations of couplings inscribing positive [composition: complexity] indicate the least typical composition pattern across the ten business reports. Most common realisations in the data are the instances of *transparent* and *transparency*. These were found to construe lower-order couplings with Targets realising individual PESTLE factors such as *laws*, *government*, *government regulations* and *political system* and Targets realising the whole *political environment* and *legal environment*. Similarly to uses of positive balance then, positive complexity realises mainly two functions: to evaluate *specific* political and legal PESTLE factors and 2) provide an *overall* positive evaluation of the *political* and *legal* environments of the target markets.

hit	[+composition: balance]	hit	[–composition: balance]
29	stable/stability <ul style="list-style-type: none"> • political, economic, cultural • currency, democracy 	13	unstable/instability <ul style="list-style-type: none"> • political • in the political environment
hit	[+composition: complexity]	hit	[–composition: complexity]
9	transparent/cy <ul style="list-style-type: none"> • political system/environment • legal environment • laws • government regulations 	26	difficult/y <ul style="list-style-type: none"> • selling/manufacturing company's product • establishing a firm • transition/expansion into target market • operating/doing business in the target market • navigating the political and legal environments • change existing trends/practices • contract enforcement • hiring/firing

Table 5.10 Most typical Targets of composition choices

As mentioned above, the appreciation sub-category [valuation] has been found to be *the most typical* attitude choice in the undergraduate business reports studied in this thesis. As reviewed in **Chapter 2**, it is the variable most sensitive to field as its use indicates an entity's social value, significance, worth or prominence (Bednarek, 2008; Coffin, 1996; Hood, 2010). In the business reports studied in this thesis, [appreciation: valuation] has crucial importance in construing business reasoning. This resource provides the interpersonal element in couplings and recouplings. *Table 5.11* below provides the most typical instantiations of positive and negative valuation, with the largest number of concordance hits across the texts highlighted in yellow. Valuation is most typically instantiated as *opportunity* (130 hits), *risk* (173 hits) and their related synonyms such as *advantages*, *obstacles*, *barriers*, etc. Instances of valuation, the preferred appreciation sub-category across the data to construe business risks and opportunities, are mostly realised as abstract entities by nominalisations and grammatical metaphors. As this choice far outweighs not only choices from other APPRECIATION sub-categories but also selections from the ATTITUDE sub-systems of AFFECT and JUDGEMENT, it is the most crucial attitudinal resource that is taken up in couplings and recouplings to construe business reasoning in undergraduate country reports.

hit	[+valuation] construing investment opportunity	hit	[–valuation] construing investment risk
130	opportunity	173	risk
65	potential	24	problem
24	advantage (incl. 11 competitive advantage)	22	challenge
18	success	14	barrier/threat
15	incentive	9	obstacle
13	prospect	9	obstacle
10	strength	4	impediment/constraint/ deterrent/ce/ hurdle
		3	limitation

Table 5.11 Most typical instances of positive and negative valuation that participate in construing investment opportunities and risks

While most instances of valuation are realised as grammatical metaphors or nominalised entities of quality, *Table 5.12* indicates further choices available to writers of undergraduate business reports. Some instantiations of valuation are congruently realised by Epithets; most typical positive instances include *important*, *favourable*, *conducive*, *key*, *profitable*, *valuable*, etc. and negative instances such as *negative*, *problematic* or *prohibitive*. These selections have been taken up to evaluate PESTLE factors in couplings and recouplings and constitute part of the academically valued lexis that could be explicitly taught to student writers in literacy intervention projects.

hit	[+valuation]	hit	[–valuation]
23	important	9	negative
16	favo(u)rable	7	problematic
10	conducive	2	prohibitive
10	key		
7	profitable		
6	valuable		
6	viable		
6	ideal		
4	distinct		

Table 5.12 Most typical instances of [appreciation: valuation] realised congruently by Epithets

So far this discussion of the key attitudinal resources in construing couplings and recouplings has mainly focused on the role of the interpersonal component of business decisions. However, in order to fully understand how business reasoning is construed in undergraduate country reports, studying the function of the *ideational*

component is equally important. This will be the focus of the next section.

5.1.4 Evaluated Targets: the basis for construing ‘impact’ in country reports

In the introduction to this chapter the importance of studying the Targets of evaluation for revealing the field of these texts was mentioned. By this point this chapter has attempted to illustrate more specifically that the Targets that couple with attitudinal meanings together construe PESTLE factors as *values*, i.e. *business opportunities* or *business risks*. From a grammatical perspective, the most typical instantiations of [appreciation: valuation] shown in *Tables 5.11* and *5.12* above typically appear in the outer layers of recouplings. This means that their Targets are realised by lower-order couplings, which were shown to be *evaluated PESTLE factors* in **Chapter 4**. An example of this is *deficient infrastructure*, a lower-order coupling of negative valuation and its Target, a technological factor. When lower-order couplings are recoupled in relation to a company’s investment goals, their values are often re-evaluated either by reinforcing or inverting recouplings: *deficient infrastructure* can be further evaluated as *a potential investment risk*. I will discuss in more detail in this section that these Targets are in fact construed as targets of *impact*, i.e. the *cause* in a cause-effect relationship, which usually refers to a company, an industry or a target country.

As shown in **Section 5.1.3** above, the Targets of appreciation across the ten business reports were found to be specific factors from the different PESTLE environments. However, not only can writers evaluate *a particular factor* from one specific environment but also *an individual environment* may be evaluated as a whole, e.g. the whole of *the economic environment* may be evaluated as *unfavourable for investment*. Only the most common instances are listed in *Table 5.13* below, however, the list is by no means exhaustive. While a more detailed discussion is beyond the scope of this thesis, it is important to mention that studying the most common Targets are crucial for understanding knowledge building in business studies assignments: they serve as the basis for analysing entity types and for building an entity classification for business reports.

External environment	Typical factors	External environment	Typical factors
POLITICAL	type of political system types of government political reforms government policies transparency of political processes taxation key stakeholders bureaucracy corruption* political in/stability national tax burden, debt labour mobility, immigration*	TECHNOLOGICAL	geography infrastructure (transportation, freight costs, road networks, telecommunications) production technology/machinery power generation electricity fossil fuels renewable energy urbanization*
ECONOMIC	market size economic growth exchange rate inflation taxation (NB. can also be political) producing/manufacturing and/or selling the company's product availability of skilled labour (population size, growth, age, education, literacy, unemployment & underemployment) labour costs labour mobility, immigration* Human Development Index (HDI) Foreign Direct Investment (FDI) Gross Domestic Product (GDP) per capita Purchasing Power Parity (PPP) Consumer Confidence Index GINI Index Coefficient ease of doing business consumer incomes, affluence/poverty, economic in/equality* hiring and firing practices*	LEGAL	(often discussed alongside political factors) type of legal systems and courts various regulations and laws (taxation laws, labour laws, business and investment regulations, food labelling, competition law) intellectual property protection patents and licenses starting a business: foreign investment laws corruption* dispute resolution contract enforcement international cooperation/memberships
SOCIO-CULTURAL	demographics consumer incomes, poverty, economic inequality* urbanization* cultural characteristics [Hofstede] sub-cultures cultural distance cultural trends and practices consumer preferences and trends societal values national holidays and festival social stability/conflict (internal and external) corruption* labour mobility, immigration* hiring and firing practices* religion	ETHICAL	corruption* ethical consumerism social and global awareness fair trade corporate social responsibility behaviour fair work rights human rights environmental awareness hiring and firing practices*

Factors with an asterisk can be discussed in relation to different PESTLE environments, e.g. corruption: can be a political, sociocultural, legal or ethical factor

Table 5.13 Most typical PESTLE factors functioning as Targets of positive and negative valuation

In terms of their significance as to how recouplings function in business reports, their role in construing ‘**impact**’ will now be summarized; i.e. how writers organise them into three main types of cause-effect relationship to demonstrate business reasoning. *Table 5.14* below lists PESTLE factors that function as Targets of resources of appreciation and judgement. For instance, the Chinese *legal system* (a legal factor) is evaluated as *weak* [–appreciation: valuation], the Spanish *employment process* (an


economic factor) as *difficult* [–appreciation: valuation], or the Brazilian *workforce* (an economic factor) as *uneducated* [–judgement: capacity]. The table also shows that evaluated PESTLE factors are realised by lower-order couplings.

hit	Couplings of [appreciation] or [judgment]	+ Target
4	weak	legal system
5	the political instability	created by the Maoist insurgency
9	difficult	employment process
10	weak	infrastructure
11	deficient	transport infrastructure
12	woefully inadequate and obsolete	infrastructure
13	an uneducated	workforce
15	skill deficiencies	in the Brazilian labour force
16	burdensome	taxation

Table 5.14 Evaluating PESTLE factors through couplings of ideation with appreciation and judgement

However, as argued throughout this thesis, simply evaluating these factors by resources of attitude does not mean a business decision has been made. What is also necessary is to demonstrate how an evaluated factor influences a company (or an industry or a country). This means that the evaluated PESTLE factor only functions as the basis for a business decision and needs to be further evaluated *in relation to* the company's objectives and goals. To illustrate this point, the results of a concordance search in AntConc shown in *Table 5.15* below exemplify that the evaluated PESTLE factor have been re-evaluated by resources of affect in order to construe ***investment anxiety***.

hit	Couplings of [appreciation] or [judgment]	+ Target	recoupled as [-security: disquiet]	Text
4	weak	legal system	a <i>serious concern</i>	2 China
5	the political instability	created by the Maoist insurgency	<i>chief</i> cause for <i>concern</i>	4 India
9	difficult	employment process	<i>prominent concern</i>	7 Spain
10	weak	infrastructure	<i>concerns</i>	8 Brazil
11	deficient	transport infrastructure	<i>notable concern</i>	8 Brazil
12	woefully inadequate and obsolete	infrastructure	<i>this concern</i>	8 Brazil
13	an uneducated	workforce	<i>concerns</i>	8 Brazil
15	skill deficiencies	in the Brazilian labour force	noteworthy <i>concern</i>	8 Brazil
16	burdensome	taxation	<i>concerns</i>	8 Brazil

Evaluated PESTLE factors
impact


*Table 5.15 Construing ‘impact’ as investment anxiety:
Recoupling evaluated PESTLE factors*

Thus *the weak legal system* in China recoupled as *a serious concern* represents a business decision as it makes explicit the **impact** the evaluated factor would have on a particular company. This example of construing ‘impact’ through recoupling is shown in *Figure 5.1* below.

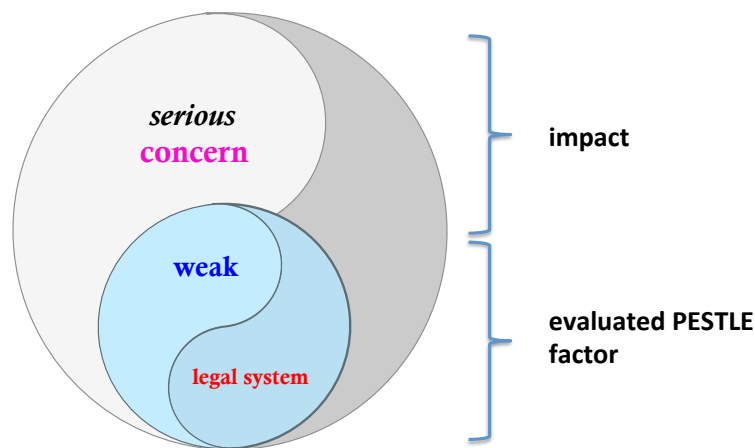


Figure 5.1 Significance of recoupling: Construing impact

These findings will now be generalised in order to propose a more formal linguistic representation for the construal of *investment opportunity* or *risk*, a type of business decision, in undergraduate business reports. As in *Table 5.16* below, the analyses found that a business decision realised through the resource of recoupling is composed of 2 units: 1) an evaluated PESTLE **factor** realised by a lower-order

coupling and 2) **impact** realised by (sometimes graded) attitude in the outermost layer of a recoupling. Through the various grammatical configurations presented in **Chapter 4**, the evaluated factor must become the Target of impact. Therefore I propose that the following function labels be used for representing the units that function as elements in the linguistic construction of business decisions through recouplings: the unit realised as the lower-order coupling functioning as Target is to be termed **Factor**, and the unit realised by optionally graded attitude in the outermost layer of recouplings to be termed **Impact**. To distinguish between general and technical uses, hereafter we will continue using lower case font to refer to factors selected from the PESTLE framework in a general sense, and the capitalised function label Factor to refer to evaluated factors realised by lower-order couplings composed of an attitudinal meaning and its Target. *Figure 5.2* below represents the configuration of the Factor and Impact functions in a two-layered yin-yang symbol:

Units	realisation		Function labels
1) evaluated factor	realised by a lower order coupling : becomes the Target	➡	Factor
2) impact	realised by (graded) attitude in the outermost layer of a recoupling	➡	Impact

Table 5.16 Construing business decisions through recoupling

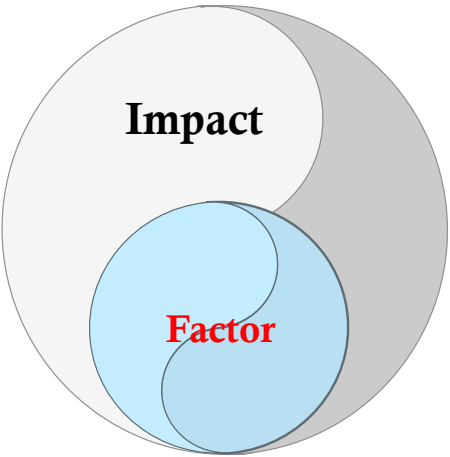


Figure 5.2 Configuration of Factor and Impact in construing a business decision through recoupling

It was mentioned in passing above that instances of inscribed attitude couple with experiential meanings to construe various types of coupling and recoupling that play an important role in the linguistic realisation of business decisions and cause-effect relationships. Apart from coupling linguistic choices from the systems of APPRAISAL and IDEATION, the resources of the discourse semantic system of GRADUATION are also significant: they enable attitudinal as well as experiential meanings to be graded by resources of force or focus (Martin & White, 2005; Hood, 2010). I comment on the significance of grading resources in construing the ‘intensity’ of impact in the next section.

5.1.5 A word on the role of GRADUATION: The scaling of ‘impact’

As noted in **Chapter 2**, resources of force play an important role in strengthening and reinforcing propositions or invoking an attitudinal reading of experiential meanings to strengthen the writer’s arguments (Martin & White, 2005; Hood, 2010). We have already seen some instances of grading appearing in couplings and recouplings above. I will now briefly comment on their role in construing *the intensity of impact*. Concordance searches of the whole data set revealed most typical instantiations, illustrated in *Table 5.17* below.

hit	[grading]
102	potential
72	increasing / ed
67	further
58	(the) great / est
57	high
51	other
45	significant / ly
25	major
19	very
17	a number of
14	considerable
13	heavy / ly
11	various
10	substantial
8	little
7	severe
7	several
6	decreased
5	main
4	minimal
4	a series of
3	added
2	high degree
2	moderate
1	minor

Table 5.17 Most typical instances of grading force: intensifying investment opportunities and risks

Instances such as *potential*, *further*, *great/the greatest*, *high*, etc. typically occur together with instances of [appreciation: valuation] that construe *investment opportunities* and *investment risks*. Their significance lies in their capacity to intensify the construal of Impact in business decisions. Analysing the resources of GRADUATION co-patterning with ATTITUDE and IDEATION allows us to construe an **‘intensity scale’ of the impact** as illustrated in *Figure 5.3*. The examples indicate the range writers can select from to construe for example the intensity of investment risk: how big a risk a particular PESTLE factor would represent for the company (or industry)? The choice of no grading at all would be used to describe very low risk investment situations while the grading of force at higher intensity would isolate the highest level of risk. Therefore, when apprenticing undergraduate students into discourses of business studies, it is important to familiarise them with the choices available to them when construing impact in business decisions.

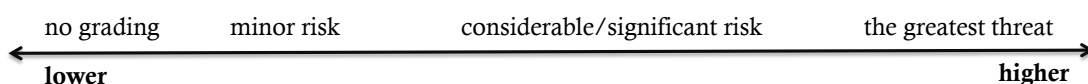
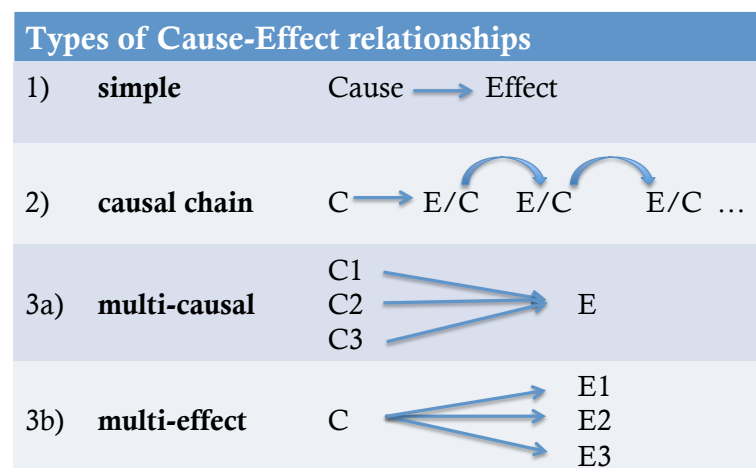


Figure 5.3 The gradability of impact

In this section I have presented the most typical choices available for writers of undergraduate business country reports for the construction of business decisions through the discourse semantic resource of recoupling. In the following section I will consider the different types of configurations through which recouplings can construe three main types of cause-effect relationship.

5.2 Choices for construing cause-effect relationships in undergraduate business reports: the role of couplings and recouplings

As mentioned in **Chapter 2**, this thesis aims to build on Donohue, Adinolfi and Shrestha's (2013) findings in order to provide a description of the linguistic realisations for their list of cause-effect relationships. To review, they have described three main types of cause-effect relationship found in business case study analyses: simple *cause-effect*, *causal chain* and *multi-causality* (Donohue, Adinolfi and Shrestha, 2013, pp. 82-83), as shown in *Table 5.18* below:



*Table 5.18 Three main types of cause-effect relationship in business case study analyses
(Adapted from Figure 3.3 in Donohue, Adinolfi and Shrestha, 2013, p. 83)*

As mentioned in **Chapter 2**, it is necessary to identify the clear criteria for the linguistic realisations of these three types of cause-effect relationship. It is thus one of the aims of this chapter to make explicit the linguistic basis for construing these types of relationship. The following section will illustrate how each type is realised at the level of discourse semantics. More specifically, I will show that the most significant

resources that form the basis of enacting cause-effect relationships in undergraduate business country reports are the resources of couplings and recouplings.

The fine-grained linguistic analyses have provided evidence that the three types of cause-effect relationship found in business case study analyses also appear in undergraduate business country reports. Since the aim of this thesis is to build on existing work to make explicit how the three types of cause-effect relationship are realised linguistically, I propose that we retain rather than replace their existing names. I will progress from the most simple to the most complex examples, thus changing slightly the order presented in *Table 5.18* above, moving from simple to multi-causal cause-effect and finally to causal chains.

5.2.1 Type 1: Construing *simple cause-effect* relationship through couplings and recouplings

I will demonstrate through two illustrative examples how couplings and recouplings can be positioned to form a relationship of simple cause-effect. *Figure 5.4* shows two lower-order couplings that both function as Factors. The figure highlights that the economic factor *rigid labour laws* functions as the Cause element and the second economic factor *difficult employment process* realises the element termed Effect in the simple cause-effect relationship. Thus this example illustrates that this type of relationship can be construed through Factors that can function both as Causes and Effects depending on what configurations writers organise them into; e.g. an economic factor can act as a Cause and another economic factor can act as the Effect as in the example presented below. In order to identify which elements function as the Cause and which element functions as the Effect, we need to retrieve the conjunctive relationship linking them into a simple cause-effect relationship. In this example, cause in the clause is realised by the causative '*have made*'. As noted in **Chapter 2**, the resources of CONNEXION signalling cause are especially relevant for this thesis. One important criterion for identifying simple cause-effect relationships concerns the linguistic relationship between the elements functioning as Cause and Effect. This relationship must be realised by 'cause in the clause' (i.e. resources that construe logical relations within clauses) (Martin, 2007, p. 46 following Achugar & Schleppegrell, 2005), often realised through a wide range of 'cause in the clause'

resources. Based on this example, I propose that these terms become technicalised and the capitalised functions labels Cause and Effect used to distinguish them as elements functioning in cause-effect relationships.

[Text 7 Spain Report] Thus, it can be seen that **rigid labour laws** have made the **employment process difficult**, which is a prominent concern for a manufacturer [[who relies heavily on human capital]].

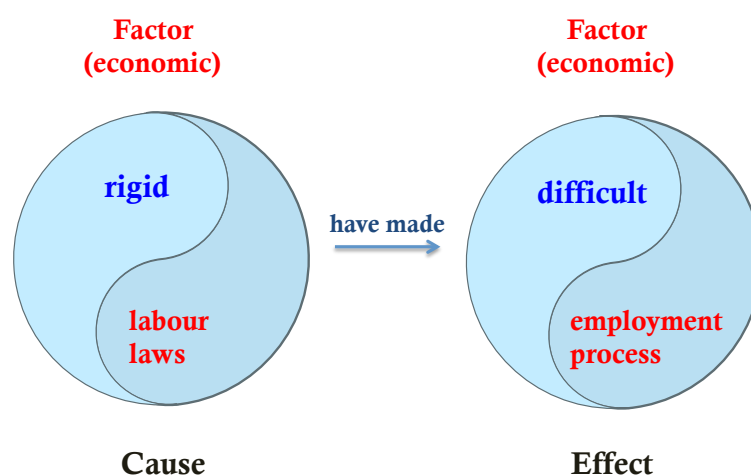


Figure 5.4 Construing simple cause-effect relationship through couplings

The next example will show that not only couplings but also recouplings can enter into a relationship of simple cause-effect. *Figure 5.5* illustrates that the political factor *repeatedly targeted India's cities (by Maoist insurgency)*, realised as a lower-order coupling, takes on the function of Cause. The Effect resulting from this Cause in this instance is realised by the recoupling *the political instability is a chief cause for concern*. Thus this Effect is composed of the elements Factor and Impact, constituting a business decision. Cause in the clause is realised by the external causal conjunction 'as'. As highlighted in the figure, the simple cause-effect relationship in this instance is formed by a coupling functioning as the Cause and a recoupling functioning as the Effect, linked together by external cause:

[Text 4 India Report] Firstly, the **political instability** created by the Maoist insurgency is a **chief cause for concern**, as they "have **repeatedly targeted India's cities**" (Euromonitor International 2009b, pp.4), [...].

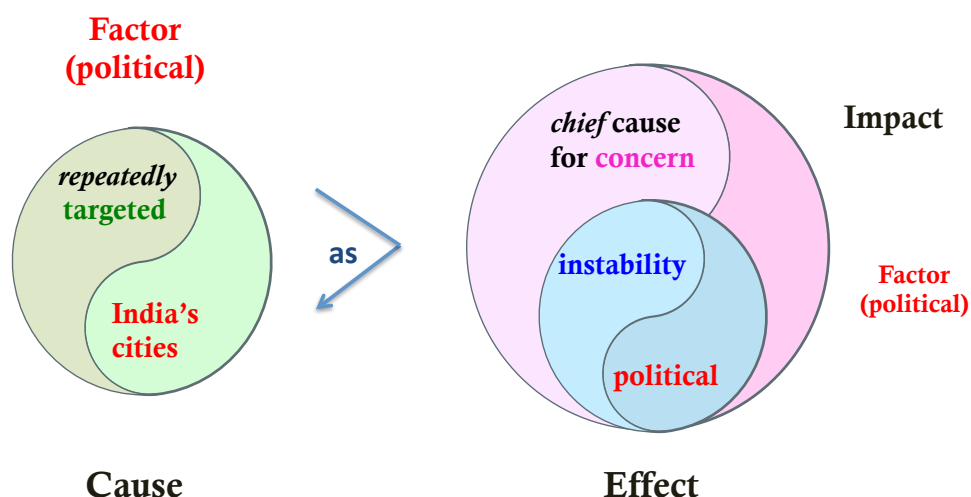


Figure 5.5 Construing simple cause-effect relationship through coupling and recoupling

Thus a simple cause-effect relationship can be realised linguistically by both couplings and recoupling. As the following examples will illustrate, these resources do not only function in this type of relationship but also play a significant role in construing more complex multi-causal cause-effect relationships and causal chains.

5.2.2 Type 2: Construing *multi-causality* through couplings and recouplings

As mentioned above, multi-causality means that different causes may have the *same* effect or one cause may lead to several *different* effects (Donohue, Adinolfi and Shrestha, 2013, pp. 82-83). The next example will illustrate the linguistic realisation of its first sub-type, the *multi-causal* cause-effect relationship. Figure 5.6 below highlights two legal factors realised by lower-order couplings, one inscribed (*weak legal system*) and one invoked (*absence of rule of law*). Both these Factors function as Causes that result in the same Effect: investment anxiety construed by resources of amplified affect (*serious concern*) that realise the Impact element in a recoupling. Thus to reiterate, the Factor elements take on the function of Causes and the Impact element takes on the function of Effect in order to construe a *multi-causal* cause-effect relationship. However, in comparison to the simple cause-effect examples presented above, the relationship between the Causes and the Effect is realised by the

relational identifying Process construing the recoupling. This is another resource that may link Causes and Effects in recouplings apart from cause in the clause.

[Text 2 China Report] The **weak legal system** and **absence of rule of law**, arising from the political nature of China, is a **serious concern** for any foreign company seeking to operate there, || [...].

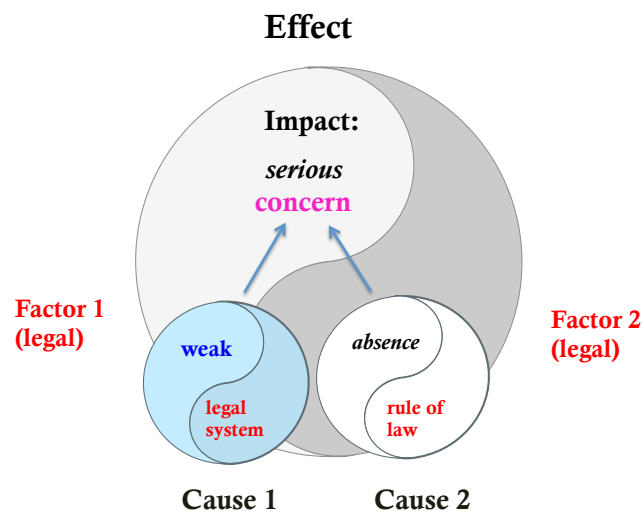


Figure 5.6 Construing multi-causal cause-effect relationship through coupling and recoupling

I will now illustrate how the second sub-type of multi-causality, the *multi-effect* type cause-effect relationship, is construed linguistically. In this example the Cause element is realised by the lower-order invoked coupling *the severity of the GFC*. This Cause leads to three Effects, realised by one recoupling (*a dramatic decline in Spain's economic stability*) and two lower-order couplings (*lost international competitiveness* and *reduced productivity*). These elements are linked by instantiations of cause in the clause, such as 'effect' and 'because of'. Figure 5.7 illustrates that multi-effect causal relationships where the same Cause results in more than one Effects can also be construed by both couplings and recouplings.

The **severity of the GFC** has left Spain as one of the few European countries still significantly suffering from its **effects** and there has been **a dramatic decline in Spain's economic stability** (Davies, 2010; Schwab 2010). One **effect** of the crisis is that Spain has **lost its international competitiveness because of reduced productivity**; [...].

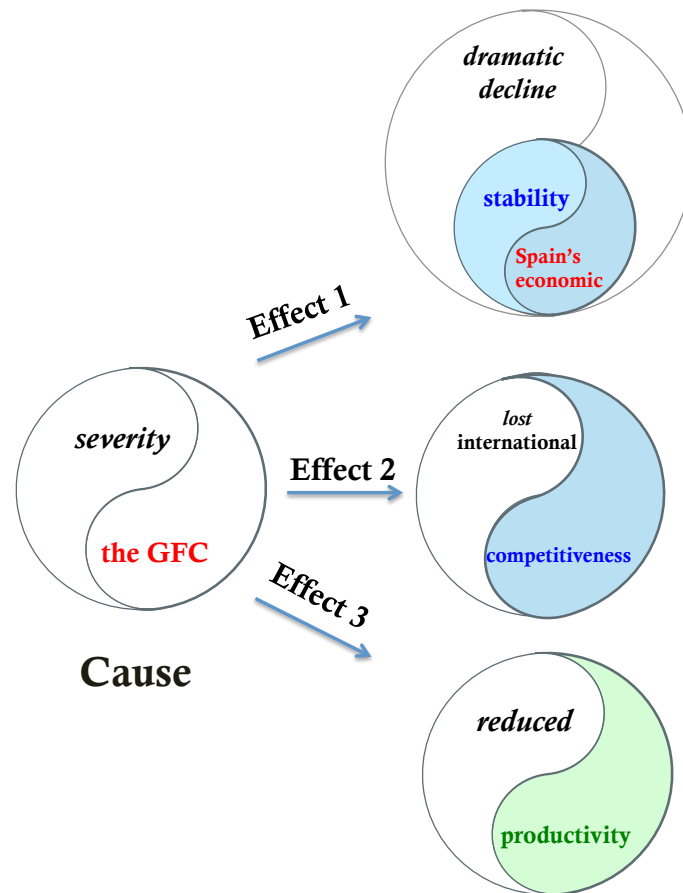


Figure 5.7 Construing multi-effect cause-effect relations through coupling and recoupling

Thus similarly to simple cause-effect relationships, potentially any number of lower-order couplings and recouplings could function as Causes or Effects in the configurations that construe multi-causality in undergraduate business country reports. This finding will be reinforced in the following presentation of the final type of cause-effect relationship: the construal of causal chains through couplings and recouplings.

5.2.3 Type 3: Construing *causal chains* through couplings and recouplings

As defined above, *causal chains* are created where a Cause results in an Effect and that Effect then turns into a Cause for another Effect, and so on. Donohue, Adinolfi and Shrestha (2013, p. 83) represent this type of cause-effect relationship diagrammatically as shown in *Figure 5.8* below:



Figure 5.8 Causal chains (Figure 3.3 adapted from Donohue, Adinolfi and Shrestha, 2013, p. 83)

If we mapped out most of the examples of causal chains provided in Donohue, Adinolfi and Shrestha (2013, Session 3, pp. 79-110), we would get a linear sequence with a cause leading to an effect, that effect becoming a cause, leading to another effect, and so on. Drawing on their representation, in *Figure 5.9* a causal chain was created based on an extract on how using credit can result in bankruptcy (2013, p. 103):

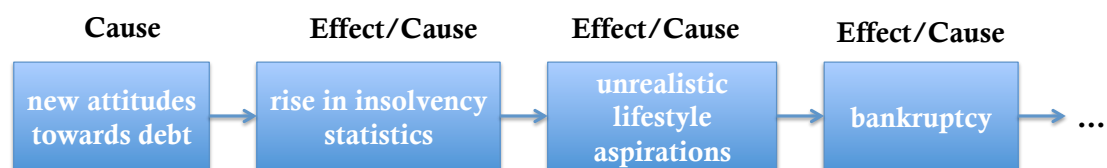


Figure 5.9 Causal chain representing the process of bankruptcy (based on Donohue, Adinolfi and Shrestha, 2013, p. 103)

As I will now show, causal chains did not follow such a simple linear sequence in the undergraduate business reports studied in this thesis. I will map the linguistic construction of such a chain through an extract found in Text 7, the Spain Report. As shown in *Figure 5.10*, several lower-order inscribed and invoked couplings were identified in this text. These couplings are organised into a causal chain not by multiplying simple cause-effect relationships, but by multi-causality: sequencing both multi-causal and multi-effect cause-effect relationships into a longer chain. The resources of cause in the clause (e.g. logical metaphors such as *as a result of*) and material Processes of the creative type (e.g. *create*) help identify the elements functioning as Causes and Effects. As the figure below illustrates, the extract commences by a multi-effect relationship: the severity of the Global Financial Crisis, the Cause, resulted in three Effects such as *implausible investment*, *burst property bubble* and *lost prosperity for the Spanish economy*. This multi-effect relationship is then transformed into a multi-causal relationship: the last two Effects have become Causes of one Effect, *a spiral of economic struggles*. This Effect then becomes a

Cause for three further Effects: *adversely affected consumer expenditure*, *dropped demand for discretionary items*, and *the government resorting to raising corporate taxes*, constituting another multi-effect relationship. Finally, these three Effects have become Causes that lead to a final Effect: *significant disincentives for investors*. This is the last Effect in this particular extract construing another multi-causal relationship; represented as ‘E/C...’ in the figure below. The reason for this is to indicate that this text is unfinished; as the writer picks up on this point and elaborates on it in the following paragraphs of the Spain Report, more similar causal chains will be created:

[Text 7 Spain Report] As a result of the *severe effect* of **the Global Financial Crisis (GFC)** on Spain, it initially appears that **investment** is **implausible**. **The Spanish market** was plunged into *a spiral of economic struggles* when **the property bubble burst** and **prosperity** for **the Spanish economy** was *lost*. **Consumer expenditure** was *adversely affected*, demand for **discretionary items** *dropped*, and the **government** *resorted to raising corporate taxes* as a form of aid; all these factors of which create *significant disincentives* for **investors**.

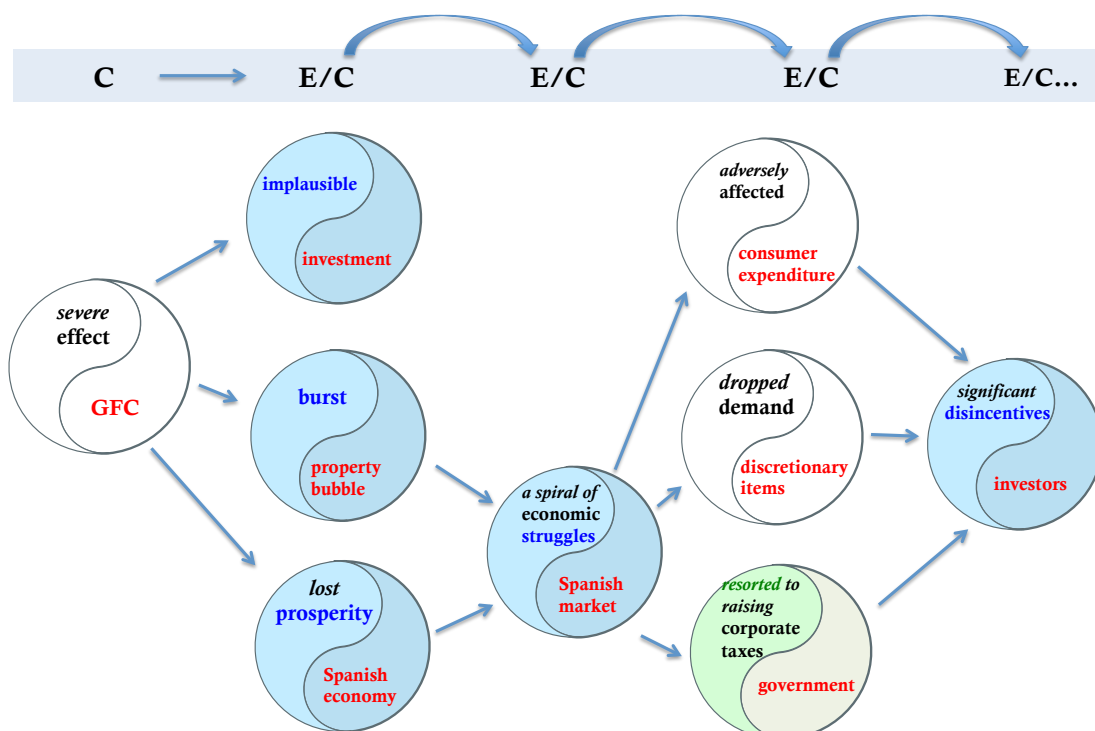


Figure 5.10 Construing causal chains through couplings

In the extract presented above lower-order couplings were organised into relationships of multi-causality to form a longer causal chain. In the following example a more complex causal chain will be shown – apart from the resources of couplings recouplings can also occur as Causes and Effects. In terms of systemic probabilities, we could also find simple cause-effect relationships in between the multi-causal or multi-effect relationships, all combining into one large causal chain, as shown in *Figure 5.11* below:

[Text 2 China Report] With *a population of 1.3 billion* (Chinese Statistical Yearbook 2007) and *a growth rate averaging above 10%* in the past decade, **China** is now **the world's fourth largest economy** (Dorsch 2008; Lambe 2008). **Such growth has led to China's energy consumption escalating** to the point at which it now accounts for **10.8 percent** of **world consumption**, surpassed only by the US (Xorte 2008). **Increased consumption of energy**, compounded by its **inefficient use**, **has**, moreover, **resulted in a rapidly worsening environmental crisis**: **eight out of the ten most polluted cities** can be found in China (Cavusgil, Knight and Riesenberger 2008). The **need** for **renewable energy solutions** is **clear** and **urgent**, and the Chinese Government has certainly set **ambitious renewable energy targets**.

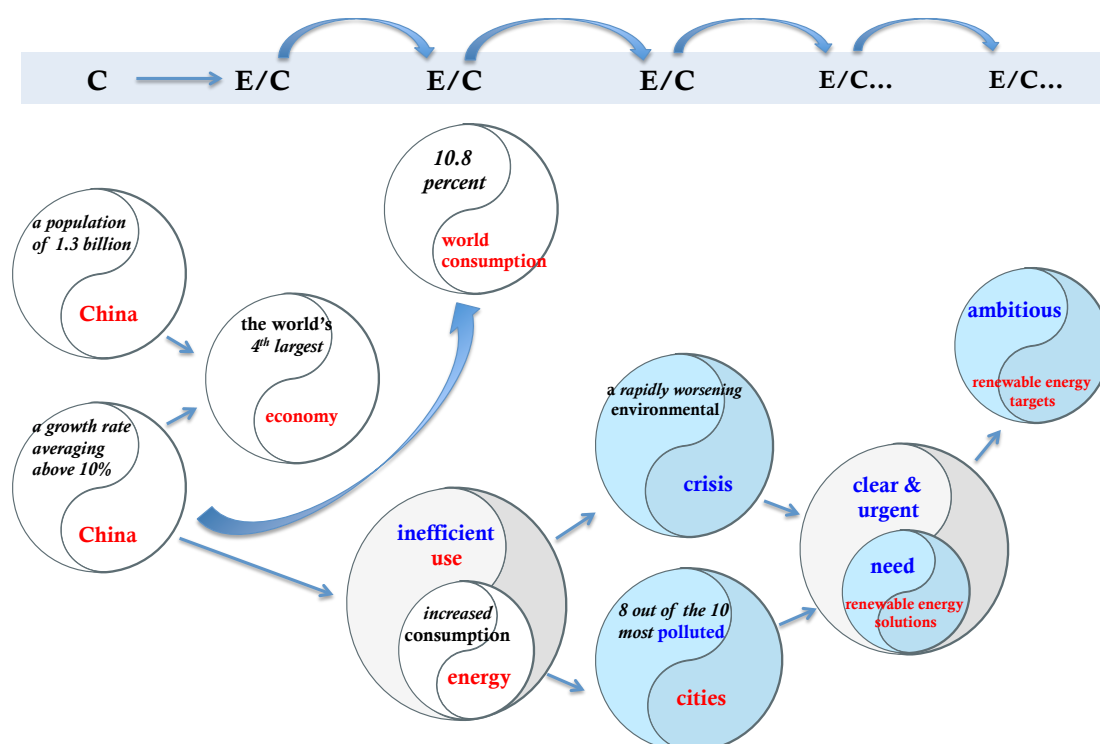


Figure 5.11 Construing causal chains through couplings and recouplings

The arrows in the figures above provide useful visual guides to show which Factors are connected and which transform from one function to another, i.e. from Cause to an Effect and Effect to a Cause. ‘Cause in the clause’ resources have been omitted to reduce visual clutter. This visual representation of causal chains construed through couplings and recouplings makes explicit that causal chains are in fact more complex constructions that combine both sub-types of multi-causality (i.e. multi-causal and multi-effect) as well as simple cause-effect relationships.

This section has presented the most typical choices successful writers of undergraduate business reports draw on to construe business decisions through recouplings. We have learnt that from a *synoptic* perspective meanings can be re-evaluated through the resource of **recoupling**. The mapping of attitude onto field to identify distributions of attitudinal expressions also represents a *synoptic* perspective. I have also presented the different kinds of configurations recouplings can enter into to construe three types of cause-effect relationship in country reports. However, in order to understand the unfolding of business discourse in these texts, we also need a *more dynamic orientation* to the patterning of evaluative meanings: we need to examine how expressions of attitude *co-articulate and interact* with one another. This chapter will now turn to the exploration of the important role couplings and recouplings play in the unfolding of the business reports from a *dynamic perspective*. I will focus on how resources selected from different discourse semantic systems co-pattern into different types of rhetoric to scaffold the superstructure of undergraduate business country reports.

Due to space constraints, this presentation will illustrate the co-patterning of discourse semantic resources in the **ISSUE** stage and the introduction to the Canada Report, which is realised by an [[embedded challenge]] genre. As I will demonstrate below, choices from the systems of IDEATION and ATTITUDE co-occurring with CONNEXION and PERIODICITY enact prosodies of domination and saturation throughout the **ISSUE**. More specifically, I will first study what role the discourse semantic system of CONNEXION plays in the logogenesis of the text from a logical perspective. Then, I will consider from the perspective of the **textual** metafunction how the co-patterning of the discourse semantic system of PERIODICITY with couplings help set up a prosody of domination within the stage.

5.3 Co-patternings of discourse semantic systems: Scaffolding a ‘big’ argument in undergraduate business

The following section will focus specifically on the co-patternings of discourse semantic systems that create prosodic patterns of saturation in the **ISSUE** stage of the Canada Report. As reviewed in **Chapter 2**, saturating prosodies are characterised as ‘opportunistic’ by Martin and White (2005, p. 19) as they take advantage of a range of opportunities in discourse to colour a text with a particular value (Hood, 2010). Hood’s research on academics’ and novice writers’ introductions has shown that canonical introductions often manifest a prosody of saturation in order to build a “compelling warrant for research” (2010, p. 158). The business country reports analysed for this study have also been found to enact saturating prosodies in their introductions in order to persuade the reader to align with the evaluative stance of the writer and rule out investment in the market under investigation.

5.3.1 Co-patternings of couplings and recouplings, **CONNEXION** and logico-semantic relations: Propagating prosodies of saturation in the stages of a challenge genre

From an interpersonal perspective, the opening **ISSUE** stage of the Canada Report is concerned with the question as to whether the company should produce and sell solar panels in the Canadian energy market. As shown in **Chapter 3**, this stage is realised by an embedded [[challenge]] genre. A closer look at each individual stage of the [[challenge]] will show how couplings and recouplings manage prosodies of saturation and how they contribute to the identification of boundaries between genre stages by shifting or maintaining prosodic values. The following analysis will focus on the co-patternings of linguistic choices made from the discourse semantic systems of APPRAISAL and IDEATION as well as the resources of **CONNEXION** (Martin, 1992a; Martin & Rose, 2003/2007, Chapter 4), which were also found to play a crucial role in managing rhetoric from a logogenetic perspective.

5.3.1.1 *Propagating prosodies of saturation in the Position challenged*

I will begin by looking at how couplings and recouplings interact with the system of

CONNEXION. As in this thesis I explore how texts grow bigger than a page, Halliday (1985) conceptualisation of **logico-semantic relations** between clauses at the level of discourse semantics is also relevant. As reviewed in **Chapter 2**, logico-semantic relations are categorised as **projection** (i.e. the reporting or quoting of speech or thought) and **expansion** (i.e. relating clauses by extension +, elaboration = and enhancement x) (Halliday & Matthiessen, 2004). Following this conceptualisation, Martin (1995) shows these resources to be important “strategies for expanding smaller texts into larger ones” (p. 14). As pointed out by Achugar and Schleppegrell’s (2005) study on history discourse, causal reasoning often remains implicit. In the examples presented below I aim to make explicit implicit resources of CONNEXION linking clauses as well as markers of ‘cause in the clause’ (Martin, 2007, p. 46; following Achugar & Schleppegrell, 2005). An example of this will be illustrated in the **Position challenged** stage of the **ISSUE**. This stage begins with a recoupling of *Canada’s appeal* as *obvious* in clause 1.1. This opening clause is linked to the subsequent clauses by the logico-semantic relation of enhancement, an implicit external conjunctive relation that could be made explicit as *because*, as shown in the conjunction analysis in *Table 5.19a* and formalised as a reticulum in *Table 5.19b* below:

Cl.	Text
1.1	To a firm such as ours, [[seeking to market solar panels offshore]], Canada’s appeal seems obvious.
	Ø (because)
2.1	Politically stable,
2.2	prosperous by conventional measures,
2.3	culturally similar to Australia,
2.4	and growing greener,
	Ø (so)
2.5	the business environment in Canada would certainly appear to be conducive to [[undertaking such an export venture]].

Table 5.19a Conjunctive relations in the Position challenged stage

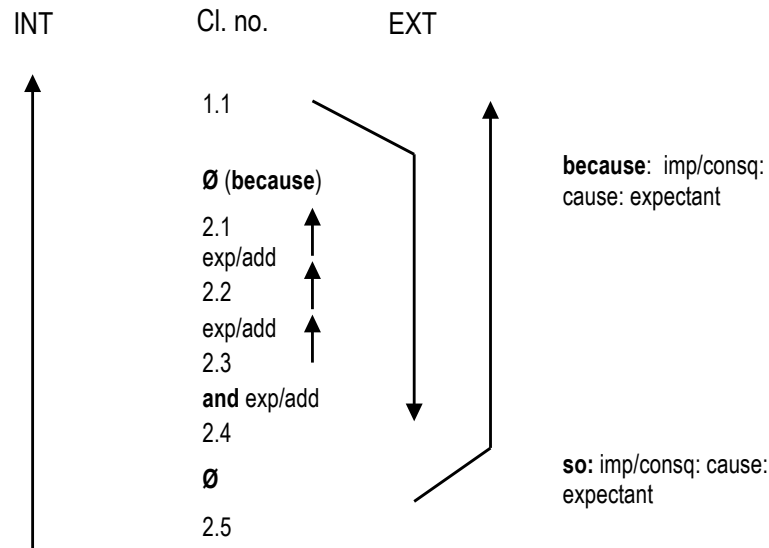


Table 5.19b Conjunctive relations formalised as reticula in the Position challenged stage

I will now look at the role enhancement plays in setting up a prosody of saturation within the **Position challenged** stage. The recoupling that the *appeal* is *obvious* in clause 1.1 is enhanced by the two lower-level inscribed couplings identified in clauses 2.1 and 2.2, which positively appraise the Canadian business environment as *stable* and *prosperous*. It is further enhanced by the two invoked field specific appreciations in clause 2.3 and 2.4, which invite a positive attitudinal reading of *culturally similar* and *growing greener* through the resources of grading. This accumulation of attitudinal choices serves to construe these couplings as a list of opportunities for investment, in other words, establish them as four PESTLE factors through the enhancement of the recoupling. The conjunctive relations that hold together these enhancements of the recoupling are that of explicit external addition. *Figure 5.12* below captures how these additive relations simultaneously contribute to spreading positive appreciation across the genre stage:

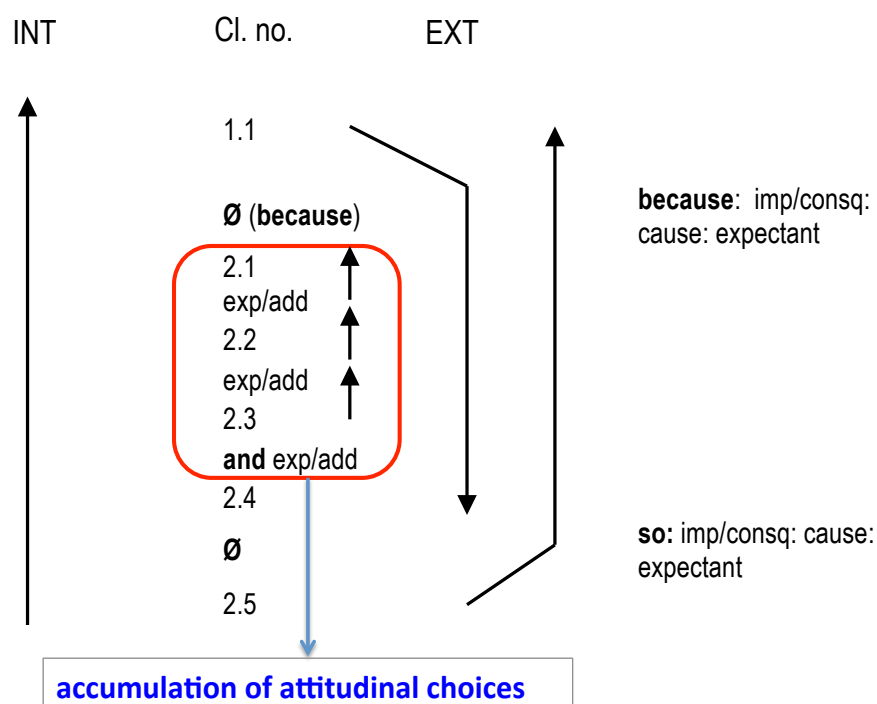


Figure 5.12 Accumulation of attitudinal choices through [extension: addition] in the Position challenged stage

The co-patternings of these discourse semantic resources thus function to propagate a prosody of saturation in the elaborating clauses of the **Position challenged** stage. Based on these findings, a visual representation of a saturating prosody can now be provided to account for the role of enhancement in spreading positive appreciation across the genre stage, as in *Figure 5.13* below:

Spreading **appreciation** across the **Position challenged**
accumulation of [+ **appreciation**]

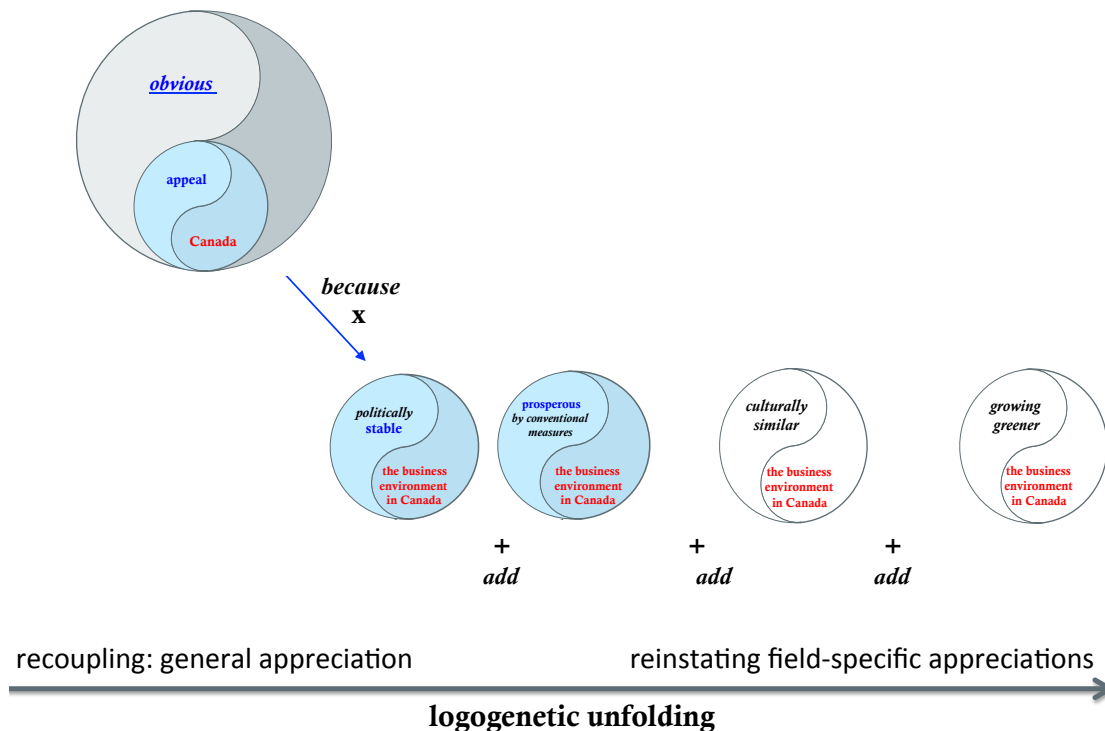


Figure 5.13 Propagating a prosody of saturation through enhancement

This visual representation of the saturating prosody above aims to capture the unfolding of the **Position challenged** stage from a logogenetic perspective. It shows that the recoupling of *Canada's appeal* as *obvious* established as general and less committed appreciation serves to establish an initial layperson judgement of investment in the Canadian solar energy market in the opening clause of the stage. The following enhancements of this recoupling by the lower-level couplings each represent a factor from the PESTLE framework. These enhancements are reinstated as field-specific appreciations construing the PESTLE factors and function to enable the switch from an initial layperson judgement to a businessperson's conclusive professional judgement in the final clause of the stage.

I will now show that the final clause of the **Position challenged** is linked to the preceding clauses of the stage by the logico-semantic relation of enhancement. This relationship is realised by implicit external consequence, which can be made explicit by the conjunction *so*, shown in *Figure 5.14a* below. This figure has been revised

below (Figure 5.14b) to illustrate that this external *so* in clause 2.5 gathers up the enhancements of the recoupling in clauses 2.1-2.4 explained above. As I will show below, it is through this implicit external *so* functioning as a salient ‘therefore’ that the field-specific appreciations, which construe the four PESTLE factors, will be built up as evidence of market analysis and transformed into the “professional” judgement at the end of the **Position challenged** stage in clause 2.5:

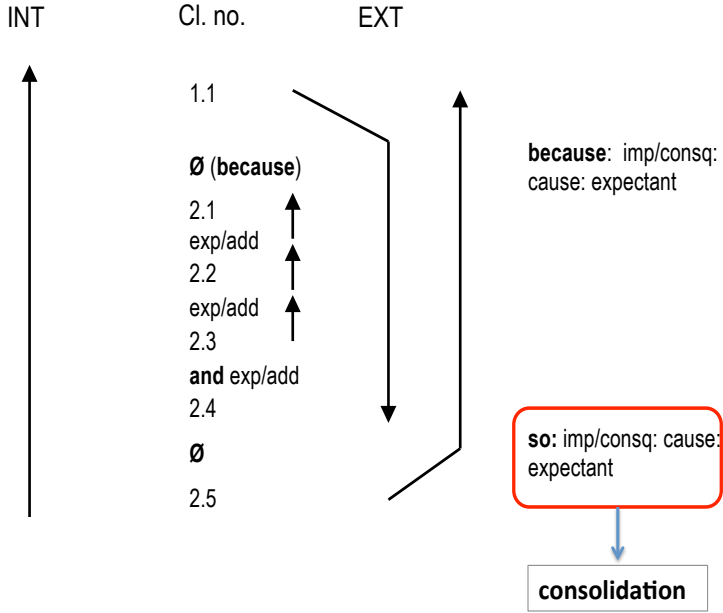


Figure 5.14a Consolidating PESTLE factors into professional judgement through enhancement

Spreading appreciation across the Position challenged
accumulation of [+ appreciation]

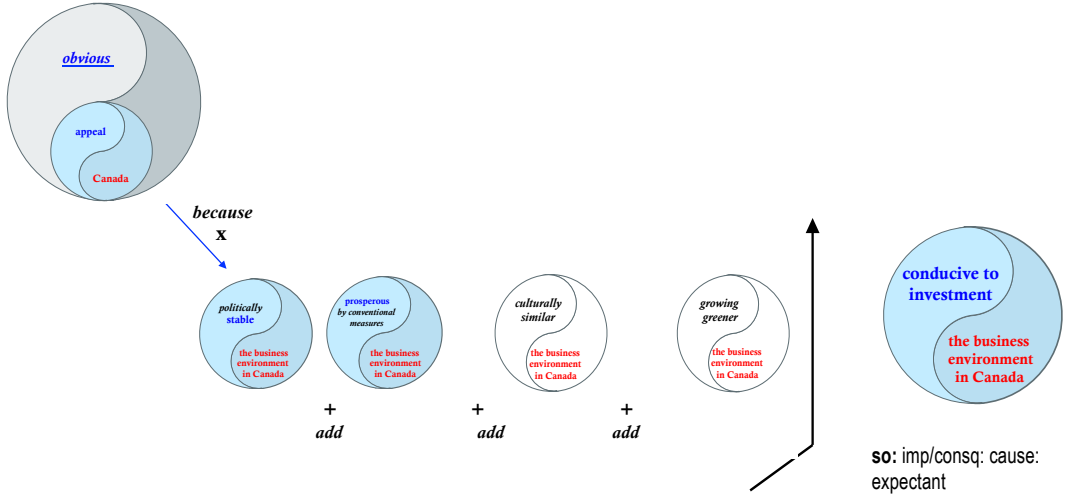


Figure 5.14b: Consolidating PESTLE factors into professional judgement through enhancement

To sum up, the Canada Report commences by a phase of discourse (the **Position challenged** stage of a [[challenge]] genre) saturated in positive appreciation. This saturating prosody enables setting up the proposition about investment that (based on an evaluation of PESTLE factors) the Canadian market appears conducive for producing and selling solar panels. From the perspectives of the **ideational** and **interpersonal** metafunctions this positive saturating prosody is scaffolded by recoupling linguistic choices from the discourse semantic systems of APPRAISAL and IDEATION. From the perspective of the **logical** metafunction the logogenetic unfolding of the saturating prosody is scaffolded by the co-patterning of lower-level couplings with the logico-semantics of enhancement and extension, realised through choices made from the discourse semantic system of CONNEXION.

Similarly to the **Position challenged**, apart from the couplings of ideational and interpersonal meanings, resources from other discourse semantic systems have been found to play a significant role in managing prosody and rhetoric in the **Rebuttal Arguments** stage. The following section will shed light on how the overall positive prosody captured in the first coupling of the stage (*the apparent strength of the Canadian marketplace*) is interrupted by a shift of valence from overall inscribed positive to negative [appreciation: valuation] in the same clause in order to propagate negative prosodic value across the rest of the stage. It will also show that the co-patterning of the linguistic choices made from different discourse semantic systems were found to 1) account for or signal shifts or boundaries between genre stages and 2) maintain the writer's specific expert judgement throughout the stage.

5.3.1.2 Propagating prosodies of saturation in the Rebuttal Arguments

The following example will highlight the crucial role the resources of CONNEXION play by relating couplings and recouplings logically to one another in managing the rhetoric of the **Rebuttal Arguments** from a logogenetic perspective. The first coupling constituting a positive evaluation of the Canadian marketplace is constructed in the nominal group *the apparent strengths of the Canadian marketplace*. Further, construed through another nominal group functioning as the Value in the grammatical structure of the same clause, it was found that a lower-order coupling encoding a

positive prosodic value (*our firm's significant presence*) was re-evaluated by a negative prosodic value (*difficult*), thus constituting an inverting recoupling. These couplings established above are both highlighted in *Table 5.20* below:

3.1 IN SPITE OF the <i>apparent</i> strengths of the Canadian marketplace , HOWEVER , Attitude: + val + Target [focus: fulfilment: actualisation]	<i>further</i> inspection	<i>reveals</i> the difficulties [<i>our firm would</i> <i>face in</i> [<i>trying to establish a</i> <i>significant presence there</i>]]. Attitude: – val + Target [focus: fulfilment: actualisation] [force: quantifying: amount]	
Circ: contingency: concession	Token	Pr: rel. id.	Value

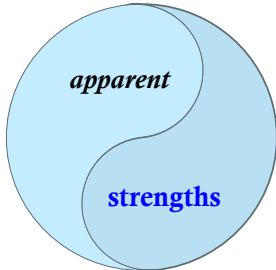
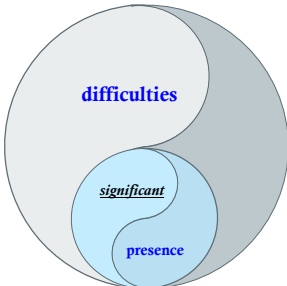



Table 5.20 Couplings constructed through nominal groups in the Rebuttal Arguments

Further, it can be seen in clause 3.1 that the first coupling construing a positive evaluation of the Canadian marketplace appears in the grammatical element functioning as a Circumstance of [contingency: concession] in the grammatical structure of the clause: *In spite of the apparent strengths of the Canadian marketplace*. This at the level of discourse semantics realises an instance of external concessive conjunction in Marked Theme position in order to signal the start of a new phase in the discourse (Rose, 2006a). This is followed by an instance of explicit internal [consequence: concession], *however*, which was found to play a significant role in shifting prosodic value and stopping the positive prosody from resonating further in the **Rebuttal Arguments** stage. I will take a closer look at the role of these conjunctions in the following paragraphs.

Table 5.20 above highlights the conjunctions in clause 3.1 in underlined green bold capital letters. As mentioned above, the first conjunction in the TRANSITIVITY structure of the clause is realised incongruently by a prepositional phrase functioning as a Circumstance of [contingency: concession] (*In spite of...*), which plays a role

shifting the stage boundaries between the **Position challenged** to the **Rebuttal arguments** stage (cf. Rose, 2006a on phases). To examine what type of conjunction it realises at the level of discourse semantics, this Circumstance can be unpacked into a congruent form, as shown in *Table 5.21* below. Here the Circumstance *In spite of the apparent strengths of the Canadian marketplace* has been unpacked as a hypotactic ranking clause, **Although** *the Canadian marketplace is strong*, with the conjunction *although* making the external consequential concessive relationship between the two couplings in clause 3.1 explicit:

<div> 3.1 IN SPITE OF the apparent strengths of the Canadian marketplace, HOWEVER, </div> <div> Circ: contingency: concession </div>	further inspection	reveals	the difficulties [[our firm would face in [[trying to establish a significant presence there]].
	Token	Pr: rel. id.	Value

xβ **Although** the Canadian marketplace is strong, however,

α further inspection reveals the difficulties [[our firm would face | | in trying to establish a significant presence there]].

although:
exp/consq: cause:
concession

Table 5.21 External and internal conjunctions managing the couplings in the Rebuttal Arguments stage

Apart from the external consequential concessive conjunction, there is another conjunction that will be shown to play a role in managing the couplings in clause 3.1. The instance of [internal: countering: unexpected: consequence] realised by *however*, which textually also appears in a Marked Theme position, blocks the first coupling coloured in positive appreciation. Thus, as internal conjunctions organise arguments within texts, by setting up counter-expectancy it functions to stop the positive prosody carried over from the **Position challenged** from radiating any further, which then enables the shift to the negative prosody spreading across the **Rebuttal Arguments** stage.

Figure 5.15 below shows the important role of the external conjunction in signaling genre stage boundaries and of the internal conjunction in interrupting the positive saturating prosody set up in the **Position challenged** stage. Exploring the conjunctions at play here thus enables us to identify on the one hand the arguments pro and contra investment realised through couplings; and on the other hand, the more salient recoupling, which will propagate a negative prosodic value across the main proposition set up in the **Rebuttal Arguments** stage:

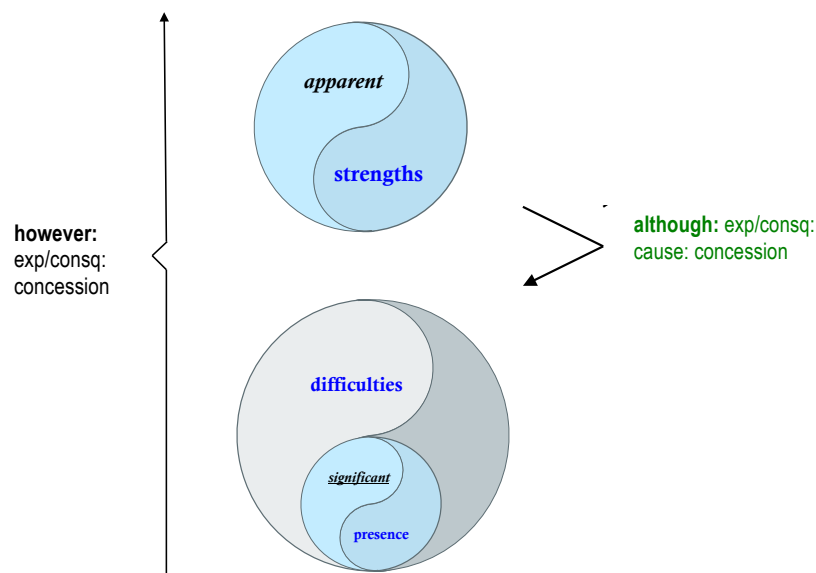


Figure 5.15 Conjunctions as prosody blockers in the Rebuttal Arguments stage

In summary, the presentation above has established that the resources of external and internal conjunction help to counter and re-evaluate the positive prosody set up in the **Position challenged** in order to saturate the **Rebuttal Arguments** in negative valuation. This is summed up in the extended Figure 5.16 below, which shows from a *dynamic* perspective that 1) logogenetically these conjunctions together function as prosody blockers (represented by the 'x' in the figure), and 2) that the recoupling sets up the shift in prosodic value in this stage in order to propagate a prosody of negative appreciation throughout the rest of the **Rebuttal Arguments**. The following section will show how this negative prosody is propagated in order to maintain the 'expert' business decision throughout the stage.

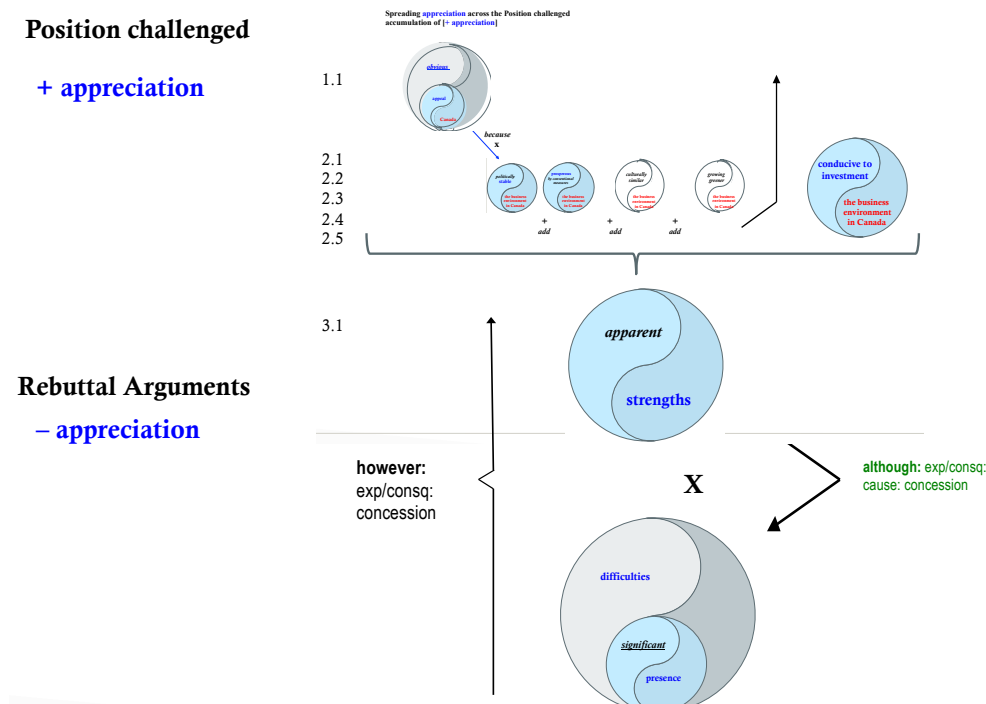


Figure 5.16 Negative prosody blocking positive prosody in the Rebuttal Arguments stage

Similarly to the opening clause of the **Position challenged** stage, clause 3.1 of the **Rebuttal Arguments** is linked to the subsequent clauses by the logico-semantic relation of enhancement by implicit external consequence, which can be made explicit by the conjunction *because*. The recoupling of *our firm's significant presence* as *difficult* in clause 3.1 is enhanced by several lower-level couplings in clauses 4.1-7.1, which negatively evaluate the Canadian business environment by instances of inscribed negative valuation (*challenges*, *dominated*, *negative* and *inconsistent*). Since these enhancements of the recoupling inscribe negative [appreciation: composition] and [valuation], they function to propagate a prosody of saturation and maintain the writer's expert business decision in the elaborating clauses of the **Rebuttal Arguments** stage. The final clause of the **Rebuttal Arguments** stage, clause 7.1, was found to end the stage with a reinforcing recoupling inscribing negative values through the structure of the nominal group (*cumbersome legislation and rules* as the Target of evaluation encoded in *patchwork*), further arguing the business case against investment. Based on these findings, we can now account for the role of enhancement in propagating negative appreciation across the genre stage, as in Figure 5.17 below:

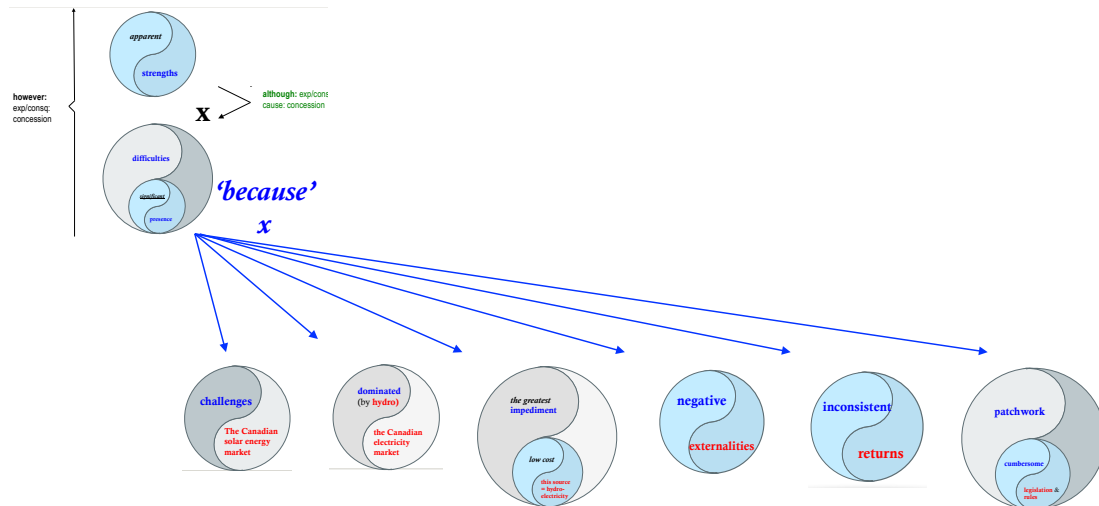


Figure 5.17 Propagating a prosody of saturation to maintain expert judgement through enhancement in the Rebuttal Arguments stage

The overall augmented negative appreciation of investment potential in the Canadian marketplace has created prosodies of saturation in the **Rebuttal Arguments** stage. As the next section will show, the interpersonal resources that scaffold the writer's professional judgement against investment will function to maintain the same amplified negative prosodic values in the following **Anti-thesis** stage.

5.3.1.3 Propagating prosodies of saturation in the Anti-thesis

This section will show that conjunctive relations in the final **Anti-Thesis** also play an important role in maintaining a negative prosody and signalling genre stage boundaries. The stage starts with the logical metaphor '*This report*' in clause 8.1, which points forward to the opposing couplings (*opportunities* versus *limitations* of selling solar) in clauses 8.1 and 8.2. The opposing couplings set up the inverting recoupling in the final clause, clause 9.1, of both the **Anti-Thesis** and the **ISSUE** (*barriers to profitable operations*). This recoupling realising the report's final recommendation is linked to the previous clauses by the semiotic entity *conclusion* functioning as internal non-concessive consequence. The negative prosodic value encoded in *barriers* in the recoupling is then elaborated by the four lower-level couplings analysed above. The logico-semantic relations that link together these elaborations of the recoupling are that of addition. These couplings that represent

particular risk factors will become reinstantiated as different sections of the entire report, e.g. the coupling *market capture by other, cheaper renewable resources* will be expanded into the Technological Factors section. *Figure 5.18* below shows from a logogenetic perspective the role elaboration and addition play in saturating the stage in negative appreciation and scaffolding an anti-investment position:

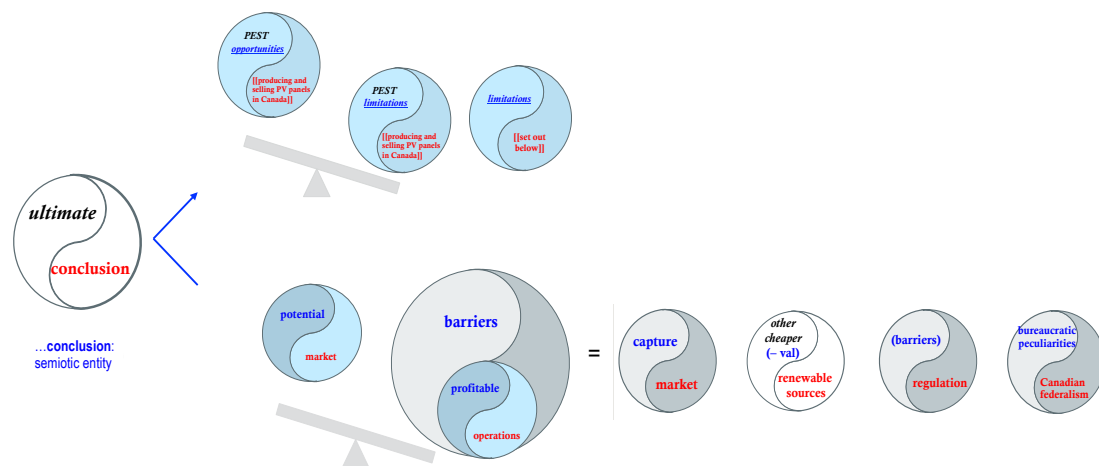


Figure 5.18 Propagating a prosody of saturation through internal consequence, elaboration and addition

Based on the analysis of conjunctive relations at play in the whole **ISSUE** stage, *Figure 5.19* presents both from a **logical** and a **dynamic** perspective 1) the crucial role of couplings and recouplings in setting up prosodies of saturation in the different stages of the [[challenge]] realising the **ISSUE** and 2) the function of these conjunctions logogenetically to block and then maintain the prosodic value of each stage. I will show in more detail in [Section 5.3.3](#) below that these patterns will be significant in enacting a **defeating rhetoric** throughout the **ISSUE**.

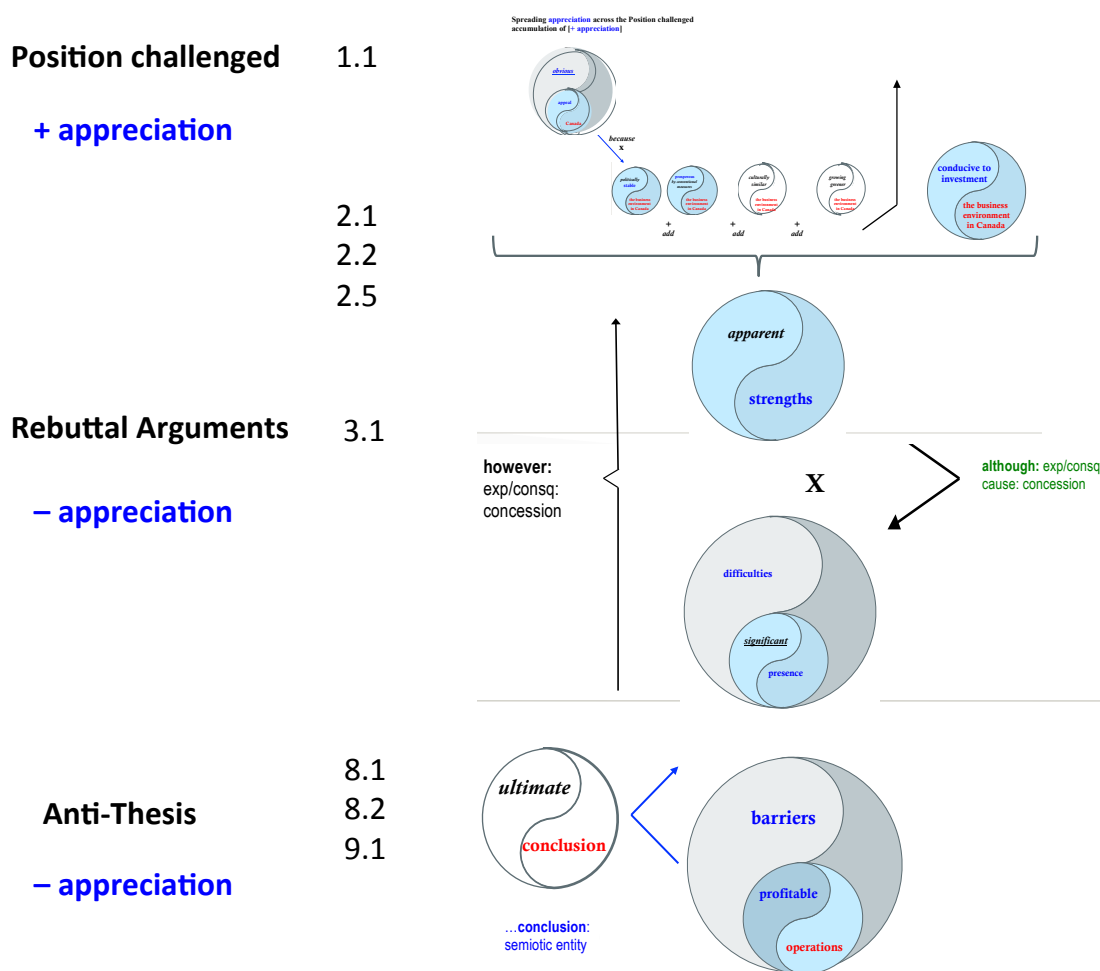


Figure 5.19 The role of conjunctive relations in propagating prosodies of saturation in the ISSUE stage of the Canada Report

I have shown from the perspective of the **logical** metafunction that the logogenetic unfolding of the negative saturating prosody is scaffolded by the co-patterning of resources of CONNEXION with recouplings and lower-level couplings (see Appendix C for the detailed CONNEXION analysis of the Canada Report). The following section will now turn to examining from the perspective of the **textual** metafunction the role of couplings in deploying another type of prosody: a prosody of domination.

5.3.2 Co-patterning of couplings, recouplings and PERIODICITY: Propagating prosodies of domination in the stages of a challenge genre

From the perspective of the **textual** metafunction, I will look at how couplings and recouplings interact with the discourse semantic system of PERIODICITY (Martin & Rose, 2003/2007, Chapter 6). As noted in **Chapter 2**, information flow and textual

meanings are organised by the resources of PERIODICITY. As the following section will show, in the business reports studied in this thesis recouplings often appear in higher level Themes to set up a dominating prosody, while higher level News consolidate the writer's critical analyses and construe the 'point', i.e. a business decision.

5.3.2.1 Propagating prosodies of domination in the Position challenged

The first recoupling of the **Position challenged** appears in the opening clause or the hyperTheme of the stage. With regards to the ideational meaning in the recoupling signaling investment location (Canada), the hyperTheme provides a very general orientation to the field of the business report. As for the interpersonal meanings inscribed in the recoupling *Canada's appeal is obvious*, the hyperTheme helps to establish the initial layperson judgement mentioned above. The recoupling in the hyperTheme is then reinstantiated as enhancements realised by two inscribed and two invoked lower-order couplings. These lower-order couplings construe more specific ideational meanings (*the business environment in Canada*) coupled with instances of positive [appreciation: composition] and [valuation]. These couplings of ideational and interpersonal meanings that construe evaluations of specific factors from the PESTLE framework occur in the elaborating clauses that follow the hyperTheme. Consequently they compose the logogenetic unfolding of the dominating prosody propagated across the rest of the stage by the recoupling in hyperTheme position. This co-patterning of the recoupling and lower-level couplings with PERIODICITY propagating a prosody of domination in the **Position challenged** stage is shown in *Figure 5.20* below:

hyperTheme 1.1

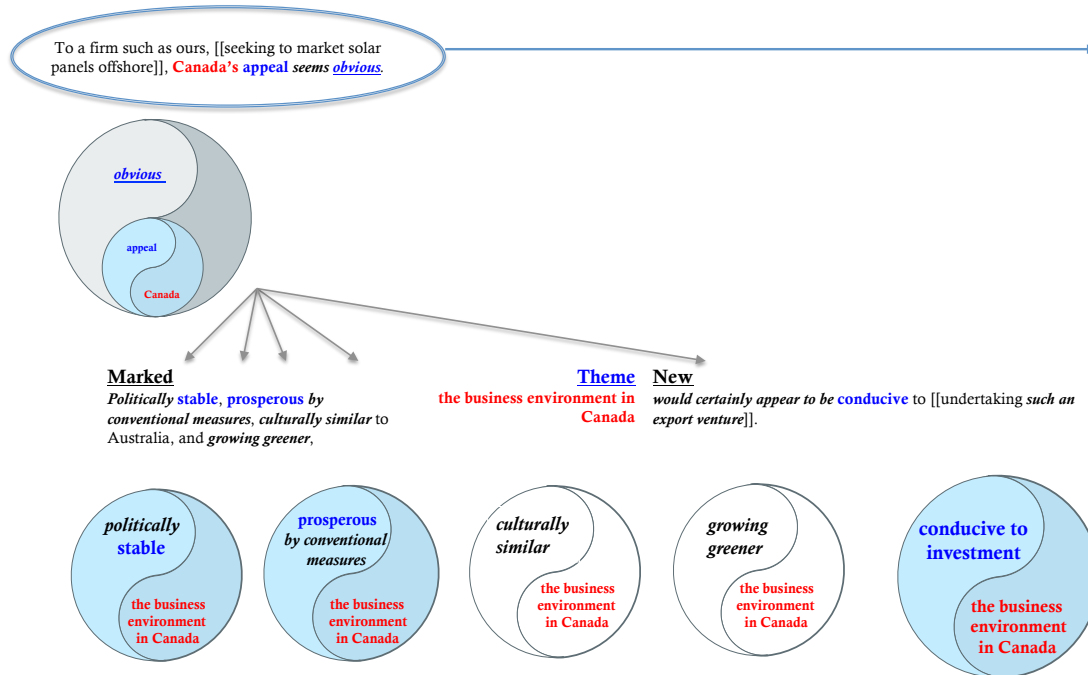


Figure 5.20 The role of PERIODICITY in propagating a prosody of domination in the Position challenged stage

In summary, the co-patterning of PERIODICITY with the higher level recoupling and lower-level couplings has two major functions in the **Position challenged** stage. Firstly, the occurrence of the recoupling in hyperTheme position and its elaborations as lower-level couplings in subsequent clauses function to set up a **dominating prosody** in the rest of the stage. Then, ideationally the recoupling in hyperTheme functions to set up a general orientation to the field and interpersonally an initial layperson judgement. This general orientation then shifts to a more specific orientation to the field by the elaborated lower-level couplings. In other words, ideationally, they are construed as ‘parts’ of the business environment (i.e. the ‘whole’) and thus represent relevant factors or forces from the PESTLE framework. Interpersonally, these lower-level couplings also function to saturate the stage in a prosody of positive appreciation to move from an initial layperson judgement to a businessperson’s professional judgement.

With regards to the social purpose of the stage, the above discussion demonstrated that in order to set up an initial positive evaluation of the Canadian solar energy market writers need to draw on the resources of IDEATION and APPRAISAL to construe

couplings and recouplings as well as the logico-semantics of elaboration and PERIODICITY simultaneously to scaffold the logogenetic unfolding of the stage of the **ISSUE**. More specifically, it is the co-patterning of these discourse semantic resources that enables the **Position challenged** stage to move from the general and less committed layperson to the specific and more committed professional business decision reached by the end of the stage in the undergraduate business reports. The following section will now turn to examining from the perspective of the **textual** metafunction the role of couplings in deploying a prosody of domination composed in the **Rebuttal Arguments**.

5.3.2.2 Propagating prosodies of domination in the Rebuttal Arguments

In this section I will consider how the textual metafunction organises the co-patterning of ideational and interpersonal meanings that scaffold the negative saturating prosody enacted in the **Rebuttal Arguments**. Our analysis has found that these co-patterning of linguistic choices from the discourse semantic systems of APPRAISAL and IDEATION with the discourse semantic system of PERIODICITY help set up a prosody of domination within the stage similar to the prosodies enacted in the **Position challenged**.

As mentioned above, recouplings in this data set are often found in higher level Themes to set up a dominating prosody. The hyperTheme of the **Rebuttal Arguments**, clause 3.1, contains a coupling of a positive prosodic value (*the apparent strengths of the Canadian marketplace*), which opens the stage with summing up the positive prosody of the **Position challenged**. The same clause was also found to contain the first inverting recoupling of the **Rebuttal Arguments**, where the positive prosodic value of *our firm's significant presence* is recoupled as *difficulties* in order to shift the stage to a negative prosodic value. This shift in prosodic value in the hyperTheme was found to be managed by the co-patterning of the ideational and interpersonal discourse semantic systems with the resources of CONNEXION, which function as prosody blockers in order to stop the positive prosody of the first coupling carried over from the **Position challenged** from radiating any further in the remainder of the **Rebuttal Arguments**. These co-patterning of these various discourse semantic

systems with the system of PERIODICITY as major systems interacting in hyperTheme position then play a significant role in setting up a prosody of domination in the **Rebuttal Arguments** stage.

The recoupling inscribing the negative prosodic value in *difficulties* in the hyperTheme is then reinstantiated as enhancements in the elaborating clauses of the **Rebuttal Arguments**. These enhancements are realised by several lower-level couplings of ideational and interpersonal meanings, which, similarly to the lower-order couplings of the **Position challenged**, construe the field-specific inscribed and invoked appreciations of PESTLE factors that will be reinstantiated as embedded genres, genre stages or phases in subsequent sections of the Canada Report. From the perspective of the ideational metafunction, this construes a specific orientation to the field; from the perspective of the interpersonal metafunction, by construing evaluations of specific factors from the PESTLE framework these lower-order couplings maintain the writer's expert judgement in the elaborating clauses that follow the hyperTheme. This co-patterning of PERIODICITY with the coupling and recoupling in hyperTheme position and the lower-level couplings in the elaborating clauses functions to set up and propagate a prosody of domination in the **Rebuttal Arguments** stage, as illustrated in *Figure 5.21* below:

hyperTheme 1.2

In spite of the **apparent strengths** of the **Canadian marketplace**, however, **further inspection reveals the difficulties** **[[our firm would face in trying to establish a significant presence there]]**.

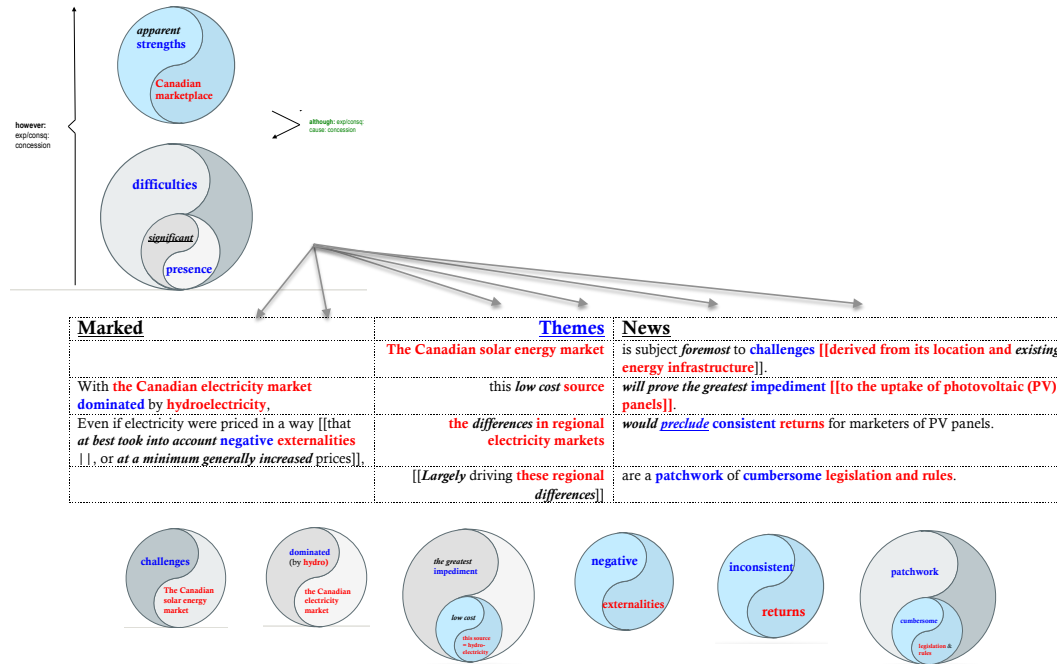


Figure 5.21 Couplings and PERIODICITY: Propagating a prosody of domination in the Rebuttal Arguments stage

The analyses presented above so far have demonstrated that the logogenetic unfolding of both the **Position challenged** and the **Rebuttal Arguments** stage was found to follow the same pattern, with the co-patternings of linguistic choices made from the same discourse semantic systems. More specifically, the **Rebuttal Arguments** stage was also found to scaffold the writer's argument *against* investment. From the perspectives of the **ideational** and **interpersonal** metafunctions the valence of the positive prosody enacted in the **Position challenged** has shifted to a negative saturating prosody scaffolded by recoupling and coupling linguistic choices from the discourse semantic systems of APPRAISAL and IDEATION. From the perspective of the **logical** metafunction, the logogenetic unfolding of the negative saturating prosody in the **Rebuttal Arguments** is also scaffolded by the co-patternings of lower-level couplings in service of the stage-opening recoupling with the logico-semantics of enhancement realised through choices made from the discourse semantic system of CONNEXION. Thus choices from these systems simultaneously co-occurring enact

prosodies of saturation and domination throughout the **Rebuttal Arguments** stage in order to scaffold the logogenetic unfolding of the **ISSUE** stage of the Canada Report. In other words, the analysis has demonstrated from both *synoptic* and *dynamic* perspectives that the same systems interact in both stages in order to 1) enable the building of a positive prosody in the **Position challenged**, where the writer moves from initial layperson to professional expert judgement, 2) reevaluate and block this positive prosody from radiating further and 3) propagate a negative prosody and maintain expert judgement throughout the **Rebuttal Arguments** stage.

The following section will now show how the **Anti-Thesis** stage will serve as a preview of the ‘big’ overarching argument and how the reader is positioned to accept an anti-investment proposal already at the beginning of the business report, i.e. the final recommendation that will be scaffolded throughout the entire business report.

5.3.2.3 Propagating prosodies of domination in the Anti-Thesis

I have shown in the **Position challenged** and the **Rebuttal Arguments** stages above that recouplings often appear in higher level Themes to set up a dominating prosody in these business reports. However, unlike the recouplings in these stages, which appear in hyperThemes, in the **Anti-Thesis** the inverting recoupling *barriers to profitable operations* appears as the New. This significant ‘new’ information consolidates the businessperson’s concluding anti-investment decision and will be reinstated as the final Conclusion and Recommendation section of the Canada Report.

This recoupling constituting the report’s anti-investment position is elaborated by three inscribed and one invoked lower-level couplings. Ideationally, these elaborations of the business decision provide a more specific orientation to the field by construing PESTLE factors, also reinstated as genre stages or whole genres realising different sections¹ of the business report. Interpersonally, these lower-level couplings also function to saturate the stage in a prosody of negative appreciation to

¹ For instance, the coupling ‘bureaucratic peculiarities’ will be discussed under 5.1.1 *Multiple Regulatory Authorities*. This sub-section provides **Perspective 1** of the analytical discussion that realises the Political Factors section of the Canada Report.

1) preview the most important risk factors to justify the final recommendation and 2) preview and maintain the businessperson's expert judgement throughout the stage. The co-patterning of the recoupling and lower-level couplings with PERIODICITY propagating a prosody of domination in the **Anti-Thesis** stage is shown in *Figure 5.22* below:

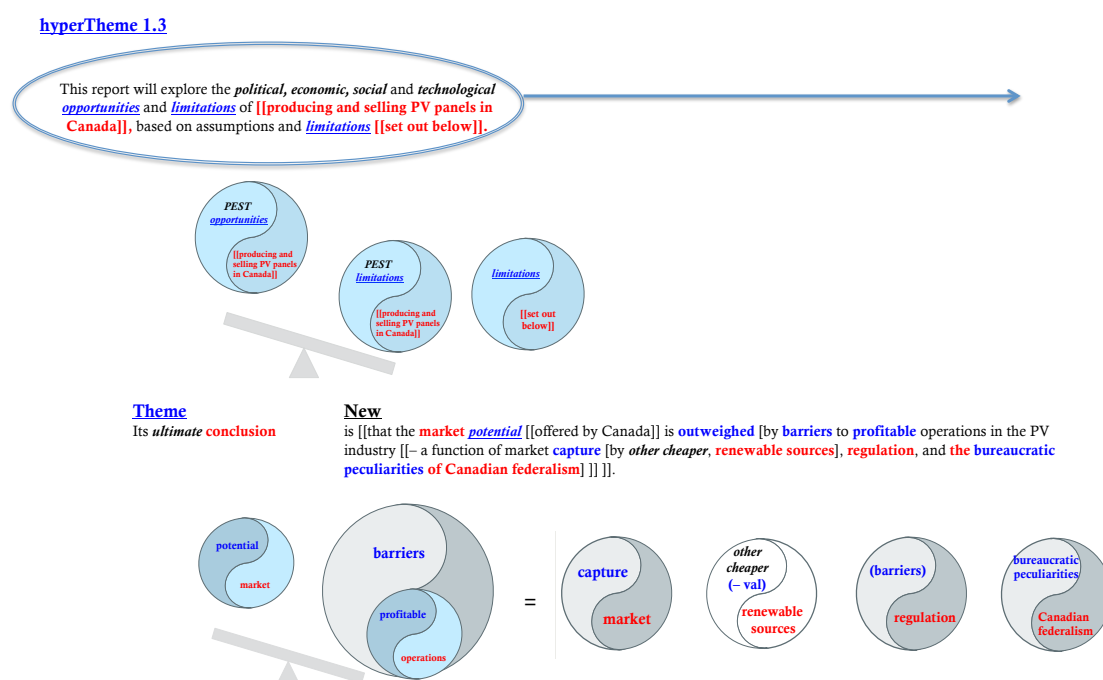


Figure 5.22 The role of PERIODICITY in propagating a prosody of domination in the Anti-Thesis stage

In summary, the final **Anti-Thesis** stage of the **ISSUE** construes a specific and more committed expert judgement through the co-patterning of the discourse semantic resources presented above to scaffold the logogenetic unfolding of the final stage of the **ISSUE** to 1) maintain a more committed professional business decision and 2) set up the business report for the market analysis that follows the **ISSUE** and debates this decision throughout the four **PERSPECTIVE** stages of the Canada Report. The previous sections above have illustrated in detail how the resources of PERIODICITY interact with other discourse semantic resources to compose prosodies of domination in the individual stages of the **ISSUE**. Based on this discussion, *Figure 5.23* below maps the most salient recouplings dominating each stage onto the whole **ISSUE**, with the '+' sign indicating positive prosodic value and the '-' sign indicating negative value. It shows these salient recouplings scaffolding

the generic structure of a challenge genre and the overarching anti-investment position that will be discussed throughout the rest of the business report:

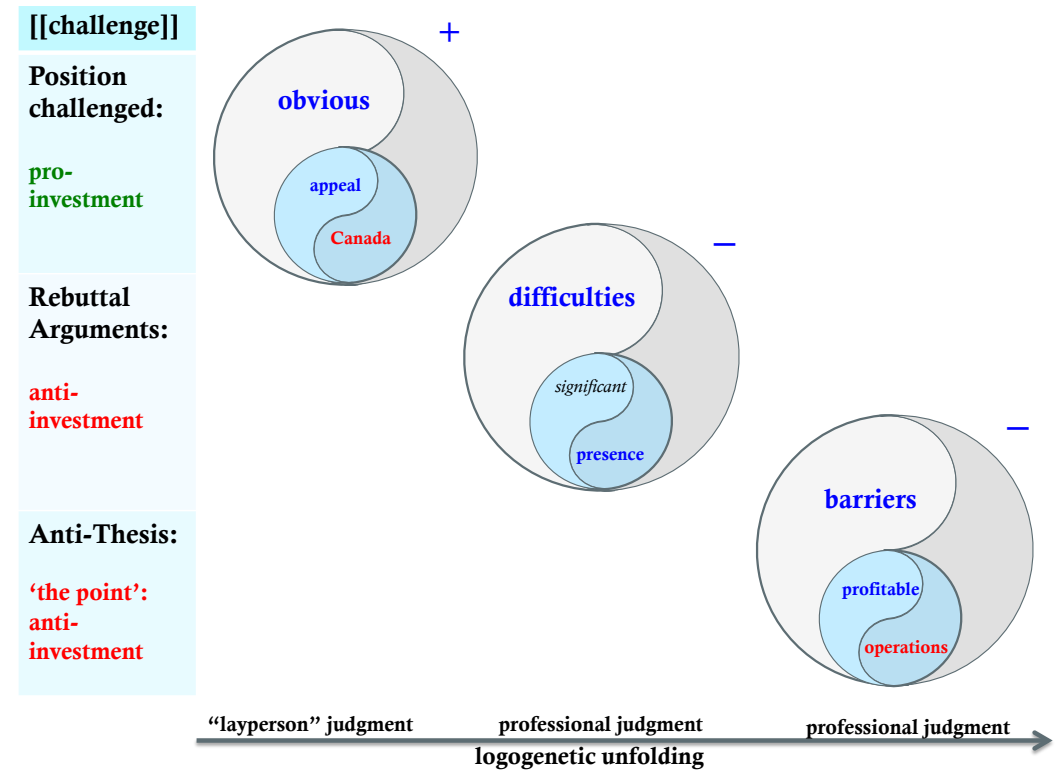


Figure 5.23 Logogenesis of the ISSUE: from layperson to expert judgement

Since the opening **ISSUE** stage contains the preview of the overarching concluding anti-investment position to be analysed throughout the subsequent **PERSPECTIVE** stages, it is also predictive of what information is to be expected in the rest of the report. Figure 5.24 below illustrates the PERIODICITY structure of the entire report, which highlights its Introduction section realised by the **ISSUE** to also function as the macroTheme to the Canada Report (see Appendix D for the detailed PERIODICITY analysis of the Canada Report):

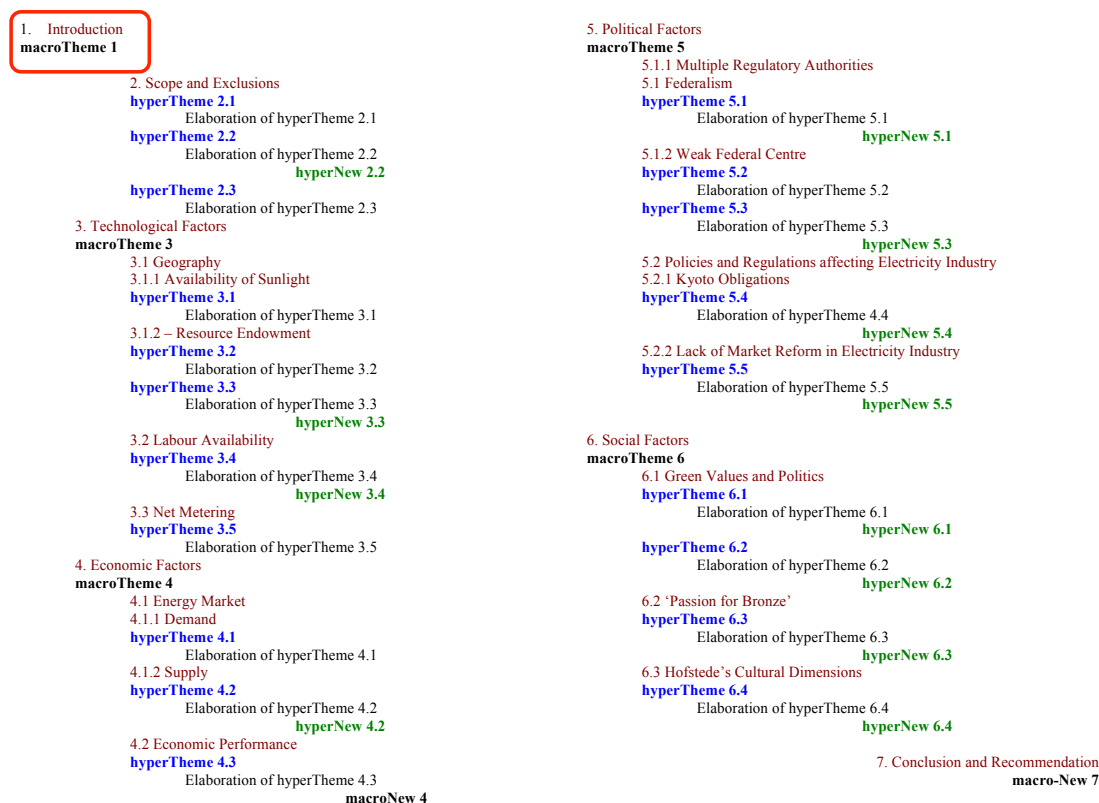


Figure 5.24 The Introduction realised by the ISSUE functioning as macroTheme of the Canada Report

The discussion up until this point has illustrated how the co-patternings of discourse semantic resources function together in each stage of the **ISSUE** to compose prosodies of saturation and domination. The following section will now illustrate how these resources scaffold the overarching anti-investment position by mapping them onto the stages of the challenge genre that realises the **ISSUE**. I will name the co-patterning of linguistic resources that scaffold the generic staging of challenge genres as **defeating rhetoric**.

5.3.3 Summary: co-patternings of discourse semantic systems in enacting 'defeating' rhetoric of a challenge genre in business

Chapter 3 above has illustrated the generic structure of the Canada Report by providing a *particulate* and an *orbital* perspective on how 'big' texts grow bigger than a page. *Ideationally*, the opening obligatory **ISSUE** stage is concerned with whether the Canadian external business environment is conducive for the company to invest in and expand into; *interpersonally*, this was formulated as the proposition '*Should* our

company invest in the target country?'. This chapter, focusing on complementary prosodic and periodic structures, set out to investigate in detail how High Distinction writers in a senior core business studies unit provide successful answers to this question, i.e. how they demonstrate the process of business *decision-making* at the level of discourse semantics. In particular, I have so far discussed what linguistic resources have been taken up from the discourse semantic systems of IDEATION, APPRAISAL, CONNEXION and PERIODICITY to manage prosodies of domination and saturation and how they contribute to the identification of boundaries between genre stages by shifting or maintaining prosodic values. This section will now discuss the overarching patterns of the overall prosodic structure realised in the three stages that make up the [[challenge]] genre providing the **ISSUE** stage of the Canada Report. An important finding here is that these linguistic resources at the level of discourse semantics construe the salient recouplings (realised by evaluated PESTLE factors) *in relation to* the objectives of the firm, i.e. with regards to profitability or viability of investment. It is through the co-patternings of the range of discourse semantic resources discussed above that business reasoning is demonstrated in the Position challenged stage of the **ISSUE**.

The previous paragraphs have demonstrated how discourse semantic resources interact in each stage of the [[challenge]] in order to construe the writer's overall *pro-* or *anti-investment* stance. Extending the work of Humphrey & Hao (2013) I will refer to phases construing a *pro-investment stance* **burnishing** and an *anti-investment stance* **tarnishing**. Humphrey & Hao's (2013) study investigated key written genres in undergraduate biology to understand how student writers extend disciplinary knowledge in their field. They found that the ability to build on existing knowledge depends on the evaluation of previous research. In their study, resources of endorsement interacting with positive inscribed and invoked attitude and ideational meanings construe the positive evaluation of sources, which was glossed as burnishing. On the other hand, phases where negative endorsement was found to interact with negative attitude and construe an overall negative appraisal of previous research was glossed as tarnishing. This thesis will draw on these useful terms to be able to distinguish writers' pro- and anti-investment stance in business reports. As I show below, these phases of burnishing and tarnishing are organised into patterns of

three kinds of rhetoric, which enables writers to demonstrate business decision-making.

Based on our analyses at the level of discourse semantics, the co-patternings of various systems construe a *pro-investment* stance in the **Position challenged**, which I will therefore name as a *burnishing* stage. The following **Rebuttal Arguments** on the other hand construes an *anti-investment* stance and therefore enacts a *tarnishing* stage. Finally, the **Anti-Thesis** with its concluding *anti-investment* stance enacts a *tarnishing* stage. I will name this ***burnishing – tarnishing – tarnishing*** pattern ***defeating rhetoric***, the first of the three types of rhetoric the writer of the Canada Report draws on in order to arrive at a business decision. *Table 5.22* below shows this defeating rhetoric mapped onto the stages of the [[challenge]], alongside the prosodies colouring each stage. The table also pulls together the co-patternings of the discourse semantic resources that construe prosodies of domination and saturation to scaffold the writer's pro- and anti-investment stance throughout the stages of the **ISSUE**.

[Text 1: The Canada Report]

ISSUE [[challenge]]	Prosodies			Rhetorical effect in genre stages
	domination	saturation	augmentation	
Position challenged	hTh 1.1 E 1.1	[+ appreciation] x [ext: cause] + [addition]	invoked + appreciation [focus: fulfilment: actualisation] [force: extent: scope]	burnishing* (pro-investment)
Rebuttal Arguments	hTh 1.2 E 1.2	[– appreciation] x [int: consq] x [ext: cause]	invoked – appreciation [force: extent: scope] [force: amount]	tarnishing* (anti-investment)
Anti-thesis	hTh 1.3 E 1.3	[– appreciation] x [int: consq]	invoked – appreciation [force: extent: scope]	tarnishing (anti-investment)



defeating rhetoric

*following Humphrey & Hao (2013)

Table 5.22 Patterns of burnishing and tarnishing enacting defeating rhetoric of an embedded challenge genre in business

The table above shows how through the structure of an embedded [[challenge]] genre the initial favourable position on investment is *defeated* by a negative assessment of the Canadian marketplace, which functions to ‘direct’ the reader towards the final proposal to be reinforced in the closing **RESOLUTION** stage. This embodies the ‘big’ argument against investment that will be debated in the subsequent **PERSPECTIVE** stages and reinstantiated in the final **RESOLUTION** stage of the analytical discussion that realises the Canada Report. Apart from defeating rhetoric, successful business country report writers have two other choices of rhetoric to draw on to demonstrate business reasoning. These options will be presented in the following section.

5.3.3.1 A word on resolving and promoting rhetoric

So far in **Section 5.3** I have illustrated in detail how the co-patternings of discourse semantic systems of IDEATION, APPRAISAL, CONNEXION and PERIODICITY enact defeating rhetoric in a challenge genre in business country reports. Based on the analyses of these discourse semantic resources, other patterns of rhetoric involving

burnishing and tarnishing stages have been identified. I comment on both these types of rhetoric in the this section for illustrative purposes.

Table 5.23 below provides a gloss for the staging of a second-order [[[[analytical discussion]]]] genre realising the **Argument 2** stage of **PERSPECTIVE 1** in the Canada Report (Text 1). Mapped onto the genre stages, it illustrates a pattern of *tarnishing – tarnishing – tarnishing – burnishing – tarnishing*.

[Text 1: The Canada Report]

Argument 2 [[[[analytical discussion]]]] resolving	3.1.2 – Resource Endowment
Issue tarnishing	Canada’s natural resource endowments are an even greater risk
Background tarnishing	Canada’s already captured by renewable energy. There are variations in electricity sources across Canada’s provinces.
Perspective 1 tarnishing	there’s limited potential for PV because of cheap hydroelectricity
Perspective 2 burnishing	in some provinces PV might replace fossil fuel
Resolution tarnishing	the presence of abundant renewable energy is still a threat

Table 5.23 *Burnishing and tarnishing stages enacting resolving rhetoric in a second-order analytical discussion*

Table 5.24 below maps this resolving rhetoric onto the stages of the [[[[analytical discussion]]]] genre, with the co-patternings of the discourse semantic resources that scaffold the genre staging and enact burnishing and tarnishing stages. The most important elements concern the Perspective stages: if one Perspective enacts a tarnishing stage, then there must be another Perspective that enacts a burnishing stage. I will name a pattern of *burnishing – tarnishing* or *tarnishing – burnishing* mapped onto the stages of a discussion genre **resolving rhetoric**. As mentioned earlier, analytical discussion genres ‘direct’ readers towards a preferred position; in this example, the final Resolution stage enacts a tarnishing stage, which means that the writer is directing the reader towards an anti-investment stance.

[Text 1: The Canada Report]

P1/ Argument 2 [[[[a/disc]]]]	Prosodies			Rhetorical effect in genre stages
	domination	saturation	augmentation	
Issue	hTh 2.2	[– appreciation] x [int: i.e.]	[force: intensifying]	tarnishing (anti-investment)
Background	E 2.2	[– appreciation] x [ext: cause]	[force: intensifying a proposal] [force: amount]	tarnishing (anti-investment)
Perspective 1	hTh 2.3	[– appreciation] x [int: consq] + [int: succ]	[force: intensifying a proposal]	tarnishing (anti-investment)
Perspective 2	E 1.3	[+ appreciation] x [int: consq] +[int: add]	[force: intensifying a proposal] [force: amount]	burnishing (pro-investment)
Resolution	hNew 2.3	[– appreciation] x [int: consq]	[force: amount]	tarnishing (anti-investment)



resolving rhetoric

Table 5.24 Patterns of burnishing and tarnishing enacting resolving rhetoric of a second-order [[[[analytical discussion]]]] genre in business

Finally, I will illustrate the third type of rhetoric writers draw on in successful business country reports. As glossed by *Table 5.25* below, the analyses found a pattern of *tarnishing – tarnishing – tarnishing – tarnishing* enacted through the staging of a second-order [[[[analytical exposition]]]] genre realising the **Perspective 2** stage of **PERSPECTIVE 3** in the Canada Report (Text 1).

[Text 1: The Canada Report]

Perspective 2 [[[[analytical exposition]]]] promoting	5.1 Federalism 5.1.2 Weak Federal Centre
Thesis tarnishing	The Canadian government will be slow to introduce reforms to make PV competitive ...
Argument 1 tarnishing	... because the federal system is dysfunctional and
Argument 2 tarnishing	... because the relations between provinces are tense
Reiteration tarnishing	therefore reforms to make PV competitive will not dominate the political agenda

Table 5.25 Tarnishing stages enacting promoting rhetoric in a second-order [[[[analytical exposition]]]]

The tarnishing stages illustrated above have been mapped onto the stages of the [[[[analytical exposition]]]] genre, as shown in *Table 5.26* below. This accumulation of *only tarnishing* stages in the exposition genre functions to enact the writer's anti-investment stance concerning the Canadian political environment. I will term patterns involving *only tarnishing* stages **promoting rhetoric**, to reflect the nature of exposition genres, which typically 'promote' the same position throughout.

[Text 1: The Canada Report]

P2 [[[[a/ disc]]]]	Prosodies			Rhetorical effect in genre stages
	domination	saturation	augmentation (reinstantiation)	
Thesis	hTh 5.2	x [int: i.e.] – appreciation	[force: intensifying] invoking – appreciation	tarnishing (anti-investment)
Argument 1	E 5.2	x [ext: cause] – appreciation	[force: intensifying a proposal] [force: amount] invoking – appreciation	tarnishing (anti-investment)
Argument 1	hTh 5.3 E 5.3	x [int: consq] + [int: succ] – appreciation	[force: intensifying a proposal] invoking – appreciation	tarnishing (anti-investment)
Reiteration of Thesis	hNew 5.3	x [int: consq] [– appreciation]	[force: amount] invoking – appreciation	tarnishing (anti-investment)



promoting rhetoric

Table 5.26 Patterns of tarnishing enacting promoting rhetoric of a second-order [[[[analytical exposition]]]] genre in business

In contrast to enacting an anti-investment stance through tarnishing stages, lower-order exposition genres in business country reports may also enact a pro-investment stance through *only burnishing* stages. The accumulation of only burnishing stages functions to construe the writer's pro-investment stance concerning business investment opportunities in the Chinese solar energy market, as glossed in *Table 5.27* below:

[Text 2: The China Report]

PERSPECTIVE 1 [[analytical exposition]] promoting	Text OPPORTUNITIES
Thesis burnishing	There are largely economic opportunities in the Chinese market such as market size and economic growth.
Argument 1 burnishing	Market Size & Growth Economic reforms and economic liberalisation has resulted in increasing economic prosperity, which provide the potential for a favourable market for solar panels.
Argument 2 burnishing	Political and Cultural Support for Renewable Energy Options China's environmental crisis will increase the need for solar demand.
Argument 3 burnishing	China's collectivist culture would be compatible with concern for the environment, which should therefore encourage change in energy consumption habits.

Table 5.27 Burnishing stages enacting promoting rhetoric in a second-order [[[[analytical exposition]]]]

Similarly to the tarnishing-only pattern shown above, this burnishing-only pattern also serves to enact promoting rhetoric through the staging of an exposition in the China Report (Text 2). Thus the pattern involving *only burnishing* stages constitute another realisation of promoting rhetoric in business country reports, as shown in *Table 5.28* below. In these business reports, burnishing stages of exposition genres function to promote the writer's pro-investment stance.

[Text 2: The China Report]

PERSPECTIVE 1 [[analytical exposition]]	Prosodies			Rhetorical effect in genre stages
	domination	saturation	augmentation	
Thesis	hTh 2.1	[+appreciation] x [int: e.g.]	[force: intensifying] [force: amount]	burnishing (pro-investment)
Argument 1	E 2.1	[+appreciation] x [int: cause]	[force: intensifying a proposal] [force: amount]	burnishing (pro-investment)
Argument 2	hTh 2.2 E 2.2	[+appreciation] x [ext: cause]	[force: intensifying a proposal] [force: amount]	burnishing (pro-investment)
Argument 3	hNew 2.3	[+appreciation] x [ext: cause]		burnishing (pro-investment)



promoting rhetoric

Table 5.28 Patterns of burnishing enacting promoting rhetoric of a second-order [[[[analytical exposition]]]] genre in business

Based on the fine-grained analyses of the co-patternings of various discourse semantic resources I have demonstrated three types of rhetoric enacted in the undergraduate business country reports studied in this thesis. In **Chapter 3** I have shown that these long and complex texts ‘grow’ bigger by embedding mostly *arguing* genres. In **Chapter 4** I have demonstrated couplings and recouplings that construe business decisions. In this chapter I have shown how couplings and recouplings interact with linguistic resources selected from different systems at the level of discourse semantics. The patterns enacted by these different resources were found to 1) scaffold the generic structure of these texts and 2) enact three types of rhetoric: defeating, resolving and promoting types of rhetoric. In *Table 5.29* below these three types of rhetoric have been mapped onto the stages of the arguing genres found across the data set. It is through these different types of rhetoric that successful writers of these business country reports ‘make a point’, i.e. demonstrate the skills of business reasoning and decision-making.

<i>defeating</i>	<i>resolving</i>	<i>promoting</i>
challenge	discussion	exposition
Position challenged	Issue	Thesis
Rebuttal Arguments	Perspective 1	Argument 1
Anti-thesis	Perspective 2... n	Argument 2... n
	(Resolution)	(Reiteration of Thesis)

Table 5.29 ‘Making a point’ through three types of rhetoric in business country reports

The final step in this chapter is to consider the role of these different types of rhetoric with regards to the superstructure of a whole business country report. The interaction between the three types of rhetoric in the Canada Report, for example, is illustrated in *Table 5.30* below. This mapping of these types of rhetoric onto the genre staging of the Canada Report aims to illustrate that successful writers may use one type of rhetoric *in the service of* another type of rhetoric through embedding different arguing genres into the superstructure of these texts. More specifically, in **Chapter 3** I have presented in detail that an embedded [[analytical exposition]] genre has been made to function as the **PERSPECTIVE 1** stage of the analytical discussion genre simplex

that realises the Canada Report. The **Argument** stages of this [[analytical exposition]] are realised by second-order [[[[discussion]]]] genres and a [[[[challenge]]]] genre. These second-order embedded genres were found to construe an overall anti-investment position (as shown in Chapter 3), enacted through resolving and defeating rhetoric. As they are made to function as **Arguments** in an exposition genre, they serve to enact a promoting rhetoric across the whole the **PERSPECTIVE 1**. Concerning the top layer of the superstructure, the writer of the Canada Report draws on all three types of rhetoric in the service of the *overarching resolving rhetoric* enacted in the whole Canada Report.

GENRE STAGES	[[embedded genre stages]]		[[[[embedded genre stages]]]]
resolving			
ISSUE	[[challenge]] defeating		
BACKGROUND	[[report]]		
PERSPECTIVE 1	[[analytical exposition]] promoting		
Thesis			
Argument 1		[[[[analytical discussion]]]]	resolving
Argument 2		[[[[analytical discussion]]]]	resolving
Argument 3		[[[[analytical discussion]]]]	resolving
Argument 4		[[[[challenge]]]]	defeating
PERSPECTIVE 2	[[analytical discussion]] resolving		
Issue			
Perspective 1			
Perspective 2			
Perspective 3		[[[[challenge]]]]	defeating
Resolution			
PERSPECTIVE 3	[[analytical discussion]] resolving		
Issue			
Perspective 1			
Perspective 2		[[[[analytical exposition]]]]	promoting
Perspective 3			
Perspective 4			
PERSPECTIVE 4	[[analytical discussion]] resolving		
Issue			
Perspective 1		[[[[challenge]]]]	defeating
Perspective 2		[[[[analytical exposition]]]]	promoting
Perspective 3			
RESOLUTION	[[challenge]] defeating		

Table 5.30 Three types of rhetoric in the service of an overarching resolving rhetoric in the Canada Report

5.4 Concluding remarks

This chapter set out to demonstrate the significance of couplings and recouplings in demonstrating business reasoning in undergraduate business country reports. The most typical attitudinal choices in couplings and recouplings were identified in terms of their significance in ‘making a point’, i.e. signalling business decision-making at

the level of discourse semantics. Specifically, the chapter identified that the most significant attitudinal resource was [appreciation: valuation] which functions to construe business opportunities and business risks as '*ideationalised*' values significant for the field of business studies. Building on this finding, the functional units that construe a business decision through recoupling (i.e. Factor and Impact) were identified.

This chapter has also illustrated from a more dynamic perspective how couplings and recouplings can be positioned to construe three main types of cause-effect relationship in business country reports: *simple cause-effect*, *multi-causality* and *causal chains*. Finally, it was illustrated from a logogenetic perspective how the co-patternings of discourse semantic systems interact to enact three major types of rhetorical move in business country reports, namely, *defeating*, *resolving* and *promoting* rhetoric. Linking back to the presentation of the generic structure of country reports in **Chapters 3**, it was also shown that one type of rhetoric can be made to function in service of another type in the overall superstructure of country reports.

This chapter made visible the linguistic construction of business rhetoric by illustrating how successful writers demonstrate the process of business *decision-making* at the level of discourse semantics. The next and final chapter of this thesis will consolidate the findings presented in **Chapters 3 to 5**. The pedagogical implications of these findings and potential directions for future research will also be considered.

Chapter 6 Conclusion

This thesis set out to explore the key linguistic demands of undergraduate business reports. It specifically addressed, from the perspective of SFL, the issue of developing a language-based model of business reasoning.

Section 6.1 will first consolidate the major findings of the thesis and its theoretical contributions to SFL theory. These contributions include an understanding of the nature of one widely deployed undergraduate tertiary assignment, the business country report, from the perspective of SFL genre theory; an understanding of the linguistic construction of ‘business decisions’ at the level of discourse semantics; and an understanding of business reasoning, as demonstrated through three types of cause-effect relations and three types of rhetoric. **Section 6.2** will consider the pedagogical implications of making explicit the basis of achievement in business country reports. Finally, **Section 6.3** will address concerns arising from this study, which provide directions for future research.

6.1 Summary of major findings and theoretical contributions

6.1.1 The nature of business country reports: particulate realisation

The first contribution of this thesis is to SFL genre analysis, namely the clarification of existing SFL descriptions of macrogenres, elemental genres and embedded genres and an understanding of the generic structure of long and complex undergraduate business country reports. Text structuring principles in ten undergraduate High Distinction business country reports were studied from a particulate perspective on realization. Revisiting Martin’s (1994) concern with how texts “get bigger than a page” (p. 29), this thesis challenged current understandings of embedded genres as “a relatively rare phenomenon” (Martin, 2012b, p. 002). The question of whether business country reports grow bigger than a page by *complexing* (i.e. whether they are macrogenres) or by *embedding* (i.e. whether they are elemental genres (genre simplexes) which expand their meaning potential through embedding) was approached in terms of text structuring principles. From an ideational perspective on particulate realisation I have considered a **constituency-based** as well as an **orbital**

perspective; from the perspective of **axial relations** these complementary text structuring principles were brought together.

6.1.1.1 Modelling business country reports: genre simplexes and embedding

This thesis found that the ‘top layer’ of the texts studied is realised by the *analytical discussion* genre – a text type from the *arguing* genre family in the SFL classification taxonomy of genre families. This demonstrates that the primary purpose of these texts is to demonstrate convincing business reasoning with reference to investment potential. This thesis has also shown that not all ‘big texts’ – including the business country reports analysed for this study – are macrogenres (where macro-genres are understood as consisting of elemental genre complexes). From an ideational perspective, these texts were found to be *elemental genre simplexes*, which build their ‘depth’ through multiple layers of embedded genres.

The social purpose of these embedded arguing genres in business country reports involves *resolving* multiple positions in discussions, *defeating* unfavourable positions in challenges and *promoting* one-sided positions in exposition genres. This accounts for the prevalence of *arguing* genres (*discussions*, *challenges* and *expositions*).

The thesis also reveals two strategies available for writers when structuring the **PERSPECTIVE** stages of the superstructure. These differences are summed up in *Table 6.1* below. While the four **PERSPECTIVES** of the Canada Report unfold through *two layers of embedded genres* only (mostly discussions), the two **PERSPECTIVES** of the China Report unfold through *three layers of embedded genres* (mostly expositions). The reason for this seems to be the need for building depth through multiple layers of embedded genres when fewer **PERSPECTIVE** stages are instantiated in the superstructure of the analytical discussions that realise country reports.

CANADA REPORT	CHINA REPORT
4 PERSPECTIVES: 3 [[a/disc]] & 1 [[a/exp]]	2 PERSPECTIVES: each [[a/exp]]
<i>2 layers</i> of embedding: <i>mostly a/disc</i>	<i>3 layers</i> of embedding: <i>mostly a/exp</i>
factors from <i>one</i> PESTLE environment	factors from <i>different</i> PESTLE environments
organized based on PESTLE: evaluating a factor as <i>both</i> O/R	organized based on O/R: evaluating a factor as <i>either</i> O/R
pro & con: <i>resolving</i> 2 positions	pro OR con: <i>promoting</i> 1 position

Table 6.1 Two choices for structuring the PERSPECTIVE stages

As summarised in *Table 6.1*, the analytical discussion realising the Canada Report has four **PERSPECTIVES**, the China Report only two **PERSPECTIVES**. The four **PERSPECTIVES** of the Canada Report are based on the PESTLE framework, with each of these stages analysing factors from *one* PESTLE dimension. This necessitates treating each factor and sub-factor as *both* an opportunity (O) *and* a risk (R) for each dimension. In order to analyse a factor as both an opportunity and a risk, writers draw mainly on *discussion* genres to structure each **PERSPECTIVE**. This functions to *resolve* whether or not a factor represents an opportunity or a risk for investment. Structuring the **PERSPECTIVES** as challenge genres is a less typical option, which functions to *demolish* an initial pro- or anti-investment position with an opposing argument. The discussion genre foregrounded in the Canada report results in a *balanced* overarching argument about investment.

In contrast, the two **PERSPECTIVES** of the China Report are organised as opportunities then risks. As a result, each of these stages analyses factors selected from *different* PESTLE dimensions, which are evaluated as *either* an investment opportunity *or* an investment risk. Since one **PERSPECTIVE** *promotes* a *pro-investment* and the other **PERSPECTIVE** an *anti-investment* position, these social functions favour exposition genres. This results in promoting the same, *one-sided* position throughout both **PERSPECTIVES** (i.e. a foregrounding of the exposition genre in the China Report).

So far this chapter has focused on the presentation of the contribution made to SFL genre *analysis*. The kind of structure constituting the business country reports was identified as a *multivariate* structure, which constitutes a ‘whole’ made up by functional constituents, i.e. its ‘parts’. In terms of *representation*, for the purposes of this thesis the traditional constituency tree was found useful for modelling multivariate structures. Specifically, the ‘tree’ lends itself to representing the several layers of downranked genres embedded as multivariate stages in a superstructure. An example (see *Figure 6.1* below) from the China Report (Text 2) was selected to illustrate the possibility of multiple layers of embeddings in the superstructure of business country reports, e.g. construing a four-layer structure in some stages:

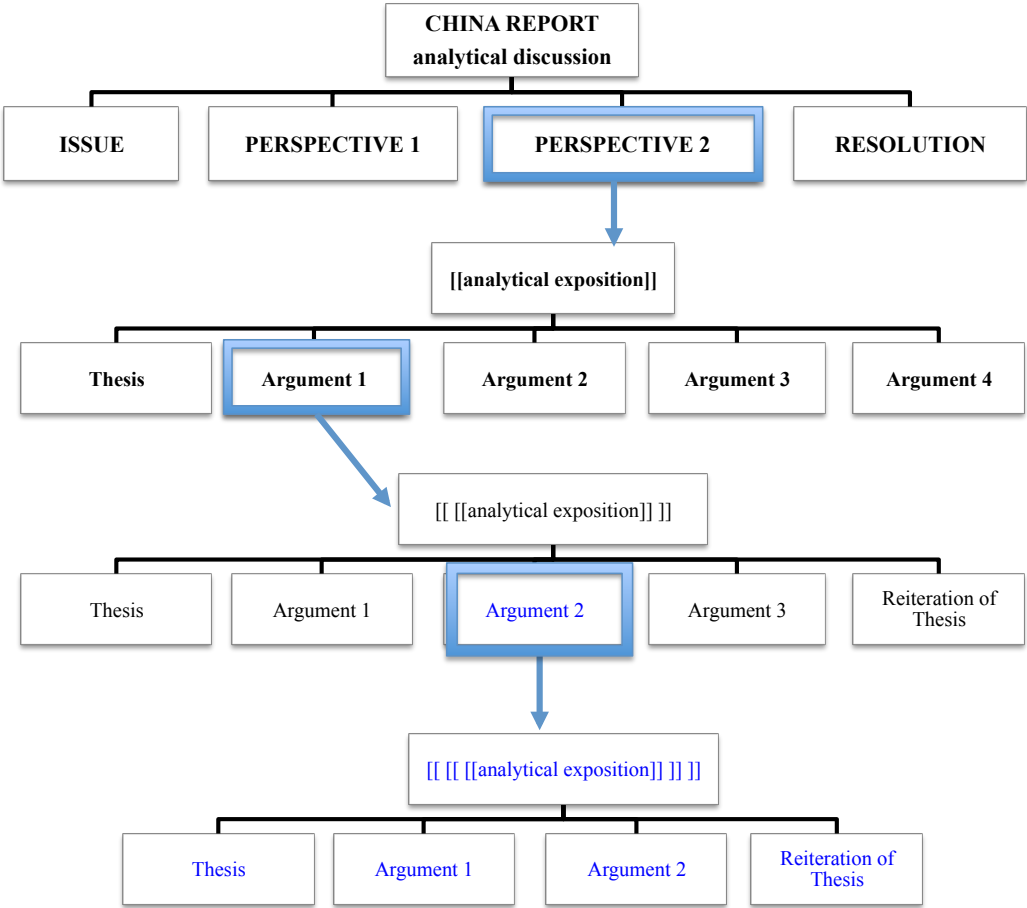


Figure 6.1 Multiple layers of embedding in the PERSPECTIVE 2 stage of the China Report

For reasons of a more ‘economical’ representation, I have also proposed a *synoptic* representation of the generic structure of long genre simplexes that contain several

layers of embedded genres. In order to indicate their status among the layers of embedded genres, I have proposed extending the bracketing convention used for first-order embedded genres based on the conventional representation of embedded clauses, i.e. enclosing embedded genres within square brackets ([[[...]]]). Second-order embedded genres will be signalled by double bracketing and third-order embedded genres by triple bracketing as shown below:

[[embedded genre]]
[[[[second-order embedded genre]]]]
[[[[[third-order embedded genre]]]]]
...

Tables 6.2a and 6.2b below provide synoptic snapshots of the generic structure of the Canada and China Reports using this bracketing representation. It visualises that these texts expand their meaning potential through two and three layers of embedded genres:

[Text 1 Canada Report]

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
ISSUE	[[challenge]]	
BACKGROUND	[[report]]	
PERSPECTIVE 1	[[analytical exposition]]	
	Thesis	
	Argument 1	[[[[analytical discussion]]]]
	Argument 2	[[[[analytical discussion]]]]
	Argument 3	[[[[analytical discussion]]]]
	Argument 4	[[[[challenge]]]]
PERSPECTIVE 2	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	
	Perspective 3	[[[[challenge]]]]
	Resolution	
PERSPECTIVE 3	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
	Perspective 4	
PERSPECTIVE 4	[[analytical discussion]]	
	Issue	
	Perspective 1	[[[[challenge]]]]
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
RESOLUTION	[[challenge]]	

Table 6.2a Synoptic view of the generic structure of the analytical discussion realising the Canada Report

[Text 2 China Report]

GENRE STAGES	[[embedding]]	[[[[embedding]]]]	[[[[[[embedding]]]]]]
ISSUE	[[challenge]]		
PERSPECTIVE 1	[[analytical exposition]]		
	Thesis		
	Argument 1	[[[[analytical exposition]]]]	
	Argument 2		
	Argument 3	[[[[analytical exposition]]]]	
PERSPECTIVE 2	[[analytical exposition]]		
	Thesis		
	Argument 1	[[[[analytical exposition]]]]	
		Argument 2	[[[[[[analytical exposition]]]]]]
		Argument 3	[[[[[[consequential explanation]]]]]]
	Argument 2		
	Argument 3	[[[[analytical exposition]]]]	
		Argument 3	[[[[[[challenge]]]]]]
	Argument 4	[[[[analytical exposition]]]]	
		Argument 2	[[[[[[analytical exposition]]]]]]
RESOLUTION	[[analytical exposition]]		
	Thesis	[[[[challenge]]]]	
	Argument 1	[[[[challenge]]]]	
	Argument 2	[[[[analytical exposition]]]]	
	Reiteration		

Table 6.2b Synoptic view of the generic structure of the analytical discussion realising the China Report

In this data set, lower-level embeddings beyond third-order embedded genres were not found; but there is no theoretical reason why more layers could not occur. As noted in **Chapter 2**, the meaning potential of long texts can be opened up by cyclical recursion (Halliday, 1965/1981), i.e. every layer of genre embedding construes a further layer of meaning potential. What matters in the context of this study is *when* the embedding of genres stops -- i.e. when business country report writers stop discussing or arguing their positions and stop embedding further layers of genres into the superstructure of these texts. In fact the embedding stops when writers reach the *conclusive* business decision in a particular stage of the genre realising the top layer of the superstructure. More specifically, simple evaluation of PESTLE factors through the staging of arguing genres is insufficient; what is also necessary is to construe them as either *business opportunities* or *business risks*. This is what I referred to as ‘making a point’ in **Chapter 3**, with the point often made explicit in the concluding *Resolution*, *Reiteration of Thesis* and *Anti-Thesis* stages of arguing genres. When this point (i.e. discussing/arguing whether a factor presents an opportunity or a risk to the

company) is made explicitly, successful writers stop embedding further layers of genres into the structure of business country reports.

6.1.1.2 Modelling business country reports from an orbital nuclearity perspective

This thesis has shed light on the nature of long tertiary business country reports from a constituency-based perspective on particulate realisation. To complement this perspective on text structuring principles, the nature of these texts was also explored from an **orbital** perspective. Examining the country reports from an orbital perspective has revealed the core, i.e. most central, elements of text structure as well as the more peripheral elements. The analysis of the data has revealed that the **RESOLUTION** stage represents the ‘Nucleus’, i.e. the ‘core’ stage, in the superstructure of the analytical discussions that realise the country reports studied in this thesis. As mentioned in **Chapter 3**, the **RESOLUTION** realises the canonical Recommendation section of country reports; without this stage a country report would be an incomplete text. In other words, these finding can be generalised by the following statement: the Recommendation realised as a RESOLUTION stage is to the country report realised by an analytical discussion genre as the Nucleus is to the clause.

**Recommendation ↘ RESOLUTION : country report ↘ discussion ::
Nucleus : clause**

The orbital perspective reveals the core and peripheral elements of the texts; with the RESOLUTION being nuclear to the ISSUE stage and the ISSUE nuclear to the Satellites (realised by other obligatory and/or optional stages of analytical discussions). *Figure 6.2* below captures this nuclearity representation based on the orbital structure of Text 1, the Canada Report.

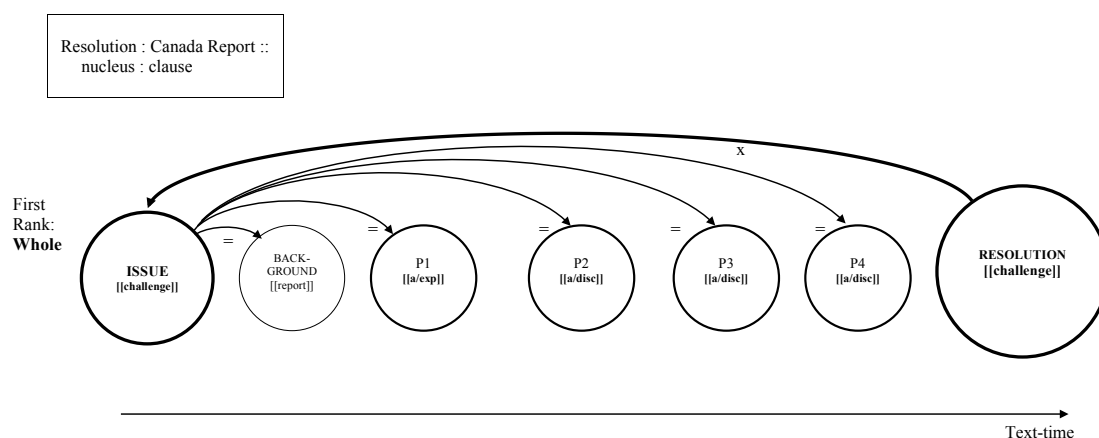


Figure 6.2 The orbital structure of the Canada Report

The findings of this thesis resonate with the findings of previous research noted in **Chapter 2**, which has identified the recommendation section as an important component of certain types of business report. The nuclearity representation shown in the figure above is significant as it shows that the individual stages of the analytical discussion superstructure of country reports are realised by embedded genres. Thus the orbital perspective has reinforced the constituency-based analysis of country reports as genre simplexes rather than genre complexes (i.e. macrogenres): the elemental genres embedded as stages of the superstructures of country reports cannot ‘stand’ on their own in a serial structure of a macrogenre.

6.1.1.3 Modelling business country reports from an axial perspective

The third contribution made to SFL genre analysis is the exploration of the nature of business country reports from the perspective of axial relations. A focus on axial relations considers the choices available to writers of business country reports in order to write successful, academically valued texts. These choices at the level of genre include the types of genre that build the generic superstructure of country reports as well as the obligatory and optional genre stages that realise these genres. *Table 6.3* below summarises the type of embedded genres that unfold as multivariate stages of the analytical discussion superstructures of the ten country reports analysed for this study:

stages of a/disc	ISSUE	(BG)	P1	P2	(P3)	(P4)	RES
Text 1 Canada	[[ch]]	[[report]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[ch]]
Text 2 China	[[ch]]		[[a/exp]]	[[a/exp]]			[[a/exp]]
Text 3 Brazil	[[ch]]		[[a/disc]]	[[a/exp]]	[[a/disc]]	[[a/exp]]	[[a/exp]]
Text 4 India	[[ch]]		[[a/exp]]	[[a/exp]]	[[a/disc]]	[[a/disc]]	[[a/disc]]
Text 5 India	[[a/disc]]		[[a/disc]]	[[a/exp]]	[[a/disc]]	[[a/exp]]	[[a/disc]]
Text 6 Hungary	[[a/exp]]		[[a/exp]]	[[a/disc]]	[[a/exp]]	[[a/disc]]	[[ch]]
Text 7 Spain	[[ch]]		[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/exp]]	[[a/disc]]
Text 8 Brazil	[[a/disc]]		[[a/disc]]	[[a/disc]]	[[a/exp]]	[[a/disc]]	[[a/exp]]
Text 9 Poland	[[a/disc]]		[[a/exp]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[ch]]
Text 10 U.K.	[[a/disc]]		[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/disc]]	[[a/exp]]

Key:
BG = **BACKGROUND**
P = **PERSPECTIVE**
RES = **RESOLUTION**
[[ch]] = [[challenge]]
[[a/exp]] = [[analytical exposition]]
[[a/disc]] = [[analytical discussion]]

Table 6.3 Embedded arguing genres as multivariate stages of the superstructure of the analytical discussion realising undergraduate business reports

The results of the genre analyses have revealed the *obligatory* and *optional* choices for structuring the analytical discussion superstructures that realise business country reports. These findings can be generalised with regards to these available choices as the following:

- **ISSUE:** *obligatory*; may be realised by an embedded [[challenge]] or [[analytical discussion]] or [[analytical exposition]];
- **BACKGROUND:** *optional*; may be realised by an embedded [[descriptive report]];
- **PERSPECTIVE:** two stages must be *obligatory*; two stages may be *optional*; may be realised by an embedded [[analytical discussion]] or [[analytical exposition]];

- **RESOLUTION:** *obligatory*; may be realised by an embedded [[challenge]] or [[analytical discussion]] or [[analytical exposition]].

In **Chapter 3** these choices were formalised as the system network shown in *Figure 6.3* below. This thesis proposes this system network for the representation of the academically valued choices available for writing successful undergraduate business country reports.

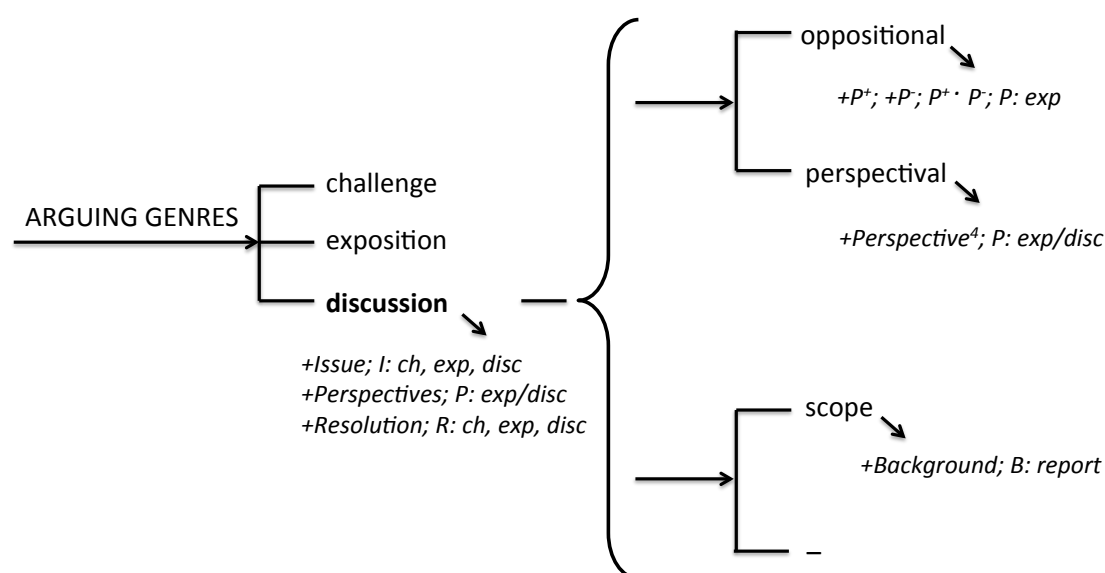


Figure 6.3 The system network proposed for undergraduate business country reports

This thesis has demonstrated the important role embedded genres play in building the superstructures that realise business country reports. The genre analysis has also moved beyond a focus on the overall superstructure in order to 1) identify the multiple layers of embedded genres that build the *depth* of the superstructures and 2) understand how these long and complex texts expand their meaning potential. The social purpose of the different *arguing*, *explaining* and *reporting* genres can now be consolidated:

- **discussions:** their social purpose is to *resolve* two contrasting positions. The staging of a discussion lends itself to the analysis of each PESTLE factor as *both* opportunities and risks. They scaffold the more ‘favourable’ position against investment by considering multiple views. Discussions are the only

genre types, which can instantiate the superstructures that realise business country reports. They can also occur as first-, second- and third-order embedded genres.

- **challenges:** their social purpose is to *defeat* an initial pro- or anti-investment position, which acknowledges or denies existing potential for investment. This initial position becomes outweighed by a more carefully considered position. This means that the staging of challenges suit the purpose of dismissing opportunities and foreground risks *or* dismissing risks and foreground opportunities. Challenges can only occur as first-, second- and third-order embedded genres in country reports.
- **expositions:** their social purpose is to *promote* the same one-sided position. The staging of an exposition lends itself to scaffolding either a pro-investment position or an anti-investment by analysing each PESTLE factor as *either* an opportunity *or* a risk. Similarly to challenges, expositions can only occur as first-, second- and third-order embedded genres in country reports.
- **explanations:** their social purpose is to *explain* the *impact* of already existing business opportunities or business risk factors on investment potential. The staging of an explanation lends itself to relating different factors from different PESTLE environments to each other in terms of their positive or negative impact on investment. Explanation can only occur as *third-order* embedded genres in country reports *in support of* arguing genres.
- **reports:** their social purpose is to narrow down and provide a rationale for the scope of the market analysis by clarifying working definitions and relevant issues concerning investment. In this study the only report genre instantiated occurs as a first-order embedded genre, which provides the optional **BACKGROUND** stage of the Canada Report.

It is interesting to note here that the **BACKGROUND** stage realized by an embedded [[descriptive report]] only occurs in the Canada Report. It is sandwiched between the **ISSUE** stage and the **PERSPECTIVE 1** stage and in some ways its function is similar to an interrupting report about amnesty for human rights violations during South Africa's apartheid from Desmond Tutu's book *No Future without Forgiveness*, analysed in detail in Martin & Rose (2003/2007, pp. 200-201). According to Martin &

Rose, after stating his thesis, Tutu interpolates a report genre to set the context for his case before moving on to his arguments. Similarly, the writer of the Canada Report stops to remind the reader that the firm needs to consider the scope of analysis before conducting the market analysis and moving on to examining the various factors from the PESTLE framework and discussing the various perspectives about the main issue. The [[descriptive report]] realising the **BACKGROUND** instantiates a multivariate stage in the superstructure of the analytical discussion genre simplex that realizes the Canada Report.

This thesis sought to arrive at a linguistically theorised understanding of the process of decision-making in undergraduate business country reports. In order to achieve this goal, it has brought together complementary constituency-based and orbital text structuring principles of particulate realisation at the level of genre. By also focusing on axial relations it has shed light on the nature of long undergraduate business country reports. Through examining how long business reports construe ‘*depth*’ **through embedding** rather than building complexity through serial expansion in a univariate structure, it complements and extends current research on SFL genre descriptions including macrogenres, elemental genres and embedded genres. This represents the first major contribution of this thesis to SFL theory.

6.1.2 Towards a typology of recouplings

This thesis also makes a major contribution to SFL research on understanding how prosodic structures are realised alongside particulate structures by exploring the role of interpersonal meanings in construing business decision at the level of discourse semantics. Specifically, to seek an answer to the question why certain kinds of meanings are coupled in undergraduate business country reports was approached from the perspective of coupling theory. The main contributions to SFL discourse semantics include identifying the **distinguishing criteria** for the types of grammatical structure that activate different kinds of **coupling** and **recoupling** on the instantiation hierarchy; exploring these grammatical structures at the levels of nominal groups, clauses, clause complexes and across sentences to demonstrate that recouplings are

construed in **clause grammar**; and taking the first step towards building a **typology of recouplings** at the level of discourse semantics.

6.1.2.1 The significance of couplings and recouplings

Chapter 4 has revealed that both inscribed and invoked couplings construe evaluated factors selected from different PESTLE environments. These couplings form the **basis** of demonstrating business decisions in undergraduate business country reports. Based on an adaptation of Hood's (2010) yin-yang symbol, this thesis has proposed the following yin-yang symbols for the representation of couplings of ideational meanings and *inscribed* attitude: blue yin-yang symbols for appreciation; green for judgement; and pink for affect. For the representation of couplings of graded ideation *invoking* attitude and ideational meanings white yin-yang symbols were proposed. *Figure 6.4* below provides a summary of these visual representations proposed for these different types of coupling:

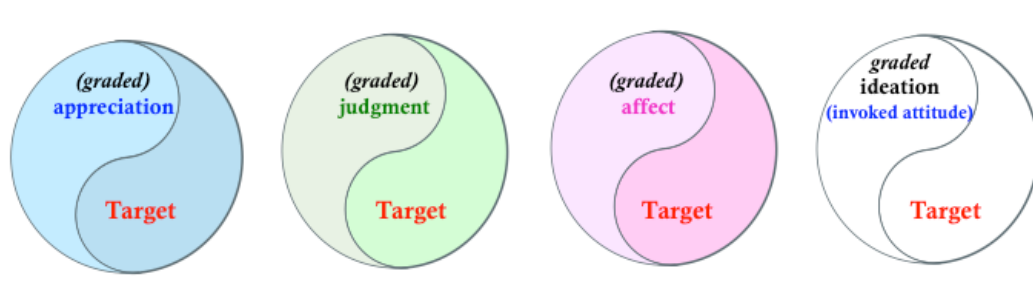


Figure 6.4 Proposed representation for couplings found in this thesis

Closer analyses of couplings in **Chapter 4** have also revealed that couplings can be further evaluated and construe **recouplings** as a result. **Chapter 4** has shown that the four types of coupling identified in the data may become *lower-order couplings* by taking on the function of Targets of evaluation in recouplings. If lower-order couplings realise evaluated PESTLE factors and become the Targets of evaluation in recouplings, they become a significant discourse semantic resource for demonstrating a type of business decision in undergraduate business country reports.

Four types of grammaticalised recoupling were identified in the business country

reports studied in this thesis, which may be realised as either *reinforcing* or *inverting* recouplings:

- 1) Value-Token
- 2) Attribute-Carrier
- 3) Medium-Agent
- 4) Thing-Qualifier

Chapter 4 formalised the strategies available for writers of business country reports for construing recouplings as a system network (see *Figure 6.5*). This proposed system network for the types of recoupling identified in this thesis represents the first step towards building a typology for recouplings in undergraduate business country reports.

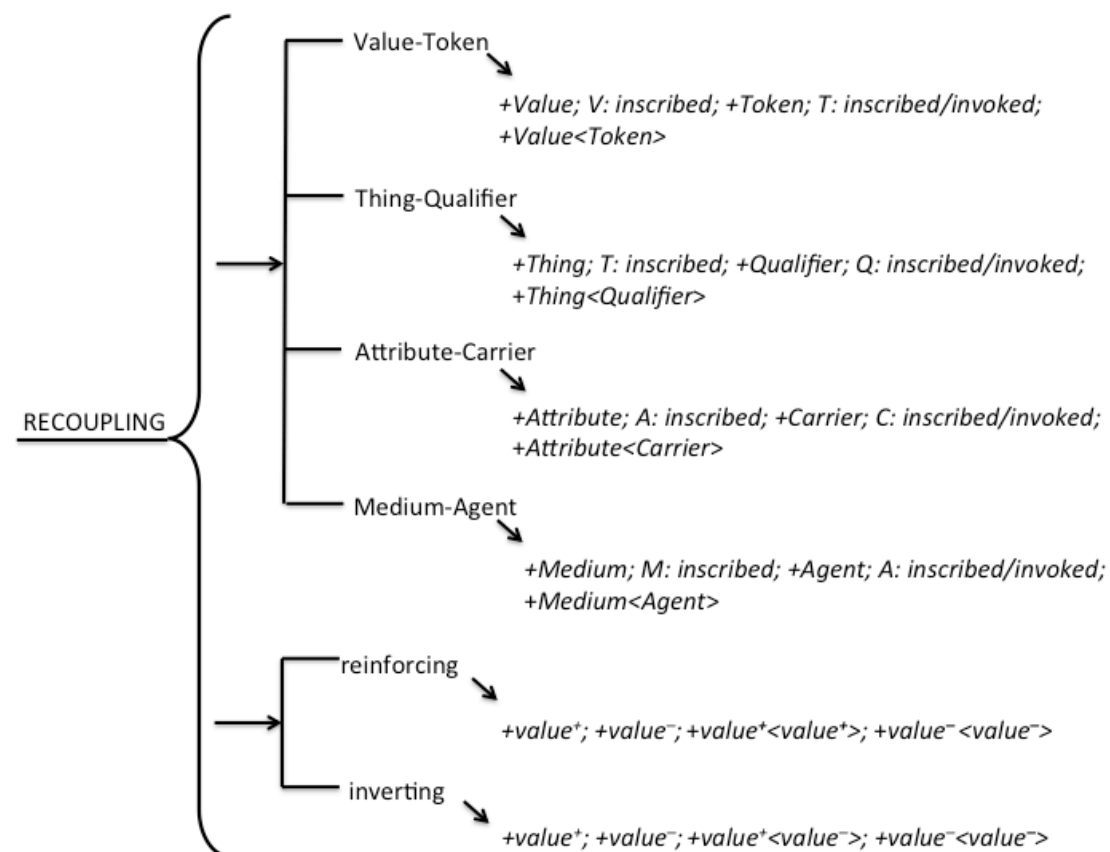


Figure 6.5 The system network proposed for recouplings

Recouplings enable writers to evaluate lower-order couplings (i.e. evaluated PESTLE factors) as *investment opportunities* or *investment risks*. This discourse semantic resource is thus significant for the successful demonstration of an expert judgement of investment viability, i.e. the linguistic construction of business decisions in undergraduate country reports.

Chapter 4 makes a contribution to SFL discourse semantics by modelling the criteria for identifying couplings and recouplings. The most important contribution of **Chapter 5** lies in the demonstration of the significance of recouplings for construing business decisions: modelling how recouplings can be positioned to build three types of cause-effect relationship and how they co-pattern with the discourse semantic systems of CONNEXION and PERIODICITY to enact three types of rhetoric.

6.1.2.2 Modelling cause-effect relations in business reports

The third major contribution this thesis makes to SFL theory concerns the significance of couplings and recouplings in ‘making a point’ (i.e. demonstrating business reasoning in undergraduate business country reports at the stratum of discourse semantics). The question as to why couplings and recouplings are crucial discourse semantic resources in these texts was approached from the perspectives of prosodic and periodic realisation. The main contributions to SFL theory at the level of discourse semantics include identifying the **most typical attitudinal choices** in couplings and recouplings from a *synoptic* perspective; the linguistic construction of three types of **cause-effect relations** from a more *dynamic* perspective; and the co-patternings of discourse semantic systems in construing three types of **rhetoric** in undergraduate business country reports from a *logogenetic* perspective. I will consolidate these contributions below.

By building on the findings of **Chapter 4**, **Chapter 5** first explored the implications of the most typical attitudinal choices in couplings and recouplings from a synoptic perspective. These choices and their functions are summarised in *Table 6.4* below. The table shows the most common choices to evaluate PESTLE factors in the business country reports analysed in this thesis from the system of ATTITUDE, ranging

from *the least typical to the most typical* choices. Based on appraisal analyses and concordance searches, this thesis found that choices selected from the subsystem of APPRECIATION outweigh choices from the sub-systems of JUDGEMENT and AFFECT. The most crucial attitudinal resource identified in this thesis for construing business reasoning via couplings and recouplings is [appreciation: valuation], primarily realised by abstract entities, nominalisations and grammatical metaphors. Its major function is the construction of PESTLE factors as *values*; more specifically, instances of [+appreciation: valuation] construe *investment opportunities*; instances of [–appreciation: valuation] construe *investment risks*.

ATTITUDE subsystem	attitudinal choices	functions to
AFFECT (least typical)	[+inclination: desire]	evaluate <i>existing</i> trends; predict <i>future</i> trends
	[+security: confidence]	evaluate entire target markets as <i>potential</i> investment locations
	[–insecurity: disquiet]	recouple appreciation and judgment as affect to construe different levels of <i>investment anxiety</i> ; construe lower-order couplings to be recoupled as <i>investment risks</i>
JUDGMENT	[+/-capacity]	evaluate labour markets
	[–propriety]	evaluate the governments, political systems and sociocultural norms of target markets; construe <i>investment risks</i>
APPRECIATION (most typical)	[+appreciation: reaction]	evaluate the target countries as <i>potential</i> investment locations
	[+composition: balance]	evaluate <i>specific</i> political and legal PESTLE factors; provide an <i>overall</i> positive evaluation of the <i>political</i> and <i>legal</i> environments of the target markets
	[–composition: complexity]	evaluate <i>overall</i> expansion potential into the target markets from an <i>economic</i> perspective; evaluate <i>specific</i> factors from a <i>legal</i> perspective
	[+appreciation: valuation]	construe <i>investment opportunities</i>
	[–appreciation: valuation]	construe <i>investment risks</i>

Table 6.4 Most typical attitude choices in couplings and recouplings and their functions in business country reports

By modelling *simple cause-effect*, *multi-causality* and *causal chain* relations in undergraduate business country reports, this thesis has extended Donohue, Adinolfi and Shrestha's (2013) work at the level of discourse semantics. The sequencing of couplings and recouplings into these types of cause-effect relations represents successful demonstration of complex business reasoning, involving the analysis of a number of business decisions to reach a final conclusion. I now turn to the role of rhetoric in demonstrating business reasoning; consolidating the analyses of couplings, recouplings and discourse semantic systems from a logogenetic perspective.

6.1.2.3 Modelling rhetoric in business country reports

The final contribution made to SFL theory in this thesis concerns the types of rhetoric identified in country reports. Writers of successful business country reports position couplings and recoupling through the co-patterning of discourse semantic resources into three types of rhetoric; namely, **defeating**, **resolving** and **promoting** rhetoric. These three options available to writers to construe *pro-* or *anti-investment* stance in business reports can be generalised as the following:

- 1) **Defeating rhetoric**, mapped onto the stages of challenge genres, functions to *defeat* an initial layperson position on investment potential and direct the reader towards a final expert proposal.
- 2) **Resolving rhetoric**, mapped onto the staging of discussions, directs readers towards the writer's *preferred* position on investment after debating PESTLE factors as both *investment opportunities* and as *investment risks*.
- 3) **Promoting rhetoric**, mapped onto the structure of exposition genres, functions to enact a one-sided *pro-* or *anti-investment stance* in business country reports.

These findings resonate with the findings of the generic analyses presented in **Chapters 3**, where I showed that one type of rhetoric is frequently used *in the service of* another type of rhetoric. Successful country reports demonstrate the skills of business reasoning and decision-making through the embedding of arguing genres such as challenges, discussions and expositions into the superstructure of these texts.

At the level of discourse semantics, successful writers demonstrate this process via the three types of rhetoric mapped onto the stages on arguing genres. By illustrating the process of business *decision-making* enacted at the level of discourse semantics, this thesis contributes to making the linguistic construction of business rhetoric in business country reports visible. The following section will consider the pedagogical implications of these findings.

6.2 Pedagogical implications

This thesis was written with a pedagogical motivation in mind, in line with Halliday's notion of applicable linguistics. The study undertaken in this project was positioned in the context of the Sydney School's approach to pedagogy. As noted in **Chapter 1**, the primary focus of this study was to contribute to the development of linguistically theorised models of business decision-making based on analyses of successful business country reports in the field of undergraduate business studies. From a pedagogical perspective, this thesis is also intended to contribute to the development of tertiary business students' skills of 'decision-making' and professional report writing in higher education.

As mentioned in **Chapter 1**, the high failure rate in the unit *Business in the Global Environment* (CISS2001) (from which the data was sourced for this study) indicates that relatively few students possess adequate knowledge of the range of genres and linguistic resources necessary to write successful assignments. An important consideration for pedagogy is how to make this knowledge explicit for less successful students. From a pedagogical point of view, this thesis found that the overall social purpose of *arguing* genres such as challenges, discussions and expositions in business is to *defeat*, *resolve* or *promote* the writer's position for or against a company's expansion into (i.e. investment in) a target market. Choices from *explaining* genres enable writers to focus on the *impact* of existing opportunities or risk factors on investment potential. Finally, the option of *reporting* enables writers to provide a rationale for the scope of market analysis. These social purposes of arguing, explaining and reporting in business country reports are summarised in *Table 6.5* below. Equipping students with knowledge of the different choices available from the

families of arguing, explaining and reporting genres could be the first step towards making the disciplinary knowledge valued in business studies explicit.

<i>reporting</i>	<i>explaining</i>	<i>arguing</i>		
descriptive report	consequential explanation	challenge	analytical discussion	analytical exposition
to provide <i>rationale</i> for scope of market analysis, clarify limitations and working definitions	to explain the <i>impact</i> of existing opportunities or risk factors on investment potential	to dismiss opportunities and foreground risks OR to dismiss risks and foreground opportunities	to weigh up opportunities and risks in order to direct reader towards final Resolution arguing for or against investment	to prove that a relevant factor from PESTLE is <i>either</i> an opportunity <i>or</i> a risk for investment




Table 6.5 The social purpose of reporting, explaining and arguing in business reports

Apart from instructing student writers of business country reports about the social purpose of each of these genres, simply familiarising them with the overall global superstructures that realise these social functions would not provide sufficient academic literacy support. This thesis has demonstrated, based on the analysis of ten high-scoring texts, that student success depends not only on the ability to construe arguing, explaining and reporting genres but also the ability to strategically embed these as multivariate stages at various points of the superstructure of genre simplexes – such as the business country reports studied in this thesis – in academic and professional business settings. **Chapter 3** has provided detailed evidence that the embedding of lower-order genres into the generic superstructure of business country reports is fundamental for expanding these undergraduate assignments into long and complex texts.

Closer analysis of lower-order embedded genres has also revealed which genres from which genre families are more academically valued in high scoring business reports. Compared to texts written in business studies at high school level, university students need knowledge of more types of genre from a wider range of genre families. In high school knowledge of primarily explaining genres is sufficient to write high scoring assignments (Weekes, 2014), however, in the genre simplexes that realise tertiary business reports mostly arguing, some explaining and optional reporting is what

seems to be highly valued. These differences in the academic genres that are valued at high school and university level are demonstrated in *Figure 6.6* below. These findings could inform the development of future academic literacy support intervention programs to design curriculum pathways for university students.

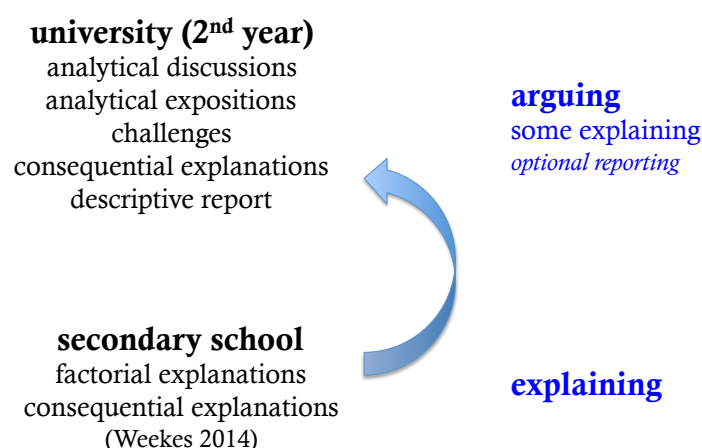


Figure 6.6 Academically valued genres in undergraduate business reports

This thesis commenced with canvassing the literature on different approaches to business writing instruction in higher education. This literature often focuses on ‘graduate qualities’; in the context of business schools, the skills of problem-solving’, ‘decision-making’ and professional report writing, respectively. In order to provide students with appropriately scaffolded business writing instruction that provides apprenticeship into discourses of doing ‘business in the global environment’, one of the major objectives of this thesis was to understand the linguistic features of the disciplinary *knowledge* business students need to demonstrate; in other words, to explore how this disciplinary knowledge is realised through written *language* in one of the most popular, core assignment types in business studies, the business country report. What this means for the design of undergraduate business writing interventions is that focusing on the ideational content of the field of study is equally important to a focus on interpersonal meanings. In business country reports this equals knowledge of relevant PESTLE factors from each external business environment.

From a discourse semantic perspective, this thesis has demonstrated that business reasoning is construed through a range of linguistic strategies involving selecting

resources from different discourse semantic systems. Based on the findings of this study it can be concluded that the demonstration of business reasoning seems to involve both logical reasoning through resources of CONNEXION and ‘cause in the clause’ as well as arguing through the co-patternings of other discourse semantic systems such as APPRAISAL, IDEATION and PERIODICITY. Specifically, from an ideational and interpersonal perspective, the ability to construe business reasoning through couplings and recouplings is dependent on the explicit evaluation of experiential meanings by the resources of inscribed attitude and invoking evaluation through the resources graduation. From a logical perspective, knowledge of the resources of CONNEXION and ‘cause in the clause’ is necessary in order to construe simple cause-effect relationships, multi-causality and causal chains and prosodies of saturation to demonstrate business reasoning. Finally, from a textual perspective, knowledge of the resources of PERIODICITY is crucial for composing prosodies of domination and placing recouplings strategically into macroThemes and macroNews as well as hyperThemes and hyperNews in order to preview and consolidate business decisions.

Learning to manipulate these resources simultaneously in order to pattern them into the three types of rhetoric identified in high-scoring student texts (i.e. defeating, resolving and promoting rhetoric) seems to be a challenging task for second-year undergraduate business students. In order to provide students with writing support so that they can achieve control of the genres and linguistic resources privileged in country reports, it is proposed that future pedagogic interventions draw on the Sydney School pedagogy and the Teaching-Learning Cycle to recontextualise the findings of this thesis. The TLC implemented by Stenglin, Welch and Cléirigh (2014) during the business school intervention (reviewed in detail in **Chapter 2**) could be extended to include deconstruction of the range of genres identified in successful country reports. Further, explicit instruction could model and deconstruct the different types of rhetoric as options to choose from for construing business decisions.

The design of an effective Sydney School -based intervention would necessitate establishing a ‘metalanguage’ for talking about disciplinary knowledge construed through language in country reports. The Sydney School already has extensive

metalanguage¹ for talking about language and knowledge. One important issue that needs consideration relates to business lecturers' 'knowledge about language' (KAL) to make visible the language of uncommonsense business discourse for students. Another anticipated challenge concerns the recontextualisation of the SFL terminology introduced in this thesis at the levels of genres and discourse semantics for pedagogic metalanguage, e.g. how to talk about lower-order embedded genres, inverting recouplings or co-patterning of systems, to mention but a few. One proposed solution to address this concerns could involve an adaptation of the '4x4 literacy toolkit' (Humphrey, 2015). This 'metalinguistic framework' (Humphrey & Macnaught, 2015) was designed to support adult learners in a tertiary ESL context (see e.g. Dreyfus, Humphrey, Mahboob & Martin, 2015 on the SLATE project); intended to be used for instruction and assessment purposes by both teachers and students. The findings of this thesis contribute to the development of a similar toolkit for business students. Such toolkit could synthesise the generic and linguistic features of business country reports at levels of whole texts, paragraphs and sentences. It would then provide useful metalanguage for both lecturers and students for talking about how disciplinary knowledge is realised through language explicitly and for developing assessment rubrics that make visible the criteria for writing successful business country reports.

This section discussed the implications the findings of this thesis have for embedding academic literacy support into degree programs and business school curricula. I conclude this thesis with a discussion of potential future directions for research.

6.3 Future directions for research

The findings of this thesis point to future directions for research. Here I will highlight the need for more work on phasal analysis, the study of modalisation and modulation and exploring implication sequences in cause-effect relationships from an SFL perspective; Semantics and the study of axiological condensation (Legitimation Code Theory) from an interdisciplinary perspective.

¹ See e.g. Macnaught (2015) for a recent study on metalanguage in tertiary classroom discourse.

6.3.1 Future directions for SFL research

Chapter 3 of this thesis has raised the issue of identifying the criteria for distinguishing the boundaries and the functions of *phases*. In current SFL research on phasal analysis phases are defined as “smaller phases of meaning within each stage, that are more variable, and sensitive to register variations such as a text’s field” (Rose, 2006a, p. 185); in other words, the intermediate units between genre stages at the level of genre and messages at the level of lexicogrammar (Rose, 2006a, p. 187). Based on phase types² occurring in story genres, Rose (2006a) theorises phases³ as units on his discourse semantic rank scale, shown in *Table 6.6*.

genre	minimal unit of text – in series in macrogenres such as textbooks, novels or conversation
stage	highly predictable segments in each genre
phase	more variable segments within each stage, carrying pulses of field and tenor
message	non-dependent, non-projected clause, together with associated dependent and projected clauses

Table 6.6 The discourse semantic rank scale (From Rose, 2006a, p. 187)

The genre analyses of the ten country reports studied in this thesis have revealed instances of phases that occur primarily within the Argument stages of analytical exposition genres; less frequently, within the Rebuttal Argument stages of challenge genres. I have termed these ‘*reservation phases*’ based on a preliminary comparison of their functions. I found, specifically, that reservation phases in business country reports introduce a counter-position that intrudes into the staging of exposition and challenge genres, which present a more one-sided rather than a balanced position on investment potential (such as discussions). The preliminary hypothesis on why these reservation phases occur in these genres concerns the fact that the superstructures of country reports are realised by discussion genres, i.e. texts that present more balanced

² These include setting, description, events, effect, reaction, problem, solution, comment, reflection (Rose, 2006, p. 189).

³ See Gregory and Malcolm (1981) for a discussion on phases from the perspective of register.

analyses of PESTLE factors in order to arrive at a final recommendation about investment. Reservation phases included specifically in exposition and challenge genres may function to allow for a more balanced consideration of PESTLE factors in genres, which are typically more one-sided, i.e. expositions, or set out to demolish an unfavourable position, i.e. challenges. Apart from studying their social purpose in more detail, another linguistic issue concerns the identification of phase boundaries within genre stages. The criteria for distinguishing phases need to be explicitly determined in order to understand their realisation within stages. Based on these issues, the study of these kinds of phases would open up an interesting future avenue for research.

Another area worthy of further research concerns the study of modalisation and modulation resources in business country reports. As noted in **Chapter 2**, existing ESP research tends to focus on metadiscourse and hedging devices to study forecasting and prediction in economic texts. A seminal study that approaches the language of forecasting from an SFL perspective is Donohue's (2006) study of modalisation in commercial economic forecasts and texts written by Dutch economists. Drawing on Halliday, the study has revealed modalisation as the key resource through which business analysts foreground and background ideational meanings. This study of modality in economic forecasts has also contributed to the identification of recurring phases whose function is to predict and forecast future trends. Since the business country reports analysed for this study need to consider investment opportunities and risks in relation to investing in a market, the analysis of the resources of modalisation and modulation would be an interesting area for further exploration. Donohue's (2006) study would therefore provide an important stepping stone for the study of forecasting and prediction of future trends and events that can impact investment potential in business country reports.

Building on Donohue, Adinolfi and Shrestha's (2013) work on cause-effect relationships, **Chapter 5** of this thesis presented an extended model of *simple cause-effect*, *multi-causality* and *causal chains* that were found crucial for the demonstration of business reasoning in country reports. Exploring the linguistic construction of cause-effect relationships has revealed that the resources of 'cause in the clause' and connexion are crucial for sequencing couplings and recouplings into the cause-effect

relationships identified in this study. As noted in **Chapter 2**, Weekes (2014) study on HSC exams in business has revealed that the construction of cause-effect relationships is crucial for writing successful exam responses. In these texts implication sequences were identified as the most significant linguistic resources for the construction of cause-effect relationships.

Due to the relatively few instantiations of explanation genres identified in the business country reports reported on in this thesis, the study of implication sequences specifically was beyond the scope of this thesis. However, since **Chapter 3** has identified third-order embedded explaining genres such as consequential explanations, business students need to be taught how to embed them into the generic structure of business reports where they can function in the service of arguing genres. As drawing on explaining genres alongside arguing genres is another option for writers of business country reports, the study of implication sequences remains an important area for further exploration.

6.3.2 Future directions for interdisciplinary research

The findings of this thesis are also relevant for pursuing an interdisciplinary research focus. As noted in **Chapter 1**, SFL and social realist scholars have engaged in interdisciplinary research for solving ‘common problems’ (Martin, 2015, p. 57). One of these common problems concerns the nature of disciplinary knowledge across a wide range of disciplines. It has been also argued throughout this thesis that to fully understand the nature of long business country reports, it is necessary to understand disciplinary knowledge in the field of business studies. The construction of disciplinary knowledge has been an important focus of SFL research from the perspective of ideation. A related area of research is research on ‘cumulative knowledge-building’ in Legitimation Code Theory (Maton, 2014; Maton, Hood & Shay, 2016). In order to study knowledge-building in business students’ writing, LCT Semantics would offer a useful dimension for the analysis of knowledge practices. The concept of the ‘semantic wave’ would be particularly useful for studying what forms of knowledge are realised in business country reports. Studies that explored knowledge-building in student writing in LCT found that high scoring texts tend to

exhibit movements between abstract, technical language realising uncommonsense knowledge and more concrete language realising commonsense knowledge. These movements can be traced on the ‘semantic wave’ and were found to be crucial for cumulative knowledge-building (see e.g. Macnaught, Maton, Martin & Matruglio 2013; Maton, 2013, 2014; Maton, Hood & Shay, 2016; Martin, 2013c; Matruglio, Maton, and Martin 2013). Tracing the profiles of successful business country reports on the semantic wave would reveal the nature of knowledge practices that form the basis of achievement in undergraduate business studies. The results of this research could then inform the design of pedagogic interventions aimed at making the basis of achievement explicit.

Chapter 3 has pointed that certain PESTLE factors might become ‘loaded’ with values particular to a specific culture. This is based on the negative evaluation of certain PESTLE factors (examples include *growing green culture* and *green policies*) as investment risks after their initial positive evaluation as opportunities) through the staging of a challenge genre. Another similar example at the level of discourse semantics from **Chapter 4** is the recoupling of the positive value of the invoked coupling *low cost hydro* as an investment risk through the resource of an inverting recoupling. What is interesting to note here is that a renewable energy source such as *hydroelectricity* is positively appraised as a lower-order coupling. Here the invocation of an attitudinal meaning is what Martin and White (2005) refer to as *affording* an attitudinal reading of ideational meanings. In other words, the attitudinal value can be retrieved from the values particular cultures attach to the ideational meanings. The fact that *low cost hydro* is positively evaluated in the Canada Report is not too surprising given the current debates about climate change, with renewable energy solutions increasingly favoured over fossil fuel resources. However, we need clearer criteria for identifying axiologically charged meanings that have to be retrieved from a particular culture. A useful concept for exploring values attached to PESTLE factors is ‘axiological condensation’, a type of condensation related to the concept of ‘social semantic density’ (Maton, 2013) from the LCT dimension of Semantics. Semantic density is defined as “the degree of condensation of meaning within socio-cultural practices, whether these comprise symbols, terms, concepts, phrases, expressions, gestures, clothing” (Maton, 2013, p. 11). Semantic density can be stronger (SD+) or weaker (SD–), depending on how much meaning is condensed into a term, symbol, or

concept. Axiological condensation refers specifically to the condensation of meanings of “emotional, aesthetic, ethical, political and moral stances” (Maton, 2013, p. 20). Exploring PESTLE factors loaded with cultural values in business country reports was beyond the scope of this thesis, so their study from the perspective of axiological condensation in LCT remains an important area for future research.

6.4 Concluding remarks

In this chapter I have consolidated the most significant descriptive findings of this study and the major contributions made to SFL genre theory and discourse semantics. This thesis has taken a step towards understanding the nature of disciplinary knowledge in undergraduate business studies. It is hoped that the results of this study will inspire further research into the disciplinary knowledge of business studies and the language realising this knowledge. The findings of this study are also intended to contribute to the design of business writing support interventions in business faculties in order to (i) make explicit the basis of achievement in business studies, (ii) equip students with academically valued linguistic resources to necessary demonstrate business reasoning, and (iii) and prepare students for successful writing in the workplace.

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APPENDIX A – Genre analysis of Text 1 (Canada Report)

KEY	signals	example
BOLD CAPITALS	STAGE OF THE SUPERSTRUCTURE	ISSUE
[[bold]]	[[embedded genre realising stage of the superstructure]]	[[challenge]]
bold	stage of [[embedded genre]]	Position challenged
[[[...]]]]	second-order embedded genres	[[[analytical discussion]]]]
normal font	stage of second-order [[[embedded genre]]]]	Issue
<i>'italics'</i>	<i>'phase' within a genre stage</i>	<i>'reason I': cost</i>

Genre staging	Text COUNTRY REPORT: Solar Panels in Canada
ISSUE [[challenge]]	1. Introduction
Position challenged	To a firm such as ours, seeking to market solar panels offshore, Canada's appeal seems obvious. Politically stable, prosperous by conventional measures, culturally similar to Australia, and growing greener, the business environment in Canada would certainly appear to be conducive to undertaking such an export venture.
Rebuttal Arguments	In spite of the apparent strengths of the Canadian marketplace, however, further inspection reveals the difficulties our firm would face in trying to establish a significant presence there. The Canadian solar energy market is subject foremost to challenges derived from its location and existing energy infrastructure. With the Canadian electricity market dominated by hydroelectricity, this low cost source will prove the greatest impediment to the uptake of photovoltaic (PV) panels. Even if electricity were priced in a way that at best took into account negative externalities, or at a minimum generally increased prices, the differences in regional electricity markets would preclude consistent returns for marketers of PV panels. Largely driving these regional differences are a patchwork of cumbersome legislation and rules.
Anti-thesis	This report will explore the political, economic, social and technological opportunities and limitations of producing and selling PV panels in Canada, based on assumptions and limitations set out below. Its ultimate conclusion is that the market potential offered by Canada is outweighed by barriers to profitable operations in the PV industry – a function of market capture by other cheaper, renewable sources, regulation, and the bureaucratic peculiarities of Canadian federalism.

BACKGROUND [[descriptive report]]	2. Scope and exclusions
Rationale	Justifying the relevance of forthcoming statements requires that a number of assumptions be made.
Description: product	Firstly, with a multitude of PV products available (Miller 2008, Murph 2008, Topolsky 2008), and their uses and configurations constantly growing, it is obvious that the broad-brush term “solar panels” is unworkably vague. To that end, this report will limit its discussion to solar panels of the kind our firm produces: permanent installations atop the roofs of residential or industrial buildings, or as part of large-scale solar arrays.
Description: market	Second, given that each Canadian province is responsible for its energy generation, and is variously dominated by coal, nuclear or hydro generators (CEA 2006, p.14), no report should argue “sell to Canada” as this statement fails to take into account these provincial differences. To that end, in provinces (such as Ontario) dominated by ageing coal or nuclear facilities (Wilson 2007) panels would be sold to firms engineering large-scale arrays with the intention of replacing fossil fuel based generators. In provinces captured by renewable energy, there would be no incentive to replace existing infrastructure, therefore distributors acting on behalf of the firm could sell panels to households or industry (who would be able to sell excess electricity back to the grid, known as “net metering”). This report intends to take these regional differences into consideration where appropriate.
Description: production	A final assumption is that the firm is entering the Canadian market with a view to eventually producing there. There are two reasons for this assumption.
<i>‘reason 1’: cost</i>	Firstly, shipping prices will likely prove prohibitively expensive in the long run given that soaring oil costs, whose prices account for nearly half of total freight costs, have translated into increased transport costs (Rubin & Tal, 2008).
<i>‘reason 2’: ranking</i>	The second reason is that if production will eventually occur there, it is important that the country scores well in the relative ease of doing business there. Indeed, in the Ease of Doing Business Index, Canada is ranked seventh to Australia’s ninth (World Bank Group 2008).
PERSPECTIVE 1 [[analytical exposition]]	3. Technological factors
Thesis	The technology of Canada’s existing energy infrastructure proves to be the ultimate deal-breaker for PV panels in Canada, even before economic, social and political factors are taken into consideration, and irrespective of the opportunities that may be uncovered. This stems primarily from the nation’s geographical features, with

	secondary issues being the availability of both inputs and net metering.
Argument 1 [[[[analytical discussion]]]]	3.1 Geography 3.1.1 Availability of Sunlight
Issue	Canada's far north location severely limits where PV cells may be economically integrated into the grid.
Perspective 1	Natural Resources Canada (2007) has calculated the PV potential during summer (July), winter (January), and total annual potential. These calculations show that there is minimal potential for solar to play a large role in providing electricity to Canada – especially as electricity demand is anticipated to expand from 530 TWh in 2003 to 730 TWh in 2020 (CEA 2006, p.11).
Perspective 2	However, that is not to say that entering the Canadian market is not worthwhile for the company. There are tracts of land that would be suitable for power generation, especially the centre of the country and south towards the US border. These are also the areas of highest population density. Since much of the areas with PV potential have higher population density, individual rather than large-scale installations would be the norm.
Argument 2 [[[[analytical discussion]]]]	3.1.2 – Resource Endowment
Issue	Canada's natural resource endowments place an even greater limitation on the viability of producing and marketing solar energy.
Background	Renewable energy, in the form of hydroelectricity, has very much captured the Canadian electricity market. Since the first hydroelectric generator was constructed in 1886, Canada has been utilising natural resources in its electricity generation (CEA 2006, p.5). Hydroelectric generation provides 18% of the nation's electricity, dwarfing coal (19%), nuclear (12%) and natural gas (6%) (CEA 2006) – although, as already discussed, there are considerable variations in electricity sources across Canada's provinces.
Perspective 1	From these figures, two conclusions may be drawn pertaining to market potential. Firstly, that in a country dominated by cheap hydro, there is a severely limited potential for a PV cell firm to capture an all but marginal segment of the electricity market.
Perspective 2	A slightly more optimistic conclusion is that as current fossil fuel plants in provinces such as Alberta, Saskatchewan and Nova Scotia age, there is a potential for solar energy to be utilised there as the former are decommissioned. Alternatively, in such provinces the panels may be utilised as part of an aggressive switch to greener energy.
Resolution	Ultimately, however, it is the very presence of such abundant renewable energy sources that threatens the profitability of any export venture of PV panels to Canadian provinces.

Argument 3 [[[[analytical discussion]]]]	3.2 Labour Availability
Issue	To the extent that PV panels are high-tech products, it is clear that their production requires the availability of highly skilled individuals. Above all, chemical engineers are necessary in the design and production process, and in project management.
Perspective 1	Canada's engineers are notable for their additional accreditation (a P.Eng) and accountability to a peak licensing body, and together with standardised education and stringent qualifications (Professional Engineers, 2008) these qualities make for a workforce of a reliably high quality. Some 160,000 engineers are licensed in Canada, and 10.6% of these are qualified chemical engineers (ibid).
Perspective 2	Despite Canada's availability of labour, and the intellectual capital it implies, the fact that only an engineer with a P.Eng may work in Canada constitutes a barrier to entry, complicating the operation of an Australian managed production facility when that time comes.
Argument 4 [[[[challenge]]]]	3.3 Net Metering
Position challenged	One incentive for households or industry to install PV is that they may on-sell excess electricity generated to the grid.
Rebuttal Arguments <i>'ph-reservation'</i>	Without this incentive, it is reasonable to assume that the uptake of residential or industrial-sited PV will be limited. Industry Canada (2003, p.35) goes so far as to argue that 'where net metering is not allowed, this all but eliminates the opportunity for PV'. Consequently sales would be virtually non-existent in Alberta (ibid.), <i>but have potential in provinces such as British Columbia, Ontario, the Yukon, Nova Scotia (ibid.) and Saskatchewan (SaskPower 2007).</i>
Anti-Thesis	However, even if net metering is available in a given province, individuals must bear the additional cost of secondary meters being fitted or even replaced. At \$C200 for residents, and \$C6000 for commercial bi-directional metering (Industry Canada 2003, p.38), installing PV panels may prove so uneconomical as to deter potential customers.
PERSPECTIVE 2 [[analytical discussion]]	4. Economic Factors
Issue	The health of the Canadian economy should immediately strike this company as a key consideration, not least because 'economic growth continues to drive the global demand for energy to new heights' (Industry Canada 2003, p.10). Consequently, an examination of Canada's indicators and outlook, and energy market and its regulation is necessary to determine the viability of investment there. From this examination, the obvious conclusion is that in spite of a reasonably strong economy the market structure precludes the possibility of PV becoming viable in Canada.

Perspective 1	<p>4.1 Energy Market</p> <p>4.1.1 Demand</p> <p>Electricity demand in Canada is substantial, greater per household than that of its southern neighbour (World Energy Council, 2008), so frequently maligned for its energy consumption. With demand projected to increase annually at a rate of 1.5% to 2%, and the anticipated retirement by 2020 of 20% of facilities operating in 2000 (CEA 2006, p.5), clearly there will be potential for PV panels to soak up some of the demand of this energy hungry nation. This assumes, however, that it can be supplied at a price the market is willing to pay.</p>														
Perspective 2	<p>4.1.2 Supply</p> <p>Herein lies the next greatest constraint to the uptake: electricity prices in Canada are among the lowest in the OECD (OECD 2004) because of their existing mix of generation sources. Given that PV generation costs for a single kilowatt start at a price greater than the current average cost of electricity (World Energy Council, 2008), it is a foregone conclusion that without the appropriate incentives the PV market in Canada will remain marginal.</p>														
Perspective 3 [[[[challenge]]]]	<p>4.2 Economic Performance</p>														
Position challenged	<p>The second point of reference in determining the viability of PV panels in Canada is its economic indicators. Low unemployment and inflation, and a reasonably high GDP per capita point to strong economic foundations (see Table 1</p> <p>Table 1: Selected Economic Indicators</p> <table> <tr> <td>Inflation</td><td>1.9%¹</td></tr> <tr> <td>Unemployment</td><td>6.1%²</td></tr> <tr> <td>Forecast GDP Growth 2008; 2009</td><td>1.3%; 2.1%¹</td></tr> <tr> <td>GDP Per Capita (PPP); Rank</td><td>\$38,200; 21^{st3}</td></tr> <tr> <td>Human Development Index Score; Rank</td><td>0.961; 4^{th4}</td></tr> <tr> <td>GINI Index Coefficient; Rank</td><td>32.1 36^{th3}</td></tr> <tr> <td>Consumer Confidence Index June '08; May '08</td><td>45.1, 60.7⁵</td></tr> </table> <p><i>Sources:</i> ¹ Economist 2008a; ² Scoffield 2008; ³ CIA 2008; ⁴ UNDP 2008; ⁵ RBC 2008</p>	Inflation	1.9% ¹	Unemployment	6.1% ²	Forecast GDP Growth 2008; 2009	1.3%; 2.1% ¹	GDP Per Capita (PPP); Rank	\$38,200; 21 ^{st3}	Human Development Index Score; Rank	0.961; 4 ^{th4}	GINI Index Coefficient; Rank	32.1 36 ^{th3}	Consumer Confidence Index June '08; May '08	45.1, 60.7 ⁵
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GINI Index Coefficient; Rank	32.1 36 ^{th3}														
Consumer Confidence Index June '08; May '08	45.1, 60.7 ⁵														
Rebuttal Arguments	<p>Of some concern, however, is the significant fall in consumer confidence recently, as well as the vulnerability Canada's economy is exposed to, given that 81.6% of its exports go to the US (CIA 2008), a trebling of pre-NAFTA trade levels (Economist 2005a).</p>														
Anti-Thesis	<p>As the world's largest bilateral trading relationship (ibid.) Canada's economic fortunes are closely tied to those of the US, so the recent downturn there is especially problematic. Security measures have slowed cross-border trade, and the appreciation of the Canadian dollar against the U.S. will push the current account into deficit into 2008 and further in 2009 (Economist 2008a). The Economist Intelligence Unit further forecasts that GDP growth this year will slow to 1% (ibid.).</p>														

Resolution	Given that energy demands are linked to economic growth, Canada's solid economic foundations are not sufficient to offset the risk of slowing economic growth. To that end, if the firm chooses to revisit the potential of Canadian market entry, it should wait until such time as the U.S. economy has strengthened, and with it the Canadian.
PERSPECTIVE 3 [[analytical discussion]]	5. Political Factors
Issue	Canada's political landscape is nothing if not fractured, a function of the quirks of federalism. Between federalism, including taxation and Canada's weak political centre, and its lack of energy reform, Canada presents glimpses of opportunity for investment for our firm, however this is more than offset by bureaucratic complications.
Perspective 1	<p>5.1 Federalism</p> <p>5.1.1 Multiple Regulatory Authorities</p> <p>Due to the existence of federal and provincial governments, business regulation is complicated by the fact that there are multiple regulatory authorities. For example, taxation in Canada is characterised by additional complexities relative to nations without such a structure. Federal income taxes are paid, in addition to a provincial income tax (WBG 2008). A value added tax is paid to Ottawa, while a provincial sales tax is paid into state coffers (ibid). Certainly this adds additional costs and complexity to doing business, and it is therefore unsurprising that respondents in the Global Competitiveness Report rated tax rates and tax regulations as the most problematic factors in doing business in Canada (WEF 2008).</p> <p>Canada's tax system should be regarded as a strong downside to operations there.</p>
Perspective 2 [[[[analytical exposition]]]]	5.1.2 Weak Federal Centre
Thesis	The nature of government in Canada suggests that the necessary changes required to make PV competitive there will be slow in the making, if they occur at all.
Argument 1	Slowing decision-making is the 'dysfunctional system' wherein the provinces are constitutionally mandated as being stronger than Ottawa (Economist 2005b). The number of state actors is bound to slow up the process of government. Making it slower still is the minority government formed by Stephen Harper and the Conservatives, the weak Tory opposition, and the disarray in the Bloc Quebecois.
Argument 2	Reducing the probability of reforms ever occurring are the tense relations between the provinces, particularly the westernmost, and the eastern seat of government. With a 'history of bad blood' (Economist 2005c), it can be expected that issues related to equal

	representation and distribution (in terms of population and wealth) will dominate the political agenda.
Reiteration of Thesis	It is feasible, as resources are fought for between the provinces and Ottawa, that political issues such as the need for a less regulated electricity market and more grants for PV installers will slip off the agenda, undermining the possibility of incentives which might make PV competitive.
Perspective 3	<p>5.2 Policies and Regulations affecting Electricity Industry</p> <p>5.2.1 Kyoto Obligations</p> <p>Despite being one of the first nations to sign on to the Kyoto Protocol (CBC 2007), Canada never really participated in its implementation. The Liberals who ratified it ‘did little to meet its stringent targets for emissions reductions’ (Economist 2007a), and the Conservatives were elected on a platform of rejecting Kyoto in favour of a ‘made-in-Canada’ approach to cutting emissions. This presents our firm with an opportunity in that our products may be integrated into the policy, especially should Ottawa be looking to symbolic and visible emissions reduction rather than legislating the cuts that would be painful to industry.</p>
Perspective 4	<p>5.2.2 Lack of Market Reform in Electricity Industry</p> <p>A factor driving the low cost of electricity is the degree of regulation experienced by the energy sector. Only Ontario and Alberta have established markets in which an independent system operator sets and administers policies – the remainder have relationships of various degrees of connection to the government, conferring such benefits as low cost of capital. While some of these provinces consider reform to be necessary, ‘reforms have been aimed at including private-sector investment and protecting access to US electricity markets while avoiding competition in generation and retail markets’ (OCED 2004, p.1). Curiously, pointing to the strength of the aversion to a retail market, some provinces have stronger transmission links with the US than their provincial neighbours (CEA, 2006). Perhaps under true market conditions electricity prices would rise to a point making PV panels competitive, but ‘provinces are politically reluctant to undertake reforms’ (OECD 2004, p.2) meaning that our product will continued to price itself out of the Canadian market.</p>
PERSPECTIVE 4 [[analytical discussion]]	6. Social Factors
Issue	Canada’s cultural landscape presents distinct opportunities to an Australian firm attempting to sell a green form of energy. Firstly it possesses a growing green culture, and secondly the nation is culturally similar to Australia according to Hofstede’s cultural dimensions. Undermining this, however, is what has been termed a ‘passion for bronze’.

Perspective 1 [[[[challenge]]]]	6.1 Green Values and Politics
Background	Canadians are indeed becoming greener (Economist 2007b), and against the preference of the Conservative heartland (Economist 2007c), the government is growing greener too, an indication of Canada's market potential for the firm. Certainly the changes to environmental policy in 2007 would be indicative of this (despite a disappointing failure to reach Kyoto targets). A further indicator would be the improved polling for the Green Party. In 2004, the first time that it had fielded candidates in all 308 ridings, the party received 4.3% of the popular vote, growing to 4.5% in the 2006 election (GPC 2007). Its leader polled 25.8% of the vote in a bi-election later that year (ibid.), and while the party remains without representation in Federal government, its growth will give it an increasingly important voice in political discourse.
Position challenged	All of this points to a strong market potential, especially as the green movement gathers momentum and, in particular, Green Party policies enter public consciousness.
Rebuttal Arguments	However, irrespective of the growth of the Green Movement the fact that it remains marginal, suggests that Canada's practices (i.e. dominance of hydroelectricity) are ahead of their values.
Anti-Thesis	As such, our firm cannot capitalise on the Green Movement wave because Green practice has already far outpaced it.
Perspective 2 [[[[analytical exposition]]]]	6.2 'Passion for Bronze'
Thesis	Further inhibiting the potential to capitalise on the Green Movement is Canada's underlying value set.
Argument 1	The Economist (2005b) argues, 'Canadians distrust big ideas, preferring to put their faith in a proven ability to muddle through', the price of which is argued to be complacency and lack of ambition. The nation's attitude is described as being 'passion for bronze', and its political debates 'tepid'. Assuming this to be the case, this points to some difficulties for our firm in producing and selling solar panels to the country. People distinguished for their ability to 'muddle through' would not be given to aggressively pushing for the systemic changes required to make solar energy form a more than marginal source of Canada's overall capacity.
Argument 2	Most disconcerting of all, a "passion for bronze" has already translated into a weak competitive climate (Scott 2006). In the Global Competitiveness Report (WEF 2008) Canada ranks 13 th , having lingered around that position over the last four years, and in the Business Competitiveness Index (HBS 2006) it ranks 15 th , down from 11 th in 2001.
Reiteration of Thesis	Ultimately, no matter how green the culture becomes, a certain inertia would need to be overcome to push through the radical changes to make the PV market viable for the firm.

Perspective 3	<p>6.3 Hofstede's Cultural Dimensions</p> <p>Australia and Canada are regarded by Hofstede, the author of arguably the most influential cultural framework, as culturally similar - regularly featuring in clusters with other post-colonial nations throughout his findings. In terms of its degree of cultural similarity to Australia, Canada scores equal second, behind only the USA (Fletcher and Bohn 1998). One might expect that these commonalities make for a greater ease of doing business between the two countries, and minimise the probability of cross-cultural conflict. To the extent that scores for uncertainty avoidance, masculinity and long-term outlook are similar, there should be considerable value alignment between the two nations, certainly constituting an operational advantage.</p>
RESOLUTION [[challenge]]	7. Conclusion and Recommendation
Position challenged	Canada provides a business environment favourable to Australian firms by virtue of its cultural similarities and the ease of doing business there.
Rebuttal Arguments	This would be sufficient justification for this firm to export there but for the fact that the firm is selling overpriced renewable energy to a market in which hydroelectricity is already dominant. With electricity so regulated and cheap, and generated in the main by abundant renewable resources, export or even production in Canada is simply uneconomical. Moreover, the softening of the economy, taxation and the 'ambition for bronze' outweigh the potential created by the rise of green values.
Anti-thesis	Ultimately, we should place Canada on an indefinite wait list until an energy market is established, economic growth is again on track and the government responds to its post-Kyoto obligations more aggressively.

Text 1 – CANADA REPORT: Full synoptic view of generic structure

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
ISSUE	[[challenge]] Position challenged Rebuttal Arguments Anti-thesis	
BACKGROUND	[[report]] Rationale Description: product Description: market Description: production	
PERSPECTIVE 1	[[analytical exposition]] Thesis Argument 1 Argument 2 Argument 3 Argument 4	[[[[analytical discussion]]]] Issue Perspective 1 Perspective 2 [[[[analytical discussion]]]] Issue Background Perspective 1 Perspective 2 Resolution [[[[analytical discussion]]]] Issue Perspective 1 Perspective 2 [[[[challenge]]]] Position challenged Rebuttal Arguments <i>'ph/reservation'</i> Anti-Thesis
PERSPECTIVE 2	[[analytical discussion]] Issue Perspective 1 Perspective 2 Perspective 3 Resolution	[[[[challenge]]]] Position challenged Rebuttal Arguments Anti-Thesis
PERSPECTIVE 3	[[analytical discussion]] Issue Perspective 1 Perspective 2	[[[[analytical exposition]]]] Thesis

		Argument 1 Argument 2 Reiteration of Thesis
	Perspective 3	
	Perspective 4	
PERSPECTIVE 4	[[analytical discussion]]	
	Issue	
	Perspective 1	[[[[challenge]]]] Background Position challenged Rebuttal Arguments Anti-Thesis
	Perspective 2	[[[[analytical exposition]]]] Thesis Argument 1 Argument 2 Reiteration of Thesis
	Perspective 3	
RESOLUTION	[[challenge]]	
	Position challenged	
	Rebuttal Arguments	
	Anti-thesis	

Text 1 – CANADA REPORT: Simplified synoptic view of generic structure

GENRE STAGES	[[embedded genre stages]]	[[[[embedded genre stages]]]]
ISSUE	[[challenge]]	
BACKGROUND	[[report]]	
PERSPECTIVE 1	[[analytical exposition]]	
	Thesis	
	Argument 1	[[[[analytical discussion]]]]
	Argument 2	[[[[analytical discussion]]]]
	Argument 3	[[[[analytical discussion]]]]
	Argument 4	[[[[challenge]]]]
PERSPECTIVE 2	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	
	Perspective 3	[[[[challenge]]]]
	Resolution	
PERSPECTIVE 3	[[analytical discussion]]	
	Issue	
	Perspective 1	
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
	Perspective 4	
PERSPECTIVE 4	[[analytical discussion]]	
	Issue	
	Perspective 1	[[[[challenge]]]]
	Perspective 2	[[[[analytical exposition]]]]
	Perspective 3	
RESOLUTION	[[challenge]]	

APPENDIX B: APPRAISAL analysis

This appendix contains the Appraisal analysis of **Text 1**, the **Canada Report**. The text is analysed for ATTITUDE and GRADUATION.

Key:

ATTITUDE (following Martin & White, 2005) red bold font: Target = appraised item + 'positive attitude' – 'negative attitude'			GRADUATION
pink bold font: Type of affect	blue bold font: Type of appreciation	green bold font: Type of judgment	black bold italics
des = desire hap = un/happiness sec = in/security sat = dis/satisfaction	reac: qual = reaction: quality reac: imp = reaction: impact comp: bal = composition: balance comp: compl = composition: complexity val = valuation	norm = normality cap = capacity ten = tenacity ver = veracity prop = propriety	[force] intensifying quantifying: amount extent: distance/scope: space/time [focus] valeur: authenticity/ specificity fulfilment: completion/actualisation

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
1.1	To a firm such as ours, [[seeking to market solar panels offshore]], Canada's appeal <i>seems</i> obvious.	Canada	appeal	+reac: qual		
		Canada's appeal		+val	seems	fulfilment: actualisation
2.1	Politically stable ,	the business environment in Canada	stable	+comp: bal	politically	extent: scope: space
2.2	prosperous by conventional measures,	the business environment in Canada	prosperous	+val	by conventional measures	extent: scope: space
2.3	culturally similar to Australia,	the business environment in Canada			culturally	extent: scope: space
					similar	intensifying
2.4	and growing greener ,	the business environment in Canada			growing	quantifying: amount
					greener	intensifying
2.5	the business environment in Canada <i>would certainly appear</i> to be conductive [[to undertaking such an export venture]].	the business environment in Canada	conductive	+val	would	fulfilment: actualisation
					certainly	fulfilment: actualisation
					appear	fulfilment: actualisation
					such	intensifying
3.1	In spite of [the apparent strengths of] the Canadian marketplace , however, further inspection reveals the difficulties [[our firm <i>would</i> face in [[trying to establish a significant presence there]]]].	the Canadian marketplace	strengths	+val	apparent	fulfilment: actualisation
		significant presence	difficulties	-val	would	fulfilment: actualisation
		our firm ...			trying	fulfilment: completion
		presence			significant	quantifying: amount
4.1	The Canadian solar energy market is subject foremost to challenges [[derived from its location and existing energy infrastructure]].	The Canadian solar energy market	challenges	-val		
		location	challenges	-val		
		existing energy infrastructure	challenges	-val	existing	extent: scope: time

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
5.1	With the Canadian electricity market [[dominated by hydroelectricity]] .	the Canadian electricity market	[[dominated by hydroelectricity]]	–val		
5.2	this low cost source will prove the greatest impediment [to the uptake of photovoltaic (PV) panels].	this ... source = hydroelectricity	low cost	+val		
		this low cost source = hydroelectricity	impediment	–val	will	fulfilment: actualisation
					prove	fulfilment: completion
					the greatest	intensifying
6.1	Even if electricity were priced in a way [[that at best took into account negative externalities, or at a minimum generally increased prices]] .	externalities	negative	–val		
		prices			generally increased	valeur: specificity quantifying: amount
6.2	the differences [in regional electricity markets] would preclude consistent returns for marketers of PV panels.	the differences [in regional electricity markets]	would preclude		would	fulfilment: actualisation
		regional electricity markets	differences	inv –val	differences	extent: scope: space
		returns	consistent	+comp: bal		
7.1	[[Largely driving these regional differences]] are a patchwork of cumbersome legislation and rules .	these regional differences		inv –val	Largely differences	intensifying extent: scope: space
		cumbersome legislation and rules	cumbersome	+comp: bal		
		legislation	cumbersome	+comp: bal		
		rules	cumbersome	+comp: bal		
8.1	This report will explore the political, economic, social and technological opportunities and limitations [of [[producing and selling PV panels in Canada]]], based on assumptions and limitations [set out below].	[[producing and selling PV panels in Canada]] .	opportunities	+val		
		[[producing and selling PV panels in Canada]] .	limitations	–val		
9.1	Its ultimate conclusion is [[that the market potential [offered by Canada]] is outweighed by barriers [to profitable	the market potential [offered by Canada]	outweighed			
		market	potential	+val		

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	operations [in the PV industry] – a function of market capture by other cheaper, renewable sources, regulation, and the bureaucratic peculiarities of Canadian federalism]].	operations [in the PV industry]	profitable	+val		
		market	capture	–val		
		renewable sources	barriers	–val	other	quantifying: amount
		regulation	barriers	–val	cheaper	intensifying
		the bureaucratic peculiarities of Canadian federalism]	barriers	–val		
		Canadian federalism	bureaucratic peculiarities	–comp: compl		
10.1	[[Justifying the relevance of forthcoming statements]] requires [[that a number of assumptions be made]].	forthcoming statements	relevance	+val	requires	intensifying a proposal
					a number of	quantifying: amount
11.1	Firstly, with a multitude of PV products [[available (Miller 2008, Murph 2008, Topolsky 2008),]] and their uses and configurations constantly growing]], it is obvious [[that the broad-brush term “solar panels” is unworkably vague]].	a multitude of PV products	available	+val	a multitude of	quantifying: amount
		their uses and configurations	constantly growing	+val	constantly	amplified force: quantifying: frequency
		the term “solar panels”	broad-brush	–val	growing	quantifying: amount
		the broad-brush term “solar panels”	unworkably vague	–comp: compl	unworkably	intensifying
		it ... [[that the broad-brush term “solar panels” is unworkably vague]]	obvious	+val		fulfilment: actualisation
12.1	To that end, this report will limit its discussion to solar panels [of the kind our firm produces: permanent installations atop the roofs of residential or industrial buildings, or as part of large-scale solar arrays].	this report			will	fulfilment: actualisation
		its discussion			limit	extent: scope: space
		solar panels			the kind	valeur: specificity
		large-scale solar arrays			part of	valeur: specificity
13.1	Second, given that each Canadian province is responsible for its energy generation,	each Canadian province	responsible	+val: inv +prop	each	quantifying: amount

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
13.2	and is variously dominated by coal, nuclear or hydro generators (CEA 2006, p.14),	each Canadian province	variously dominated	–val	variously	extent: scope: space
13.3	no report should argue				should	intensifying a proposal
13.4	"sell to Canada"					
13.5	as this statement fails to take into account these provincial differences .	this statement	fails to take into account	–val	fails	fulfilment: completion
					take into account	intensifying: infusion of manner
		provincial differences			differences	extent: scope: space
14.1	To that end, in provinces (such as Ontario) [[dominated by ageing coal or nuclear facilities (Wilson 2007)]] panels would be sold to firms [[engineering large-scale arrays [with the intention [of replacing fossil fuel based generators]]]].	provinces (such as Ontario)	dominated	–val		
		coal or nuclear facilities	ageing	–val		
		panels			would be sold	fulfilment: actualisation
15.1	In provinces [[captured by renewable energy]], there would be no incentive [[to replace existing infrastructure]].	provinces	captured by renewable energy	–val		
		provinces [[captured by renewable energy]],	there would be no incentive [[to replace existing infrastructure]]	–val	would	fulfilment: actualisation
					existing	extent: distance: time
15.2	therefore distributors [[acting on behalf of the firm]] could sell panels to households or industry [[(who would be able to sell excess electricity back to the grid, [[known as "net metering"]])]].	distributors	could sell		could	fulfilment: actualisation
		households or industry	would be able to sell		would	fulfilment: actualisation
		electricity	excess		be able to	intensifying a proposal
16.1	This report intends to take these regional differences into	these regional differences			differences	extent: scope: space

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	<i>consideration</i>	This report	<i>take ...into consideration</i>		<i>take ...into consideration</i>	intensifying: infusion of manner
16.2	where appropriate .	take these regional differences into consideration	appropriate	+val		
17.1	A final assumption is [[that the firm is entering the Canadian market with a view to eventually [[producing there]]]].				eventually	extent: distance: time
18.1	There are two reasons for this assumption.	reasons			two	quantifying: amount
19.1	Firstly, shipping prices will likely prove prohibitively expensive in the long run	shipping prices	will likely prove prohibitively expensive in the long run	-val	will	fulfilment: actualisation
					likely	fulfilment: actualisation
					prove	fulfilment: completion
					prohibitively	intensifying
					in the long run	extent: distance: time
19.2	given that soaring oil costs , [[whose prices account for nearly half of total freight costs]], have translated into increased transport costs (Rubin & Tal, 2008).	oil costs	soaring		soaring	intensifying: infusion
		freight costs	nearly half of total		nearly	fulfilment: completion
		transport costs	increased		half of total	quantifying: amount
20.1	The second reason is [[that if production will eventually occur there, it is important [[that the country scores well in the relative ease of doing business there]]]]	production	will eventually occur		will	fulfilment: actualisation
		[[that the country scores well in the relative ease of doing business there]]	important	+val	eventually	extent: distance: time
		the country	scores well	inv +val	scores well	intensifying
		doing business	relative ease	[+comp:	relative	intensifying:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
				compl		isolating: relative
21.1	<i>Indeed</i> , in the Ease of Doing Business Index, Canada is ranked seventh to Australia's ninth (World Bank Group 2008).	Canada	seventh to Australia's ninth		<i>Indeed</i>	intensifying
					seventh to ... ninth	intensifying: isolating: relative
22.1	The technology of Canada's existing energy infrastructure proves to be the ultimate deal-breaker for PV panels in Canada,	The technology of Canada's existing energy infrastructure	the ultimate deal-breaker	–val	the ultimate	intensifying
		energy infrastructure	existing		existing	extent: scope: time
22.2	even before economic, social and political factors are taken into consideration ,	economic, social and political factors			even	intensifying
			taken into consideration		taken into consideration	intensifying: infusion of manner
23.1	and irrespective of the opportunities [[that may be uncovered]] .	[[that may be uncovered]]	opportunities	+val	may	fulfilment: actualisation
23.1	This stems primarily from the nation's geographical features ,	the nation's geographical features	the ultimate deal-breaker	–val		
23.2	with secondary issues being the availability of both inputs and net metering .	the availability of both inputs and net metering	secondary issues	–val	secondary	intensifying
		inputs	the availability of both inputs and net metering	+val	both	quantifying: amount
		net metering	the availability of both inputs and net metering	+val	both	quantifying: amount
24.1	Canada's far north location severely limits [[where PV cells may be economically integrated into the grid]] .	Canada's far north location	limits	–val	severely	intensifying
		PV cells			may	fulfilment: actualisation
		PV cells			economically	extent: scope: space
25.1	Natural Resources Canada (2007) has calculated the PV potential during summer (July), winter (January), and	PV	potential	+val		
		PV			total	quantifying: amount
		PV			annual	quantifying:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	<i>total annual potential.</i>					frequency
26.1	These calculations show that there is <i>minimal potential</i> for <i>solar</i> to play a <i>large role</i> [[in providing electricity to Canada]] –	<i>solar</i>	<i>potential</i>		<i>minimal</i>	quantifying: amount
		<i>role</i> [[in providing electricity to Canada]			<i>large</i>	quantifying: amount
26.2	<i>especially</i> as <i>electricity demand is anticipated to expand from 530 TWh in 2003 to 730 TWh in 2020</i> (CEA 2006, p.11).	<i>electricity</i>	<i>demand</i>		<i>is anticipated to expand</i>	quantifying: amount
					<i>from 530 TWh in 2003 to 730 TWh</i>	quantifying: amount
					<i>in 2020</i>	extent: scope: time
27.1	However, that is <i>not to say</i> that [[entering the Canadian market is <i>not worthwhile</i> for the company]].	<i>entering the Canadian market</i>	<i>worthwhile</i>	+val	<i>not to say ...not</i>	intensifying
28.1	There are <i>tracts of land</i> that <i>would</i> be <i>suitable</i> for power generation, <i>especially</i> the centre of the country and south towards the US border.	<i>tracts of land</i>	<i>suitable</i>	+val	<i>would</i>	
					<i>especially</i>	intensifying
29.1	These are also <i>the areas of highest population density.</i>	<i>the areas of population density</i>	<i>suitable</i>	+val	<i>highest</i>	intensifying
30.1	Since <i>much</i> of <i>the areas</i> with <i>PV potential</i> have <i>higher population density.</i>	<i>the areas</i> with <i>PV potential</i>	<i>potential</i>	+val	<i>much</i>	quantifying: amount
		<i>population density</i>			<i>higher</i>	intensifying
30.2	<i>individual</i> rather than large-scale <i>installations would</i> be <i>the norm.</i>	<i>individual ... installations</i>	<i>the norm</i>	+val	<i>would</i>	focus: fulfilment: actualisation
31.1	<i>Canada's natural resource endowments</i> place an <i>even greater limitation</i> on the <i>viability</i> of [[producing and marketing solar energy]].	<i>Canada's natural resource endowments</i>	<i>limitation</i>	–val	<i>even greater</i>	intensifying
		<i>[[producing and marketing solar energy]]</i>	<i>viability</i>	+val		
32.1	<i>Renewable energy, in the form of hydroelectricity,</i> has <i>very much captured</i> the Canadian electricity market.	<i>Renewable energy, in the form of hydroelectricity</i>	<i>captured</i>	–val	<i>very</i>	intensifying
					<i>much</i>	quantifying: amount
33.1	<i>Since the first</i> hydroelectric generator				<i>Since</i>	quantifying:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	was constructed <i>in 1886</i> ,					distance: time
					<i>the first</i>	intensifying
					<i>in 1886</i> ,	quantifying: distance: time
33.2	Canada has been utilising natural resources in its electricity generation (CEA 2006, p.5).					
34.1	Hydroelectric generation provides 18% of the nation's electricity, dwarfing coal (19%), nuclear (12%) and natural gas (6%) (CEA 2006) –				18%, 19%, 12%, 6%	quantifying: amount
34.2	although, << >>, there are considerable variations in electricity sources across Canada's provinces .	electricity sources across Canada's provinces	variations	+comp: compl	considerable	quantifying: amount
34.3	<<as already discussed>>					
35.1	From these figures, two conclusions may be drawn				two	quantifying: amount
					may	fulfilment: actualisation
35.2	pertaining to market potential .	market	potential	+val		
		a country	dominated	–val		
36.1	Firstly, that in a country [[dominated by cheap hydro]], there is a severely limited potential for a PV cell firm to capture an all but marginal segment of the electricity market .	hydro	cheap	+val		
		[[to capture ...electricity market]]	limited potential	–val	severely	
		electricity market	capture	+val		
		segment			all but marginal	extent: scope: space
37.1	A slightly more optimistic conclusion is [[that as current fossil fuel plants in provinces such as Alberta, Saskatchewan and Nova Scotia age , there is a potential for solar energy [[to be utilised there as the former are decommissioned]]]].	conclusion	optimistic	+val	slightly more	intensifying
		current fossil fuel plants	age	–val	current	extent: distance: time
		solar energy	potential	+val		
		fossil fuel plants			provinces such as Alberta, Saskatchewan and	extent: distance: space

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
					<i>Nova Scotia</i>	
38.1	Alternatively, in such provinces the panels <i>may</i> be utilised as part of an aggressive switch to greener energy .	the panels			<i>may</i> be utilised	fulfilment: actualisation
		the panels	aggressive switch to greener energy	+val	aggressive	intensifying
		energy			greener	intensifying
39.1	Ultimately, however, it is the very presence of such abundant renewable energy sources [[that threatens the profitability [of any export venture of PV panels to Canadian provinces]].	the very presence of such abundant renewable energy sources	threatens	–val		
		such abundant renewable energy sources			very presence	intensifying
		renewable energy sources	such abundant	inv –val	such abundant	quantifying: amount
		any export venture of PV panels to Canadian provinces	profitability	–val	any	softened focus: fulfilment
40.1	To the extent that PV panels are high-tech products,					
41.1	Above all, chemical engineers are necessary in the design and production process, and in project management .	chemical engineers	necessary	nv +prop		intensifying a proposal; directive authorially-sourced social sanction
42.1	Canada's engineers are notable for their additional accreditation (a P.Eng) and accountability to a peak licensing body ,	Canada's engineers	notable	+cap		
		Canada's engineers	accreditation	+val [inv +cap]	additional	quantifying: amount
		Canada's engineers	accountability	+val [inv +cap]		
		licensing body	peak	+ val		
42.2	and together with standardised education and stringent qualifications (Professional Engineers, 2008) these qualities make for a workforce of a reliably high quality .	these qualities = additional accreditation (a P.Eng) and accountability to a peak licensing body , standardised education and stringent qualifications	a workforce of a ... quality	+val [inv +cap]	reliably high	intensifying
		standardised education and	qualities	+val		

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
		stringent qualifications		[inv +cap]		
		education	standardised	+comp: bal [inv +cap]		
		qualifications	stringent	+val [inv +cap]		
		workforce	quality	+val [inv +cap]	reliably high	intensifying
43.1	Some 160,000 engineers are licensed in Canada,	engineers	licensed	+cap	Some 160,000	quantifying: amount
43.2	and 10.6% of these are qualified chemical engineers (ibid).	chemical engineers	qualified	+cap	10.6%	quantifying: amount
44.1	Despite Canada's availability of labour, and the intellectual capital [[it implies]], [[the fact [[that only an engineer with a P.Eng may work in Canada]] constitutes a barrier [to entry]]],	Canada's labour	availability	+val		
		[[it implies]] = Canada's availability of labour	intellectual capital	+val [inv +cap]		
		[[the fact [[that only an engineer with a P.Eng may work in Canada]]	barrier	– val	only	focus: counter-expectancy
					may	fulfilment: actualisation
44.2	complicating the operation [of an Australian managed production facility]	the operation [of an Australian managed production facility]	complicating	-comp: compl		
44.3	when that time comes.					
45.1	One incentive [for households or industry [[to install PV]]] is [[that they may on-sell excess electricity [[generated]] to the grid]] .	to install PV	incentive	+val	One	quantifying: amount
46.1	Without this incentive, it is reasonable [[to assume [[that the uptake [of residential or industrial-sited PV] will be limited]]]].	[[to assume [[that the uptake [of residential or industrial-sited PV] will be limited]]]]	it is reasonable	+comp: bal		
		the uptake of residential or industrial-sited PV	limited	–val	will be	fulfilment: actualisation
47.1	Industry Canada (2003, p.35) goes so far as to argue that 'where net metering is not allowed,	net metering			not allowed	negation + intensifying a proposal

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
47.2	this all but eliminates the opportunity for PV'.	this = where net metering is not allowed	opportunity	+val	all but eliminates	fulfilment: completion
48.1	Consequently sales would be virtually non-existent in Alberta (ibid.),	sales	non-existent	–val	would be	fulfilment: actualisation
48.2	but have potential in provinces such as British Columbia, Ontario, the Yukon, Nova Scotia (ibid.) and Saskatchewan (SaskPower 2007).	sales	potential	+val		
		potential			provinces such as British Columbia, Ontario, the Yukon, Nova Scotia (ibid.) and Saskatchewan	extent: scope: space
49.1	However, even if net metering is available in a given province,	net metering	available	+val		
49.2	individuals must bear the additional cost [of secondary meters [[being fitted or even replaced]]] .	individuals	bear	–val	must	intensifying a proposal
		of secondary meters being fitted or even replaced	cost		additional	quantifying: amount
		meters			secondary	quantifying: amount
		replaced			even	intensifying
50.1	At \$C200 for residents, and \$C6000 for commercial bi-directional metering (Industry Canada 2003, p.38), [[installing PV panels]] may prove so uneconomical as to deter potential customers .	[[installing PV panels]]			\$C200	quantifying: amount
		[[installing PV panels]]			\$C6000	quantifying: amount
		[[installing PV panels]]	uneconomical	–val	may	fulfilment: actualisation
					prove	fulfilment: completion
					so	intensifying
		customers	potential	+val	deter	intensifying a proposal
51.1	The health [of the Canadian economy] should immediately strike this company as a key consideration ,	The health [of the Canadian economy]	strike	+sat: interest	should	intensifying a proposal
		The health [of the Canadian economy]	key	+val	consideration	intensifying: infusion of manner
51.2	not least because ' economic growth continues to drive the global demand [for energy] to new heights ' (Industry	economic growth	drive	+val	not least	heightened negation + force: intensifying:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	Canada 2003, p.10).					isolating: relative
		economic demand [for energy] to new heights			growth	quantifying: amount
		[for energy]	new heights	+val		
			demand	+val	global	extent: scope: space
52.1	Consequently, an examination [of Canada's indicators [and outlook, [and energy market [and its regulation]]]] is necessary [[to determine the viability [of investment] there]].	[of Canada's indicators [and outlook, [and energy market [and its regulation]]]]			examination	intensifying: infusion with manner, invoking rigour
			necessary	+prop		intensifying a proposal; directive authorially-sourced social sanction
		[of investment]	viability	+val		
53.1	From this examination , the obvious conclusion is [[that in spite of a reasonably strong economy the market structure precludes the possibility [of PV becoming viable] [in Canada]]].	conclusion	obvious	+val		fulfilment: actualisation
		the obvious conclusion	[[that in spite of a reasonably strong economy the market structure precludes the possibility [of PV becoming viable [in Canada]]].	-val		
		conclusion	obvious	+val		
		economy	strong	+val	reasonably	softened focus
		the market structure	precludes	-val		
		the possibility of PV	viable	+val	becoming	fulfilment: actualisation
		PV			possibility	fulfilment: actualisation
54.1	Electricity demand in Canada is substantial, greater per household than	Electricity demand in Canada			substantial	quantifying: amount

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	that of its southern neighbour (World Energy Council, 2008), [[so frequently maligned for its energy consumption]].	Electricity demand in Canada			greater per household than	quantifying: amount intensifying: isolating: localised
		its southern neighbour	maligned	–val [inv –norm]	so frequently	amplified force: quantifying: frequency
55.1	With demand [[projected to increase annually at a rate of 1.5% to 2%]],	demand			projected to	force: intensifying a proposal
					to increase	quantifying: amount
					annually	amplified force: quantifying: frequency
					at a rate of 1.5% to 2%	quantifying: amount
55.2	and (with) the anticipated retirement by 2020 of 20% of facilities operating in 2000 (CEA 2006, p.5),	retirement			anticipated	intensifying a proposal
					by 2020	extent: distance: time
		facilities			20%	quantifying: amount
		facilities operating			in 2000	extent: distance: time
55.3	clearly there will be potential for PV panels [[to soak up some of the demand [of this energy hungry nation]]].				clearly	intensifying a proposal
		[[to soak up some of the demand [of this energy hungry nation]]]	potential	+val	will be	fulfilment: actualisation
		this energy hungry nation	demand	+val	some	quantifying: amount
		nation	energy hungry	–sat: interest		
56.1	This assumes, however, [[that it can be supplied at a price [[the market is willing to pay]]]].	This = there will be potential			[[that it can be supplied at a price [[the market is willing to pay]]]].	fulfilment: actualisation

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
					to pay]]	
		it = energy			can be supplied	fulfilment: actualisation
		a price	[[the market is willing to pay]]	+incl		
57.1	Herein lies the next greatest constraint to the uptake:	electricity prices in Canada among the lowest in the OECD	constraint	–val	the next greatest	intensifying: isolating: relative
57.2	electricity prices in Canada are among the lowest in the OECD (OECD 2004) because of their existing mix of generation sources .	electricity prices in Canada		inv –val	the lowest	intensifying: isolating: relative
					in the OECD	extent: distance: space
		generation sources		inv –val	existing mix	extent: distance: time & quantifying: amount (variety)
58.1	Given that PV generation costs [for a single kilowatt] start at a price greater than the current average cost of electricity (World Energy Council, 2008),	PV generation costs [for a single kilowatt]		inv –val	a price greater than the current average cost of electricity	
		price		inv –val	greater	intensifying: isolating: localised
		cost of electricity			current	extent: distance: time
					average	quantifying: amount
58.2	it is a foregone conclusion [[that without the appropriate incentives the PV market in Canada will remain marginal]].	the PV market in Canada	WITHOUT the appropriate incentives	–val	will remain	focus: fulfilment: actualisation
					marginal	amplified force: quantifying: amount
59.1	The second point [of reference [[in determining the viability [of PV panels] [in Canada]]] is its economic indicators .	PV panels in Canada	viability	+val		
		its economic indicators	strong economic foundations	+val		
60.1	Low unemployment and inflation , and	unemployment	point to strong	+val	Low	quantifying: amount

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	a <i>reasonably high</i> GDP per capita point to <i>strong</i> economic foundations (see Table 1).		<i>economic foundations</i>		<i>point to</i>	fulfilment: actualisation
		<i>inflation</i>		+val		
		<i>GDP per capita</i>		+val	<i>reasonably high</i>	intensifying
		<i>economic foundations</i>	<i>strong</i>	+val		intensifying
61.1	Of <i>some concern</i> , however, is the <i>significant fall</i> [in <i>consumer confidence recently</i> ,	<i>consumer confidence</i>	<i>concern</i>	–val	<i>some</i>	
				inv –val	<i>significant fall...</i>	quantifying: amount
					<i>recently</i>	extent: distance: time]
61.2	as well as the <i>vulnerability</i> [[<i>Canada's economy</i> is <i>exposed</i> to]],	<i>Canada's economy</i>	<i>exposed to vulnerability</i>	–val		
61.3	given that <i>81.6%</i> of <i>its exports</i> go to the US (CIA 2008)], a <i>trebling</i> [of pre-NAFTA trade levels] (Economist 2005a).	<i>its exports</i>			<i>81.6%</i>	quantifying: amount
					<i>trebling</i>	quantifying: amount
62.1	As the <i>world's largest bilateral trading relationship</i> (ibid.) <i>Canada's economic fortunes</i> are <i>closely tied</i> to those [of the US],	<i>world's largest bilateral trading relationship</i>				
		<i>Canada's economic fortunes</i>	<i>tied</i>	–val	<i>closely</i>	intensifying
62.2	so the <i>recent downturn there</i> is <i>especially problematic</i> .	the <i>recent downturn there</i> = the US	<i>problematic</i>	–val	<i>especially</i>	intensifying
			<i>downturn</i>	–val	<i>recent</i>	extent: distance: time
63.1	<i>Security measures</i> have <i>slowed</i> cross-border trade,	<i>Security measures</i>	<i>have slowed</i>	–val		
63.2	and the <i>appreciation</i> [of the <i>Canadian dollar against the U.S.</i>] <i>will</i> push the <i>current</i> account into <i>deficit in 2008</i> and <i>further in 2009</i> (Economist 2008a).	the <i>appreciation</i> [of the <i>Canadian dollar against the U.S.</i>]	<i>will</i> push the <i>current</i> account into <i>deficit in 2008</i> and <i>further in 2009</i>	inv –val	<i>will</i>	fulfilment: actualisation
					<i>current</i>	extent: distance: time
					<i>deficit</i>	quantifying: amount
					<i>in 2008</i> and <i>in 2009</i>	extent: distance: time

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
					<i>further</i>	intensifying
64.1	The Economist Intelligence Unit <i>further</i> forecasts [[that GDP growth this year <i>will slow</i> to 1% (ibid.)]].	GDP growth	<i>will slow</i>	-val	<i>further</i>	intensifying
					<i>growth</i>	quantifying: amount
					<i>will</i>	fulfilment: actualisation
65.1	Given that energy demands are linked to economic growth ,	energy	demands	+val	growth	quantifying: amount
65.2	Canada's solid economic foundations are <i>not sufficient</i> [[to offset the risk [of slowing economic growth]]].	Canada's economic foundations	solid	+val		quantifying: amount
		Canada's solid economic foundations	<i>not sufficient</i> [[to offset the risk...]]	- comp: bal - val	<i>not sufficient</i>	quantifying: amount
		slowing economic growth	risk	- val	<i>slowing</i>	quantifying: amount
					<i>growth</i>	quantifying: amount
66.1	To that end, if the firm chooses to revisit the potential [of Canadian market entry],	Canadian market entry	potential	+val		
66.2	it should wait	It = the firm		directive authorially- sourced +prop	should	intensifying a proposal
66.3	UNTIL such time as the U.S. economy has strengthened , and with it the Canadian .	the U.S. economy	has strengthened	+val	such time	extent: distance: time
		the Canadian (economy)				
67.1	Canada's political landscape is <i>nothing if not fractured</i> , a function [of the quirks [of federalism]].	Canada's political landscape	<i>nothing if not fractured</i> ,	-val	<i>nothing if not</i>	intensifying
		the quirks [of federalism]	quirks	-val		
68.1	Between federalism , << >>, and its lack of energy reform , Canada presents glimpses [of opportunity [for investment]] for our firm,	federalism	quirks*	-val		
		lack of energy reform ,		-val	lack	fulfilment: completion
		Canada	opportunity	+val	presents	fulfilment: completion
					glimpses	quantifying: amount
68.2	HOWEVER this is <i>more than offset</i> by	this = glimpses of	offset	-comp: bal	more than	intensifying:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	bureaucratic complications.	opportunity				isolating: localised
			bureaucratic complications	–comp: compl		
				–val		
68.3	<<including taxation and Canada's weak political centre>> ,	taxation Canada's weak political centre	weak	–val		
69.1	Due to the existence of federal and provincial governments, business regulation is complicated by [the fact [[that there are multiple regulatory authorities]]].	business regulation multiple regulatory authorities	complicated complicated	–comp: compl –comp: compl		multiple quantifying: amount
70.1	For example, taxation in Canada is characterised by additional complexities [[relative to nations without such a structure]].	taxation	complexities			
71.1	Federal income taxes are paid, IN ADDITION to a provincial income tax (WBG 2008).	Federal income taxes a provincial income tax	complexities complexities	–comp: compl	additional	quantifying: amount
72.1	A value added tax is paid to Ottawa,	A value added tax	complexities			
72.2	while a provincial sales tax is paid into state coffers (ibid).	a provincial sales tax	complexities			
73.1	Certainly this adds additional costs and complexity [[to doing business]],	this = taxes	complexity	–comp: compl	Certainly ... adds additional	fulfilment: actualisation quantifying: amount quantifying: amount
73.2	and it is therefore unsurprising [[that respondents in the Global Competitiveness Report rated tax rates and tax regulations as the most problematic factors [[in doing business in Canada (WEF 2008)]]].	[[that respondents in the Global Competitiveness Report rated tax rates and tax regulations as the most problematic factors [[in doing business in Canada (WEF 2008)]]].	it is unsurprising	+sec: confidence		
		factors = tax rates and tax regulations	problematic	–val	the most	intensifying: isolating: relative

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
74.1	Canada's tax system should be regarded as a strong downside to operations there.	Canada's tax system	downside	–val	should	intensifying a proposal
					strong	intensifying
75.1	The nature [of government] in Canada suggests [[that the necessary changes [[required to make PV competitive there]] will be slow in the making]]],	the necessary changes [[required to make PV competitive there	slow	–val	will be	fulfilment: actualisation
		PV	competitive	–val		
75.2	if they occur at all.					
76.1	[[Slowing decision-making] is the 'dysfunctional system']]	decision-making system	dysfunctional	–val	Slowing	intensifying
76.2	wherein the provinces are constitutionally mandated as [[being stronger than Ottawa]] (Economist 2005b).	the provinces		–val	constitutionally	extent: scope: space
				–val	stronger	intensifying: isolating: localised
77.1	The number of state actors is bound to slow up the process of government.	The number of state actors	slow up	–val [inv –cap]	number of	quantifying: amount
					bound to	fulfilment: actualisation
78.1	[[Making it slower] still is the minority government [[formed by Stephen Harper and the Conservatives, the weak Tory opposition, and the disarray in the Bloc Quebecois]].	the minority government [[formed by Stephen Harper and the Conservatives, the weak Tory opposition, and the disarray in the Bloc Quebecois]].	[[Making it slower]]	–val [inv –cap]		intensifying: isolating: localised
		the weak Tory opposition	weak	–val [inv –cap]		
		the disarray in the Bloc Quebecois	disarray	–comp: bal [inv –cap]		
79.1	[[Reducing the probability [of reforms [[ever occurring]]]]] are the tense relations [between the provinces, particularly the westernmost, and the eastern seat of government].	the tense relations [between the provinces, particularly the westernmost, and the eastern seat of government]	[[Reducing the probability [of reforms [[ever occurring]]]]]		Reducing	quantifying: amount
					ever	extent: distance: time
					particularly	intensifying

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
		relations	tense	–sec: disquiet		
80.1	With a 'history of bad blood' (Economist 2005c), it can be expected [[that issues [[related to equal representation and distribution (in terms of population and wealth)]] will dominate the political agenda]].	the tense relations [between the provinces...	a 'history of bad blood'	–hap: antipathy		
		[[that issues [[related to equal representation and distribution (in terms of population and wealth)]] will dominate the political agenda]].	dominate	–val	will	fulfilment: actualisation
		representation and distribution	equal	+comp: bal		
81.1	<i>It is feasible</i> , << >> [[that political issues such as the need for a less regulated electricity market and more grants for PV installers will slip off the agenda,]]	[[that political issues such as the need for a less regulated electricity market and more grants for PV installers will slip off the agenda]]	<i>It is feasible</i>	+val	<i>It is feasible</i>	fulfilment: actualisation
		political issues [...]	slip off	–val	will	fulfilment: actualisation
		a less regulated electricity market and more grants for PV installers	the need	inv –val	the need	intensifying a proposal; directive authorially-sourced social sanction
		electricity market	less regulated	+comp: bal	less	intensifying: isolating: localised
		grants for PV installers			more	intensifying: isolating: localised
81.2	<<as resources are fought for between the provinces and Ottawa,>>	resources	fought for	–val		
81.3	undermining the possibility [of incentives [[which might make PV competitive]]]	the possibility [of incentives [...]]	undermining	–val	possibility	fulfilment: actualisation
		incentives [[which might make PV competitive]]	possibility	+val		

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
		[[which <i>might</i> make PV competitive]]	incentives	+val	<i>might</i>	fulfilment: actualisation
		PV	competitive	+val		
82.1	Despite [[being <i>one of the first nations</i> [[to sign on to the Kyoto Protocol (CBC 2007)]]]], <i>Canada never really</i> participated in its implementation.	Canada		inv +val	<i>one of the first nations</i> [[to sign on to the Kyoto Protocol]]	intensifying: isolating: relative
			<i>never really</i> participated in its implementation	inv -val	<i>never</i>	heightened negation/ fulfilment: completion
83.1	The Liberals [[who ratified it]] 'did <i>little</i> to meet <i>its stringent targets</i> [for <i>emissions reductions</i>]' (Economist 2007a),	The Liberals [[who ratified it]]	did <i>little</i> to meet		<i>little</i>	quantifying: amount
		targets	stringent	+val [inv -ten]		
		emissions reductions			reductions	quantifying: amount
83.2	and the Conservatives were elected on a platform [of <i>rejecting</i> Kyoto] in favour [of a 'made-in-Canada' approach to [[cutting emissions]]].	a platform	[of <i>rejecting</i> Kyoto]	-val		
		[[cutting emissions]]	in favour of	+inc: des	cutting	quantifying: amount
		approach	'made-in-Canada'	+val [inv +norm]		
84.1	This <i>presents</i> our firm with an <i>opportunity</i> [[in that <i>our products may</i> be <i>integrated</i> into the policy,]] <i>especially should Ottawa be looking</i> to <i>symbolic</i> and <i>visible emissions reduction</i> rather than <i>legislating the cuts</i> [[that <i>would</i> be <i>painful</i> to industry]].	This	<i>presents</i> an <i>opportunity</i>	+val	<i>presents</i>	fulfilment: completion
		our products	<i>may</i> be <i>integrated</i>	+comp: bal	<i>may</i>	fulfilment: actualisation
					<i>especially</i>	intensifying
		Ottawa	<i>should be looking</i> to <i>symbolic</i> and <i>visible emissions reduction</i>	+val	<i>should be looking</i>	fulfilment: actualisation
		emissions reduction	<i>symbolic</i>	+val	reduction	quantifying: amount
		emissions reduction	<i>visible</i>	+val	reduction	quantifying: amount
		legislating the cuts	<i>would</i> be <i>painful</i>	-val	<i>would</i>	fulfilment: actualisation

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
85.1	A factor [[driving the low cost [of electricity]]] is the degree [of regulation [[experienced by the energy sector]]].	A factor [[driving the low cost [of electricity]]]	the degree [of regulation [[experienced by the energy sector]]	inv –val	degree	extent: scope: space
		cost of electricity	low			quantifying: amount
86.1	Only Ontario and Alberta have established markets [[in which an independent system operator sets and administers policies]] -	Ontario and Alberta			Only	intensifying: isolating: relative
86.2	the remainder have relationships [of various degrees [of connection to the government]],	the remainder have relationships [of various degrees [of connection to the government]],	such benefits	+val	various	quantifying: amount
					degrees	extent: scope: space
86.3	conferring such benefits as low cost of capital .	such benefits	conferring	+val	such	intensifying
		low cost of capital	such benefits	+val	low	quantifying: amount
87.1	While some of these provinces consider reform to be necessary,	these provinces			some	quantifying: amount
		reform	consider ... to be necessary	inv –prop	consider	intensifying: infusion of manner/ intensifying a proposal; directive authorially-sourced social sanction
87.2	'reforms have been aimed at [[including private-sector investment and protecting access to US electricity market while avoiding competition in generation and retail markets ' (OCED 2004, p.1)]].	reforms	aimed at		aimed	valeur: authenticity
		private-sector investment	including	+val		
		access to US electricity market	protecting	+val		
88.1	Curiously, pointing to the strength [of the aversion to a retail market],	a retail market	the strength of the aversion	–hap: antipathy	pointing to	intensifying
					strength	fulfilment: actualisation
88.2	some provinces have stronger transmission links with the US than their provincial neighbours (CEA, 2006).	some provinces	have stronger transmission links .. than	inv +val	some	quantifying: amount

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
		transmission links	stronger	inv +val	stronger	intensifying: isolating: localised
89.1	Perhaps under true market conditions electricity prices would rise to a point [[making PV panels competitive]],	electricity prices	would rise to a point [[making PV panels competitive]]	+val	would rise	fulfilment: actualisation
89.2	but 'provinces' are politically reluctant [[to undertake reforms']] (OECD 2004, p.2)	provinces	politically reluctant	-val [inv -ten]	politically	extent: scope: space
89.3	meaning that our product will continued to price itself out of the Canadian market.	our product	will continued to price itself out of the Canadian market.	inv -val	will	fulfilment: actualisation
90.1	Canada's cultural landscape presents distinct opportunities to an Australian firm [[attempting to sell a green form of energy]].	Canada's cultural landscape	opportunities	+val	presents	fulfilment: completion
					distinct	fulfilment: actualisation
91.1	Firstly it possesses a growing green culture,	it = Canada's cultural landscape	green culture	afforded +val	growing	quantifying: amount
91.2	and secondly the nation is culturally similar to Australia according to Hofstede's cultural dimensions.	the nation	culturally similar to Australia	afforded +val	culturally	extent: scope: space
					similar	intensifying: isolating: localised
92.1	[[Undermining this]], however, is [[what has been termed a 'passion for bronze']].	this = distinct opportunities	Undermining	-val		
			a 'passion for bronze'	-cap		
93.1	Canadians are indeed becoming greener (Economist 2007b),	Canadians	are indeed becoming greener	inv +val	indeed	intensifying
					greener	intensifying: isolating: localised
93.2	and AGAINST the preference of the Conservative heartland (Economist 2007c), the government is growing greener too,	the government is growing greener	AGAINST the preference of the Conservative heartland	+inc: des	growing	quantifying: amount
					greener	intensifying: isolating: localised
93.3	an indication [of Canada's market potential] for the firm]].	Canada's market potential	potential	+val		intensifying a proposal
					indication	fulfilment:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
						actualisation
94.1	Certainly the changes to environmental policy in 2007 would be indicative [of this] (despite a disappointing failure [[to reach Kyoto targets]]).	the changes to environmental policy in 2007	<u>potential</u>		Certainly... would be indicative	intensifying a proposal fulfilment: actualisation 3x
		[[to reach Kyoto targets]]	a disappointing failure	–sat: displeasure	<u>failure</u>	fulfilment: completion
95.1	A further indicator would be the improved polling for the Green Party.	the improved polling for the Green Party	A further indicator would be	inv +val	further	quantifying: amount
					indicator	intensifying
					would	fulfilment: actualisation
96.1	In 2004, the first time [[that it had fielded candidates in all 308 ridings]], the party received 4.3% of the popular vote, [[growing to 4.5% in the 2006 election (GPC 2007)]].	the party	4.3% of the popular vote, [[growing to 4.5%]]	+val	4.3%	quantifying: amount
					growing	quantifying: amount
					4.5%	quantifying: amount
97.1	Its leader polled 25.8% of the vote in a bi-election later that year (ibid.),	Its leader	25.8% of the vote	inv +val	25.8%	quantifying: amount
97.2	and while the party remains without representation in Federal government,					
97.3	its growth will give it an increasingly important voice in political discourse.	its growth	will give it an increasingly important voice	+val	will	quantifying: amount
		voice	increasingly important	+val	increasingly	intensifying
98.1	All of this points to a strong market potential ,	All of this	A strong market	+val	points to	fulfilment: actualisation
			<u>potential</u>	+val		intensifying
			<u>strong</u>	+val		intensifying a proposal
98.2	especially as the green movement gathers momentum	the green movement	gathers momentum	+val	especially	intensifying
98.3	and, in particular , Green Party policies	Green Party policies	enter public	+val	in particular	intensifying

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	enter public consciousness.		consciousness			
99.1	However, IRRESPECTIVE [of the growth [of the Green Movement]] [[the fact [[that it remains marginal]]]], suggests [[that Canada's practices (i.e. dominance of hydroelectricity) are ahead of their values]].	the Green Movement	growth	inv +val	growth	quantifying: amount
		[[the fact [[that it remains marginal]]]],	suggests [[that Canada's practices (i.e. dominance of hydroelectricity) are ahead of their values]]	–val	suggests	fulfilment: actualisation
		it = the Green Movement	remains marginal	–val	marginal	amplified force: quantifying: amount
		Canada's practices (i.e. dominance of hydroelectricity)	are ahead of their values	–val		
		hydroelectricity	dominance	–val		
100.1	As such, our firm cannot capitalise on the Green Movement wave	the Green Movement wave	our firm cannot capitalise on	–val	cannot	intensifying a proposal
100.2	because Green practice has already far outpaced it .	it = the Green Movement wave	Green practice has already far outpaced it	–val	already	fulfilment: completion
					far	intensifying
101.1	[[Further inhibiting the potential [[to capitalise on the Green Movement]]]] is Canada's underlying value set .	Canada's underlying value set	Further inhibiting ...	–val	Further	intensifying
		the Green Movement	the potential [[to capitalise on...]]	+val	potential	intensifying a proposal
102.1	The Economist (2005b) argues, [[Canadians distrust big ideas , preferring to put their faith in a proven ability [[to muddle through]], [[the price [of which is argued to be complacency and lack of ambition]]]].	big ideas	distrust	–sec: trust		
faith in a proven ability [[to muddle through]]		preferring				
faith in a proven ability [[to muddle through]]		preferring	+hap: incl: des			
[[to muddle through]]		a proven ability	+cap	proven	fulfilment: completion	
				ability	intensifying a proposal	
the price of which = a proven		complacency	–hap			

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
		<i>ability</i> [[to muddle through]]	<i>lack of ambition</i>		<i>lack</i>	fulfilment: completion
103.1	The nation's attitude is described as [[being 'passion for bronze',]] and its political debates 'tepid']].	The nation's attitude	a 'passion for bronze'	–cap		
		its = the nation's political debates	tepid	–reac: impact		
104.1	Assuming this to be the case,					
104.2	this points to some difficulties for our firm [[in producing and selling solar panels to the country]].	this	some difficulties	–val	points to	fulfilment: actualisation
					some	quantifying: amount
105.1	People [[distinguished for their ability [[to 'muddle through']]]] would not be given to aggressively [[pushing for the systemic changes [[required to make solar energy form a more than marginal source [of Canada's overall capacity]]]]].	People	[[distinguished ...]]	–norm		
		[[to muddle through]]	ability	–cap	ability	intensifying a proposal
		People	would not be given to aggressively [[pushing...]]	–ten: +ten	would	fulfilment: actualisation
		the systemic changes	required to make ...		aggressively	intensifying
		changes	systemic	+comp: bal	required to make	intensifying a proposal
		solar energy form = source			more than	intensifying: isolating: localised
		Canada's	capacity	+val	marginal	quantifying: amount
					overall	focus: valeur: specificity
106.1	Most disconcerting of all, a "passion for bronze" has already translated into a weak competitive climate (Scott 2006).		passion for bronze	–cap		
		a "passion for bronze" has already translated into a weak competitive climate	Most disconcerting of all	–sec: disquiet	Most ... of all	intensifying: isolating: relative
		a "passion for bronze"	has already translated into a weak competitive climate	–val		fulfilment: completion
107.1	In the Global Competitiveness Report	competitive climate	weak	–val		
		Canada	ranks 13 th	inv –val	ranks 13 th	intensifying:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	(WEF 2008) Canada ranks 13th ,					isolating: relative
107.2	having lingered around that position over the last four years,	Canada	having lingered around that position over the last four years	–val	around that position	extent: scope: space
					over the last four years	extent: scope: time
107.3	and in the Business Competitiveness Index (HBS 2006) it ranks 15th, down from 11th in 2001 .	it = Canada	ranks 15th, down from 11th in 2001	inv –val	ranks 15th, down from 11th in 2001	intensifying: isolating: relative
108.1	Ultimately, no matter how green the culture becomes ,	the culture	no matter how green... becomes	+val		intensifying
108.2	a certain inertia would need to be overcome	a certain inertia	would need to be overcome	– prop – ten	would	fulfilment: actualisation
		inertia	certain	– norm	certain	fulfilment: actualisation
108.3	to push through the radical changes	the radical changes	to push through	+ten	radical	intensifying
					push through	fulfilment: actualisation
108.4	to make the PV market viable for the firm.	the PV market	to make ... viable	–val	to make ...	fulfilment: actualisation
109.1	Australia and Canada are regarded by Hofstede, the author [of arguably the most influential cultural framework ,] as culturally similar –	Australia and Canada	culturally similar	inv +val	culturally	extent: scope: space
		cultural framework	most influential	+val	similar	intensifying: isolating: localised
109.2	regularly featuring in clusters with other post-colonial nations throughout his findings.					
110.1	In terms of its degree of cultural similarity to Australia , Canada scores equal second , behind only the USA (Fletcher and Bohn 1998).	Canada	its degree of cultural similarity to Australia		its degree of	intensifying
					cultural	localised extent: scope: space
					similarity	intensifying: isolating: localised
			scores equal		scores equal	sharpened focus:

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
			second , beind only the USA		second	valeur: specificity
					only	intensifying: isolating: relative
111.1	One might expect [[that these commonalities make for a greater ease [of [[doing business between the two countries]]]]],	One	might expect		might	fulfilment: actualisation
					expect	intensifying a proposal
		these commonalities	make for	+val	commonalities	intensifying: isolating: localised
					make for	fulfilment: actualisation
		[[doing business]]	a greater ease	+val	greater	intensifying: isolating: localised
111.2	and minimise the probability [of cross-cultural conflict].	these commonalities	minimise	inv +val	commonalities	intensifying: isolating: localised
					minimise	quantifying: amount
		cross-cultural conflict	probability	–hap: antipathy	cross-cultural	extent: scope: space
					probability	fulfilment: actualisation
112.1	To the extent that scores for uncertainty avoidance, masculinity and long-term outlook are similar ,	scores for uncertainty avoidance, masculinity and long-term outlook	similar	inv +val		intensifying: isolating: localised
112.2	there should be considerable value alignment between the two nations ,	the two nations	there should be considerable value alignment	afforded +val	should	fulfilment: actualisation
		value alignment	considerable	+val	considerable	quantifying: amount
112.3	certainly constituting an operational advantage .	considerable value alignment	certainly constituting...	+ comp: balance	certainly	fulfilment: actualisation
		an advantage	operational	+val	operational	focus: valeur: specificity
113.1	Canada provides a business environment [[favourable to Australian firms by virtue of its cultural	Canada	provides	+val		
		a business environment	[[favourable to Australian firms by	+val		

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
	<i>similarities</i> and the ease [of [[doing business]] there]].		<i>virtue</i> of its <i>cultural similarities</i> and the ease [of [[doing business]] there]].			
		<i>its cultural similarities</i> and the ease [of [[doing business]]	<i>virtue</i>	+val	<i>cultural</i>	extent: scope: space
					<i>similarities</i>	intensifying: isolating: localised
114.1	This <i>would</i> be <i>sufficient</i> justification for this firm [[to export there]]	This = (The fact that) Canada provides a business environment [[favourable...]]	<i>would</i> be <i>sufficient</i> justification	–val	<i>would</i>	fulfilment: actualisation
		[[to export there]]	<i>sufficient</i> justification	+val	<i>sufficient</i>	quantifying: amount
114.2	but for [the fact [[that the firm is selling <i>overpriced</i> renewable energy to a market [[in which hydroelectricity is already dominant]]]].	<i>renewable energy</i>	<i>overpriced</i>	–val		
		<i>a market</i>	[[in which <i>hydroelectricity</i> is <i>already</i> dominant]]	inv –val		
		<i>hydroelectricity</i>	<i>already</i> dominant	–val	<i>already</i>	fulfilment: completion
115.1	With <i>electricity</i> <i>so</i> regulated and <i>cheap</i> ,	<i>electricity</i>	<i>so</i> regulated...	– comp: bal	<i>so</i>	intensifying
			<i>so ... cheap</i>	–val	<i>so</i>	intensifying
115.2	and generated in the main by <i>abundant</i> renewable resources,	<i>electricity</i>	generated in the main by <i>abundant</i> renewable resources,	inv –val		
		<i>renewable resources</i>	<i>abundant</i>	inv –val	<i>abundant</i>	quantifying: amount
115.3	<i>export</i> or <i>even</i> production in Canada is <i>simply</i> uneconomical.	<i>export</i> or <i>even</i> production in Canada	<i>simply</i> uneconomical	–val	<i>even</i>	intensifying
					<i>simply</i>	intensifying
116.1	Moreover, the <i>softening</i> of the <i>economy</i> , <i>taxation</i> and the ‘ <i>ambition for bronze</i> ’ outweigh the <i>potential</i> [[created by the <i>rise</i> [of green values]]].	the <i>softening</i> of the <i>economy</i>	outweigh the <i>potential</i>	–val		intensifying
		<i>economy</i>	<i>softening</i>	–val		
		<i>taxation</i>	outweigh the <i>potential</i>	–val		intensifying

CLAUSE #	TEXT	Target	ATTITUDE		GRADUATION	
			Appraising item	type	Grading item	type
		the 'ambition for bronze'	outweigh the potential	–val		intensifying
		Canadians (bridging)	'ambition for bronze'	–val		
		market (bridging)	potential	–cap		intensifying a proposal
			the rise of green values	+val	rise	quantifying: amount
117.1	Ultimately, we should place Canada on an indefinite wait list	Canada	indefinite wait list	–comp: bal	should	intensifying a proposal
117.2	UNTIL an energy market is established ,	an energy market	UNTIL established	–cap		
117.3	economic growth is again on track	economic growth	UNTIL is on track	–cap	growth	quantifying: amount
117.4	and the government responds to its post-Kyoto obligations more aggressively .	the government	UNTIL responds	–prop	more aggressively	amplified force: intensifying
			post-Kyoto obligations	–prop		

APPENDIX C – CONNEXION analysis of Text 1 (Canada Report)

cl no	sentence	inc lud	Periodicity Macro Hyper Elaboratio	type	internal	clause text	external	type2	External: Addition	External: Comparison	External: Spatio- temporal	External: Consequence	Internal: Addition	Internal: Comparison	Internal: Time	Internal: Consequence	Continuative	comments
					organize texts (MODE): text time		relate activities, construe FIELD (field time)											
1.1	1		macro- Theme 1 1. Introduction			To a firm such as ours, [[seeking to market solar panels offshore]], Canada's appeal seems obvious.												
				imp/i.e.		Ø (i.e)								similarity: reform: rework: abstraction				
2.1	2					Politically stable,												
						exp/add ↑			addition: positive									
2.2	2					prosperous by conventional measures,												
						exp/add ↑			addition: positive									
2.3	2					culturally similar to Australia,												
						and: exp/add ↑												
2.4	2					and growing greener,			addition: positive									
						Ø (so)		so: imp/consq: cause: expectant				cause: expectant						
2.5	2					the business environment in Canada would certainly appear to be conducive to [[undertaking such an export venture]].												
				however: exp/consq: concession		Unpacked 'In spite of...': Although the Canadian marketplace is strong, further inspection....		although: exp/consq: cause: concession				cause: concessive				concessive: counter- expectation		
3.1	3					In spite of the apparent strengths of the Canadian marketplace, however, further inspection reveals the difficulties [[our firm would face in [[trying to establish a significant presence there]]]].												logical metaphor - internal cause in the clause (as circumstance of contingency:concession In spite of)
				imp/i.e.		Ø (i.e)												
4.1	4					The Canadian solar energy market is subject foremost to challenges [[derived from its location and existing energy infrastructure]].												
												cause: expectant						
5.1						With the Canadian electricity market [[dominated by hydroelectricity]],												
5.2	5					this low cost source will prove the greatest impediment to the uptake of photovoltaic (PV) panels.												logical metaphor (circumstance of accompaniment with)
6.1	6					Even if electricity were priced in a way [[that at best took into account negative externalities, or at a minimum generally increased prices]].												
								Even if: exp/cond: open: concessive				condition: open/incl: concessive						
6.2	6					the differences [in regional electricity markets] would preclude consistent returns for marketers of PV panels.				contrast: opposition								difference = metaphorical internal conjunction, realising causal Thing

[illegible]

order	cl no	sentence	inc lud	Periodicity Macro Hyper Elaborati	type	internal	clause text	external	type2	External: Addition	External: Comparison	External: Spatio- temporal	External: Consequence	Internal: Addition	Internal: Comparison	Internal: Time	Internal: Consequence	Continuative	comments
3						organize texts (MODE): text time		relate activities, construe FIELD (field time)											
30	10.1-2	10		hyper- Theme 1.1 2. Scope and Exclusions	assumptions		[[Justifying the relevance of forthcoming statements]] requires [[that a number of assumptions be made]].												
					imp/i.e.		Ø (i.e.)												
					Firstly: exp/succ: ordering														
	11.1	11					Firstly, with a multitude of PV products [[available (Miller 2008, Murph 2008, Topolsky 2008),] and their uses and configurations constantly growing]], it is obvious [[that the broad- brush term "solar panels" is unworkably vague]].									successive: ordering			
33	11.2	11																	logical metaphor (circumstance of cause with)
34									To that end: exp/purp: desire: expectant				purpose: desire: expectant						
35	12.1	12		Elaboration 1.1			To that end, this report will limit its discussion [to solar panels [of the kind our firm produces: permanent installations atop the roofs of residential or industrial buildings, or as part of large- scale solar arrays]].												
36																			
37					Second: exp/succ: ordering		Unpacked: given that... = since...		since: exp/consq: cause: expectant				cause: expectant			successive: ordering			given that = circumstance of cause: reason BUT IFG: 81 treats is as a conjunction as well
38	13.1	13		hyper- Theme 1.2			Second, given that each Canadian province is responsible for its energy generation,												
							and: exp/add			addition: positive									
40	13.2	13					and is variously dominated by coal, nuclear or hydro generators (CEA 2006, p.14),												
41	13.3	13					no report should argue "sell to Canada"												
									as: exp/consq: cause: expectant				cause: expectant						difference = metaphorical internal conjunction, realising causal Thing
42	13.4	13					as this statement fails to take into account these provincial differences.												
									To that end: exp/purp: desire: expectant				purpose: desire: expectant						

[illegible]

cl no	senten ce	inc lud	Periodicity Macro Hyper Elaborative	type	internal	clause text	external	type2	External: Addition	External: Comparison	External: Spatio- temporal	External: Consequence	Internal: Addition	Internal: Comparison	Internal: Time	Internal: Consequence	Continuative	comments
					organize texts (MODE): text time		relate activities, construe FIELD (field time)											
					Factors: metadiscourse exp/conseq: cause proves to be: LogM: exp/conseq													Factor = metaphorical internal conjunction, realising causal Thing
22.1	22		macro- Theme 2 3. Technological Factors			The technology of Canada's existing energy infrastructure proves to be the ultimate deal-breaker for PV panels in Canada,												logical metaphor as Process - relational verb expressing internal logical consequential relationship
				factor: metadiscourse exp/conseq: cause				even before: concessive temporal exp/succ: following: posterior dependent										Factor = metaphorical internal conjunction, realising causal Thing
22.2	22					even before economic, social and political factors are taken into consideration, and: exp/add					succ: foll: pos/dep							
						Unpacked irrespective of -> despite -> although opportunities might ... and irrespective of the opportunities [[that may be uncovered]].			although: exp/conseq: cause: concessive	addition: positive		cause: concessive						
22.3	22																	LogM: circumstance of accompaniment
				stems from: logical metaphor: exp: consq: cause														
23.1	23					This stems primarily from the nation's geographical features, with secondary issues [[being the availability of both inputs and net metering]].												logical metaphor as Process - external logical relationship
				imp/e.g.		Ø (e.g.)												
24.1	24		hyper- Theme 2.1 3.1 Geography 3.1.1 Availability of Sunlight			Canada's far north location severely limits												
24.2	24					where PV cells may be economically integrated into the grid.			where: exp/loc		locative							
				imp/f.i.e.		Ø (i.e.)												
25.1	25		Elaboration 2.1			Natural Resources Canada (2007) has calculated the PV potential during summer (July), winter (January), and total annual potential.												
				show: logical metaphor: exp/conseq														
26.1	26					These calculations show [[that there is minimal potential for solar [[to play a large role in providing electricity to Canada]]]] -												logical metaphor as Process - relational verb expressing internal logical consequential relationship
								as: exp/simul: overlapping: durative anterior dependent: nonstative			simul: overlap: dur							
26.2	26					especially as electricity demand is anticipated to expand from 530 TWh in 2003 to 730 TWh in 2020 (CEA 2006, p.11).												
				however: exp/conseq: concession that is not to say: exp/conseq: countering												concessive: counter- expectation		

35.1	35	hyper-Theme 2.3	two conclusions: metadiscourse exp/consp: concl		From these figures, two conclusions may be drawn													conclusion = metaphorical internal conjunction, realising causal Thing
35.2	35				pertaining to market potential.													
			Firstly: exp/succ: ordering													successive: ordering		
36.1	36	Elaboration 2.3			Firstly, that in a country [[dominated by cheap hydro]], there is a severely limited potential [for a PV cell firm [[to capture an all but marginal segment of the electricity market]]].													
			... conclusion: metadiscourse exp/consp: conclude															
37.1	37				A slightly more optimistic conclusion is [[that as current fossil fuel plants in provinces such as Alberta, Saskatchewan and Nova Scotia age, there is a potential for solar energy [[to be utilised there as the former are decommissioned]]]].											non-concessive: conclude		conclusion = metaphorical internal conjunction, realising causal Thing
			Alternatively: exp/add: developing: alternation													developing: alternation		
38.1	38				Alternatively, in such provinces the panels may be utilised as part [of an aggressive switch to greener energy].													
			however: exp/consp: concession														concessive: counter-expectation	
39.1	39	hyper-New 2.3			Ultimately, however, it is the very presence [of such abundant renewable energy sources] [[that threatens the profitability [of any export venture of PV panels to Canadian provinces]]].													here however related to FIELD
40.1	40	hyper-Theme 2.3 3.2 Labour Availability			To the extent [[that PV panels are high-tech products]], it is clear [[that their production requires the availability of highly skilled individuals]].													
			Above all: exp/comp															
						To the extent: exp/consp: cause: concessive										cause: concessive	similarity: reform: adjust: amp	

[illegible]

45.1	45	hyper-Theme 2.4 3.3 Net Metering			One incentive for households or industry [[to install PV]] is [[that they may on-sell excess electricity [[generated to the grid]]]].													logical metaphor as Participant
					Unpacked: Without... = If households or industry may not on-sell...OR Unless households or industry may ...		If not/Unless: exp/conseq: condition: closed			condition: closed/exclusive								it's not purpose: desire: concessive because it's not a hypotactic cause cf. ET: 199 Ben can train hard without improving his time.
46.1	46	Elaboration 2.4			Without this incentive, it is reasonable [[to assume [[that the uptake [of residential or industrial-sited PV] will be limited]].													logical metaphor (circumstance of closed condition)
							so far as to: exp/conseq: purp: desire: expectant			purpose: desire: expectant	developing: addition: simple							
47.1-2	47				Industry Canada (2003, p.35) goes so far as to argue [[that 'where net metering is not allowed,]]													
							but: exp/conseq: cause: concessive											
47.3	47				this all but eliminates the opportunity for PV'.													
				Consequently: exp/conseq: conclude												non-concessive: conclude		
48.1	48				Consequently sales would be virtually non-existent in Alberta (ibid.),]													
							but: exp/conseq: cause: concessive			cause: concessive								
48.2	48				but have potential in provinces such as British Columbia, Ontario, the Yukon, Nova Scotia (ibid.) and Saskatchewan (SaskPower 2007).													
				However: exp/conseq: concession												concessive: counter-expectation		
49.1	49				However, even if net metering is available in a given province,]													
					even: CONT/comp			even if: exp/conseq: condition: open: concessive		condition: open/incl: concessive						comparison		
49.2	49				individuals must bear the additional cost [of secondary meters [[being fitted] or even replaced]]].													
				prove: logical metaphor: exp/conseq: cause				so...as to: exp/conseq: purp: desire: expectant		purpose: desire: expectant								
50.1	50				At \$C200 for residents, and \$C6000 for commercial bi-directional metering (Industry Canada 2003, p.38), [[installing PV panels]] may prove so uneconomical as to deter potential customers.													logical metaphor as Process - relational verb expressing internal logical consequential relationship
45	0				68			3	0	6	11	3	1	1	5	5	15	

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3						organize texts (MODE): text time		relate activities, construe FIELD (field time)											
153					Factors: metadiscourse exp/conseq: cause														factor = metaphorical internal conjunction, realising causal Thing
154	51.1	51		macro- Theme 3 4. Economic Factors			The health [of the Canadian economy] should immediately strike this company as a key consideration, [I (= the most important reason)						cause: expectant						
155	51.2	51					not least because 'economic growth continues to drive the global demand [for energy] to new heights' (Industry Canada 2003, p.10).												
156					Consequently: exp/conseq: conclude												non-concessive: conclude		
157	52.1	52					Consequently, an examination [of Canada's indicators [and outlook, [and energy market [and its regulation]]] is necessary												
							to determine the viability [of investment] there).						purpose: desire: expectant						
158					... conclusion: metadiscourse exp/conseq: conclude														
159	53.1	53					From this examination, the obvious conclusion is [[that in spite of a reasonably strong economy the market structure precludes the possibility [of PV [Becoming viable [in Canada]]]].										non-concessive: conclude		conclusion = metaphorical internal conjunction, realising causal Thing
160																			
161																			
162	54.1	54		hyper- Theme 3.1 4.1 Energy Market 4.1.1 Demand			Electricity demand [in Canada] is substantial, greater per household than that of its southern neighbour (World Energy Council, 2008). [[so frequently maligned for its energy consumption]].												
163					(Firstly) imp/succ		(Firstly))												
							Unpacked 'With...': Since demand is projected...						cause: expectant						
							and: exp/add												
							and 20% of facilities operating in 2000 are anticipated to retire by 2020												
164	55.1	55		Elaboration 3.1			With demand [[projected to increase annually at a rate of 1.5% to 2%]], and the anticipated retirement by 2020 of 20% of facilities operating in 2000 (CEA 2006, p.5), clearly there will be potential for PV panels [[to soak up some of the demand [of this energy hungry nation]]].												logical metaphor (circumstance) LogM: causal Process
165					however: exp/conseq: countering														
166	56.1-2	56					This assumes, however , [[that it can be supplied at a price [[the market is willing to pay]]]].												
168					Herein: exp/conseq: concl														

169	57.1	57	hyper-Theme 3.2 4.1.2 Supply			Herein lies the next greatest constraint to the uptake:													
						Unpacked because of: because Canada has an existing mix of ...		because of: exp/consq: cause: expectant		cause: expectant									
170	57.2	57				electricity prices in Canada are among the lowest in the OECD (OECD 2004) because of their existing mix of generation sources.												logical metaphor (circumstance)	
171						Unpacked: given that... = since...		since: exp/consq: cause: expectant		cause: expectant								given that = circumstance of cause: reason BUT IFG: 81 treats is as a conjunction as well	
172	58.1-2	58	hyper-New 3			Given that PV generation costs [for a single kilowatt] start at a price greater than the current average cost of electricity (World Energy Council, 2008),													
				... conclusion: metadiscourse exp/consq: concl		Unpacked: Without the appropriate incentives... = unless appropriate incentives are present, the PV market ...will remain marginal.		If not/Unless: exp/consq: condition: closed		condition: closed/exclusive									
174	58.3	58				it is a foregone conclusion [[that without the appropriate incentives the PV market in Canada will remain marginal]].												conclusion = metaphorical internal conjunction, realising causal Thing; without... = circumstance of closed condition	
175				second: exp/succ: ordering point: metadiscourse: exp/consq: cause															
176																	successive: ordering		
177	59.1	59	hyper-Theme 3.3 4.2 Economic Performance			The second point [of reference [[in determining the viability [of PV panels] [in Canada]]] is its economic indicators.												point = metaphorical internal conjunction, realising causal Thing	
178				... point to: metadiscourse exp/consq: concl															
179	60.1	60				Low unemployment and inflation, and a reasonably high GDP per capita point to strong economic foundations (see Table 1).												logical metaphor as Process - relational verb expressing internal logical consequential relationship	
180				however: exp/consq: concession as well as: exp/add: simple								developing: addition: simple				concessive: counter- expectation			

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3						organize texts (MODE): text time		relate activities, construe FIELD (field time)											
203					Factors: metadiscourse exp/conspq: cause														Factor = metaphorical internal conjunction, realising causal Thing
204	67.1	67		macro- Theme 4 5. Political Factors			Canada's political landscape is nothing if not fractured, a function [of the quirks [of federalism]].												
205																			
206					imp/i.e.		Ø (i.e.)												
207	68.1	68					Between federalism, << >>, and its lack of energy reform, Canada presents glimpses [of opportunity [for investment]] for our firm,												
209	68.2	68					<<including taxation and Canada's weak political centre>>.												
					however: exp/conspq: concession												concessive: counter- expectation		
208	68.3	68					however this is more than offset by bureaucratic complications.												
211					fact: semiotic entity: internal fact		Unpacked Due to...: Because federal and provincial governments exist/...OR Federal and provincial governments exist so...		because/so: exp/conspq: cause: expectant				cause: expectant						
212	69.1	69		hyper- Theme 4.1 5.1 Federalism 5.1.1 Multiple Regulatory Authorities			Due to the existence of federal and provincial governments, business regulation is complicated by [the fact [[that there are multiple regulatory authorities]]].												due to = logical metaphor as internal conjunctive relation realised as circumstantial Attribute (expectant cause in the clause) fact = metaphorical internal conjunction, realising causal Thing
213					For example: exp/simil: exemplify														
214	70.1	70		Elaboration 4.1			For example, taxation in Canada is characterised by additional complexities [[relative to nations without such a structure]].								similarity: reform: rework: abstraction				
215					imp/i.e.		Ø (i.e.)												
216	71.1	71					Federal income taxes are paid, in addition to a provincial income tax (WBG 2008).												
217							Ø (and) imp/add												
218	72.1	72					A value added tax is paid to Ottawa,												
									while: exp/contr: opposition		contrast: opposition								
219	72.2	72					while a provincial sales tax is paid into state coffers (ibid).												

[illegible]

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3						organize texts (MODE): text time		relate activities, construe FIELD (field time)											
274					Factors: metadiscourse exp/consq: cause														Factor = metaphorical internal conjunction, realising causal Thing
275	90.1	90		macro- Theme 5 6. Social Factors			Canada's cultural landscape presents distinct opportunities to an Australian firm [[attempting to sell a green form of energy]].												
276					Firstly: exp/succ: ordering											successive: ordering			
277	91.1	91					Firstly it possesses a growing green culture,										successive: ordering		
					secondly: exp/succ: ordering					addition: positive									
278	91.2	91					and: exp/add and secondly the nation is culturally similar to Australia according to Hofstede's cultural dimensions.												
279					however: exp/consq: concession												concessive: counter- expectation		
280	92.1	92					[[Undermining this]], however, is [[what has been termed a 'passion for bronze']].												
281																			
282					indeed: exp/simil: reformulation: amp: augment										similarity: reform: adjust: amp				
283	93.1	93		hyper- Theme 5.1 6.1 Green Values and Politics			Canadians are indeed becoming greener (Economist 2007b),												
							and: exp/add too: CONT/add			addition: positive								addition	
284	93.2	93					and against the preference of the Conservative heartland (Economist 2007c), the government is growing greener too,												
					imp/I.e.		(i.e.)												
93.3	93						an indication [of Canada's market potential] for the firm]].												
285					(First) imp/succ		(First/The first example)												
286	94.1	94		Elaboration 5.1			Certainly the changes to environmental policy in 2007 would be indicative [of this] (despite a disappointing failure [to reach Kyoto targets])).												
							Unpacked: Despite... = Although/even though Canada failed to reach Kyoto targets.												
					indicator: logical metaphor: CHECK WHAT ENTITY														
287																			
288	95.1	95					A further indicator would be the improved polling for the Green Party.												further: Identification system

108.2	108				a certain inertia would need to be overcome														
								to: exp/purp: desire: expectant					purpose: desire: expectant						
108.3	108				to push through the radical changes														
								to: exp/purp: desire: expectant					purpose: desire: expectant						
108.4	108				to make the PV market viable for the firm.														
109.1	109		hyper-Theme 5.3		Australia and Canada are regarded by Hofstede, the author [of arguably the most influential cultural framework,] as culturally similar –														
					(and) imp/add ↑														
109.2	109				regularly featuring in clusters with other post-colonial nations throughout his findings.														
				exp/consq: cause		only: CONT/comp											comparison		
110.1	110		Elaboration 5.3		In terms of its degree of cultural similarity to Australia, Canada scores equal second, being only the USA [Fletcher and Bohn 1998].													in terms of = with regard to, in this regard (Halliday - ET p 173)	
111.1-2	111				One might expect [that these commonalities make for a greater ease [of [doing business between the two countries]]],														
					and: exp/add ↑					addition: positive									
111.2	111				and minimise the probability [of cross-cultural conflict].														
112.1	112				To the extent [[that scores for uncertainty avoidance, masculinity and long-term outlook are similar]], there should be considerable value alignment between the two nations,														
								To the extent: exp/consq: cause: concessive					cause: concessive						IFG: 272: "frustrated cause, with the sense of 'although'"
112.2	112				certainly constituting an operational advantage.														
Total	40		0			59				6	1	1	5	1	2	3	2	4	8

order	cl no	sentence	inc lud	Periodicity Macro Hyper Elaborative	type	internal	clause text	external	type2	External: Addition	External: Comparison	External: Spatio- temporal	External: Consequence	Internal: Addition	Internal: Comparison	Internal: Time	Internal: Consequence	Continuative	comments
3						organize texts (MODE): text time		relate activities, construe FIELD (field time)											
					exp/consq														conclusion in heading = metaphorical internal conjunction, realising causal Thing
	113.1	113		macro-New (Final) 7. Conclusion and Recommendation			Canada provides a business environment [[[favourable to Australian firms by virtue of its cultural similarities and the ease [of [[doing business]] there]]].												
					fact: semiotic entity: internal fact		already: CONT/time											time	
	114.1	114					This would be sufficient justification for this firm [[to export there												
									but for		contrast: exception								
	114.2	114					but for the fact [[that the firm is selling overpriced renewable energy to a market [[in which hydroelectricity is already dominant]]]].												fact = metaphorical internal conjunction, realising causal Thing
							Unpacked 'With...': Since ...		Since: exp/consq: cause: expectant			cause: expectant							
	115.1	115					With electricity [[so regulated and cheap,]] and generated in the main by abundant renewable resources]], export or even production in Canada is simply uneconomical.												logical metaphor (expectant cause in the clause)
					Moreover: exp/add: cumulative: amplifying									developing: addition: cumulative					
	116.1	116					Moreover, the softening of the economy, taxation and the 'ambition for bronze' outweigh the potential [[created by the rise [of green values]]].												
					(In conclusion) imp/consq: concl		(In conclusion)												
	117.1	117					Ultimately, we should place Canada on an indefinite wait list]												
									until: exp/succ: following immediately: posterior dependent			succ: immed: pos/dep							
	117.2	117					until an energy market is established,]												
							(and until) imp/add again: CONT/time		(until) imp/succ: following immediately: posterior dependent			succ: immed: pos/dep						time	
	117.3	117					economic growth is again on track]												
							and: exp/add			addition: positive									
	117.4	117					and the government responds to its post-Kyoto obligations more aggressively.												
Total	9		0				14			1	1	2	1	1	0	0	0	2	3

APPENDIX D – PERIODICITY analysis of Text 1 (Canada Report)

macroTheme 1

i. Introduction

To a firm such as ours, seeking to market solar panels offshore, Canada's appeal seems obvious. Politically stable, prosperous by conventional measures, culturally similar to Australia, and growing greener, the business environment in Canada would certainly appear to be conducive to undertaking such an export venture. In spite of the apparent strengths of the Canadian marketplace, however, further inspection reveals the difficulties our firm would face in trying to establish a significant presence there. The Canadian solar energy market is subject foremost to challenges derived from its location and existing energy infrastructure. With the Canadian electricity market dominated by hydroelectricity, this low cost source will prove the greatest impediment to the uptake of photovoltaic (PV) panels. Even if electricity were priced in a way that at best took into account negative externalities, or at a minimum generally increased prices, the differences in regional electricity markets would preclude consistent returns for marketers of PV panels. Largely driving these regional differences are a patchwork of cumbersome legislation and rules.

This report will explore the political, economic, social and technological opportunities and limitations of producing and selling PV panels in Canada, based on assumptions and limitations set out below. Its ultimate conclusion is that the market potential offered by Canada is outweighed by barriers to profitable operations in the PV industry – a function of market capture by other cheaper, renewable sources, regulation, and the bureaucratic peculiarities of Canadian federalism.

hyperTheme 1.1

2. Scope and Exclusions

Justifying the relevance of forthcoming statements requires that a number of assumptions be made.

Elaboration of hyperTheme 1.1

Firstly, with a multitude of PV products available (Miller 2008, Murph 2008,

Topolsky 2008), and their uses and configurations constantly growing, it is obvious that the broad-brush term “solar panels” is unworkably vague. To that end, this report will limit its discussion to solar panels of the kind our firm produces: permanent installations atop the roofs of residential or industrial buildings, or as part of large-scale solar arrays.

hyperTheme 1.2

Second, given that each Canadian province is responsible for its energy generation, and is variously dominated by coal, nuclear or hydro generators (CEA 2006, p.14), no report should argue “sell to Canada” as this statement fails to take into account these provincial differences.

Elaboration of hyperTheme 1.2

To that end, in provinces (such as Ontario) dominated by ageing coal or nuclear facilities (Wilson 2007) panels would be sold to firms engineering large-scale arrays with the intention of replacing fossil fuel based generators. In provinces captured by renewable energy, there would be no incentive to replace existing infrastructure, therefore distributors acting on behalf of the firm could sell panels to households or industry (who would be able to sell excess electricity back to the grid, known as “net metering”).

hyperNew 1.2

This report intends to take these regional differences into consideration where appropriate.

hyperTheme 1.3

A final assumption is that the firm is entering the Canadian market with a view to eventually producing there.

Elaboration of hyperTheme 1.3

There are two reasons for this assumption. Firstly, shipping prices will likely prove prohibitively expensive in the long run given that soaring oil costs, whose prices account for nearly half of total freight costs, have translated into increased transport costs (Rubin & Tal, 2008). The second reason is that if production will eventually occur there, it is important that the country scores well in the relative ease of doing business there. Indeed, in the Ease of Doing Business Index, Canada is ranked seventh to Australia’s ninth (World Bank Group 2008).

macroTheme 2

3. Technological Factors

The technology of Canada's existing energy infrastructure proves to be the ultimate deal-breaker for PV panels in Canada, even before economic, social and political factors are taken into consideration, and irrespective of the opportunities that may be uncovered. This stems primarily from the nation's geographical features, with secondary issues being the availability of both inputs and net metering.

hyperTheme 2.1

3.1 Geography

3.1.1 Availability of Sunlight

Canada's far north location severely limits where PV cells may be economically integrated into the grid.

Elaboration of hyperTheme 2.1

Natural Resources Canada (2007) has calculated the PV potential during summer (July), winter (January), and total annual potential. These calculations show that there is minimal potential for solar to play a large role in providing electricity to Canada – especially as electricity demand is anticipated to expand from 530 TWh in 2003 to 730 TWh in 2020 (CEA 2006, p.11). However, that is not to say that entering the Canadian market is not worthwhile for the company. There are tracts of land that would be suitable for power generation, especially the centre of the country and south towards the US border. These are also the areas of highest population density. Since much of the areas with PV potential have higher population density, individual rather than large-scale installations would be the norm.

hyperNew 2.1

Since much of the areas with PV potential have higher population density, individual rather than large-scale installations would be the norm.

hyperTheme 2.2

3.1.2 – Resource Endowment

Canada's natural resource endowments place an even greater limitation on the viability of producing and marketing solar energy.

Elaboration of hyperTheme 2.2

Renewable energy, in the form of hydroelectricity, has very much captured the Canadian electricity market. Since the first hydroelectric generator was constructed in

1886, Canada has been utilising natural resources in its electricity generation (CEA 2006, p.5). Hydroelectric generation provides 18% of the nation's electricity, dwarfing coal (19%), nuclear (12%) and natural gas (6%) (CEA 2006) – although, as already discussed, there are considerable variations in electricity sources across Canada's provinces.

hyperTheme 2.3

From these figures, two conclusions may be drawn pertaining to market potential.

Elaboration of hyperTheme 2.3

Firstly, that in a country dominated by cheap hydro, there is a severely limited potential for a PV cell firm to capture an all but marginal segment of the electricity market. A slightly more optimistic conclusion is that as current fossil fuel plants in provinces such as Alberta, Saskatchewan and Nova Scotia age, there is a potential for solar energy to be utilised there as the former are decommissioned. Alternatively, in such provinces the panels may be utilised as part of an aggressive switch to greener energy.

hyperNew 2.3

Ultimately, however, it is the very presence of such abundant renewable energy sources that threatens the profitability of any export venture of PV panels to Canadian provinces.

hyperTheme 2.4

3.2 Labour Availability

To the extent that PV panels are high-tech products, it is clear that their production requires the availability of highly skilled individuals.

Elaboration of hyperTheme 2.4

Above all, chemical engineers are necessary in the design and production process, and in project management. Canada's engineers are notable for their additional accreditation (a P.Eng) and accountability to a peak licensing body, and together with standardised education and stringent qualifications (Professional Engineers, 2008) these qualities make for a workforce of a reliably high quality. Some 160,000 engineers are licensed in Canada, and 10.6% of these are qualified chemical engineers (ibid).

hyperNew 2.4

Despite Canada's availability of labour, and the intellectual capital it implies, the fact that only an engineer with a P.Eng may work in Canada constitutes a barrier to entry, complicating the operation

of an Australian managed production facility when that time comes.

hyperTheme 2.5

3.3 Net Metering

One incentive for households or industry to install PV is that they may on-sell excess electricity generated to the grid.

Elaboration of hyperTheme 2.5

Without this incentive, it is reasonable to assume that the uptake of residential or industrial-sited PV will be limited. Industry Canada (2003, p.35) goes so far as to argue that 'where net metering is not allowed, this all but eliminates the opportunity for PV'. Consequently sales would be virtually non-existent in Alberta (ibid.), but have potential in provinces such as British Columbia, Ontario, the Yukon, Nova Scotia (ibid.) and Saskatchewan (SaskPower 2007). However, even if net metering is available in a given province, individuals must bear the additional cost of secondary meters being fitted or even replaced. At \$C200 for residents, and \$C6000 for commercial bi-directional metering (Industry Canada 2003, p.38), installing PV panels may prove so uneconomical as to deter potential customers.

macroTheme 3

4. Economic Factors

The health of the Canadian economy should immediately strike this company as a key consideration, not least because 'economic growth continues to drive the global demand for energy to new heights' (Industry Canada 2003, p.10).

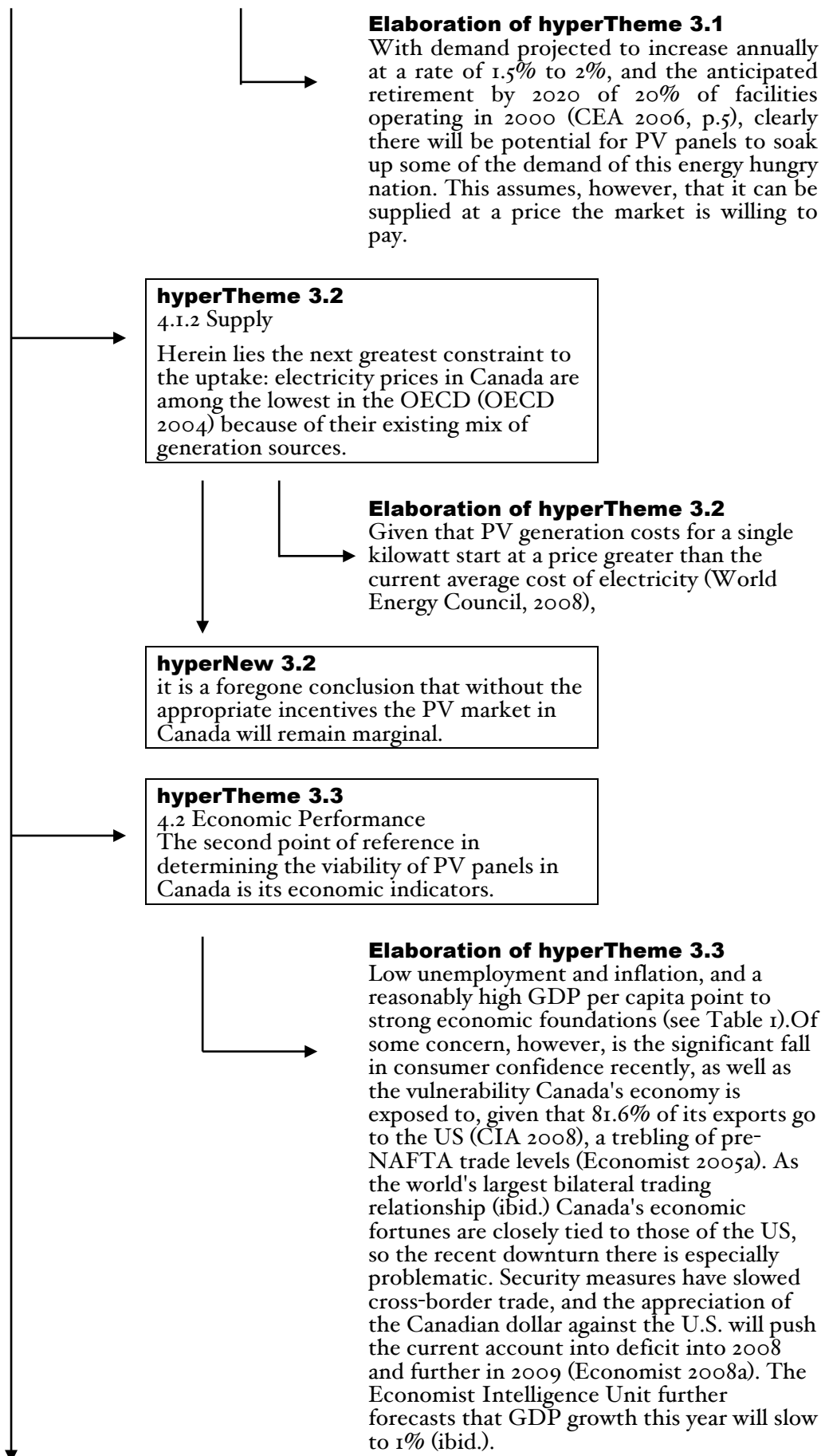
Consequently, an examination of Canada's indicators and outlook, and energy market and its regulation is necessary to determine the viability of investment there. From this examination, the obvious conclusion is that in spite of a reasonably strong economy the market structure precludes the possibility of PV becoming viable in Canada.

hyperTheme 3.1

4.1 Energy Market

4.1.1 Demand

Electricity demand in Canada is substantial, greater per household than that of its southern neighbour (World Energy Council, 2008), so frequently maligned for its energy consumption.



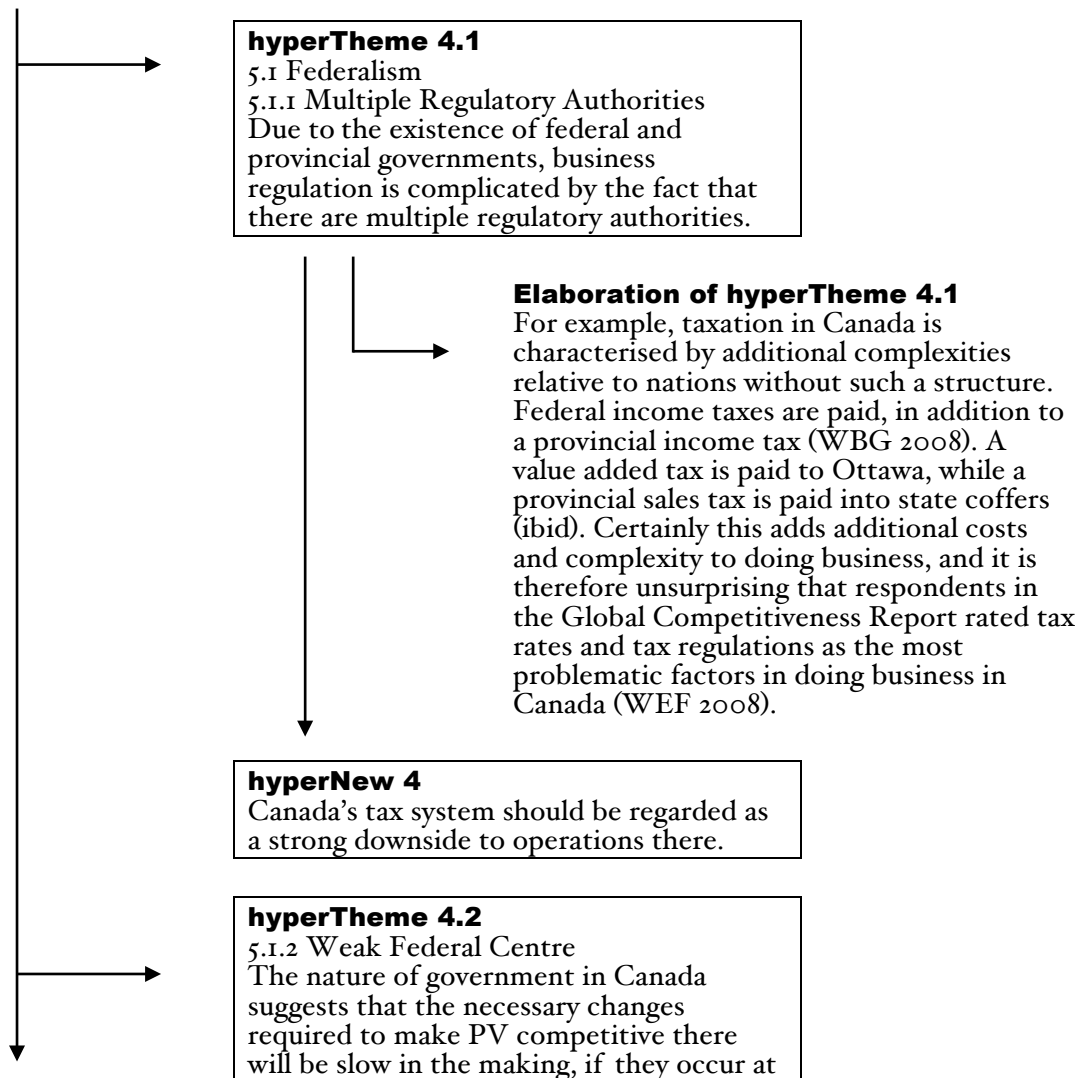
macroNew 3

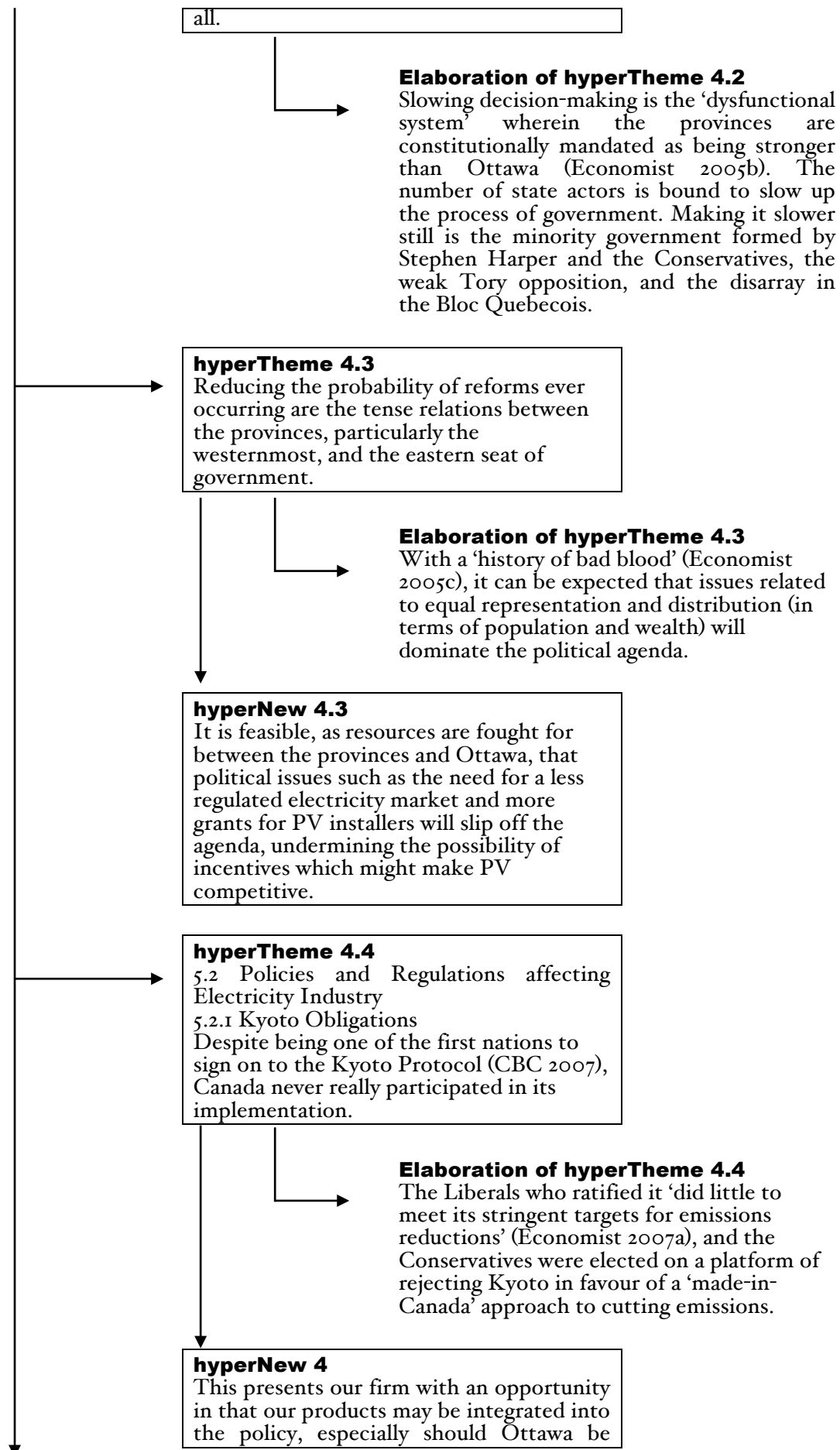
Given that energy demands are linked to economic growth, Canada's solid economic foundations are not sufficient to offset the risk of slowing economic growth. To that end, if the firm chooses to revisit the potential of Canadian market entry, it should wait until such time as the U.S. economy has strengthened, and with it the Canadian.

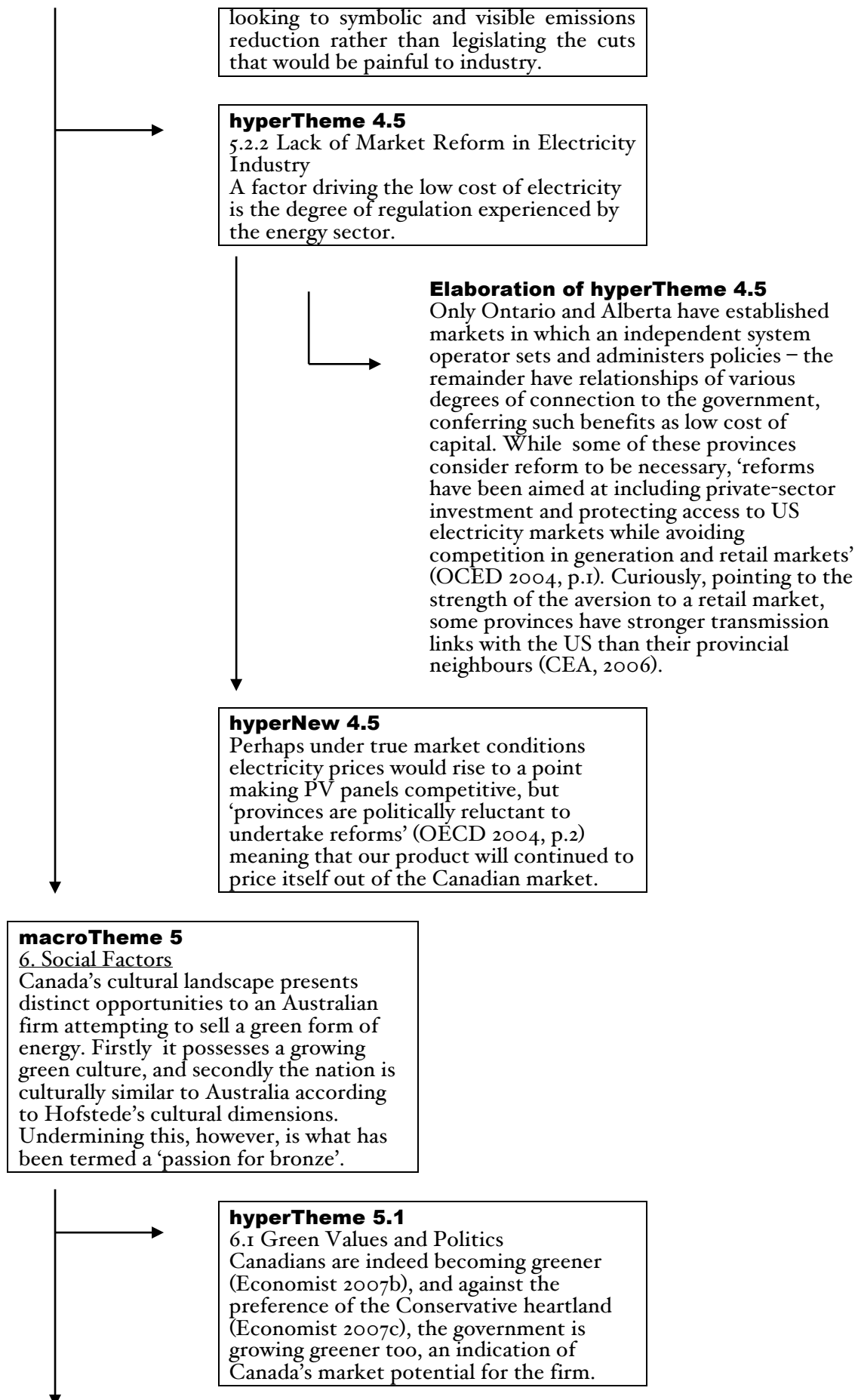
macroTheme 4

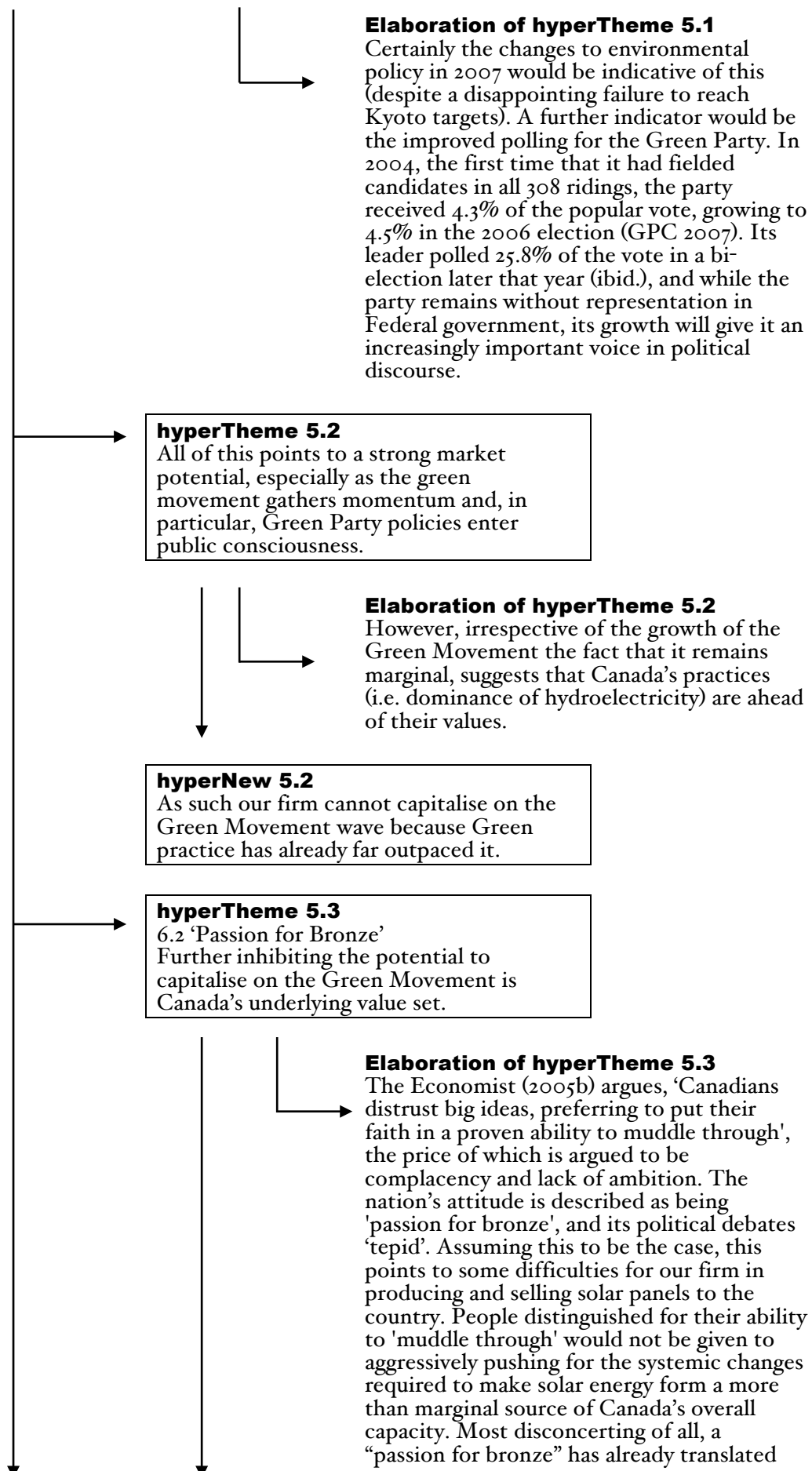
5. Political Factors

Canada's political landscape is nothing if not fractured, a function of the quirks of federalism. Between federalism, including taxation and Canada's weak political centre, and its lack of energy reform, Canada presents glimpses of opportunity for investment for our firm, however is more than offset by bureaucratic complications.









into a weak competitive climate (Scott 2006). In the Global Competitiveness Report (WEF 2008) Canada ranks 13th, having lingered around that position over the last four years, and in the Business Competitiveness Index (HBS 2006) it ranks 15th, down from 11th in 2001.

hyperNew 5.3

Ultimately, no matter how green the culture becomes, a certain inertia would need to be overcome to push through the radical changes to make the PV market viable for the firm.

hyperTheme 5.4

6.3 Hofstede's Cultural Dimensions
Australia and Canada are regarded by Hofstede, the author of arguably the most influential cultural framework, as culturally similar - regularly featuring in clusters with other post-colonial nations throughout his findings.

Elaboration of hyperTheme 5.4

In terms of its degree of cultural similarity to Australia, Canada scores equal second, behind only the USA (Fletcher and Bohn 1998). One might expect that these commonalities make for a greater ease of doing business between the two countries, and minimise the probability of cross-cultural conflict. To the extent that scores for uncertainty avoidance, masculinity and long-term outlook are similar, there should be considerable value alignment between the two nations, certainly constituting an operational advantage.

hyperNew 5.4

To the extent that scores for uncertainty avoidance, masculinity and long-term outlook are similar, there should be considerable value alignment between the two nations, certainly constituting an operational advantage.

macroNew (Final)

7. Conclusion and Recommendation

Canada provides a business environment favourable to Australian firms by virtue of its cultural similarities and the ease of doing business there. This would be sufficient justification for this firm to export there but for the fact that the firm is selling overpriced renewable energy to a market in which hydroelectricity is already dominant. With electricity so regulated and cheap, and generated in the main by abundant

renewable resources, export or even production in Canada is simply uneconomical. Moreover, the softening of the economy, taxation and the 'ambition for bronze' outweigh the potential created by the rise of green values. Ultimately, we should place Canada on an indefinite wait list until an energy market is established, economic growth is again on track and the government responds to its post-Kyoto obligations more aggressively.