A Decent Writer:

Professional Environmental Communication

Among Professional Environmental Managers

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ABSTRACT

The study explores a set of genre-hybrid reviews, 1999–2001, characterised by a standpoint of ecological rationality, and produced by a professional writer for a professional environmental management organisation. The interaction between such managers has not been studied before in terms of professional communication and was delineated as a new field of enquiry. The issues of tact and Face were important for this organisational community, which shared characteristics of contact communities and Communities of Practice. Methods used derive from studies of text in context, and organisational communication.

The assembly of theoretical material is one outcome of the study, which tackled three questions:

- 1 To assess in what way the reviews made a contribution to the organisation, Weick's equivoque and the notion of the Fractal were combined to explain the text as an active organ for collaborative organisational learning and knowledge management. Thereby the texts are presumed to have contributed to the organisation's goal to enhance knowledge and practice in environmental management among managers drawn from diverse intellectual backgrounds.
- 2 To address the question of the technical characteristics of the reviews, narrative polyphony concepts provided suspension dialogia, which complemented the notion of translation suspension.
- To address how the reviewer had managed to reproduce organisational patterns despite his inconsistent moral standpoint, the search for a theoretical position travelled through code-switching, pragmatics and translation, emerging with a concept similar to intersemiosis, labelled 'codehandling'.

The combination of questions produced complex answers. Translation constructs, such as dynamic equivalence, increasingly emerged as productive and suitable to complement emerging endogenous approaches in environmental management literature. The genre-hybrid is argued to have altered the social function of the review. In prioritising interaction, it put at risk the organisation's strategic tact

structure. Nevertheless, the reviewer managed the risk within acceptable limits and produced popular and successful reviews.

DECLARATION

This thesis contains no material previously accepted for the award of any other degree or diploma in any university or other tertiary institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

I consent to make the thesis available for photocopying and loan if accepted for the award of the degree.

.....

May 2004

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Thanks to both my supervisors for their scholarship and their modelling of environmentally responsible behaviour, especially their organically produced snacks. Thanks to Professor Ken Dyer for acceptance, guidance, discussion and encouragement. Thanks to Professor Peter Mühlhäusler for his cartographically sophisticated interaction with my diagrams and charts, his superhuman capacity to digest, remember and compare, uncomplainingly, drafts of hundreds of thousands of words, his euphemism that parts of a text 'might not be doing much work' and for the privilege of cuddling his ferrets.

GLOSSARY

Where indicated [R], definitions are sourced from Bussman Hadumod 1996, translated and edited by G Trauth and K Kazzasi *Routledge dictionary of linguistics* and language Routledge, London. In other cases, definitions are quoted from scholars represented in the bibliography. Otherwise the definitions are original.

abstract compact formal academic summary which eliminates

everything except the logic path, method and data findings. The abstract is for insider readers, and machine readers, using key words in dense and

concentrated blocks.

advocacy texts which directly advocate for action to reverse

environmental degradation, enhance ecological sustainability or present arguments at a variety of levels for respect for ecological relationships

Arc-info the software program operating to manage information

in state government offices during the 1980s

assumptive framework intellectual framework of interpretation, schema,

script

betweenness one of Gurevitch's descriptions of the suspension

dialogic category

cadres groups of Guild members representing occupational

or attitude standpoints

code a linguistic variety, such as a language, a dialect, an

accent, a discourse variety, a register, a situational variety, or any kind of language which people might characterise with the morphemes -talk, -ese or -speak, such as football-ese, green-speak, potty-talk etc. Sense

[4] in the Routledge definitions.

[R: 78] 1 In information theory, the rule for the coordination of two different repertoires of signs, which

can represent the same information

2 In linguistics, 'code' is used in the sense of 1 above for linguistic signs and the syntactic rules which bind them together. Martinet used the term 'code' for *langue* (language system) as opposed to 'message' for

parole (language use)

[...] 4 A term in sociolinguistics for class-specific language variations, especially for the different

strategies of verbal planning

code-handling a coopted term which applies the translation idea of

> intersemiosis to monolingual interaction. The term arises as an extension of 'code-switching'. It is employed to label as a construct the set of complex unconscious processes which enable the reviewer to replicate the range of responses and positions in The Guild culture. PG 'reads' or 'handles' the codes as members interact in terms of their RO sets, and he uses that reading of the whole gathering to capture the

essence of the meeting.

[R: 78] where multilingual speakers switch between code-switching

language varieties

Cof P Community of Practice

cohort cognitively, a group of reading elements that are

related because they were co-activated at some time

during reading

Community of Otherness or Difference [Shields 2000] a contact community

Community of Practice/interpretive a Community of Practice which concerns

itself with theoretical development

constraint satisfaction cognitive model which can be argued to work through

construction-integration

construction-integration the mental activity of first constructing approximate

> mental representations, then integrating those mental representations into a coherent whole. Intermediate structures are produced through systems of contextual

and anaphoric suppression and anaphoric

enhancement.

contact community a community which brings together groups from

different backgrounds. Shields' [2000] Community of

Otherness or Difference is a contact community.

contact linguistics linguistic theory relating to the study of languages and

cultures in contact and conflict

Guild cadre of policy researchers and academics critics

dialogics 1 the study of the separate voices woven into texts.

Some scholars refer to dialogia as polyphony.

2 'a kind of multiparty translation [Spivak 1993 quoted in Hawes 1999] where an accountable translator speaks with an ethical singularity ... speakers speak "essentially"... the translator's job is

to mediate the essentialism'.

Spivak is referring to the various voices in the polyphony or dialogia, by using the analogy of translation.

dialogia

Gurevitch's fourth dialogic category of language use which is characterised by more than one voice. The term is used to refer to the kind of language which Gurevitch sees as characterised by complexity.

differance

Derrida's coined term meaning to defer and to differ

diglossia

[R: 128] any stable linguistic situation in which there exists a strict functional differentiation between a [socially] 'L[ow]-variety' and a distinct 'H[igh]-variety'

discourse

1 [R: 131] generic term for various types of text. The term has been used with various differences in meaning: connected speech (Harris 1952); the product of an interactive process in a sociocultural context (Pike 1954); performance (versus 'text' as a representation of the formal grammatical structure of discourse) (van Dijk 1974); talk (versus written prose or 'text') (Cicourel 1975); conversational interaction (Coulthard 1977); 'language in context across all forms and modes' (Tannen 1981); and process (versus product or 'text') (Brown and Yule 1983)

2 in other studies sometimes used as a short form for 'discourse variety' or discourse type

discourse base

a term used by Tuler and Webler [1999: 443] to include structure and personality characteristics – they also differentiated between interactions that were more or less constructive

discourse type

the variety of language used by a particular group, its typical grammatical forms and its characteristic lexis. In other studies sometimes shortened to 'discourse'.

discourse variety

see discourse type. In other studies sometimes shortened to 'discourse'.

discursive pragmatism

term used by Alvesson [2000(a)] relating to research in organisational communication which makes use of discourse analysis. Alvesson urged a kind of triangulation to ensure credibility in this kind of research.

dynamic equivalence

the outcome produced from the process of **intersemiosis**. Lexical equivalence is contrasted with

it. Dynamic equivalence produces translation that is not word for word, and is favoured by translators because it retains cultural complexity.

cognitive process where appropriate information is made more available by anaphors but not by context

Guild cadre of natural resources exploiters

Weick's concept of the organisation as decisionenvironment, as abstract rather than concrete

hypothesis that readers build situation models by monitoring at least five event dimensions: protagonist, time, space, causation, and intentionality

1 used in the thesis to label the fragile contact culture that is protected by the Guild's **positive tact structure**

2 public self image [Verschueren 1999: 45]

3 the concept of face has built into it both aspects [...Independence (negative face) negative or deference politeness. .and... Involvement (positive face) solidarity politeness...] (Scollon and Scollon 2001: 47)

4 [R: 370] A central concept of politeness theory is 'face', which is taken to be important to individuals in both a positive and negative aspect. One preserves the negative face of an interactant by impeding or interfering with his/her actions and values as little as possible; one attends to the positive face of an interactant by endorsing and supporting the interactant's presumed positive self-image as much as possible.

1 a coopted label for the Review, used to indicate a concept similar to that of 'dynamic equivalence' or 'suspension text' in translation studies. The notion of the Fractal is employed to point first to the replication of the range of responses and positions in Guild culture, or Weickian equivoque, and second to the genre-hybrid. Because the term, 'Fractal' is used to refer to self-similar patterns, where a single fragment replicates the whole, the reference for the Fractal in the thesis implies that PG's Review replicates The Guild in important ways.

2 the name for the product which results from the code-handling process.

enhancement

entrepreneurs

Event-Indexing model

equivoque

Face

Fractal

The relation of the Fractal to code-handling looks like this: codehandling =[polyphonic transformation/translation intersemiosis]-> dynamic equivalence/suspension text=>Fractal [Weickian equivoque] genre-hybrid Review.

That is to say, that through a sometimes unconscious procedure of 'code-handling' involving processes of reading RO sets, polyphonic transformation and translation intersemiosis, there is produced a Fractal genre-hybrid Review which reproduces Guild patterns, ie a dynamically equivalent text, or an instantiation of Weickian equivoque [the abstract decision environment].

3 sometimes a synonym for the Reviews, emphasising the dynamic nature of the text as Weickian equivoque.

Face Threatening Act

[R: 370] Acts which involve the speaker in breaking away from ... face-threatening tendencies are known as 'face-threatening acts'. Ordering someone to do something is *prima facie* threatening to the person's negative face. Positive face is reflected in numerous appreciative conversational gambits.

text type, such as poem, play, scientific abstract, cricket commentary.

a mixture of several different genres, or a new genre. In the thesis genre-hybrid is sometimes another way of talking about the 'Fractal', ie PG's Reviews. The reviews are hybrids because they are neither strictly scientific summaries nor narratives, but a mixture of both.

Global Information System, a satellite positioning system. Although the term is now familiar in the community, when the Guild meeting took place it was still an exotic satellite masterpiece. The natural resources management application is starting to be reported in the press [ABCRN *Bush Telegraph* 25.6.03] as a system of checking whether land clearing is taking place.

a term built on the analogy with 'whitewash', meaning to make claims about minimal environmentally friendly practice, in order to camouflage other more serious environmentally harmful practices. One example is printing

FTA

genre

genre-hybrid

GIS

greenwash

environmentally friendly messages on plastic

supermarket bags.

Guild refers to the professional organisation for

environmental management which is the context for

PG's genre-hybrid summaries

Guild cadre a label given to each of the five divisions of Guild

members identified in the thesis: entrepreneurs, harm minimisers, negotiators, scientific experts and critics.

Gumperz a linguist theorising on code-switching where the

code is seen to be used in discrete ways, indicative of

social constructs.

Gumperz' theory contrasts with that of Myers-Scotton's RO sets. Gumperz encourages the view that the speaker can use code-switching as a stylistic device. Myers-Scotton's theory starts from the other end, where the speaker is obliged to use certain forms,

but can draw attention if she varies them.

Gurevich a theorist whose article on dialogia identifies four

categories: dialogia, monologia, silence, unity

Half-spectrum a term used to characterise The Guild membership

criteria which remove a section of the interested community, by restricting membership to qualified

professionals

harm minimisers Guild cadre of natural resources managers

Hawes a theorist whose article on dialogia identifies the link

of dialogia with the translation process. He explains that translation requires suspension, or simultaneous maintenance of multiple interpretations. Hawes contrasts dialogia against dialectic, which he sees as

duality or polarisation.

heteroglossia another word for dialogia, as opposed to monologia. It

means the inclusion of a range of perspectives, or voices, in the text. Another word for it is polyphony, on the musical analogy where melodies are mingled.

INTER interaction between professionals, excluding

communication to clients

INTERPECPEM professional environmental communication [PEC]

between environmental management professionals [PEM] exclusively [INTER]. An alternative label for

this new field is 'Natrat-talk'.

intercultural communication a general term for linguistic and other semiotic

interaction across cultural groups

interdiscourse term used by Scollon and Scollon to refer to a notion

similar to that termed 'cross-cultural pragmatics' by

others such as Wierzbicka

interlanguage a language variety acquired in contact situations.

[R: 235] The relatively systematic transition from initial knowledge of a language to (near)-native proficiency during the process of language acquisition. Often manifested as an unstable set of productive characteristics, interlanguage encodes the rules of both the native language and the target language as well as a set of rules that belong to neither, but rather

a set of rules that belong to neither, but rather manifests universal principles inherent in language

learner's competence

interlinguistic process translation between languages

intersemiosis the translation of concepts from one kind of system of

signs to another system. Dynamic equivalence is the outcome. This is the process which produces the complex translations favoured by translators.

KIFOWS a type of organisational community – Knowledge

Intensive Foundations Organisations Workers And Structures. It means something like a professional

society.

Landscape model a connectionist cognitive model with cohort

activation, which allows the model to dynamically incorporate the reader's activation state from the previous reading cycle into the current mental

representation.

language as a social semiotic Halliday's notion that language is social behaviour,

and that its structure can be explained in social terms

language in context kinds of enquiry in linguistics, sociology and cultural

studies which investigate how language is integral to society, how language constructs society. Functional theories of linguistics are included in this rubric, as are

theories of pragmatics.

lect

variety of language, a term encompassing the 'code' referred to in theories of code-switching, and including the whole range of language variation from idiolect, to register, discourse variety, sociolect, pidgin, Creole, dialect, and national language.

[R: 272] Term introduced in American variational linguistics to designate regional, social, and other types of language varieties. In compound words (e.g. sociolect, dialect, idiolect, isolect etc.) the first element indicates the type of variety.

Lexical equivalence

translating with the correct gloss for each word. This contrasts with dynamic equivalence, where the translator works for equivalence at levels higher than the word, such as the phrase or idiom or pragmatic function or genre. Lexical equivalence is seen as simplistic, while dynamic equivalence is regarded as more complex, richer.

Malmkjaer

a translation theorist who makes the point that the TT [target text] specific lexical item is not at such a high degree of importance as are the overall patterns supplied in the TT. That is, she does not recommend a word for word approach. She prefers the translator to hunt for cultural accuracy rather than word accuracy.

Maslow's hierarchy

an organisational management theory relating to the satisfaction of human needs, where when survival needs such as hunger and shelter are satisfied, people look to satisfy higher level needs such as community acceptance.

monolingual intersemiosis

applying the translation concept within a single language, that is translating from variety to variety within one language using techniques that are not word for word.

monologia

Gurevitch's category of language use which is characterised by one dominant voice or variety. In this study the discourse of science is claimed to be monologic.

Myers-Scotton

a linguist theorising code-switching in terms of Rights and Obligation sets, the observance of which appears in unmarked forms, and the renegotiation of which appears in marked forms. Myers-Scotton's theory contrasts with that of Gumperz.

Natrat-talk another way of referring to INTERPECPEM or

professional environmental communication [PEC] between environmental management professionals [PEM], exclusive to fellow professionals [INTER]. Formed on analogy with doctor-talk and teacher-talk.

negative-reference groups defining one's partner as an enemy [Janney and Arndt

1992]

negotiators Guild cadre of business and government

NEPM National Environment Protection Measures

NGO Non-Government Organisation

NRM Natural Resources Manager/Management

organisational community a construct which characterises the organisation itself

as a community and includes communities within organisations. The construct is used in organisational theory as a point from which to access scholarship about communities to inform organisational practice. **The Guild** refers to the professional organisation for environmental management which is the context for

PG's genre-hybrid summaries.

OUTER communication from professionals to client groups

PEC professional environmental communicator,

professional environmental communication [PEC]

PEM professional environmental management, professional

environmental manager

PG pseudonym for the reviewer whose work is

investigated

politeness a term used in linguistic pragmatics to refer to

information structure in a text and its relation to how the textual goals are addressed. It does not necessarily refer to the function of being polite, but it does relate to successful conversational performance. Politeness theory is the precursor to the Relevance Pragmatic theory and hence to the RO sets theory. Politeness is a subsection of the cooperative maxims of Grice.

[R: 370] Umbrella term for a combination of interpersonal considerations and linguistic choices affecting the form and function of linguistic interactions. Analysts from diverse fields –

pragmatics, sociolinguistics, and anthropology - argue

that the specific ways in which speakers, as interactants, perform speech acts...such as requests, commands, elicitations and offers, both express and reflect the nature of the relationship between them.

Positive frame of communication 'temporarily replaces partners' respective

cultures as the nonnegotiable basis of communication' [Janney and Arndt 1992], where the partners tacitly agree to become members of a common, transcendent positive-reference group; where the starting point is some aspect of the situation common to both partners' immediate interests, activities or goals. Also referred to as the **positive tact frame** and the **strategic tact structure**

positive tact frame

the same as the **positive frame of communication**, the situation engendered by the Halfspectrum professional filter. Sometimes called the **strategic tact structure**. It refers to The Guild's agenda to avoid confrontation.

pragmatics

1 The study utilises the first, second and fourth of Levinson's [1985] pragmatic categories:

- study of language from a functional perspective
- study of the context-dependent nature of language use and language understanding
- study of nonconventional or not truth-conditional meaning, possibly to be understood as speaker or utterance-meaning rather than sentence-meaning [Levinson quoted in Grundy 1994: 176]
- 2 ...pragmatics as a general cognitive, social and cultural perspective on linguistic phenomena in relation to their usage in forms of behaviour...how does language function in the lives of human beings? [Verschueren 1999: 68]
- 3 [R: 374] While semantics is concerned with the literal and contextually non-variable meaning of linguistic expressions or with the contextually non-variable side of the truth conditions of propositions or sentences, pragmatics deals with the function of linguistic utterances and the propositions that are expressed by them, depending upon their use in specific situations.

Ramsar

The Convention on Wetlands of International Importance especially as Waterfowl Habitat adopted on 2 February 1971 in the Iranian city of Ramsar RC

rational choice models – 'rational code choices are instances of speakers negotiating new norms' in Myers-Scotton

register

a kind of language used in given situations.
[R: 402] Manner of speaking or writing specific to a certain function, that is, characteristic of a certain domain of communication (or of an institution), for example, the language of religious sermons, of parents with their child, or of an employee with his/her supervisor. Register plays a prominent role in Halliday's school of Systematic Functional Grammar.

Relevance Pragmatic

Sperber and Wilson's theory that successful contributions to a language event demonstrate their relevance to what has gone before in the text, and what the community values. The precursor to Myers-Scotton's RO sets.

review

genre which implies some kind of valuation and a broad summary which does not try to cover all aspects of the source text.

Review

when the word uses uppercase first letter it signals PG's genre-hybrid reviews. The label is a hypernym, with the task of including every characteristic up for discussion about PG's reviews, such as the textual manipulation techniques, the narrative polyphony, the genre-hybrid nature of the Reviews, and the intersemiosis. [The label 'Fractal' is used for the Reviews as a hyponym to draw attention to intersemiosis, to the translation techniques, to the patterns of the organisation.]

RO sets

Rights and Obligations sets – Myers-Scotton's RO sets expand Sperber and Wilson's Relevance Pragmatic by demonstrating that it is through showing an understanding of the community's rights and obligations that the relevance is achieved. RO sets are 'the means by which the social negotiation is achieved. Existing social conditions are maintained by adherence to the RO sets in using unmarked forms.' When the speaker uses unmarked forms, she is conforming to the rights and obligations. When a marked, or unusual, form is used, she is renegotiating the rights and obligations.

S/H

Speaker/Hearer

scientific experts

Guild cadre of scientists

SFL Systemic Functional Linguistics is MAK Halliday's

theory of language as a social semiotic, involving the construct of the lexicogrammar, instead of the more usual division of the lexicon from the grammar. Halliday explains that all language has social functions, and that society is organised by means of

language.

SL source language. The language of the original text

which the translator works on.

SMR sender message receiver [transmission models of

communication]. These are exemplified in models such as that developed by Shannon and Weaver. Also

called conduit models.

ST source text. The original text which the translator will

render in the target language.

strategic tact structure sometimes called the positive tact frame imposed by

the Halfspectrum membership filter, which enables The Guild's strategic tact to operate by protecting the Face of participants, thus enabling The Guild's work

to proceed.

strategic tact the requirement of The Guild organisation that

confrontation on environmental matters is minimised

or eliminated

summary genre which provides a gentler path into theoretical

complexity than the scientific abstract; a genre which

can provide detail, and which is presumed to reproduce the main structure and points

suppression cognitive process where inappropriate information is

made unavailable by context and anaphors

suspension used in Gurevitch's dialogic classifications to indicate

the highest degree of recognition of complexity, where oppositions are not brought prematurely to resolution, but are held and valued for their divergence and separateness. Suspension situations are potentially the sites of problem solving because groups normally in contention are able to meet in the suspended situation and maintain the complexity of their positions while

searching for solutions.

suspension text in translation a text characterised by dynamic

equivalence, in contrast to a text which exhibits lexical

equivalence, called a transparent access text. A

suspension text is considered richer than a transparent

access text.

tact a means of maintaining the sense of cooperation and

supportiveness necessary for successful interaction. [Janney and Arndt 1992] Tact is not necessarily silence, but it is the avoidance of confrontation.

Target-oriented translation oriented to lexical equivalence [word-

for-word translation]. Translators regard this as simplistic and non-representative of cultural

complexity.

TBL Triple Bottom Line accounting, including

environmental and social outcomes alongside financial

outcomes

text a communication event, either written or spoken,

> composed of a single mode or a mixture or variation of modes, sometimes including non-linguistic components. Conversations are regarded as texts,

along with written documents.

TL target language. The language the translator is

translating into.

transfer-oriented translation oriented to dynamic equivalence [where

> the effect on the target reader should match that of the effect on the reader in the original language]. This is a complex kind of translation which translators consider

more skilful than word for word translations.

a text where dynamic equivalence has not been transparent access text

> reached or even sought, but rather where lexical equivalence [matching word for word] has

characterised the translation procedure. This sort of translation is criticised by translators as simplistic.

TT target text

see code variety

Weickian equivoque Weick's concept of the organisation as a decision

> environment. The organisation is an abstract set of rules for interactions, not a group of people, not a collection of data, not an assembly of physical items.

LIST OF ABBREVIATIONS AND ACRONYMS

There is more detail on some of these terms in the glossary.

Global Information System

INTER interaction between professionals

INTERPECPEM professional environmental communication between

environmental management professionals. An alternative label for this new field is 'Natrat-talk', meaning talk among environmental management

professionals, or 'natrat shop'.

KIFOWS Knowledge Intensive Foundations Organisations

Workers And Structures

NEPM National Environment Protection measures

OUTERPECPEM professional environmental communication delivered

to clients of the environment professional. The

Natrat's 'work'.

PEC professional environmental communicator,

professional environmental communication

PEM professional environmental management, professional

environmental manager

'PG' pseudonym for the reviewer whose work is

investigated

RO sets Rights and Obligations sets

SL source language

ST source text

TBL Triple Bottom Line accounting

TL target language

TT target text

1 THE INTRODUCTION

1.1 Background

A professional writer, 'PG', went to work for an environmental management organisation, 'The Guild'. He did a good job, but it was hard to work out why. This analytical text study uses as data a set of Reviews which were produced by this writer for the monthly meetings of 'The Guild' over a 2-year period from June 1999 to July 2001, supported by a range of organisational and observation documents, including drafts and discussion notes.

The need for information arose when the Reviews PG produced turned out to be unprecedentedly popular with The Guild committee. However, he was not certain about staying. Perhaps a replacement would have to be briefed, so it became necessary to work out why The Guild liked his work.

1.2 Research problems and objectives

The research was thus built on two main struts of organisation and communication. The organisational requirement was to work out what needs PG was meeting in The Guild. The communication requirement was to identify and label the techniques PG was using to write to such acclaim.

Hence the primary research question asked in what respect the Reviews were successful in the organisation. This research question broke down into a number of focusing questions: how the Reviews related to the goals of the organisation, what kind of organisation it was, how the members saw themselves, in what ways they could be described as a community, and what the successful components of the Reviews were in contextual terms.

The secondary research question asked what the successful components of the Reviews were in technical, textual terms. How good was the reviewer at the levels of grammar, word choice, and even format? How fluent was he in the different kinds of language from scientific to shop talk (or 'Natrat-talk')? Was there any development in this community language? What kind of text did he produce? Was it a standard recognisable form, or a mixture of genres? What was his approach to

meaning-making? On whose terms were meanings negotiated? On the speaker's terms, on The Guild committee's terms, or on the audience's terms? Was PG exerting some kind of dominance and negotiating on his own terms? How did he handle the various voices in his texts? Where did he stand to tell the story? What characteristics could be observed in the structuring of information? Did he stick to the rules of politeness and tact? What sort of jobs did his Reviews seem to be doing?

The tertiary research question asked how he could accurately reproduce patterns of organisational positions when he did not seem to be fully aware of all the politics of the situation. The problem converted into a question. Were there any theories which would tolerate the idea that the reviewer might be able to take in information automatically at certain levels, while concentrating on technicalities at other levels? Translation scholars eventually provided support for this idea.

1.3 Deficiencies in our current knowledge: INTERPECPEM or Natrat-talk

If there had been a suitable body of literature in this domain, the research would never have been carried out. All that was required was a more or less relevant page of useful guidelines. Nothing reliable was available.

We know very little about what makes one writer better than another in communication between environmental managers. There is a growing body of material on environmental advocacy, and another body growing alongside it on scientific communication, with still another on professional communication. If one assumes that environmental communication is either advocacy or scientific communication, then the information is sufficient. If one assumes that a professional environmental management organisation has the same needs as any other organisation, then the information suffices. However, if we put a professional communicator into a professional environmental management organisation, and ask him to do a good job, how do we know what a good job is? There is virtually no study of this specific situation, and it is the function of this thesis to address the gap.

There is a need for a new name to describe the field. 'INTERPECPEM' is one suggestion, with the more approachable 'Natrat-talk' as an alternative. The

INTERPECPEM acronym indicates interest in the Internal Interaction level of Professional Environmental Communication among Professional Environmental Managers. The next step is for the internal interaction of environmental managers, INTERPECPEM, to be distinguished from the external, or 'OUTERPECPEM' level, where the current extensive literature in scientific, advocacy and counteradvocacy communication is relevant.

It is important to know that professional environmental managers [PEMs], affectionately known as 'Natrats' in some circles, are often dealing with the exploitation of natural resources, and cannot be conflated with 'environmentalists'. What characterises PEMs, or Natrats, is their morally ambiguous position. They are in a similar situation to those who deal with exploitative, violent or negative practice, by meeting the perpetrators on their own ground, by adopting harm minimisation, by becoming part of the target community and by modelling informed, responsible practice from the centre of bad practice. Criminal lawyers, politicians, and the Salvation Army might all see themselves as analogous. However, this research has adopted the analogy of the translator.

Translators are professionally committed to enter a negotiating situation with a neutral point of view. The very skill which translators bring to proceedings, however, is part of the skill set which all participants use, so translation actions obviously and overtly affect the directions and outcomes of the interaction. Part of the professional approach of the translator is to minimise the degree of obviousness and overtness, to make the action tactful and true to participants' intentions as far as possible. PEMs, or Natrats, are in a similar position. Their employers, or the people who contract them, have business goals which the PEMs have to deliver on as the basis of their employment. Harm minimisation and education are often the only realistic sustainability goals which they can hope to meet. Their OUTERPECPEM activities are well recorded and reported, with communication and education scholars working alongside PEMs to develop the body of knowledge and expertise. However, the way PEMs talk among themselves and interact is rarely available for scrutiny.

INTERPECPEM, or Natrat-talk, starts from a completely different basis to OUTERPECPEM. With Natrat-talk there is first a presumed professional knowledge and a concomitant expression of respect, which takes a range of forms. Second, advocacy of any kind is completely inappropriate, counter productive and in fact taboo. Third, tact is paramount. Finally, as this research is to find, the social task is prime.

A starting point for how to model Natrat-talk can be found in studies in the discourse of various groups, including doctors and 'doctor-talk' [Loewe and Schwartzman 1998] and teachers and 'teacher-talk' [Moorman 2003]; and in other similar studies for police [Gibbons 1999] and computer science seminar participants [Rendle-Short 1999]; alongside talk-in-interaction studies, including airline pilots [Nevile 2002], pragmatics analysis of medical personnel [Cicourel 1987], talk among sports stars and movie buffs [Burridge and Florey 2002], cross-cultural communication [FitzGerald 1996], writing in community and professional contexts [Bazerman and Paradis 1991] and writing in technical groups [Doheny-Farina 1992]. The study does not utilise those studies or scholarship areas per se, but sits alongside them and utilises the principles of language in context enquiry which inform them.

In the discipline of linguistics Halliday [1975–1993] provides the text in context model of analysis. Other influential scholars in the analysis of language are Swales [1990], Hawes [1999] and Gurevitch [2001], and the most influential translation scholars are Gentzler [2001], Hickey [1998] and Malmkjaer [1998].

Where the environmental management organisation is unique is in the area of tact and Face. Verschueren [1999], Myers-Scotton [1998], Scollon and Scollon [2001], Janney and Arndt [1992] and Chang [1999] provide a pragmatic and social interactional structure of a positive tact frame.

In the environmental disciplines, the position taken by Doyle and McEchearn [1998] is the most influential.

The research found that in practice the closest field to Natrat-talk is, to a limited extent, organisational communication. The studies in this field examine how people interact in organisations. From organisational disciplines the study used work by Pepper [1995], Weick [1979], Alvesson and Karreman [2000(a)] and Tuler and Webler [1999]. The most helpful literature in the organisational field comes from that on communities in organisations and that on learning in organisations, especially Wenger [1998] on Communities of Practice and Sveiby [2001] on Knowledge Management.

Thus the scholarly context for the study is broad. An extensive and previously uncollated body of learned work is accessed in the background, literature, methodology and construct chapters, in order to assemble the intellectual tools to assess the texts, in relation to the work they do in the professional community. The discussion is not limited to organisational communication constructs, but employs an array of theoretical notions from a range of language and communication disciplines.

Because of the specificity of the Natrat-talk field, there is no single body of literature that can be surveyed. Therefore the chapters that review literature deal with tools which can be turned to the purposes implicit in the research questions and their objectives. However, the scholars who have provided these tools did not foresee their use for analysing Natrat-talk. They developed their tools in the context of a different set of questions, and so the application of them to Natrat-talk is patchy and partial. Nevertheless, the tools must be adopted and adapted. The choice of tools must be eclectic, because in the absence of an overarching theoretical framework it is necessary to cast the theoretical net widely.

1.4 Scope of the current work

The research is pre-theoretical. It is responding to questions with available theories, which may fit awkwardly. The argument is assembled in terms of what is known theoretically about the interchange of knowledge, and about how the data furnish characteristics of successful knowledge negotiation. Further research would be necessary to forge the eclectic set of constructs into a consolidated theory set. This study is limited to the collection of some of the constructs and a demonstration of

how they can contribute to understanding of environmental communication in analysis of texts in professional environmental management.

The scope of the study made it impossible to interrogate all the Reviews along every parameter of enquiry. It was not even possible to cover all the Reviews in the 1999-2001 period. Priority was given to the most interesting points of articulation with the research questions, and the areas where the reviewer encountered some difficulty.

The reliability of the study's findings may be limited by the lack of any firm data on reader response. However, the most convincing reader response was the reaction after PG's very first review. The Guild committee liked PG's work so much that they doubled the fee in order to secure his regular services. Throughout the study, there is also observation of actions by members, which are interpreted as responses.

1.5 Progress, principal results and conclusions

The driver for the research was the imminent threat of the reviewer's resignation. PG's moral standpoint had led him to resign from other jobs and it seemed he might do so again. Strangely though, his inconsistent moral standpoint seemed to present little obstacle to his accurate representation of organisational patterns, which prompted the third research question: how was PG able to accurately reproduce patterns of organisational positions when he did not seem to be fully aware of all the politics of the situation?

The most straightforward starting point was obviously the second research question on identifying technical features. However, although it was easy to make reliable technical lists, these did not at first mean anything, because it did not look on the surface as if any selected text by PG was very different from one that another professional writer could come up with.

What was required was the integration of the first two questions, so that divining the ways the community could be responding might lead to determining the relevance of the textual ploys. That is to say, listing rhetorical tricks was not enough. It was more relevant to work out what the community liked about his writing and then explain the likeable features by linking up the tricks. Naturally, the most fruitful

sites were where the process was flawed in some way. The fact that it could be flawed at all testified to some other elements working: that PG was taking risks and that the text was fundamentally different from standard, risk averse professional practice. The level of intimacy achieved was bringing with it the risks.

If the observer were only looking at the technicalities, they would miss the intimacy, which in fact was the secret. There would be little yield for the observer taking a default scientific approach to environmental communication, or looking for environmental advocacy. The organisational observer might get some distance with a diversity motif, but most such scholarship assumes a top-down situation on meaning-negotiation with a diverse workforce.

Some flaws occurred where PG subverted his usual practice. This drew attention to features of the normal practice. It occurred at times where PG felt that The Guild people were compromised in some way, a demonstration of his growing commitment to the community.

As to the outcomes for the primary question, it was deduced that by doing the job of developing culture and community the Reviews could claim to have contributed to the organisation's goal:

to enable and facilitate communication and interaction between environmental managers from diverse intellectual backgrounds in the pursuit of environmental sustainability [The Guild's website 2002]*

The integration of the primary organisational needs question with the secondary technical question leads to the elaboration of what sort of community the writer is dealing with, and the Community of Practice emerged as an important model. The work that the Reviews were doing in enhancing identification and building a sense of community turned out to be consonant with that required for organisational learning and knowledge management.

For the secondary technical question, the development of the genre-hybrid Review was plotted, with the important perspective that genre is interpreted as social

.

website details not included in bibliography to preserve the organisation's anonymity

purpose and hence that a change in genre signals a change in social purpose. PG's genre-hybrid Review changed the job of the review from that of scientific report to interactive instrument. It possibly made the information more accessible to a wider group of members when it released the material from the scientific formality into the intimate space. However, the release increased the level of risk to Face and jeopardised The Guild's strategic tact.

In addressing the tertiary question of how PG managed to maintain the positive tact structure, PG's ability to capture organisational patterns in a sort of Fractal reproduction was noticed. It was found that translators accept unconscious processing as a factor of the translation process, and this discovery led to the assessment that the translator's multiple ethical positioning provided a model for the capacity to include several points of view. The narrative polyphony of the Reviews, which included characterisation and personification, created an intimate space of shared cultural assumptions, textual games, and multidimensional experiences for members. The narrative positioning and the handling of the disparate voices were intricate and multifarious. The rich tapestry of PG's dialogic suspension enabled a rack of potentially conflicting ideas to exist in the same place, cushioned by this cultural matrix.

The study found that PG prioritised interactional structure over detail, dynamic equivalence over lexical equivalence. He related text to context, not along simple Gumperzian lines of codes, but by patterning cadres, personalities, different audiences, different publics, different intellectual pursuits, even different aesthetics, in a complex code-handling process, explicable in terms of Myers-Scottonian Rights and Obligations sets. This intersemiosis was made possible through his intense and sincere participation in the speech community and his capacity and determination to comprehend and represent all the levels of complexity.

PG replicated the multiplicity of voices in The Guild community and furthered their Natrat-talk meaning-making.

1.6 Organisation of the thesis

There are literature reviews in every major section leading up to the analysis. Background chapter 2 reviews material related to tact, Face and assumptive framework. Literature review chapter 3 reviews organisational literature. Methodology chapter 4 reviews code-switching. Construct chapter 5 continues a review of code-switching and goes on to review markedness, cognition, dialogics and translation in its quest to legitimate unconscious processing. The constructs chapters begin the primary and tertiary arguments by entering into a close relationship with the field of translation and emerging with two derivative constructs, 'code-handling', which is related to intersemiosis, and the 'Fractal', which is the product of intersemiosis. The Analysis chapters 7–17 tackle the secondary question. They start with a discussion of the oeuvre and a look at genre in chapter 7, ending with the Discussion of the main outcomes in chapter 17. After the Conclusion chapter 18, the Bibliography follows. The text transcripts are then clustered into Appendices B and C alongside a small set of other interpretive material in Appendix A.

1.7 Significance of addressing the questions

The significance of the research falls into two categories. The first is that it was undertaken for an immediate practical purpose, necessitated by the gap in the literature. The second category is its longer-term significance and contribution to scholarship.

The three main questions as to whether PG's Reviews made a contribution to The Guild organisation, what the nature of the contribution was, and how it was achieved are organisational. The decision to link the text research with the endogenous organisational category for environmental management makes the insights generalisable to other organisations, especially to other environmental management organisations, and to theoretical scholarship in organisational communication.

The new collation of disparate theoretical instruments is of wider interest in a range of other communication disciplines. In each

constituent discipline, there is a scholarly contribution made by utilising the disciplinary knowledge in a new context. The first new context is often the environmental management context itself. The second new context is the adjacency of the other disciplines in the eclectic assembly.

1.7.1 The mediator

The readers of a target text do not glimpse the original. Their only experience is the translator's text. Sometimes it would be nice to have an intermediate step:

the writer must intend the reader to form a belief in virtue of his or her recognition of the writer's intention that s/he form this belief. In translation this picture is skewed by the intervention of the translator. The reader of a translation typically finds it meaningful; s/he feels that s/he is being told something. But s/he cannot be being told this because s/he recognises any intentions of the writer; s/he is recognising the telling-intentions of the translator. But the translator is not the author. There is no place in the theory for a mediator. Perhaps a place could be found. [Malmkjaer 1998: 36]

In fact the mentor/author of this study provides just such a mediation for the reader, thereby making overt the unconscious processes of the professional writer in this environmental communication context. This provides another sort of justification for the selection of the material for study in environmental communication.

1.7.2 The unsung

The most innovative theoretical contribution of the enquiry is that which developed in response to the conjecture that PG might have been processing levels of information unconsciously. The extension of concepts from translation and pragmatics to monolingual intersemiosis lays a new pathway to further study.

The research confronts assumptions about what environmental communication is. Environmentally responsible people whose work uses the language of exploitation and entrepreneurialism are largely unsung. This thesis counteracts the presumption that effective environmental communication is necessarily overtly ecologically correct. It provides a new direction for serious enquiry about how to achieve action for sustainability of natural systems.

The research serves to stimulate the question of career paths for communication professionals in the environment field. Instead of tacit complicity in the process that

sees talented communicators aspire to employment in advertising and public relations, it might be wise for environment strategists to embark on high level promotion of an attractive, well-funded specialist career path for talented professional environmental communicators. Assumptions that any professional communicator can, unproblematically, turn their hand to environmental communication are challenged. The presumption of scientific or advocacy orientation is flawed and dangerous. Assumptions that environmental professionals are the natural choice to do their own communication are also confronted. The element of unconscious processing is presumably an unrealistic job prerequisite for an environmental manager, but perhaps does come with a writer's commitment to the dialogic process. The concentration and effort required for the writing task arguably amount to an inappropriate use of time for environment professionals. They are logically better employed in managing environments.

Indeed the ultimate significance of this research might be its potential to contribute to common sense, with the confirmation that we should ask a writer to do a writer's job.

2 BACKGROUND AND CONTEXT

2.1 PG and The Guild

This chapter introduces the reviewer, PG, together with his mentor, and The Guild, its members and procedures. The culture of The Guild is introduced with its strategic tact structure, the Halfspectrum professional membership filter, and the history behind it. Briefly, strategic tact refers to a non-confrontational approach to contentious factors. The chapter also reviews some literature related to constructs for interpreting The Guild. While The Guild itself is not the object of study in this thesis, it provides the context in which the Reviews are produced. The introductions begin with the mentor, the reviewer, The Guild President, the presenters and the live audience.

2.1.1 The mentor

The author of this study was the mentor. As a member of two professional groups, those of professional writers and environment professionals, she acted as participant observer and mentor to PG in two separate ways. The first role was as supervisor for his honours thesis, and the second was as mentor for PG's early Guild Reviews. This mentoring role later took on a suitably collegial character, and eventually, as the mentor's Guild committee role lessened and attendance at meetings waned, she offered a detached and virtually uninvolved resource.

The early mentoring role involved consulting as academic supervisor and employment induction officer. As a committee member, indeed at the time as Vice-president, the mentor was involved in various ways: meeting the speaker; attendance at the speech; interaction with others who listened to the speech; committee attendance; access to committee minutes, newsletters and national organisation documents; writing for and reading the organisation's learned academic journal; and interaction with other committee members. As academic and mentor, the task in relation to PG involved listening to the tape with him, discussion, interaction in emails and drafts, as well as consultations with the speakers and the President. The mentor provided the writer with some background in terms of politics and overall understanding of the professional context, and was

able to help with details of the default standard scientific lexis and management lexis. She never discussed the organisational strategic tact or why it was required, ceding the responsibility for managing that aspect to the President with his veto, initially judging that he might have tactical reasons for using PG's voice as a representative of the critical cadre over a series of weeks. However, as PG's successful and popular Reviews continued week after week, there came a moment when he was specifically told by a committee member that he would be employed regularly and he should simply take it for granted that he was required for every meeting. The important point was that he was never told about the strategic tact factor. [section 2.2.3.1]

2.1.2 PG, the professional writer

PG was in 1997 a mature age student, a family man retraining after a redundancy package. He included Global Environmental Politics in his undergraduate subject mix, and produced his Professional Writing honours thesis on the notion of the professional writer's social responsibility, including environmental responsibility. A talented writer and trained graphic artist, he completed his first class honours degree and was employed by the university as a tutor for two years. He did not enjoy university teaching, and left to work in the abattoirs. [see discussion of *Wildlands* 16.1]

PG was selected from a field which included the following contenders. One contender attended regularly and worked in the public service, writing documents. This member acted as the default reviewer. The Secretary acted as reviewer on some occasions, simply taking the presenter's OHPs and summarising them. A student environmental professional produced a series of summaries, but an academic on the committee had to ghost the writing before it was deemed acceptable. The other contender, a professional writing honours student whose excellence is attested by his eventual first class honours award, produced one summary for the organisation. The committee did not like his work.

PG's first Review was greeted with a high degree of enthusiasm by the committee. A motion was passed to double the fee previously paid in order to secure PG's services. The mentor was present at this meeting and was surprised at the insistence of the other committee members that PG's work was of such high quality as to warrant this reaction. This event sparked the interest for the present study.

PG was born in England and had his early schooling there. He arrived in Australia when he was 10, and has no trace of British accent in his speech. His political philosophy includes a strong sense of social justice, and his private conversation often makes use of terms and constructs which are current in northern hemisphere politics. He avails himself of a range of media to keep up with current affairs and is active in a social group which includes English speaking people from both sides of the Atlantic in the Northern Hemisphere. Their convivial conversation is full of political comment, analysis, discussion and argument. In his honours thesis he mentioned that one of his motivating forces was the maintenance of the quality of his contribution to this social discussion. The notion of a social movement can be applied to this group:

social movements is a term used to refer to the form in which new combinations of people inject themselves into politics and challenge dominant ideas and given constellations of power [Doyle and McEachern 1998: 54]

PG's social group ethos can be claimed as a social movement in Doyle and McEachern's scheme of the western European political ecology, since the group arises in reaction to problems of industrialised societies, and with a strong urban focus. [1998: 66]

PG questions capitalist ideals, seeing them as responsible for much of the environmental crisis. At the same time he is a realist and pragmatist, acknowledging the comfortable life which capitalism affords and protecting his family's interests. That is to say, he does not behave as a public activist or advocate. However, he tries to live out his ideals in an advocacy which involves his family. He adopts strong principles when it comes to employment. In his final two undergraduate years, when his ability had become apparent, he received many job offers through the university and also through the casual employment he did undertake. Despite family pressure

to find lucrative employment, he refused jobs which compromised his principles. When turning down a job with an extremely high profile Public Relations company, he gave the reason that he thought advertising and promotion were at the root of consumerism and exploitation, blaming such companies for contributing to community misery and environmental problems. His integrity was such that he could not bring himself to become part of it. He considered such work dishonest.

PG resigned from the university tutoring job after two years, and his casual job with The Guild became his only writing job, in addition to what he considers the honest employment of the abattoirs. He exchanged his job in academe for his job in the abattoirs, because it involves him having constant consideration of his own life's direct dependency in exchange for that of other life. His family have acquired some chickens which he has named in terms of the sauces which will be served with them when they arrive at the table, such as Lemon, Tarragon and so on. PG is determined to make clear to his children, and everybody in his social group, the life issues, the emotional issues and the philosophical issues involved in the simple act of sitting at the table. He prefers this to the unexamined version where children unquestioningly buy factory battery chickens from take-away outlets.

As The Guild reviewer, he is responsible for transforming the live presentation into an interesting text for inclusion in the Newsletter, an organ designed to whet the appetites of members for future attendance and to report responsibly for those members who are unable to attend, but rely on the newsletter to keep themselves attuned to trends. There is often a sensitive political agenda to be respected. Drafts of summaries are presented to the speaker for comment or alteration requests, and the final draft is approved by the President before the item is delivered to the Secretary for circulation.

2.1.3 Immediate participants

Those who interact with PG directly are the presenter and the President. The audience play an important part, and are our entry into the organisation itself and its wider membership.

Normally the presenter is an environmental manager with a working professional level of presentation skills, and is often responsible for presenting material on difficult political issues to hostile or unsympathetic audiences.

The President's strength lies in his political and organisational acumen. He demonstrates his strategy and judgement in reading the factions, counting the numbers, orchestrating the sessions, researching and suggesting the speakers, preparing and lobbying the committee.

The material usually has a level of scientific and technical complexity, but is presented to a group which is not expected to have specialist knowledge in the specific area. Rather, the audience demonstrates its environmental management credentials by being able to cope with technical information across a wide set of areas.

2.2 Guild workings and constructs

This section introduces and theorises the nature of the organisation for which PG wrote the Reviews. There is a short summary of stages in the history of the environment movement, and a conundrum of excluded conservative voices is presented. The notion of strategic tact is introduced as the organisation's communication ploy to manage diversity. The 'Halfspectrum' membership qualification is described and presented as a possible explanation for the organisation's successful performance in terms of managing contact, diversity or the element of 'Otherness'. Finally the cadres of The Guild are listed.

2.2.1 Nature of The Guild organisation

The [Guild]'s purpose is to enable and facilitate communication and interaction between environmental managers from diverse intellectual backgrounds in the pursuit of environmental sustainability. [goals from the organisation's website 2002]

This involves people with contentious ideas working together, making necessary a degree of caution in interactions, as well as organisational structures and strategies to manage the danger of division or conflict.

2.2.2 Short history of the environment movement and conundrum

Tact is one of the most important elements of the study because it is the stricture to which PG adheres in his genre-hybrid Reviews. Tact relates centrally to the question of what constitutes professionalism in professional environmental communication. One answer to this might be that professionalism acknowledges the importance of professional tact. A professional environmental communicator [PEC] is seen to work towards pursuing environmental objectives while accommodating the perspectives of those whose objectives are counter-productive to sustainability.

The history of work for environmental sustainability makes clear why tact is necessary. Action for environmental sustainability involved protest and commitment, but produced failure in the 1970s, apathy in the 1980s, and broad level action and recruitment of rational economic forces in the 1990s. The period 1990–2000 is characterised by Doyle and McEchearn [1998: 149] as being the public service era.

When Young wrote his 1991 book entitled *Sustaining The Earth*, *The Past, Present And Future Of The Green Movement*, he was marking a point which he called 'postenvironmentalism', a word which appeared in the alternative title of the work. The phrase, Young explained in 1992 [pers com], was intended to indicate the mainstreaming of environmental action, with the quest for sustainable living a normal, urban set of routine behaviours rather than the former radicalised action by a minority. Young's point was intended to mark the end of contention and the beginning of public acknowledgement of the gravity of the crisis in environmental sustainability. Even at the turn of the decade of the 1990s, environmental managers had to take care to distinguish themselves in the public eye from radical members of the environment movement. Environmental sustainability had been constructed in public life as the preserve of fringe members of society. That was about to change with the Rio conference of 1992, but it still took the rest of the decade for there to be any change in public cultural construction of the matter.

Elliott [1998] starts the recent history of environmental politics acknowledging the part played in the late 1960s by NGOs (such as the Sierra Club and the National Audubon Society), Greenpeace and Friends of the Earth, which constituted the

environmental managers of their era. Up until virtually the twenty-first century, the environment was seen as something that had impact on organisations and businesses, rather than the element that was abused and impacted by business activity. Environmental managers of today still centre their duties on safeguarding businesses against challenges which might result from environmental factors and/or occupational health and safety issues. Now environmental managers also concentrate on safeguarding businesses against damage claims relating to loss of environmental sustainability. The last factor lies in the still rudimentary area of legislative protection for the environment, and many environmental managers are seen as working with businesses to delineate minimum margins for defence in case of a challenge, rather than targeting compliance and maximising environmental sustainability. It is easy to see the possibility for tensions within the profession and among environmentally responsible professionals. These tensions were, in the decades leading up to the 1990s, played out in the confrontation between environmentalists and business interests. The great achievement of the 1990s was to get the groups together. The Guild is one such venue where this happens.

Elliott [1998] sees the journey from the environment conference in Stockholm [1972] to that in Rio [1992] as the journey from law to politics. In the 1960s, Elliott argues, environmental problems were seen as occurring within state borders. The 1972 UN Conference On The Human Environment [The Stockholm Conference] saw the beginning of international cooperation and multilateral efforts to deal with transboundary problems.

Participants were government representatives. At the 1992 UNCED [UN Conference On Environment And Development], the participants were NGOs and international organisations. It is thought that the move from conflict to cooperation in environmental action for sustainability matured at Rio, and was given impetus by some of its products, including the Rio declaration, Agenda 21, Statement of Forest Principles, the UNFCCC Framework Convention on Climate and the CBD Convention on Biodiversity. Its purposes were to move environmental issues into the centre of economic policy and decision-making, to focus on the changes that must be made in economic behaviour, to ensure global environmental security, and to establish the basis of new dimensions of international cooperation through the

elaboration of principles, a program for action and a strengthening environmental governance. [Elliott 1998] These purposes are reflected in microcosm in The Guild, especially in the ideal of strengthening the role of major groups, such as local government, business and technology groups, and also strengthening the means of implementation, such as technology transfer, institutional arrangements, legal instruments and capacity building. The Guild also inherits the Rio extreme caution and diplomatic concern for tact and accommodation of diversity.

Hence there is the conundrum of the powerful marginalised voices in environmental management. The conundrum can be encapsulated as an inside-out view of disadvantage and franchise. The literature of social responsibility and justice is accustomed to presenting the victims of destructive action as the disenfranchised. Now in circles devoted to environmental responsibility, the rights and wrongs are seemingly reversed. The perpetrators of destructive action have been framed as the disenfranchised and silenced. This was widely discussed in trying to assess the reasons for the lack of progress in environmental responsibility during the 1980s, when there was much talk of 'balance', the meaning taking into account the dominant economic interests. See Elliott [1998], Aplin [1999] and Doyle and McEchearn [1998] for further discussion. The task of those in the environmentally responsible community is now to reinstate the voices of those responsible for degradation. This is another way in which The Guild is a contact community, as it mirrors the actions of groups convened to include formerly contesting parties. Now the argument can return to commentators in the area of disadvantage and try for a position in terms of otherness and difference.

Van Toorn and English [1995], in a framework which can be linked with Denzin's 'definition of situation' [Denzin 1998: 196], deal with 'who has the right to speak':

to use the notion of a positioned speaker may be to invoke essentialist assumptions of identity or it may involve locating a discursively and institutionally situated subject; many recent projects historicise subjectivity, politicise representation, and trace the emergence and development of discursive and cultural formations [Van Toorn and English 1995: 1]

This invites investigation of the use of such categories as Elliott's critical, technological and reformist cultural positions in terms of their positioning speakers and inviting essentialist assumptions. The important point about PG's practice was that he never did this. He did not ever try to segment the group and label them in terms of their ideologies, tribes or even their deeds. It seems that he assumed that the environmentally responsible subject matter might be an index of a uniformly responsible group.

An example of essentialist assumptions occurs in an essay written from a critical perspective. McSwite [1998: 279] reports a Citizen Advisory Committee member's feedback observation after a meeting

It is more important for someone who isn't in the 'clique of paid lobbyists' to make them feel comfortable so that they know someone isn't going to 'ha ha ha listen to this idiot!' They just listen and if you add something that was totally off the wall it didn't elicit much reaction. There were no eyes rolling. It was just 'oh well that is another way of looking at it I guess.' It was pleasing in that respect. [McSwite 1998: 279]

The speaker was a member of a New York group, a 'State-based Citizen Advisory Committee', composed of people representing landowners, property rights interests, environmental interests, the timber industry, academia, the recreation and tourism businesses and community, and others. The experience recounted here will be familiar to environmentally responsible people in all communities. This thesis raises the opportunity to appreciate circumstances where the 'clique of paid lobbyists' themselves can be conceived of as the silenced and marginalised: circumstances where they might feel intimidated to speak for fear of being greeted with a derisive comment from the audience. It is sometimes difficult to imagine that industry, corporate and government representatives might have suffered from such feelings of communicative restriction.

The most important insight into organisational performance for environmental change lies in the concept of negotiation instead of confrontation.

no matter how much environmental politics has focused on pressure group/NGO activity, the development of green parties and the use of environmental issues as part of the electoral context between rival political parties or the activities of business, much of what happens in protecting or harming the environment comes from the management and making of policy in the hands of administration and bureaucracy [Doyle and McEachern 1998: 149]

Hawkins and Hudson [1990] note that

people are more likely to act competitively if they perceive the outcome of the negotiation is one side winning and the other side losing. Almost certain to cooperate where they see the probability of joint gain [Hawkins and Hudson 1990: 13]

and present a picture of negotiation which relates it closely to culture and relationships.

Another definition of negotiation is the process of changing a relationship – when someone has been resisting you and then changes their mind it is because the relationship has changed – you for example may be perceived as more trustworthy or powerful or cooperative, so the relationship changes from one of distrust to predictability at least on one side [Hawkins and Hudson 1990: 13]

In what seems to be an application of this, Borschmann (of Greening Australia, an organisation which is devoted to achieving gains in the problems presented by land clearing, biodiversity loss and soil degradation) replies in answer to a question about getting sustainable results in agriculture

the secret of success is that you've got to be part of the farmer culture [Borschmann 1998: TV program aired 4.1.98]

Doyle and McEchearn [2001: 156] outline a position which relates to common goals and refer to Dryzek's contrast between administrative and ecological rationality. Dryzek [1987] presented ecological rationality in terms of an anthropocentric life-support approach, emphasising the productive, protective, and waste-assimilative value of ecosystems, the aspects which provide the basic requirements for human life. He saw the life-support approach as minimal, one which could support the addition of other reasons for attaching positive values to natural systems.

Importantly, he saw ecological rationality as enabling a robust position in the struggle with competing forms of functional rationality, such as economic, social, legal, and political rationality. Ecological rationality would meet such arguments on their own ground, that of specifically human interests.

The functional rationality angle provides the start of the positive tact frame. It is to be distinguished from the intellectual position referred to by Elliott [1998] as the technological paradigm. As Dryzek acknowledges, the functional rationality angle can bring to attention other reasons for attaching positive values to natural systems. This is one reason for examining with interest the contribution made by PG's Reviews to elaborating the technological paradigm into functional rationality, elsewhere described in this study as elaborating a monological position into dialogical, or moving from a Cartesian frame to interactional mode.

The present study is about the professional task in the context of extending membership of the group to the members of the 'clique of paid lobbyists' and environment management professionals in the pay of destructive interests. The conditions for entry into The Guild are such as to ensure a hearing for members of the factions who are the adversaries of people like the State-based Citizen Advisory Committee US participant quoted. The resultant mingling of contending interests deserves to be considered as a contact community, and as such, the justification of the tact position can be strengthened by sources such as George et al [1998]. The secret of the amalgam lies in foregrounding human interest as a common goal. The importance of getting a clear picture of the counter positions which have been thrust together is seen when PG's work is brought into focus, and it is observed that PG strongly holds a counter position.

2.2.3 Strategic tact structure

So far the participants have been introduced. Furthermore, the historical background outlined suggests that tact has morphed into a strategy for environmental management. Now the components of tact itself are discussed, along with the role tact plays in achieving the goals of The Guild organisation.

2.2.3.1 Face, tact and the assumptive framework

This is the way a representative manager sees the issue of strategic tact:

The interdependence of science, politics and moral value makes it unwise to regard any as independent variables in environmental management. [Robin 2001: 111]

Given that strategic tact is an operating requirement in environmental management, we must consider the steps required for its achievement. Tact protects Face. Face is a central construct in pragmatics, as explained in Verschueren [1999: 45]. The contact nature of The Guild encourages adoption of a realisation such as Scollon and Scollon's application of Face in intercultural communication. [2001]

The concept of Face has built into it both aspects [...Independence (negative Face) negative or deference politeness... and... Involvement (positive Face) solidarity politeness...] [Scollon and Scollon 2001: 47]

Verschueren's definition sees Face as the publicly negotiated relationship [1999: 45], and it can also be explained in terms of Sperber and Wilson's [1986] relevance pragmatic. The two major forms of negative and positive Face are theorised by writers in pragmatics to include adherence to a range of strategies, which include various kinds of silences and hedges designed to preserve autonomy and ameliorate Face Threatening Acts. [Verschueren 1999: 45] There is more analysis of Face in Appendix A1.

The construct characterising the method of achieving strategic tact is the assumptive framework, consisting of the positive reference group and positive frame of communication explained by Janney and Arndt [1992]. This frame 'temporarily replaces partners' respective cultures as the non-negotiable basis of communication'

where the partners tacitly agree to become members of a common, transcendent positive-reference group; where the starting point is some aspect of the situation common to both partners' immediate interests, activities or goals [Janney and Arndt 1992: 25]

The positive frame of communication for The Guild is professionalism.

Professionalism can also be referred to as the positive tact frame. The strategic tact structure is a term referring to the overall management of strategic tact and the set of

constructs: the assumptive framework, the 'Halfspectrum' filter, the resultant positive reference group, and the protection of Face. As explained below, professionalism is guaranteed by the 'Halfspectrum' membership filter.

2.2.3.2 'Halfspectrum' professional membership filter

Interaction in The Guild depends on the positive tact structure. Members are drawn from all categories of critical, reformist and technological [Elliott 1998] sectors of environmental management and culture. [See also Young 1991 and Stephens 1992 on the circles of participants in the environment movement and environmental management.] Scientists, business figures, public servants and government decision makers mingle with academics, students and field professionals. However, at Guild meetings there is no requirement to interact with people who are not qualified to earn their living within the field of environmental management.

The term 'Halfspectrum' is adopted for this study to indicate that by means of the professional filter, for the prerequisite of membership, the organisation reduces the number of possible intellectual positions from the full spectrum of ideologies which may be represented in an organisation related to environmental responsibility. Alongside those with qualifications in environmental management, it also includes those without formal qualifications who earn their living in environmental management and who have extensive documented experience and reputation. It excludes committed and well-educated non-professionals.

Alongside analysis of what it excludes, there can be analysis of the Halfspectrum filter in terms of what it includes, constructs or brings together. It constructs an assumptive framework and positively determines the mix of interactants. Janney and Arndt [1992] deal with tact in terms of social psychological positive frame theory and explain that in any culture, tact can generate a sense of cooperation and supportiveness necessary for successful interaction:

avoid conflict by managing the impressions at the situational assumptive level, where the partner needs to know what sort of person he is dealing with [Janney and Arndt 1992: 25]

Janney and Arndt [1992] explain the strategies to manage conflict by managing assumptions in imposing the assumptive framework.

When people cannot rely on shared cultural knowledge in attempting to regulate their relationships they usually try to find some other type of assumptive framework as a temporary replacement. This positive reference frame temporarily replaces their respective cultures as the non-negotiable basis of communication and the partners tacitly agree to become members of a common, transcendent positive reference group. [Janney and Arndt 1992: 25]

The Guild itself can also be characterised as an assumptive framework, first putting the filter in place to reduce negativity, and then encouraging the eligible people to work together in a new community to break down the technological isolation of the individual professions. The new assumptive framework gives the reassurance that people are drawn from a group of professional managers. Breaking the isolation of expertise is in itself quite a recent development in professional circles, one that is still regarded with a degree of suspicion in universities, whose working frame of interpretation is to prefer the facilitation of mastery and specialisation by dealing intensively with one esoteric area of knowledge, rather than prioritising interaction across specialisations. Whatever the case, the framework provided by The Guild differs from that offered in the participants' places of work and there is a degree of predictability about it, hence it can still be called an assumptive framework.

There are two important aspects to The Guild's status as assumptive framework. The first is the professional activity of environmental management. The second is the political aspect or stance. It is the second aspect which is the more revolutionary, and is of the greatest interest in this study. The aspect of political stance is taken to be that of the 'professional', that is someone who has to be sufficiently adept, reliable and collaborative to make credible daily environmental judgements in the workforce. It is the credibility accrued through professional practice which contributes to the positive reference frame. The credentialism of the qualifications requirement is an even more powerful output of the organisation, a separate cultural item, which works to both underscore the professional practice requirement, but also to validate professional practice that is not represented in credentialing organisations such as universities.

2.2.3.3 Tact related constructs: predictability, indeterminacy, ambiguity and trust

Predictability, indeterminacy, strategic ambiguity and trust are a set of ancillary constructs for tact. This section looks further into how the assumptive framework reduces Face threats.

Janney and Arndt [1992] tell us that in any culture, being tactful is an important means of maintaining the sense of cooperation and supportiveness necessary for successful interaction.

The assumption of affiliation reduces the danger of threats to interpersonal Face; the partners implicitly accept each other. This plus the assumption that they are communicating in good faith enables partners to view each other's ununderstandable or inappropriate behaviour as accidental rather than intentional... to cultural differences or momentary personal problems [Janney and Arndt 1992: 25]

The emphasis on predictability finds an echo in Scollon and Scollon's [2001] admonition that for successful intercultural communication, uncertainty needs to be reduced, and assumptions need to be controlled.

The function of positive-reference groups in intercultural communication is not to make the partners more understandable, but to make their behaviour more predictable. [Janney and Arndt 1992: 25]

The Halfspectrum filter limits the mix of interactants and makes them more predictable for the culturally diverse Guild. The social aspect of The Guild is where the danger of Face threats is reduced, where interactants are freed from the challenges of activists who are not committed professionally to environmental management work, and where interactants have the number of possible threats confined to credible challenges. As the members work together and find common ground, the number of threats reduces, which brings confidence that encourages more interaction, activity and sharing. The most important task of The Guild is to keep the parties talking to each other. The social task of keeping the communication channels open is even more important than the transfer of technological expertise.

avoid conflict by managing the impressions at the situational assumptive level, where the partner needs to know what sort of person he is dealing with [Janney and Arndt 1992: 25]

Thus part of the social profile is to be able to predict – not only in the home state Guild, but in other state meetings where newcomers are always welcome – that a new member will behave professionally. The new member is not asked to like the other participants, but to trust the others' professional judgement, because people outside do so daily, and because they are professionals. The more experienced the professionals are, the more predictable they are. Furthermore The Guild, in its manifestation as a Community of Practice, is working to acculturate younger members so that their actions will in turn become more predictable.

The Halfspectrum serves the tact functions by reducing the range of responses and challenges, simplifying the social mix and providing a positive reference frame. [Janney and Arndt 1992, Gudykunst 1994, Zupnik 1999] The Halfspectrum is a necessary precondition for interaction, a safety precaution for potentially confrontational interaction. Under such positive conditions, comprehension is improved and negotiation of difficult principles is facilitated.

Extending the theoretical Face notions into organisational communication, Chang [1999] aligns with Scollon and Scollon's [2001] orientation in intercultural communication with his claims that the well-defined is 'ambiguous'. Chang [1999: 535] deals with indeterminacy in Chinese conversation. He finds that indeterminacy [indirect, ambiguous verbal discourse] is a way to negotiate and to redefine the interpersonal position. His approach is similar to that of Zupnik [1999: 471] in the set of strategies used at interpersonal dyad level, which are also employed or mirrored at organisational level. This study utilises these notions in assessing how the Reviews contributed to the integration of meaning in the organisation, noting the part played by adherence to the tact requirement of the organisation.

Another ancillary concept to the positive tact frame is strategic ambiguity, which is about selective information flow upward and downward, and most importantly for The Guild, horizontally. [Eisenberg 1984 quoted in Pepper 1995: 119] Strategic ambiguity is essential and useful within the organisational context. Pepper [1995] points out that it promotes unified diversity by allowing organisation members to be exposed to the same message. Members can believe in the same symbolic construction and yet interpret it in different ways. Based on the notion that we do not want to know every detail, information can be used to avoid clarity, rather than

to accomplish the greatest amount of clarity possible. Given that meanings do not reside in messages, Eisenberg [1984] explains that clarity and ambiguity are relational variables, rather than message attributes. The level of clarity is actually a perception on the part of message senders and receivers.

Strategic ambiguity facilitates organisational and interpersonal change. At the organisational level it offers alternatives to the dominant organisational image, allowing new insights and ways of understanding to emerge [Eisenberg 1984 quoted in Pepper 1995: 119]

The construct of strategic ambiguity provides another level on which to assess the contribution of the Reviews in terms of organisational change. The relation of tact to trust and learning is furthered in the scholarship of Gamble and Blackwell [2001].

In a relationship-based trust culture, trust plays a much larger role in either doing business or in learning. [Gamble and Blackwell 2001: 156]

According to this theory, the orientation to making meanings in community reflects the positioning in the field of knowledge management. This provides a useful standpoint from which to judge the Reviews and their contribution to the organisation. Section 2.3 on culture and learning delves further into this.

2.2.4 Full environmental commitment spectrum versus The Guild cadres

The cadres of the Halfspectrum, which remain after the professional filter has been applied, are one way of describing a first layer in the complex web of organisational relationships and patterns which PG is claimed to capture in his Reviews. The entrepreneurs, harm minimisers, negotiators, scientific experts, and critics are profiled. Then, looking at the whole spectrum from which the Halfspectrum is chosen, it is indicated where PG stands, and more of The Guild's credentials in terms of a contact community are showcased.

2.2.4.1 Entrepreneurs

What might be considered the cadre of the far right consists of environmental managers who work in support of companies which sometimes act destructively, such as mining, logging, agricultural, chemical and nuclear industries. This 'Entrepreneur' group can be characterised in terms of Doyle and McEachern's 'Pollyannas' who see the environment as

external to human beings, an instrumental resource to be used and managed for human purposes but with a capacity to have impacts upon people and vice versa. [This group] does not see humanity as intrinsically part of the environment or nature [Doyle and McEachern 1998: 4]

While working on exploitation of one natural system, they nevertheless have little consideration for other natural systems and little interest in positive gains in sustainability. This can be the result of inadequate training. The professional aim of these managers, set by the companies they work for, is to keep abreast of compliance requirements and professional techniques, to the extent required to avoid prosecution or damage litigation. An example would be monitoring for radiation leaks in uranium mines. While it may seem incongruous, hypocritical or unprofessional to recognise these exploitative professionals, their inclusion headlines the success story of the organisation. Their voluntary participation in The Guild is the first step toward knowledge sharing and filling gaps in training or understanding. For the purpose of this study it is the existence of this group, and PG's attitudes toward them, which provide the content for the third research question on unconscious processing, dealt with in chapter 5.

2.2.4.2 Harm minimisers

The adjacent classification to entrepreneurs are harm minimisers, comprising of managers who work for such companies, but who have an agenda to improve sustainability and work for harm minimisation, to educate their corporate community and its customers, and to look for opportunities to trade off destructive actions with reparation. Examples of such members are environmental managers who work for power companies, chemical companies and transport companies. These environment professionals, such as those who work in mining and resource companies, work to present the endeavours of the exploiters in terms which will

green-wash their activities, using their professional knowledge to explain continuation of unsustainable exploitation practices despite their knowledge of sustainability factors. They are considered to be harm minimisers, because having them there is better than not having them there at all.

2.2.4.3 Negotiators: government and business

The central group of negotiation experts consists of corporate managers and public servants who both manage physical conditions in environmental portfolios and, more importantly, manage political and communication interactions. They might be seen as the pivot point classification, taking a large share of responsibility and demonstrating a high degree of expertise in mediating relations and decisions between the exploiter groups and the expert groups. The negotiators are the members with the greatest capability of making a physical difference in working with the art of the possible, in realising Doyle and McEachern's [1998] bureaucratic environmental protection. Environmental managers cannot, for example, manage a national park if there is no national park; there can only be a national park if there is sufficient electoral and financial support. This group must start from the disinterested viewpoint even if the facts require a stronger advocacy from the environmental experts. Doyle and McEachearn quote Weber in support of the neutral position which has to be adopted by the negotiators:

administration achieves both its efficiency and danger from its ability to impose rationality on the performance of various tasks such that the personality, interests, association and sympathies of the administrator would be stripped away and made irrelevant to the task at hand [Doyle and McEachern 1998: 155]

Negotiating parties demand such impartiality as a precondition to engaging in negotiation. The disinterested stance, the professional strategic tact, is an indicator of professionalism in environmental management and administration, and hence one of the cornerstones of Guild membership and practice. It was a President drawn from this category whose approval of PG's work resulted in the doubled fee, and hence a judgement to be respected as highly credible.

the performance of a task could be codified in the set of rules and procedures, minimising discretion and maximising the certainty of performance [Doyle and McEachern 1998: 155]

Bureaucrats are limited by their position of public trust. That is, their service is to the minister, the representative of the people. They must be seen as impartial and their expertise in technical terms is valued but not a guarantee that the best environmental decision will be made. The minister makes political decisions and implements them through their department. Ministers and their staff often instruct bureaucrats to delete, hide or downplay technical information which would bring about an environmentally sustainable decision, and make sure that the politically expedient decision is not troubled by the scientific facts. [Elliott 1995] A politically expedient decision made in flagrant contradiction of the technical advice can often result in economically disastrous outcomes for the state. Such was the decision which led to the tuna deaths in Port Lincoln, South Australia in 1997, where the technical advisor was forced to defend publicly the political decision against which he had fought so hard. [Guild member pers com 1997]

2.2.4.4 Scientific experts

Adjacent to the public servants are scientists. They have the highest level of prestige in terms of the technological paradigm and also have an important part to play in the positive tact frame, because of their professional impartiality stance. Scientific impartiality is different from the strategic and negotiating impartial stance taken by the negotiators. The scientist can afford to be uncompromisingly firm about the findings and what they indicate about future action. The negotiator does not have that luxury. Thus there are sometimes Guild clashes between negotiators and scientists, when scientists perceive that progress is not fast enough to bring about necessary change. This will often occur in question time after the speaker has finished, and leads to some lively exchanges. PG's reading of the dynamic patterns is likely to have been made easier by some of these frank and free verbal contests. Some of the tension between scientific information and the negotiation ethos was brought to light by Elliott's warning [Elliott 1995] that public service reports had suffered deletion of scientific information, which was inconvenient in terms of negotiation outcomes [eg in relation to decline of species and vegetation issues, in sand dredging and development decisions]. Scientific reputations depend on not prejudging in technical terms, and require all aspects of the scientific context to be set out. Scientists can only have the power to act while these reputations are intact. Elliott pointed out that if scientists cannot be made to come up with answers that

will lead to sustainable decisions [eg if the minister has asked the wrong questions and their funded research has been limited to that which will give an irrelevant answer] then scientists must decide on the facts only, and the decision may self-evidently go in the unsustainable direction. [Elliott 1995] Such exchanges form the context for the meaning negotiation involved in the preparation for PG's Reviews.

2.2.4.5 Critics: policy researchers and other experts

The group adjacent to the scientists, the critics, have the characteristic of not being limited to empirical objectivity, but are able to venture into interpretive paradigms and critical paradigms. Some scientists also locate themselves in this category. This group is the only set whose predictable behaviour includes the critical component. Examples of matters which might involve this group include such things as the legal, cultural and sociological issues related to the construction of the Hindmarsh Bridge in South Australia, where the scientific component was not an issue in contention and played little part in the decision. Although teaching in this domain, the author of this study does not consider herself to be in the critical group of The Guild community. Her professional position in the organisation is within the classification of managers, locating her activity in natural vegetation matters, sustainable farming and diversification of rural incomes.

Many Guild professionals are restricted by their employment positions to the categories we have considered. Thus public servants and professional managers are not able to take a position on matters which are part of their portfolio, even when their knowledge of the matter indicates that actions are unsustainable. Members who are not hobbled by professional limiters are classed here in the critical category and are free to speak judiciously of matters which need airing. Academics are included here, as well as consultants and independent operators. Employees of companies where the CEO is not at liberty to speak freely are also represented here, for example architectural employees and contract environmental analysts for some of the big firms. Members in other categories can pass information and there is always a strong consultative current circulating amongst members in this category.

Restraint is exercised, however, because The Guild's credibility depends on its ability to attract the participation of all environment professionals. It must

distinguish itself and separate itself from the positions adopted by NGOs such as the Wilderness Society and Greenpeace.

Guild members who are not dependent on the constraints of a professional practice can speak up and provide a show of sustainability concerns which can be addressed by other more constrained members. This procedure reflects House's [1998: 1011] analysis of the use of the text for other than first intended means. For example, The Guild can sponsor seminars where community volunteers and other members can speak, contribute and give advice, which can then be reported in proceedings. Guests can register to gain information and not necessarily show that they have been there; such guests can also give advice to members and visitors in an informal manner. Examples include forums held on location management, such as management of the water near ports.

2.2.4.6 Environmental commitment full spectrum

Pulling back to examine the whole spectrum reveals a large cohort which might be at least as large again as that of the professional environmental managers. Three groups excised by the Halfspectrum filter deserve a closer look. They are activists, concerned and/or spiritually motivated laypersons, and Aboriginal Australians.

The professionals' critic category is distinguished from the actions of activist groups and NGOs. It is important that this distinction remains, as it leaves activist groups free to make use of the range of activist strategies without the constraint of professional considerations. Many activist groups receive advice from professionals and act on issues identified by professionals. They are seen by professionals to be performing the important task of informing the public about issues which are deliberately hidden or sidelined by the government and press. This set includes both conventionally and unconventionally educated people. In the first category are academics and students in disciplines which do not have the label 'environmental' in them, and we can include here the discipline of communication from which the professional writer, PG, is drawn.

Groups of concerned citizens are not admitted to The Guild. These groups may represent a high number of professionals in peri-environmental categories such as engineers and health professionals, teachers, academics and business people. Again

the practical advantage of this is to leave a large body of articulate, credible people in a position to make the clear point that their local environment is under threat. The group also includes people living in practising groups of environmentally responsible collectives such as those established in the 1970s, groups who have consciously distanced themselves from mainstream institutions (including educational institutions) for political, cultural and social reasons, and also reasons of conscience.

New Age or Deep Green adherents are also missing from The Guild. Professional environmental managers need to be seen to adopt a scientific, technological approach to their work, one which resonates with the dominant culture. In the discussion of Gammon night in the Analysis section, the point is made that under the influence of alcohol and intimacy, a small group of professionals enjoyed a moment of interaction which had a spiritual element, but that the privacy of that moment was respected when PG omitted it from his summary. The spiritually confessional behaviour stands as exceptional in a context where the culture is not supportive of an overtly spiritual approach to environmental management.

The third group will not be excluded in the long term. The professional management stipulation had the unfortunate effect of accidentally excluding Aboriginal Australians with expert knowledge of fauna and flora, seasons, interactions, and ecological relationships. This gap will not be there for much longer as Indigenous graduates from environmental management programs become members. As an interim gesture of acknowledgement and validation of traditional knowledges, The Guild has on several occasions invited Aboriginal storytellers to the meetings.

2.3 Guild culture

The Guild constitutes a social group with a culture accessible to members to consume and contribute to. A definition of organisational culture such as this:

culture comprises three elements: social representation corresponding to a group – eg values, personal status, structure of the group etc; forms and fields in which they are expressed; and productions of various kinds that let the group recognise, record and share the result of the expression process. [Poche 1998: 1]

is adaptationist. Pepper warns that ideational definitions which position culture within the organisation participants are preferable, where

Culture becomes a cognitive event that must be inferred, for it is not directly observable. [Pepper 1995: 37]

Such a social group provides the opportunity for change. Members can work for ecological sustainability by applying, at the most ideal level, principles of ecological rationality in their strategic professional approaches.

The members of The Guild can be characterised as adopters of Doyle and McEachern's [1998: 155] interpretation of Dryzek's [1987] optimistic view of

how little needs to be changed before the organisational logic of bureaucracy [Weber 1978] starts to grind out better forms of policy making once ecological rationality gets into the process [Doyle and McEachern 1998: 155]

The important ideas here are those of rationality and policy, discussed in more detail previously in section 2.2.2.

Here is a quick look at The Guild as a contact community, a matter dealt with in more detail in section 3.4.6. The Guild makes it possible for people in the community who are working in environmental management to participate in a forum where they interact with others who are knowledge intensive in various ways. In most cases professionals have tertiary qualifications, but there are members whose expertise derives mainly from, and is manifested in, effective practice, and is recognised in equal terms. Somebody may be welcomed into the organisation who is an independently assessed effective practitioner, but who has not turned their knowledge into theory accessible to others. In this respect The Guild, as a contact community, becomes the place where such skills are overtly valued. It is advantageous for anyone who is dealing directly with the environment and earning one's living from it to be exposed to a wide area of knowledge. There is both the carrot of validating one's expertise and the stick that one often receives, in return, information that might be unwelcome, a financial burden, or morally challenging. Under other circumstances managers might ignore such awkward information, but because The Guild constructs them as credible members of the expert and professional community, there is a certain moral imperative to join in and not have

an ironical attitude to participation. The sense of identity which people bring to this kind of organisation is part of marketing and developing good environmental practice. Maslow's hierarchy [1954] explains that if people are successful they seek social acclaim. Through The Guild, this is possible. The Guild also enables individuals to continue their registration and, in doing so, they have the opportunity to learn from others. The cohesive element consists in the fact that the community itself is viewing the environment, not solely as a source of raw material or a place of work, but as the matrix for the development or maintenance of identity as a professional, as a community member, and as a member of a group with expertise. The intricacy and accuracy of the knowledge becomes an attractive feature in itself, and thus the positive tact structure works to integrate the knowledges into a rich mixture. The argument can go on from this to interpret the integration of knowledges in terms of organisational learning, and then pursue that to consider the part played by PG's Reviews in that process.

The positive tact structure of the Halfspectrum professional filter enables fruitful interaction and learning. Still thinking in terms of The Guild as a contact community, we can see the community in terms of members of technological, critical and reformist groups [Elliott 1998], all mingling and creating a new paradigm. Cohen et al [1999] studied scientists in British universities and publicly funded institutes to find out their attitudes to administration and the new demands for their work to be directed to applications. The report of this work is useful for providing some framework to interpret the Halfspectrum, for it deals with scientists' attitudes to those they cooperate with and those who use their work. The descriptions in their study of interactions between scientists and non-scientists are in many ways equivalent and applicable to the categories of professionals found in The Guild.

The Cohen et al findings give insight to the complexity of what is involved in bringing together scientists from a variety of backgrounds and people from outside of the science discipline. The findings also outline the importance of acknowledging the scientific research outcomes in community action. One of the functions The Guild carries out is as Cohen et al [1999: 223] describe in the situations they investigated:

as aspects of other discourses [business, entrepreneurship, management] were seen as meaningful and relevant, they were appropriated into existing notions of science and scientific purpose thus creating new ways of understanding [Cohen et al 1999: 223]

While scientists in such settings and those in The Guild may be impatient with the process of coming to shared understandings, this outcome of increased awareness from the non-scientific community is what scientists have been searching for. Cohen et al's standpoint that 'the discourse of science is itself constructed and articulated as a pluralistic negotiated arena' is derived from Pinch [1990]. Cohen et al's most salient contribution [1999] to the discussion here is the point that other kinds of discourses are integrated into the prestige science discourse variety. Material from other perspectives and disciplines is washing through the science discourse and emerging with a scientific and therefore prestigious tinge. This supports the claim that PG is making a contribution with his Reviews.

The Guild fits into the political and social developments outlined by Doyle and McEachern [1998: 152] of 'qualified' people looking at instrumentalities to bring about reform, following Weber's [1978] foundational analysis of the rationality of administration and its ability to produce an efficient linking between intention, means and ends. The Guild acts along the lines of the Paehlke and Torgerson [1990] battle between cooption and transformation as Doyle and McEachern [1998: 152] explain it:

instead of administration colonising the environmental mind, the environmental project comes to colonise the administrative mind, displacing economic rationality by ecological rationality, which is then driven deeper into the social and political processes by the routines of the administrative mind. [Doyle and McEachern 1998: 152]

As Guild members meet and discuss projects away from the hurly-burly of the negotiations, they are able to glean new information in non-threatening circumstances and are better equipped to make informed decisions.

The Guild profile here elaborates the picture of what constitutes environmental management, and addresses the issue of the technological paradigm. The Halfspectrum community configuration provides a multilateral counter to the possibly monocultural space afforded by other scientific circles which environment

managers participate in, a space where things can be explained at more leisure. When assessing the category to describe what sort of community The Guild is, section 3.4.5 notes that the *KIFOWS* category is too limited. It assumes Orange's [2001: 287] 'Cartesian' or scientistic interpretive paradigm, characterised as 'isolated and self-sufficient, subject opposed to object, inner, devoted to clear-and-distinct ideas, reliant on true-false logic, atemporal, representational, and substantial'. Now Orange defines what the target 'experiential' change would mean:

The experiential world is relational, social, dialogic, and contextual, perspectival, doubly inhabited and inhabiting, complex and fallibilistic, more or less aware, temporal and emergent, understanding-oriented, and organizing process. [Orange 2001: 287]

One immediate contrast on which The Guild can claim action is in the relational and social factors. Cotexts to the technical briefings include fine food and wines and the attendance of high profile members of the community. The other set of contrasts are dealt with as the main interest in this study, with the treatment of the dialogic Reviews forming the central focus. The most important point in this chapter is indeed the social point, for the whole business of the importance of tact and the Halfspectrum is directed to this social goal, making it possible for the disparate groups to interact safely in The Guild.

3 LITERATURE REVIEW

3.1 Organisation of literature review and other chapters discussing literature

While some problems in the environmental sustainability field have been well described, other areas have not been given much attention until now. Physical degradation, global climate change, loss of species and communication about them have been the focus of study. The manner in which managers talk to each other has not. This is as it should be – a reflection of the urgency and seriousness of the physical problems, where although the degradation may be obvious, the understanding of the systems is still rudimentary, and the solution a long way off. The way in which professional environmental managers [PEMs] interact and negotiate meanings is at a second ranking level of importance. But that meaningmaking nevertheless can be argued to contribute to the success of the professional physical interventions, and hence to be making an indirect contribution to sustainability. In accordance with the second rank status of such enquiry, then, it is not surprising that little theoretical development has taken place. The current study has had to range widely to find perspectives and intellectual tools for analysis. Given the dearth of similar studies, and the absence of a developed theoretical paradigm, the literature review for this study necessarily has had to collect, review and collate theoretical concepts.

Thus several chapters in the thesis review literature. Literature on the organisation as community was reviewed in the Background chapter. The Literature Review chapter reviews the literature of narrative in organisational management and matters related to organisations. The Methods chapter necessarily continues reviewing literature in the search for intellectual tools to approach Natrat-talk. There is also a considerable discussion of literature in Argument chapter 5, reporting the hunt for intellectual support for the idea of processing below the level of consciousness.

To justify the position that Natrat-talk has not been studied before, and that there is no literature of direct relevance to review, section 3.2 scopes the adjacent fields. Section 3.3 chooses an area adjacent to Natrat-talk in organisational management literature which treats environmental communication in organisations in terms of

polyphony, and suggests it as a suitably endogenous site for the new field. Section 3.4 continues in the organisational management field with reviews of collaborative learning and Knowledge Management literature. Section 3.5 reviews literature on the organisation as a community for learning, linking it with narrative and translation material, and laying the groundwork for capturing the complexity of Natrat-talk.

3.2 Scope of the field: excluding adjacent environmental communication fields

Section 3.2 further delineates the specific nature of Natrat-talk, or INTERPECPEM, by scoping it in relation to adjacent fields. INTERPECPEM was distinguished from OUTERPECPEM in the introduction. Background chapter 2 set out how the needs of the PEM organisation differ from those of other organisations, in that professional respect and tact rule out advocacy. Thus neither the body of knowledge about advocacy, nor the body which assumes that advocacy is an included construct, are any use to the enquiry. That leaves us with the job of considering the relevance of enquiry in scientific communication and professional communication.

It has been noted that scientific communication characterises OUTERPECPEM and forms one of the contrasts to INTERPECPEM. There is no place in the enquiry for OUTERPECPEM scholarship such as that by Kempton [1997] testing understanding of climate change, nor Burgess et al [1998] on how the scientific paradigm may be counterproductive in some communities.

For INTERPECPEM, using the scientific register is complicated by a set of pragmatic requirements. If managers use an inappropriate degree of scientificity one way or the other, they are acting improperly and are warning of a separate agenda, a signal of a renegotiation of conversational Rights and Obligations in Myers-Scotton's terms [1998]. No scholarship in this area was discovered.

Sampling environmental communication as a subset of professional communication turns up a lot of users, with a set of categories which includes critical, social, advocacy, technological, communication generalist, management, exploitative, corporate, default science, technical, and bibliographies. The sample is in Appendix A2. None of these categories sits close enough to the field of enquiry of this thesis.

This delineation rules out much of the enquiry which would be assumed as 'environmental communication', such as Jagtenburg and Mackie [1992] and other communication and cultural studies such as the media bias dealt with by Roll-Hansen [1994], and Harrison et al [1998] on farmers' knowledge.

Even the OUTERPECPEM field of professional environmental communication for environmental managers is tackled by few. This field includes such studies as Waddell [1995] on defining sustainable development, the environmental history of Powell [1996], Coppola [1997] on rhetorical analysis of stakeholders, and Valenti [1998] on ethical decision-making in environmental communication.

No studies were found to deal with the professional environmental communication of environmental managers' interacting with each other. Tuler and Webler [1999] are adopted as the adjacent field in section 2.2 because they are managers talking to each other. Adoption of their work brings with it the adoption of scholars they choose in the organisational communication field, such as Alvesson and Karreman [2000(b)].

One can afford to ignore Kabba's lament that

...technical rationalities stifle communicative freedom and deform environmental discourses [Kabba 1999: web database accessed 20.5.2004]

because that deformation relates to the OUTERPECPEM language used by managers in their interaction with employers and audiences. It is the given to which managers work and is a non-negotiable part of the matrix this study has to work in. Krücken [1999] makes similar observations, targeting Tuler's area almost exactly, pointing out that reducing the environmental crisis to the notion of 'risk' is simplistic and dangerous. Managers know this, but nevertheless have to work to that imperative.

The broad range of professional communication and interactional communication studies falls under the rubric of the study of language in context, which supplies intellectual tools throughout the thesis and is reviewed under theoretical topics. Such are the studies exampled in the introduction by Jenlink [2001], Burridge and Florey [2002], Bazerman and Paradis [1991], Janney and Arndt [1992], Halliday

[1985(a) and (b)], Swales [1990], Hawes [1999], Gurevitch [2001], Gentzler [2001], Hickey [1998] and Malmkjaer [1998].

No indication was found of the kind of translation-oriented organisational communication approach to professional environmental communication among managers established in this study. There did not appear to be any literature specifically discussing the part played by narrative in knowledge integration in PEM interaction between members. In technical communication, Doheny-Farina [1992] discusses the part played by professional writers in teams. Knowledge Management scholars such as Housel and Bell [2001] take an interest in a cross-section of these perspectives, and note the dearth of relevant studies [Housel and Bell 2001: 49], citing the difficulty of restricted access to information.

Even at the genre level, texts such as organisational monthly meeting reviews have not been studied previously in terms of environmental communication, and studies which do use monthly meeting documents are almost all data collation exercises.

3.3 Polyphony and translation as an endogenous paradigm for professional environmental communication

3.3.1 Narrative polyphony

Section 3.3 identifies the emergence of an area adjacent to INTERPECPEM in organisational management literature which treats environmental communication in organisations in terms of polyphony. Although this is OUTERPECPEM, it is suggested as a suitable site for adjacency to the new INTERPECPEM field because it is endogenous. It is the PEC work of PEMs, and a selection of studies deals with intellectual tools which can be used for INTERPECPEM, such as narrative polyphony, which this section reviews. There is a more intense review of material dealing with polyphony or dialogia in section 4.5.3 on Gurevitch [1995]. The focus here is on the link of dialogia with environmental management and the most important theme developed in this section is the part played by polyphony and narrative in meaning-making, organisational learning and knowledge management. The potential for this emerges in the consideration of communities in organisations in the next section.

Scholars are drawn from outside environmental management as well as those involved in the field. In looking at management literature discussing polyphony, there is seen to be a contest between those urging caution in applying the insights of polyphony and those who embrace it wholeheartedly. There is a remarkable path of adoption in environmental management literature for theories of language function in society, seemingly via the post-*peristroika* release of Russian organicist theories. The notion of narrative comes first.

3.3.2 Linking narrative to collaborative learning

Literary studies have a natural body of theory in narrative, helpfully traced by Henkel [1996] where she links various literary critical movements and linguistic movements. Clark and Ivanic [1997] and Flower [1993] apply narrative in critical directions. The focus in this thesis, however, is on the adoption of theories of narrative polyphony as applications in professions which do not have language as their primary focus.

The notion of narrative is linked with the study of collaborative learning in organisational literature from 1990, the time when Orr's 'reps' appeared as a Community of Practice [CofP], which appears in more detail in the final section of this chapter. Lave and Wenger's [1991] CofP work based on Orr [1990] is enriched by Seely Brown and Duguid [1990] and extended by Wenger [1998] in collaborative learning and knowledge management in organisations. The Community of Practice [CofP] is taken up by Campos, Laferrière and Harasim's [2001] echo of Weick's equivoque [1979] in their social constructionist view of collaborative interaction and cognition as productive action able to promote structural changes in a system, 'creating history by aggregating a pre-existent world of meanings in continual development'. [Campos et al 2001: 1]

Narrative and learning discussions are linked to discussions of dialogue and dialogics. Powell [2002: 17] makes the case that Dialogue provides a means of encouraging a 'connectedness' between research, practice and theory. Holman [2000: 957] advises that the advantages of dialogic processes are interpreting them in terms of skills, ie conversational skills. Wertsch [1999: 267] describes the background of how polyphony arose from Bakhtinian insights. Conle [2000: 185]

describes how to use dialogic processes, and explains what they are, using narrative in a way consonant with the Hayworth [1999] analysis of the Bahktinian approach. Hayworth [1999: 100] links dialogia to Halliday and the processes of his interpersonal metafunction. Roscio [1999] and Mcswite [1998] engage in dialectic on the topic of dialogics. Harvey Brown [1987: 119], in a discussion reminiscent of Richardson and Spivey [2000: 269], can be taken in combination with Holman [2000], as he explains frames of comprehension in the context of dialogic processes.

Holman [2000: 957] advises that the advantages of dialogic processes are those of interpreting them in terms of skills, ie conversational skills. Holman's [2000: 957] dialogical approach to skill and skilled activity described organisational skills in terms of the linguistically based skills that are generally thought to be significant at an intrapersonal, interpersonal and organisational level of analysis, eg communication, team work, decision-making and critical thinking. [Holman 2000: 957]

With Tuler [2000: 2] the dialogic paradigm has arrived in environmental communication:

the framework offered by Bakhtin and his followers shows how different forms of discursive interactions can convey meaning differently. The monologic form of discourse...is not generative of new understandings whereas in contrast the collaborative or dialogic form of discourse is generative of new understandings. [Tuler 2000: 2]

3.3.3 Narrative affects action in environmental management

To take up the notion that the ideals of narrative discourse are spreading from the linguistic literary and theoretical community into practical public action, especially in relation to the environment, we find White and Orien [1998: 471] on the ideology of technocratic empiricism and the discourse movement in contemporary public administration. Hansen [1998: 450], in a challenge for the newly emerging dialogic processes in organisations, sets performance criteria of inclusion, self-regulation and policy inputs.

For the emergence of polyphony in scholarship about environmental management and communication, we can turn to Tuler [2000], Tuler and Webler [1999], and Laird [1993]. This literature shares with the organisational communication literature

some unusual uses of words drawn from linguistics such as 'discourse'. The term 'non-discoursal' [Hansen 1998] means something like 'not engaging in democratic, consultative, inclusive organisational processes'. A discourse variety which is seen to be constructing the social or organisational group in a positive, inclusive direction is the one granted the appellation of 'discoursal'. Other communication events are then described as 'non-discoursal'. The term 'dialogical' can be seen to take on the same positive marking, as it comes to be distinguished from 'monological'. Tuler [2000] takes this further to mean 'collaborative'.

We can see that for the PEMs researching their PEC, policy outcomes and implementation criteria are crucial because they have real consequences in the physical environment. There is not much point in talking about action for environmental sustainability if nothing gets done. Tuler [2000: 1] defines two ways of talking in policy dialogue as monologic and dialogic forms of discourse which can loosely be understood to parallel the distinction between adversarial and collaborative ways of talking respectively. We shall return to this notion in 5.4 when we make the link via Hawes [1999] with translation. Deliberative policy making processes rest on an idea that discourse can generate new understanding about issues, options and outcomes among participants. Dialogue is used as a means to allow for the emergence of new meaning. [Tuler 2000: 1]

Laird [1993: 341] sets out to develop criteria to evaluate participatory mechanisms, called 'participatory analysis', emphasising the importance of learning to participants in policy issues.

It is not enough that participants simply acquire new facts. They must be able to analyse the problem at hand. At the simplest level, this means understanding the differing interpretations that one can draw from the facts and trying to think of ways to choose among those interpretations. [Laird 1993: 360]

Webler and Tuler [2000: 566] are interested in a discourse-based approach to public participation and observe progress in scholarship, focusing on the ways people who participate in decision-making talk with each other. They build on Fox and Miller [1997: 64] and Hansen [1998: 443], and embrace Hansen's guiding criteria of inclusivity, self-regulation, and policy-outputs to propose them as the basis of judging the quality of discourse. We see here the application of a central principle

found in functional models of linguistics: that society and language construct each other. [Halliday 1975-1993, Putnis and Petelin 1996] The notion that language behaviour affects physical reality is no more clearly demonstrated than in this adoption by the environmental management and risk assessment community of principles relating to language to diagnose the success of their public participation.

Webler and Tuler [2000: 566] claim that their theory of public participation is based on Bakhtin, but the roots go very deep and the constructs are widely applied. Their appearance in the environmental management literature appears to derive from critical organisational management literature. In Tuler's [2000] treatment of Bakhtin, we note that much of his interpretation originates in the work of Lotman, via the translators Mandelka and Leo. Instead of starting with Lotman, we could also recall sources of these concepts in earlier linguistic application. A line of development is traceable in applied linguistics from Malinowski to Halliday [1978], and then again in Kress [1985], right through to Myers-Scotton [1998].

3.3.4 Dialogics in environmental management

In Tuler and Webler [1999] members of the public involved in decision-making on forests outlined seven categories of principles on ideas of 'good' process in policy-making, of which the ones that concern us here are structural characteristics to promote constructive interactions, and facilitation of constructive personal behaviours. The method by which these two principles are to be accomplished relates to dialogic processes. Tuler and Webler explain these further:

By this we mean attending to the discursive nature of the policy-making process. People paid attention to the nature of the social interaction. They emphasised the time, location, availability, and structure eg. seating arrangement of the meetings. They told us that people's behaviour mattered a great deal. Respect, openness, honesty, understanding, listening, and trust were all cited as relevant personality features. In other words, people cared about the quality of the talk – the quality of the 'discourse base' [a term we use to include structure and personality characteristics] – and they differentiated between interactions that were more or less constructive. [Tuler and Webler 1999: 443]

One important aspect of this OUTERPECPEM dialogics paradigm is its transfer capacity for explaining the efficacy of prioritising the social task in INTERPECPEM. The theme of negotiating different positions is common to these

analytical orientations. The link of narrative and polyphony with learning in the organisation is a firm strut of the study, and is extended in the argument dealing with knowledge management.

3.4 Some types of organisation encourage learning

3.4.1 Introduction – the organisation and learning

Staying with the organisational communication field, this section reviews work on the organisation as community and on learning in the organisation, taking in knowledge management and collaborative learning. The concept of the organisation as community was introduced in Background chapter 2, with the contact nature of The Guild. Knowledge Management and collaborative learning are the first stages in the link.

3.4.2 Collaborative learning and Knowledge Management

Collaborative learning scholarship and studies in Knowledge Management are not in the same paradigm, but their work is complementary, and in some ways, together they match with this Natrat-talk study.

Collaborative learning scholarship is highly concentrated on new kinds of media and new requirements for learning. The research is often focused on computing environments. Cho et al [2002] interpret their computer instructional efforts in terms of Social Network theory, which reflects the present study's concern with kinds of communities in organisations. Sutter [2002] reflects cognitive theoretical positions with her interest in instructional artefacts, and her concern for active approaches to integrating knowledge in her clinical instruction work. Stahl [2002] is interested in how to transfer the notion of knowledge artefacts to the collaborative learning situation. Jonassen and Remidez [2002] show how knowledge development happens collaboratively, and claim that 'since the knowledge is shared and owned by the discourse community, it is not only apprehended better by the members but also more likely to be appropriated by the members'. [Jonassen and Remidez 2002: website accessed 18.04, 2002] They contrast shared knowledge with 'dispensed knowledge' and note that the latter is not as likely to be accepted by the community.

Knowledge Management literature is in a period of expansion. There is current work of interest by Sveiby [2001], Allee [2000], Macintosh [2003], Gamble and Blackwell [2001] and Housel and Bell [2001]. Studies such as that of Mack, Ravin and Byrd [2001] see that for the knowledge workplace, the research challenges continue to be in finding how knowledge workers find relevant information, assisting them in seeing implications and connections of seemingly unrelated facts, and helping them accomplish elements of project plans and artefacts, a list which brings to mind some of the characteristics which have been attributed to Communities of Practice and which apply to The Guild.

3.4.3 The link between learning and the organisation as community

The studies so far have noted that learning is enhanced in community. The next group of studies consider different kinds of communities in organisations and note the attendant learning connection.

3.4.4 How The Guild has characteristics in each category

The Guild's characteristics span a range of community types in organisations and it does not fit snugly into one or the other characteristic profile. The Introduction and Background chapters have already mentioned CofPs [Communities Of Practice], Communities of Otherness And Difference, and *KIFOWs*. Here we refine the CofP to CofP/interpretive [Holmes and Meyerhoff 1999: 179] and underscore the importance of tact.

As we think about each category, we note that there is a way of talking about language in each one. To establish the CofP classification, Holmes and Meyerhoff [1999: 179 reproduced in Appendix A3] offer a convenient classification of Communities of Practice in contrast to those of the speech community and of social identity. The CofP commentators refer to the importance of the specialised 'talk' which characterises the groups. This transfers to the CofP/interpretive classification, but with the extended meaning that the 'talk' enables kinds of understanding which are the preserve of the group, and which also provide the scaffolding for further group and organisational learning. Let us begin with the *KIFOW* classification.

3.4.5 The Guild as *KIFOWS* or learned society – why it's more elaborate than that

The acronym *KIFOWS* [Knowledge Intensive Foundations Organisations Workers and Structures] is used by Alvesson [1993: 997] and Miller and Fox [2001], who added the workers to the original acronym, *KIFO*. The 'Knowledge Intensive Foundations Organisations' is another way of referring to professional organisations and societies. Such organisations act as repositories of expert knowledge and guardians of professional standards. They often undertake accreditation of organisations and individuals who wish to attain professional status. The workers were added to avoid the danger that the safeguarding would turn into gate keeping. As long as the workers are involved, whistle blowing and updating is claimed to occur reasonably effectively.

The Guild qualifies as a learned society, or a knowledge intensive foundations organisation. Miller and Fox [2001: 668] see value in understanding the 'Epistemic' Community, 'gathering localised intentionality... into the project of enquiry', and thereby determining the nature of knowledge. We have interpreted how the knowledge and experience of the workers or hands-on practitioners is validated, and how this relates to the environmental management expertise and goals of the organisation. An important qualifying factor is that of the Halfspectrum restriction on membership. What might we miss by considering the organisation in the *KIFOWS*, or learned society category alone?

The answer to this is that the learned society is only one of a number of manifestations of learning groupings and most of the literature is not confining itself to categories at the level of types of organisations, but rather takes in any kind of group from pairs to nationalities. The phenomena under discussion here are wider than just the workings of the organisation itself. Indeed, the focus of attention is not on the organisation qua organisation, the focus is on the genre-hybrid Reviews and how they relate to the wider goal of efficacy in Natrat-talk.

Other reasons for not limiting the consideration of The Guild to the *KIFOWS* category have to do with some of the negative connotations of learned societies. There is a certain degree of self-interest in the development of all organisations.

Brante [1988] claims that much of the effort in *KIFOW*s is spent on just validating the professionalism. Alvesson [1993] surveys various concepts of professionalism and concludes that focus on knowledge rationality and predictability of outcomes distracts from the more important qualities of skill, creativity, judgement and savoir-faire.

The Guild in some of the texts under scrutiny here may demonstrate a couple of unlovely tendencies, such as Fores et al's [1991: 97] 'scientificity', but the counterpoints, dialogical intricacy or antiphony evident in the genre-hybrid Reviews testify to the existence of elements in the organisation which are trying to deal with or reverse those tendencies. For example the texts encourage us to see The Guild as moving to escape from what Orange [2001] characterises as the Cartesian mindset

isolated and self-sufficient, subject opposed to object, inner, devoted to clearand-distinct ideas, reliant on true-false logic, atemporal, representational, and substantial. [Orange 2001: 287]

to Orange's alternative 'experiential world'. This is part of what emerges in the Analysis section.

3.4.6 Contact: Communities of Otherness or Difference

This is the community type which we used as the interim classification for The Guild in the Background and Context chapter. Communities of Otherness or Difference are explained as a construct developed in modern organisational communication as an elaboration of analytical tools for recognising diversity and managing difference. Often such a group is not formally constituted and comes together with a degree of friction.

Shields [2000] has advanced the notion of Communities of Otherness or Difference in respect of schools, suggesting that rather than thinking of schools as communities that exist because of a common affiliation to an established school ethos or tradition, it might be more helpful to explore an alternative concept.

A school community founded on difference would be one in which the common centre would not be taken as a given but would be co-constructed from the negotiation of disparate beliefs and values as participants learn to respect, and to

listen to, each other. In this concept, bonds among members are not assumed, but forged, and boundaries are not imposed, but negotiated. [Shields 2000: 295]

The Guild has behaved in ways suitable for a Community of Otherness or Difference. A first step, according to Shields [2000], is to limit the danger to those with the capacity and knowledge to interact usefully. The Halfspectrum membership restriction corresponds to this step.

Why is it important to mix people with different kinds of expertise? Wenger [1998] refers to the CofP in explaining it in terms of 'product lines', which are applicable to The Guild in terms of environmental management projects:

Important knowledge is often distributed in different business units. People who work in cross-functional teams thus form communities of practice to keep in touch with their peers in various parts of the company and maintain their expertise. When communities of practice cut across business units, they can develop strategic perspectives that transcend the fragmentation of [product lines]. [Wenger 1998: website accessed 10.2.2002]

In the management of the environment, the fragmentation of knowledge is in terms of species and elements and ecological interactions rather than in product lines, but the principle is even more important. There are people in different parts of the community who hold important parts of the ecological knowledge which is needed to understand how to cope with environmental degradation. These people are unevenly distributed and many are divided by political and commercial lines. The fact that someone works for a company whose business is adding to the degradation of environmental sustainability does not mean that their knowledge is inaccurate. In fact it may be just that bit of knowledge which is needed to understand the next part of the ecological jigsaw. Thus a learned society dealing in knowledge about environmental management must not only include, but also welcome and facilitate, interaction between people drawn from potentially hostile and competing groups. The political environmental management issue of today may well have a negative outcome and lead to the further degradation of the environment, but it possibly could lead to valuable interaction between members in The Guild who may exchange information, constructs, principles or methodologies which might be useful in coping with the next challenge.

3.4.7 Communities of Practice

Communities of Practice [CofPs] appear in Dzinkowski 1999, Lave and Wenger 1991, Holmes and Meyerhoff 1999, Wenger 1998, Seely Brown and Duguid 1990, and Orr 1990. They have attained a mainstream status in learning theory and organisational theory, where the notion is linked with that of situated learning. CofP literature encompasses educational theory literature as well as management literature. By means of adopting the subcategory of 'interpretation', we can extricate ourselves from the trend in current definitions to restrict the use of the term CofPs to groups within organisations.

Dzinkowski [1999] provides the most up-to-date and practice-focused definition.

communities of practice – an informal workgroup that shares a common purpose and a common set of practices, usually members of a specific profession or speciality who often work in different processes, departments or functions [Dzinkowski 1999: 43]

The Guild spans different departments in the public service and different departments in large organisations such as power companies, but it is not an informal group. Lave and Wenger's 1991 definition more nearly characterises The Guild:

an aggregate of people who come together around mutual engagement in an endeavour. Ways of doing things, ways of talking, beliefs, values, power relations – in short, practices – emerge in the course of this mutual endeavour. As a social construct, a CofP is different from the traditional community, primarily because it is defined simultaneously by its membership and by the practice in which that membership engages. [Lave and Wenger 1991: 464]

Holmes and Meyerhoff [1999: 180] differentiate a CofP from Milroy's [1987] social network by the nature of the contact that defines them:

a social network requires quantity of interaction, a CofP requires quality of interaction [Holmes and Meyerhoff 1999: 180]

3.4.8 Interpretation

Lave and Wenger [1991] originally used the term 'interpretive', and the revival of this term is given credence by more recent literature in teaching and learning, where the community of interpreters is described. Laferrière and Breuleux [2000] explain how they see that the networked community

can develop as communities of interpretation, engaging in activities that will provide joint definitions of what constitutes the center and what constitutes the periphery. [Laferrière and Breuleux 2000: website accessed 1.9.02]

The specialist label of CofP/Interpretive for The Guild encompasses the theoretical amalgam with its foundation struts in translation/interpreting. Furthermore, the interpretive part of the label indicates the cognitive level of activity, with associated constructs of paradigm, mindset, and culture. The Guild is a site for finding new paradigms of thinking and interpretation which lead to organisational learning or, in this case, the group's learning through participation in their organisation.

3.5 Linking organisation as community, learning, narrative and translation

Finally, we consider the link which the organisational communication researchers have found between learning and the organisation as community, taking the Community of Practice as a generic reference. We have reviewed the Lave and Wenger [1991] collaborative learning model adopted in organisational communication practice and research, which is at the core of the CofP. An early researcher, Orr [1990], noted the importance of narrative in the process of exchanging knowledge. Now we loosely lock this learning notion with the ideas of dialogia or narrative polyphony and translation in a precursor to the main argument directions.

Section 5.5 deals with cognition in more detail, but here we find a clue as to how dialogic processes work to provide the stimulus for reinterpretation of cultural schemata in Polkinghorne's

narrative meaning is a cognitive process that organises human experiences into temporally meaningful episodes [Polkinghorne 1988: 1].

Brown and Roberts [2000: 649] explore memory, learning and narrative among teachers, using their own writing as a reflective/constructive narrative layer to inform their practice. Jenlink [2001] reinforces the link between dialogia and learning in analysing educational systems and design conversation to understand its mediational importance, claiming that mediational artefacts such as language and discourse do not exist inside or outside of individual consciousness; rather they reside on the borderline between oneself as designer and the others who are also designers and users. [Jenlink 2001: 345].

Maines and Couch's conception of the process nature of communication ['portraying society as in movement'] lays the groundwork for an organisation to learn and develop. Where they claim that the 'structures of action and the action of structure... must be expressed as communicative activity' [1990: 1], Maines and Couch are pointing the way to the feature of dialogic processes, the enabling of action and learning, which have become attractive in organisational communication and hence in environmental organisational management.

Hawes [1999] shows how the power and purpose of the polyphonic text can lead to organisational learning and knowledge management because of the

space that opens momentarily by means of asking, questioning and listening [Hawes 1999: 228]

Such texts play an important role in reducing conflict, in providing what we have seen The Guild prioritises in the positive tact frame and strategic integrity

the key to opening dialectic space to third spaces is the will to power, the will to ask and listen, as well as to represent and critique [Hawes 1999: 228]

reminding us that 'power is the affirmation of difference' and control the 'negation of difference'. [Hawes 1999: 234]

The main review of translation is located in chapter 5 as the outcome of the quest for the intellectual structure of unconscious processing. Here only the translation and learning interface is noted. Suspension texts, as opposed to texts which presume transparent access, are concepts dealt with in more detail later, but are briefly explained in the glossary.

Spivak observes that the effort to produce suspension texts holds possibilities for learning:

the learning made possible by dialogue is earned by the slow effort at responsibility – a two way road with the compromised as teacher [Spivak 1993: 277]

Spivak explains that dialogic processes are educational, because one has to slowly consider each thing genuinely, to walk through it, to experience it directly, to be genuine:

like translation, dialogue negotiates multiple meanings which are always already contested and negotiable and like negotiation, dialogue traffics in will[ingness]in this sense the medium of dialogue is the will to listen and speak across lived differences [Spivak 1993: 277]

This move approaches Lambert's idea of non-translation, which is predicated on the fact that for understanding to develop, there must be some kind of immersion of the target culture in the source culture. Gentzler [2001: 192] explains that the category of non-translation is now prominent in translation studies:

every text, every word contains 'translated' elements, and translated texts may also contain many discursive elements that are NOT translated [Lambert and Robyns (forthcoming) quoted in Gentzler 2001: 192]

3.6 Weickian equivoque

The study makes use of the notion of 'equivoque' as argued by Weick [1979] to assess whether there was a contribution to the organisation by PG's Reviews.

This notion of organisation as behaviour, as action rather than substance, sees organisations as decision environments, not as a container in which are offices, desks, phones, workers and all the other nouns of organising. [Pepper 1995: 247]

In a statement about organisations which emphasises their process nature, in contrast to models which see them as containers, Weick [1979] defined the organisation as follows. The organisation is

a consensually validated grammar for reducing equivocality by means of sensible interlocked behaviours. To organise is to assemble ongoing interdependent actions into sensible sequences that generate sensible outcomes [Weick 1979: 3]

Reducing equivocality means understanding ambiguity and coping with uncertainty. A consensually validated grammar means people agree on a set of rules and there are patterns which realise that agreement. In the context of this study of communication events relating to The Guild, Weick's point about understanding ambiguity relates to the dialogic category of suspension [5.5.6]. Weick's second point about the agreed set of rules translates to finding ways of going about the organisational business, as for example in the way The Guild sets its Halfspectrum professional filter and enjoys its resultant strategic positive tact structure. The grammar idea allows conjecture about how PG is able to emerge unscathed from the potential conflict of his own political position with of those embedded in The Guild roles. That is to say, that just as with human language grammars which exist at a level of system different from that of conscious processing, so the patterns of an organisation, its 'grammar', are situated at a level invisible to the daily processes and decisions.

This organising process is indeed the organisation itself. The organisation is seen as 'a temporarily managed moment in a stream of activities'. [Weick 1979: 3]

This process metaphor of the organisation is consistent with a process language theory, both being counters to the limited container theories. The next observation sees the cognitive frameworks arriving to complete this complementary picture of the organisation:

The structural permanence which we like to call 'the organisation', then, is built upon the fragile foundations of the interlocked communicative behaviour of organisational members as they try to make sense of the world around them. [Weick 1979: 3]

This vision of the organisation is what the term 'equivoque' refers to, a dynamic, active process which exists on an abstract level and enables people to make the decisions which result in the physical interactions of their business. This construct is used in the realm of organisational communication. It can be seen on a larger scale in the concept of language as a social semiotic, the functional model of linguistics adopted in this study.

4 METHODS

Sections one to three of this chapter state the methodological standpoint in terms of ethos, epistemology, ontology and methodology. Sections four to seven line up the methods with the questions. Given the novelty of the Natrat-talk field and given that deductive theories were not likely to be useful, the study was forced to remain largely in the pretheoretical area of investigation. Thus the work was carried out inductively, finding out what questions there are, observing data that pertains to those questions and trying to establish certain classificatory areas. The methodology is justified in two fields, that of language theory and separately that of organisational communication. The reason for the extension into organisational communication is that it is an endogenous model for environmental communication.

4.1 Ontology and epistemology

4.1.1 The data

4.1.1.1 Assumptions

There are two points to establish in order to make certain assumptions explicit in the face of the challenge that there is so much to know, and that at this stage much of it is not knowable. The success of the Reviews was a surprise and provoked the need to find an explanation, for the practical reason that if the reviewer resigned, it would be desirable to replace him and to instruct the next incumbent with strategies designed to emulate his success. The first assumption was that there had to be some technical explanation for the success of the Reviews. The second was that there needed to be an explanation for the quality of the reviewer's output-standpoint, which was inconsistent with his personal moral standpoint.

4.1.1.2 Summary statement of data, rationale, questions and theory

The published written text of the Reviews constituted data at each phase of the enquiry, and is included in Appendices B and C. The foundation of all the data is texts, most recorded, but taking account of live unrecorded texts too.

The primary question was why the Reviews were successful. The reason for asking was to see what the rules behind the success might be and whether another person

could achieve similar success by following those rules. The theory applied was that common in language in context studies, where the method involves analysing the text in terms of its cotexts and contexts.

A preliminary defining question was to establish in what terms the Reviews might be described as successful. The theory adopted was organisational theory. The Reviews were assessed alongside the organisational goal and in terms of organisational culture. Further theory was pursued as the contribution to organisational learning started to emerge, and as the configuration of the community came to be of interest. Dialogic theory was utilised in analysing the texts in terms of their context and cotexts, and was to prove useful again in the hunt for the model to answer the tertiary question.

The secondary question was what constituted the success. At the output technical level, the interest centred on the technique of matching the Review to the organisational goals. The theory of genre as social purpose was utilised. It was deduced that what the reviewer had created was a hybrid genre and that in doing so he had embarked on a new social purpose.

As the observation proceeded, a tertiary question arose at the input interpretive level. PG's moral standpoint was out of step with the Reviews and needed investigation. The tertiary question was how to explain the accuracy of the textual representation of organisational patterns in the contradictory context of the ethical mismatch. The explanation of professional detachment was ruled out, because the reviewer's personal practice was routinely to resign from jobs which contravened his personal code. Indeed, the reason for pursuing the puzzle was to assess the risk of the reviewer's resignation. Presumably the manner in which he carried out his work was relevant to the degree of risk. The standpoints in the texts and the cotexts constituted the data. The method was to seek theory to uphold and enrich an explanation for the observed phenomenon. Pragmatic Face theory, social psychological positive frame theory and organisational communication theory of strategy, culture and groups were utilised. The texts and cotexts were examined for instances of overt contradiction and detectable transposition of standpoint. Some examples were identified and discussed, but predominantly the Reviews respected the range of standpoints represented in the organisational patterns. It was thought

that the overall fidelity of the reviewer's output, inconsistent with his moral standpoint, might be explained by stylistic code-switching mimicry. Gumperz's [1976] code-switching theory [discussed in 4.7] was applied to the texts and did not yield much result. There did not seem to be any ordered transfer of stylistic codes. Rather, the patterns were translated from the original codes to the reviewer's own codes and patterns. More recent models of code-switching and pragmatic RO sets were useful, but were unable to provide the unconscious component. The inclusion of unconscious processing as a component in translation studies made that model the most relevant. Translation theory was able to explain convincingly the fidelity to the range of standpoints in terms of 'suspension', because translation and interpreting deals with the phenomenon of holding several standpoints in suspension. This meshed conveniently with dialogic theory which was also used in the technical output analysis.

4.1.1.3 The essentials of truth and data: ontology and epistemology in social semiotic terms

The reality of the physical environment is a determining motive in the study, along with the degradation of ecological relationships, the loss of biodiversity and the urgent need to work for ecological sustainability. Second, the study sees that human actions have a real physical impact on the natural environment. These impacts impede or further the process of ecological integrity and environmental sustainability. Third, human actions are seen as the result of human social processes, ie humans do not act necessarily from rational motives, but from a range of socially produced motives.

Fourth, the study works from a strong version of the paradigm that language is a social semiotic [Halliday 1985(a)], seeing that language meanings are social meanings, that society does not exist without language, that language plays a major role in constructing social reality; and of cognitive paradigms which in turn constitute language structure. Fifth, there is a corollary set of assumptions including the one that social processes can be observed through language and that language constitutes social action. Sixth, that linking human society with the physical natural environment involves working in terms of human society, language and communication.

4.1.1.4 Research paradigm

The methodology is geared to creating answers. The research, with its simple questions and search for complex answers, is characteristic of twentieth and twenty-first century enquiry, which stands in contrast to the nineteenth century's predominant research configuration of complex questions and the search for simple answers. [Mühlhausler 2003]

The deceptively straightforward textual data is the visible but fractured record of intricate and invisible processes. Identifying, collating and asking new sorts of questions about data such as this initiates processes which reveal new layers of complexity. This complexity makes it impossible to offer a fully-fledged theory as the basis for enquiry. Rather, the process of the enquiry implies a pretheoretical kind of investigation.

The data do not exist in a theoretical vacuum. The data determine the theory. Epistemologists in general agree that enquiry structures our knowledge of the objects of enquiry; this is part of what is involved in maintaining that all experience is theory-laden. [Walker and Evers 1988: 32] Thus as the data unfurl, as the theoretical needs arise and are met, the appropriate theoretical framework can be constructed. This study does not seek to complete this theoretical construction process, which would require much more extensive attention than is possible within the confines of the current opportunity. However, it does reveal, and offer as a contribution for such a future endeavour, a new mix of theoretical perspectives.

4.1.1.5 Data disclaimer

The research drew inspiration from a number of discipline areas, but it was not possible or desirable to deal with data to any extent past that which is included here. Thus research paradigms which explicate video and audio were not employed. The written Review drafts became the data for the enquiry and explanations were sought in terms of cotexts and contexts where appropriate. Thus the study does not account for phenomena such as non-verbal communication, suprasegmentals such as loudness, psychological states or conversational turn-taking. The pragmatic enquiry is restricted to the matters of Face and of RO sets. Mention is made of material on

the tapes or factors reported in phone conversations, but the mode formats are not explored nor examined for minutiae.

4.1.2 Eclectic methodology

The researcher's task is seen as observation and development of limited theoretical structure for more informed action. Thus it is expected that what is generated by the enquiry is a contribution to the intellectual framework for understanding environmental communication, and eventually, through this, informed practice. The study proceeded by working inductively on the data, but the ultimate aim was not to produce a complete or exhaustive account of every element. It would be impossible to apply every theory to every detail in every Review. The study limits itself to exploring a range of theories and perspectives, visiting a set of issues and notions, employing a variety of approaches. The aim is to explore relevant intellectual territory and to collect intellectual instruments which can later form a contribution to a more elaborate intellectual structure for further analysis.

In so far as the study focus is on the lessons to be learned and the practical applications to be derived and ploughed into further Natrat-talk practice, the study can be characterised as reflective practice and theoretical development. Action research for education has been justified in Kemmis and McTaggart [1988] and others. The model adopted here uses the kinds of methods appropriate to reflective practice and application of research procedures to matters in progress. The only motive for this research is to discover the components of effective practice in Natrat-talk. It makes a contribution in that part of the action research cycle which includes the reflective stage where one analyses, synthesises, interprets, explains and draws conclusions. [Kemmis and McTaggart 1988] It does not adopt any wider tasks such as 'writing a rationale for change and an action plan'. [Kemmis and McTaggart 1988: 261] If there is any motive, or rationale, it is in terms of the contribution to be made in communication practice toward the eventual goal of environmental sustainability, ecological rationality, and biodiversity.

4.2 Standpoint

4.2.1 Dialogic/dialectic – inherent tension in the study's standpoint

In centring the enquiry in contextual schools of linguistic analysis, the study arrives at many of the same positional statements as are to be found in scholarly approaches such as postcolonial translation studies and contact linguistic enquiry, which draw attention to power relations, disadvantage and loss of linguistic and other social rights. This results in a tension within the study between such a social justice ethos and the ethos which recognises the need for professional tact in professional environmental management. The maintenance of this tension is seen as an exemplar of the kinds of issues which arise when the invitation to dialogical approaches is accepted. The matter of the tension between dialectic and dialogical approaches is dealt with at length by Hawes [1999: 229] and provides a platform for the study's approach to dialectic in organisational communication.

4.2.2 Moral standpoint strictures on methodological identification

In epistemological terms, the study looked to develop theories about effective communication practice in professional environmental management interaction.

When one theorises this practice, one is expected to adopt a political standpoint. It is often assumed that the standpoints of radical environmentalism and of instrumentalist empiricism are at opposite ends of a spectrum on which the political standpoint is to be measured. This study takes a different angle of attack, regarding the communicative imperative as the determinant of the ethos.

Thus the study starts with a functional standpoint: that whatever it takes to get the communication task done is to be done most skilfully. This is not at odds with the aforementioned polarised point of view, but it sidelines it. The functional standpoint needs all parts of the community spectrum involved, which means including elements which are sometimes not welcomed to the discourse.

The present study accepts power differentials and injustices as given, and looks at what it takes to communicate successfully right across to that part of the audience which would be regarded as the conservative power establishment or even as counter operatives. This audience sometimes appears as aggressive opponents of action for sustainability or as contrarian in a number of respects.

The goal of communicating professionally, effectively and interactively with the section of the spectrum which includes organisational decision makers is taken as the functional prime. Additional appropriate goals, in environmental communication terms, such as engineering lexical change and problematising exploitative discourse, are not completely ignored, but are taken as included at other levels in the matrix.

This professional communication goal is another justification for adopting the Alvesson and Karreman [2000(a)] methodological philosophy arising in organisational communication, because the debate set in that scholarly milieu is concerned that much of the awkward material is ignored. This study has a goal to approach the boundary of the 'environmental communication' field and interpret what it takes to open that boundary. Thus it is expected that this study may provide some utility in organisational communication scholarship.

4.3 Justification in terms of organisational methods – Alvesson

Having justified the methods as language analysis, the next step is to justify the methods in organisational communication terms, since much endeavour in environmental communication is centred in that field. The study's methods find a congenial relation in Alvesson, who has expressed caution [Alvesson and Karreman 2000(a): 2] in the applicability of non-referential discourse in decision-making and recommends a 'pragmatic' approach which balances new kinds of emphasis on the knowledge to be gleaned from examination of internal textual dynamics with other kinds of empirical material. This looks like the triangulation which is a normal requirement in studies of language in context, and is a guiding posture for the Hallidayan theoretical orientation adopted in the study. The methodological stance, albeit seated in an interpretive paradigm, nevertheless retains a certain recognition of empirical accountability.

The acknowledgement of the Alvesson perspective is undertaken for two reasons. First Alvesson's work takes into account an important element in this study – that of strategic integrity. Second it is linked because it is endogenous, it arises from within the community of environmental management itself, via its introduction from organisational management in the work of Tuler [2000] and others. The importance of endogenous models is outlined by Miller and Fox [2001: 668].

It is worthwhile justifying the procedures in this study in terms of Alvesson and Karreman's methodological framework, that of 'defending claims'. Alvesson and Karreman [2000(a): 9] advise that claims need 'deep grounding', ie to be defended at each of a range of levels. The defence of claims is found in Appendix A6.

4.4 Study questions and methods

4.4.1 Introduction to sections four to seven

The next four sections outline the methods in terms of the study questions, whether there was a contribution, what it was, and how it was achieved. The constructs for the tertiary 'How' question are split across two chapters, continuing on into chapter 5 with a specific literature review. Here the notion of code is dealt with in 4.7, since it is relevant to the secondary technical 'What' question as well.

First there are the two major theoretical groupings, the linguistic [4.4.2] and the organisational [4.5.2].

4.4.2 Theory group one – Hallidayan and translation

The study consists of observation, so it was necessary to identify tools to achieve observational adequacy. Although not in itself a Systemic Functional Linguistic research project, the study nevertheless owes its theoretical orientation at the deepest level to Halliday [1975–1993]. Much of the scholarship used or acknowledged can be appreciated in terms of how it articulates with Halliday's work. This is the first structure, which can accommodate all the theoretical positions at work on the making of meaning in social context. Organisational communication and learning theory can be included, as well as strategy, culture and groups. Indeed sociological theory generally can be subsumed under this structure, taking in the configuration of the organisation as community [section 3.4], social psychological

positive frame theory and Gumperz's view of code-switching [1976] as transfer of stylistic codes. Close to the top of this structure is Kress's theory of genre as social purpose [1985]. Weick's [1979] concept of the organisation as equivoque finds a special place in this structure. From Halliday's language in context methodology comes the procedural means for considering the text in terms of the context and cotexts.

While it is possible to group the other theories conceptually alongside Halliday's theories, they are not as likely to be accepted by Hallidayan scholars because of their intrinsic divergence from the notion of the lexicogrammar. Translation theory stands as a second structure in its own right with an ancient and at the same time blossoming modern theoretical 'cornucopia' [Gentzler 2001], especially translation studies in intersemiosis [Lambert (forthcoming) quoted in Gentzler et al 2001] and dynamic equivalence [Hickey 1998]. Dialogics [Hawes 1999] utilises translation theory. Scholarship in dialogics, polyphony and narrative [Gurevitch 2001, Hawes 1999, Spivak 1993] links translation with the adoption of narrative in organisational communication study. In these terms Hallidayan translation approaches would be included as one kind among others. Scollon and Scollon's [2001] work on interdiscourse is the tip of a large body of work in intercultural communication, and is complementary to translation. Their work has its initiation in pragmatics, and so pragmatic Face and RO sets can be linked to this grouping. Appearing here too is the relevance pragmatic model of Sperber and Wilson [1986], the basis for Myers-Scotton's RO sets [1998] alongside her approach to code-switching.

Thereby a strong distinction is made between stylistic code-switching and the intricate way in which codes are seen to work in later theoretical positions, as the study splits them between the Hallidayan and the translation structures.

Theoretical gaps and absences led to interim theoretical positions represented by the construct of the Fractal, and a new perspective on code processing, labelled 'code-handling'. The Fractal construct was coopted to encapsulate the feat of managing to represent the patterns of the organisation in the Review. The notion of code-handling was coopted to label what was observed as unconscious processing. The theoretical equipment to validate these coopted constructs emerges in the course of the enquiry. Before going any further, however, the term 'code' should be clarified.

It is not intended to imply any sort of adherence to models of systems which use code in a highly technical, sharply delineated sense. It is used here in the sense employed by language theorists who are currently using it in theoretical labels such as 'code-switching', in a sense which means something like ways of speaking, or varieties of language. A more descriptive term, 'lect' was considered, but abandoned because of its lack of currency in general literature.

4.5 Primary question

The primary question, as to why or in what terms the Reviews were successful, was approached by analysing the text in terms of its cotexts and contexts [Halliday 1975–1993]. The context was interpreted in organisational terms [Pepper 1995]. The texts are organised in dialogical categories [Gurevitch 2001].

4.5.1 Halliday's language as a social semiotic and linguistic contact

Semiotic systems are systems of signs and meanings. Halliday's [1975, 1985(a), 1992, 1993] theory of language as a social semiotic sees language as a semiotic system where the signs are words and the meanings are social meanings. A Hallidayan approach to the social meanings which a text is negotiating considers it in relation to its context and cotexts. This can be characterised as a process theory of language in that the signs are involved in continuously shifting social contexts. This is the structural starting point for the study's primary question about why PG's Reviews were successful. The tripartite set of field, tenor and mode provide a basis for analysis which is implicit in the whole study. The field refers specifically to the social action of the text, what the language and other semiotic resources do.

the field of discourse refers to what is happening, to the nature of the social action that is taking place, to what is it that the participants are engaged in. [Halliday 1985(b): 12]

Tenor refers to who is taking part in the language interaction, to the nature of the participants, their statuses and roles, the types of speech role that they are taking on in the dialogue and the whole cluster of socially significant relationships in which they are involved [Halliday 1985(b): 12]. The concept of tenor arises from the function that language has in specific contexts as interaction. It is related in terms of social distance to the deictic category of positive Face in pragmatics [Grundy 1995: 154]. Mode refers to what part the language is playing, what it is that the participants are expecting language to do for them in the situation, the symbolic organisation of the text, the status that it has, and its function in the context. [Halliday and Hasan 1985: 12]

There are similarities with Hallidayan theory in Scollon and Scollon's work on interdiscourse [2001], which concentrates on situations of linguistic contact. It relies on seven components of the grammar of context: namely scene, key, participants, message form, sequence, coocurrence patterns and manifestation. Scollon and Scollon's [2001] key relates to the tone or mood of communication, and includes the capacity for misinterpretation. The sequence is the rhetorical structure and whether it is set or open. The coocurrence patterns relate to whether the linguistic form is marked or unmarked in the situation. Manifestation refers to power structures, which can be tacit or explicit.

4.5.2 Theory group two – Pepper and Weick on organisational theory and community

For the theoretical scheme to assess the preliminary question, in what respect the Reviews might have made a contribution, Pepper [1995] was the main theorist, alongside theorists on organisational learning and communities. Weickian equivoque is a special perspective in organisational theory, which is used to deal with the question of how the contribution was accomplished. Weick's [1979] notion of the organisation as decision environment provides the basis for seeing the Reviews as instantiations of organisational culture. Pepper's is a general critical approach to organisations, their culture and complexity. His analytical template [1995: 119] for organisational cultural communication texts provides categories of vocabulary, themes, temporality, architecture, metaphors, stories and fantasy themes. He infers expectations from norms, roles, motives, agenda and style, and

infers meanings in terms of constructs and relations among constructs, thereby providing some of the methodological orientation for this study.

The configuration of the organisational community is dealt with in section 3.4, where Alvesson's *KIFOWs* [1993], Shields' Communities of Otherness or Difference [2000] and Lave and Wenger's [1991] Communities of Practice are outlined.

4.5.3 Gurevitch's dialogics as endogenous text approach

Dialogics is a subsection of studies in rhetoric which examines the polyphonic nature of texts, the ways in which the different voices become apparent. Much of the study in dialogics is also the focus of scholarship in pragmatics. Dialogics, known also as studies in narrative polyphony, is chosen as a field because it is found in the organisational communication literature dealing with environmental communication. Gurevitch's [2000: 243] discussion of Bakhtin found four processes of text construction: a monologic process, and three kinds of dialogic processes. In Gurevitch's terms, the dialogic processes are related to kinds of space – unity, suspension and silence. These are used as organising categories for the text analysis and are visited again in section 6.4.2.

4.6 Secondary question – genre as social purpose

To appreciate the technical contribution, a range of devices current in text analysis is exploited. The tool at the highest level of hierarchy is the functional linguistic concept of genre as social purpose.

Starting from the notion of genre as social purpose [Kress 1985] and proceeding through categories of genre as expounded by Swales [1990], the logic leads to the realisation that a change in genre signals a change in social purpose. PG's genrehybrid is designed to bring personalities back into the technical exchange and has the corollary effect of changing the way in which the members interact. This notion is used to push the argument along to the consideration of the organisational benefits this change might produce. This is done in terms of Community of Practice [Wenger 1998] and Knowledge Management [Sveiby 2001], presented in section 3.4.2.

In approaching genre definitions, we can first look at those which characterise genre as kinds of texts, then move on to those which emphasise the pragmatic, the functional and the social purpose nature of genre, and eventually to those that refer to genre's specific reality as a cognitive frame. Kress [1985], Butt [1990], Halliday and Hasan [1985] treat genre as the template for a set of regular social tasks which are performed through language. Obviously in these terms, genre is a pragmatic unit, a level of pragmatic activity, just as a speech act is a level of pragmatic activity. Both Swales [1990] and Wierzbicka [1992] demonstrate a pragmatic approach to genre. Critical [Cicourel 1987], cognitive [Paltridge 1997] and literary [Saunders 1993] genre theorists also contribute to the exploration of the significance of the genre-hybrid produced by PG.

4.7 Tertiary question – code-switching

The study exploits the notion of code. The use of the word 'code' is not indicative of a restricted theoretical model such as the transmission models of Shannon and Weaver [1949]. Its use seemed appropriate because of its adoption across a range of language scholarship sourced here, in particular that of code-switching.

To consider how the Reviews managed the threats posed by the change in genre, the skill of handling code is linked with the imperative to observe the organisation's strategic tact requirement, through the pathway of linguistic pragmatics and Face.

One of the ways in which Face is maintained is through code management. [Scollon and Scollon 2001, Chang 1999] Interpretation of code in contact situations initially follows Gumperz [1976] in handling each linguistic variety, code or lect as a discrete entity, applying the multilingual theory to the monolingual code-switching tasks. Dialogical categories are taken from Gurevitch [2000].

The section uses theory on trust in organisational learning [Gamble and Blackwell 2001] and employs concepts introduced in the Background chapter, namely tact [Janney and Arndt 1992] and Face [Verschueren 1999: 45]; concepts introduced in the literature review, namely dialogic theory; and organisational communication theory of strategy, culture and groups.

The discrete entities position on code-switching, formulated by Gumperz [1976], is the start of the search for an intellectual path into the complexity of unconscious code-handling, which moves in the next section through the discomfort felt by such as Francheschini [1999] to the adventure of RO sets with Myers-Scotton [1998], which puts the argument in a good position to link with the translator's position pleaded by Spivak [1993] and found in Hawesian dialogics [1999].

This is the place to clarify the standard position on code-switching. If an individual speaks two languages, one of the possible choices which can be made is to use both languages at the same time. Gardner-Chloros offers a rudimentary definition of code-switching as

the alternate use of elements from two different languages or dialects within the same conversation or even the same sentence. [1991: 2]

Gumperz [1976, 1982] explores the switch from one code to another as stylistic purpose, and this position has proved a mainstay of code-switching theory for several decades.

Gumperz provides encouragement for venturing from the multilingual code-switching to monolingual situations. He sees code-switching as an additional communicative strategy to those available to monolinguals and notes that bilinguals are not fundamentally different from monolinguals simply because the varieties they use are connected with what are generally called 'different languages'. He generalises that rather than characterising members as speaking particular languages, it seems reasonable to speak of speech behaviour in human groups as describable in terms of a linguistic repertoire consisting of a series of functionally related codes. The extension from multilingual to monolingual is confirmed in Gardner-Chloros [1991] and in Gardner-Chloros et al [2000]. The later study points to the links between code-switching and variation of code in monolingual discourse in relation to conversational functions of bilingual code-switching and validates treating monolingual discourse in terms of varietal or codal switching. Johnstone and Bean [1997] provide an example of utilising Gumperzian stylistic variation in code, or monolingual code-switching. Gordon and Williams' [1998] distinguish

between style-shifting and code-switching, and link the latter to macrosemiosis, or strategic code-deployment:

code-switching in communities plays a role in the definition of roles and role relationships. Code-switching is also a register of changes in multiple role relationships. It is an important mechanism of the negotiation and definition of social roles, networks and boundaries [Gordon and Williams 1998: 75]

Section 5.2.2 deals with non-Gumperzian code-switching, where the varieties or codes are seen as less discrete, less available to conscious decision.

INTRODUCTION TO ARGUMENT SECTIONS

The Background, Literature and Methods chapters have set things up to start the argument relating to the primary, tertiary and secondary questions. The tertiary question about the unconscious processing has to come first, so that the literature surveyed can be arranged alongside the previous chapters reviewing literature.

In deciding whether to present the primary argument before or after the individual Review analyses, the issue of keeping together the translation-related constructs of 'code-handling' and 'Fractal' outweighed the semiosis of placing the argument after the analysis. Armed with the constructs, the reader is enabled more closely to judge the analysis in these amalgamated theoretical terms.

The staggered ordering of the discussion relating to the research questions emphasises the point that the answers to the individual questions do not constitute the whole answer to all the questions which arose in the progress of the research. It was the combination of the questions, the complexity of the answers, the richness of the appreciation which grew as the layers unfolded which characterised the study. This matter returns in the Conclusion.

5 THE TERTIARY QUESTION: THEORY TO SUPPORT UNCONSCIOUS PROCESSING, OR 'CODE-HANDLING'

The method by which PG observes the organisational patterns is uncertain. This chapter addresses the tertiary question by hunting for theories to license the possibility of unconscious processing, and is in effect a further review of literature. After proposing the label 'code-handling' for PG's unconscious application of codeswitching principles within a single language, the chapter relates reviewing to translating, with the claim that transposing the material from one language variety to another employs a comparable procedure to that required for translating from one national language to another. The language continuum is the key to this. The third step is the crucial one, using Rights and Obligation sets to justify unconscious pattern reading. The fourth section links translation theory with the thesis theories, matching 'intersemiosis' with 'code-handling', and 'dynamic equivalence' with the 'Fractal'. The fifth section finds translation links in dialogic research and this enables some further sections to support the first section's translation perspective in monolingual manipulation with some even finer distinctions in rhetorical theory. Section nine seeks a model in language and cognition studies which might either support or at least not rule out unconscious processing. Section ten looks to the presumption of unconscious processing in Knowledge Management practice.

5.1 Introduction to code-handling

'Code-handling' is the term adopted in the thesis to refer to PG's suggested unconscious processing. The code-handling construct can be glossed as unconscious monolingual intersemiosis. PG 'translates' between one language register and another, doing it automatically and thereby achieving a high degree of truth in his transfer of ideas.

Let us first consider the business of moving between codes or registers.

5.2 The language continuum as non-Gumperzian codeswitching

Code-switching might explain unconscious processing. A listener reacts to changes in the way people speak, without identifying exactly what the differences are or what they purport. At the first stage, this can be interpreted in terms of social markers in speech. [Scherer and Giles 1979] At the second stage, the argument can resume at the point established in Methods 4.7, where Gumperz provided a straightforward view of code-switching which directly expresses the speaker's purpose. The last stage modifies Gumperz' view. While Gumperz [1982] saw code-switching as switching between a 'series of functionally related codes', the continuum modification sees the varieties or codes as less discrete, and less available to conscious decision.

Gardner-Chloros questions Gumperz' outlook:

Some definitions tend to prejudge some of the important questions. For example Gumperz [1982: 59] calls it 'the juxtaposition within the same speech exchange of passages of speech belonging to different grammatical systems or subsystems'; in fact the degree of separateness of the 2 systems is one of the aspects of code-switching which requires investigation. [Gardner-Chloros 1991: 2]

5.2.1 Language is not monosystemic

The first step is to dissolve some boundaries. To get to the notion of the language continuum, one dispenses with the notion of a language, and adopts terms such as 'mixed discourse', or simply 'code' across the range of varieties. Human language behaviour calls on a repertoire, so the speaker can call on a range of varieties according to their social tasks. This brings the emphasis onto the functional aspect of the code-selection behaviour. Another useful concept is that of the 'linguistic potential', which can be marshalled into use at all levels of linguistic expression.

We would want to see linguists as chary of talking about a language in any monosystemic sense, as biologists are by now of talking about a human race... We see the competence of the individual as containing a lexical and phrasal repertoire acquired from speakers possibly of many other languages or dialects and psychologically marked accordingly. We see it as possibly containing also many fragmentary and overlapping systems, of his own creation, marked as

being the attributes of groups he has identified in his society [Le Page and Tabouret-Keller 1982: 181]

The 'fragmentary and overlapping systems' suit this thesis because the study is looking at the subtle business of using a range of linguistic codes within one standard variety, and the even subtler business of reading that range of codes and unconsciously recording patterns which are then later, unconsciously, replicated.

The first step has been taken to dissolve the strict divisions between varieties or codes. Franceschini's [1999] model of the double-focusing speaker emphasises how normal it is to switch codes:

the longstanding and multiplex discussion on how to draw a line between codeswitching, code-mixing, borrowing, transfer etc indicates that the problem is a heuristic one ... the way in which bilinguals converse [typically by codeswitching] is not a 'third' – exceptional – way [between the monolingual ways in the two languages] but the central one ... seen as a simple continuum, the consistently monolingual ways of speaking would be the extremes, while codeswitching [as well as other phenomena of language contact] might be located in the central area [which in itself would have to be conceptualised as multidimensional] [Franceschini 1999: website accessed 9.8.99]

The next step is to apply the notion of the continuum to monolingual codeswitching and dissolve the boundaries into a non-Gumperzian model.

5.2.2 Non-Gumperzian code-switching

Myers-Scotton [1988] has a model of code deployment at a deep level of system which is a non-Gumperzian sort of code-switching, and would comprehend dialogics and Weickian equivoque. [section 3.6]

Gardner-Chloros et al [2000: 1305] elaborate Gumperzian stylistic code-switching when they describe a language shift which can allow speakers to introduce structural contrasts, manage the conversational 'floor', or highlight the different connotations of each variety as a counterpoint to the referential meaning of their utterance. The Gardner-Chloros argument implies that it is possible for PG to respond to the range of factors such as these at an unconscious level, to 'read' The Guild patterns available in the code-switching as any other pragmatic factor.

Mindful of Halliday's principle of language as a social semiotic [1978], which offers sets of paradigmatic choices to be made in line with social conditions, the study is suspicious of the assumption that the speaker consciously decides on code. More likely the social conditions exert constraints, leaving little option for the proficient speaker, except to invent or elaborate at more nuanced levels. Such principles approach a position where code-changes are obligatory. This notion of obligation links elegantly with Gricean politeness [1975], pragmatics, and eventually the Myers-Scotton markedness model with its RO sets [1998].

5.3 Myers-Scotton's RO sets enable pattern reading

This section returns to Myers-Scotton's [1998] notion of markedness, which is the speaker's grasp of relevance. Speakers demonstrate their understanding of what is going on in a speech event by choosing contributions from the unmarked paradigm, that is those forms which the listener expects in each situation. Unmarked items are relevant. Marked items need explanation. Myers-Scotton interprets marked contributions as renegotiations of the whole set of Rights and Obligations:

interaction types in every conversational situation are conventionalised and have relatively fixed schemata about the role relations between speakers. The schemata are the unmarked 'Rights and Obligations' [RO] sets for particular interaction types. A speaker may comply with the unmarked RO set on the basis of non-linguistic conditions such as her or his identity, degree of formality... [Myers-Scotton 1993: 113]

This opens the possibility for a Code-handler, such as PG, to read the subtle interactions at any one of a number of levels. In fact, there seems to be no reason to prevent a Code-handler from reading accurately and replicating, from adhering to sequential and other sorts of patterns and schemata, even while not understanding the complete denotational import. Where the subject matter is unfamiliar, it might initially be easier to read non-linguistic and suprasegmental indicators, instead of listening to the words themselves. The Code-handler could thereby set a pattern structure, and flesh it out later with words. PG used to take several iterations to review the source text. The attendance, the tape transcription and the mentoring discussion gave him complementary experiences to confirm and fill in his original pattern setting.

The elements of licence to explain unconscious code-handling are in the observation that 'speakers are free to make any choices [between codes] but how their choices are interpreted is not free'. [Myers-Scotton 1988: 155] Thus a proficient reader of the codes might be advantaged in terms of reading social processes and patterns. Myers-Scotton [1993] deals with the socio-psychological motivations behind codeswitching

most code-switching is to negotiate a social situation and code-switching is viewed as a phenomenon serving a social function which occurs at the intention of the speaker. [Myers-Scotton 1993: 113]

and she suggests the RO sets as the means by which the social negotiation is achieved. That is, the speaker observes appropriate Rights and undertakes suitable Obligations in order to appeal to the people she most wants to reach in the audience. This focus can shift, of course, and therefore alter the RO sets. We maintain existing social conditions by adhering to the RO sets in using unmarked forms. In The Guild then, there is a set of organisational, social and intellectual practices which become observable for PG.

5.3.1 Rational markedness does not rule out unconscious code-handling

The quest to justify unconscious processing might end here, except that, since Myers-Scotton overtly states a link between RO sets and intention,

all code choices can ultimately be explained in terms of such speaker motivation [Myers-Scotton 1993: 113].

the study is unable to adopt her system fully. It is heartening that Myers-Scotton does not definitely rule out PG's unconscious reproduction patterns flagged by RO sets. However, it seems best to create a new category and to label it 'code-handling'.

5.4 Translation definitions and correspondences

The argument turns now to translators and their experiences of unconscious phenomena. The study enters translation through intersemiosis: that is the translation of concepts from one system of signs to another system. The outcome of intersemiosis is labelled as a product, that of 'dynamic equivalence'. These

translation constructs parallel the study's coopted constructs which specifically recognise the unconscious components of the process. The Fractal is seen as the outcome of code-handling. PG uses intersemiosis and unconscious processing ['code-handling'] to produce a dynamically equivalent text [a 'Fractal'].

5.4.1 Translators acknowledge unconscious processing

Translation studies offer unconscious processing as an acknowledged part of the procedure, labelling it variously as 'the extra factor of unconscious processing', the 'something', the classical 'logopoeia' and Pound's 'energy in language'. [Gentzler 2001]

Unconscious competence – where a person has internalized the thoughts and behaviours that would be appropriate in another culture. [Gamble and Blackwell 2001: 156]

Gentzler outlines the American workshop approach to translation, hailing its 'first look into the black box of the human mind as it works and reworks during the activity of translating'. He clearly recognises the issue of unconscious procedure

As many decisions are clearly subjective and often unconscious, the analysis of this process of translation has been the most neglected branch of translation theory. [Gentzler 2001: 35]

but notes that we are left with more questions than answers, the most obvious question being the definition of the term 'translation', showing approval of the Jakobson term 'creative transposition'. [Jakobson 1959: 238]

'Something heard or intuited' is a Romantic phrase for the unconscious which emerges when Gentzler examines translation's epistemological problem. What sort of knowledge does translation deal with? Gentzler hints that it is abstract and unconscious.

when one assumes a Poundian approach to literary translation, what are the referents? meaning? Things? Energy in language seems too vague of a concept for any sort of rational investigation. Are the criteria totally subjective? ... To what is the translator bound, the written text or something heard or intuited? [Gentzler 2001: 35]

5.4.2 Malmkjaer patterns: 'dynamic equivalence' almost explains the Fractal

This epistemological problem of what translation does can be resolved by the notion of dynamic equivalence, explained in an extreme form by the claim from the Göttingen group of translation researchers that

the translation of literature means the translation of a literary work's interpretation, one that is subject to the literary traditions in the target culture. [Frank 1990: 55]

The study is going to recruit this notion of dynamic equivalence to support the claim that PG can reproduce, accurately, patterns which were observed at an unconscious level. It will first consider lexical equivalence, which will contrast with dynamic equivalence. Lexical equivalence means working to the correct gloss for a word. A good example of an issue concerning lexical equivalence occurs in *Shag Shoal* [chapter 16], where PG was forced to issue an apology because he wrote that the speaker had used 'exotic species' in his 'glorified gardening'. PG has committed a mistake comparable to those produced by non-native speakers in a foreign language.

Errors in the use of situation-bound utterances can mainly be due to the lack of native-like conceptual fluency and metaphorical competence of adult second-language learners, who rely on their first-language conceptual system when producing and comprehending situation-bound utterances in the target language. [Kecskes 2000: 605]

If PG had been more of an insider, he would have read the 'exotic species' as the seemingly oxymoronic 'exotic native species', not a concept with wide currency in the general community, but part of the technical lore of the vegetation manager, especially in cases where the original seed stock has been lost.

However, Hickey [1998: 2] notes that linguistic equivalence and dynamic equivalence may contradict each other:

for some time now the notion of equivalence, or rather equivalences, has been debated ... [Bassnett 1991: 23-9]. It may also be that translation is merely an approximate, imprecise procedure, and that any text has so many dimensions that equivalence on one may be incompatible with equivalence on some others. For example linguistic equivalence [an extreme example of which would be word-for-word translation] may conflict with dynamic equivalence [stimulating an effect in the reader of the translation similar to that caused in the reader of the

original] in the sense that if the linguistic surface of both texts is similar, the effect on their readers may necessarily be very different. [Hickey 1998: 2]

The coopted term 'Fractal' is intended to be interpreted as one instantiation of dynamic equivalence, manifesting the Weickian equivoque of the organisation. This sort of text [a suspension text] is to be distinguished from a transparent access text, or a text where dynamic equivalence has not been reached or even sought. Thus the 'Fractal' is a noun, carrying the sense of a dynamically equivalent text. 'Codehandling' is the verb chosen to describe the process of producing such a dynamically equivalent text.

Malmkjaer pushes dynamic equivalence to the point where she suggests that the reader might reconstruct original contextual effects through patterns in the translated text.

...what we need in my view is a recasting of that distinction [between literal meaning and non-literal meaning] as one between first meaning [Davidson 1986] and whatever else might be implicated. First meaning is whatever comes first in the order of interpretation... it need not matter whether what comes first is, in fact, the same for readers of the ST [source text] and readers of the TT [target text], as long as everyone might in principle end up in the same place [Malmkjaer 1998 in Hickey 2001: 35]

At this stage Malmkjaer has arrived at a fairly standard view of dynamic equivalence, but it is the next point which holds the pattern promise:

it is true that they will not generate this as first meaning of the clause. However they might be able to generate it eventually, taking into consideration the entire context of the work. [Malmkjaer 1998 in Hickey 2001: 35]

Malmkjaer's point about the entire context relates to a complex referent requiring a paragraph of cultural and intertextual explanation. That paragraph cannot of course be included in the translation, but must be approximated by choosing a lexical item with a similar kind of referent in the TL [target language]. Malmkjaer's point is that the TT [target text] specific lexical item is not at such a high degree of importance as are the overall patterns supplied in the TT. Put bluntly, the translator does not need to worry about the odd word if the rest of the text is able to carry the cultural contextual complexity of the source text.

This is a bold claim and it relates closely to the point being extruded in this study, which is that the product of the professional writer's work is a Fractal of The Guild's equivoque. The Review is a small replica of the whole large organisation. Thus one way of approaching the idea of the Fractal in its manifestation as Weickian equivoque is to see it as a set of Malmkjaer patterns which appear in the TT. With the Genre Challenge text in 14, the issue of whether or not the text could be cut is really the issue of the integrity of the patterns following the Malmkjaerian faithful reconstruction of context. Malmkjaer's boldly made point stands as an invitation to consider the process of how the whole context might provide the relevant information.

5.4.3 'Intersemiotics' is similar to 'code-handling'

Code-handling can be aligned with intersemiotic approaches in translation. Gentzler [2001] explains Lambert and Robyns' vision of the future of translation studies as 'both target-oriented empirical science and transfer-oriented semiotic practice'. [Lambert and Robyns (forthcoming) quoted in Gentzler 2001: 193] 'Target-oriented' relates to lexical equivalence and 'transfer-oriented' relates to dynamic equivalence. Gentzler [2001] outlines Lambert and Robyns' [forthcoming] intersemiosis:

translation is the migration-through-transformation of discursive elements [signs] [Lambert and Robyns (forthcoming) quoted in Gentzler 2001: 193]

The approach mirrors Malmkjaer in emphasising larger discourse entities over smaller word entities. This matches the study's attention to genre, both in discussion of PG's innovative genre-hybrid and the Genre Challenge.

translation is the process during which they are interpreted [recontextualised] according to different code [Lambert and Robyns (forthcoming) quoted in Gentzler 2001: 193]

This echoes Malmkjaer's emphasis on the importance of making available large canvas context, rather than making more simplistic equivalences for individual signs. In the Reviews, the Gammon night decision [chapter 12] to remove references to the beautiful girl, lest they direct the reader into inappropriate territory, sees the sign completely sacrificed to the contextual demands. Such a ruthless

gesture is reminiscent of Malmkjaer's bold view of the importance of 'first meaning'.

Again the justification of unconscious processing might stop here, and adopt either intersemiosis, or migration-through-transformation as the process which produces the dynamically equivalent text. The only problem is that unconscious processing is identified as an important explanatory construct for what was observed in the study. It would be impertinent to assume that extra factor in the constructs of intersemiosis and dynamic equivalence without signalling its addition. First, many theorists would not welcome the factor as a component presented as given, necessary or always present. Second and consequently, since the unconscious factor is not always present or necessary, it is neater and clearer to distinguish processes where the unconscious factor is operating. Hence the study coopts the 'Fractal' and 'codehandling' labels in order to include the unconscious factor.

5.5 Language and cognition

5.5.1 Cognitive models to support code-handling

In looking for cognition models to support unconscious processing, the first step is to recall Kress's [1988] distinction between process models of communication and the transmission or conduit models, which, it was observed, are still current in the default model of environmental communication.

Contemporary views of language have discarded any theory of language which views communication as the encoding and decoding of thoughts in favour of a view of meaning as actively constructed by the mind through the interplay of the context with knowledge and reasoning [Cook 1994: 36]

Two major models to start with are constraint satisfaction [propositional] processing and mental model processing or structure building. Orsolini and Burge [1997: 486] explain the reconciliation of constraint satisfaction with mental models and outline what is agreed by all cognitive scientists. Firstly the output of text processing is agreed to be a semantic code [ie a type of representation very close to lexical meaning]. Secondly language processing is agreed to generate an intermediate representation. This is then sent to more central cognitive processes.

Mental models theory [Orsolini and Burge 1997] finds that the hearer replicates the logical structure of the speaker's text. This suits the notion of the Fractal as a miniaturised replica of the community's text with a high degree of frozen or embedded complexity, the result of translation and compromise, melting and mixing. Gernsbacher et al [1992] describe the three processes by which the mental model is constructed. Firstly people lay mental foundations. Secondly, they build a structure on the foundation. Thirdly, they shift from one substructure to another.

Propositional processing and constraint satisfaction models appear to demand a very close fit between production and understanding because the emphasis is on decoding the detail of the speaker's production. They are not going to offer much support for PG's proposed unconscious processing. But the sets of theories are not opposed. Gernsbacher and McKinney [1999: 568] note that it is constraint satisfaction that drives the construction of mental representations and integration of those mental representations into a coherent whole.

In applying the cognitive models to PG's work it is tempting to suggest the following. Constraint satisfaction offers the possibility that the suppression process is facilitated in cases where PG does not have all the details of all the interactions. His subsequent search in the context for assistance in identifying patterns might be an ingredient in his success, and a prophylactic against infelicitous conclusions. After those patterns are produced, perhaps his attention to the anaphors helps to develop the patterns. While a little knowledge is a dangerous thing, it can also be a helpful thing and perhaps the PEC's outsider status in The Guild is to be guarded? The study has no intention of following through those suggestions, but so far the cognitive models do not rule out code-handling.

5.5.2 Situation and event-indexing models

Situation model theory, explained here in terms of reading, might make a stepping stone to code-handling. A new development in the study of situation models is the Event-Indexing model [Zwaan, Langston and Graesser 1995; Zwaan, Magliano and Graesser 1995; Zwaan and Radvansky 1998], where readers build situation models by monitoring at least five event dimensions: protagonist, time, space, causation and intentionality. By integrating information from these dimensions, readers gradually

update their mental representations and build an interconnected coherent network or situation model. The five dimensions map nicely onto the elements for narrative analysis, and in fact onto PG's rhetorical architecture for the genre-hybrid Review [7.1.1].

Tzeng et al [2000] present the Landscape model as a connectionist model with cohort activation, which allows the model to dynamically incorporate the reader's activation state from the previous reading cycle into the current mental representation. A cohort is a group of reading elements that are related because they were co-activated at some time during reading. An important property of a cohort is that if any part of the cohort is activated the rest of the cohort will be activated as well, to a less degree. This has implications for the readers of PG's Reviews who were present at the meeting as well. The recall of the cohort is likely to facilitate the knowledge management of the CofP. This is so even in respect of the little jokes and quirky spots, which is another vindication of the President's decision to persist with the Review rather than give in to the demands for reversion to scientific abstracts in the Genre Challenge [chapter 13].

However, the study is not intending to chart the cognitive issues in detail. The overview of relevant elements indicates that there is scope for the serious consideration of the construct of code-handling, or of something with the same factors but a different name.

5.6 Knowledge Management

Housel and Bell [2001: 11] are interested in unconscious processing, which they call 'second order knowledge', as opposed to the 'first order knowledge' of conscious processing. Their interest is in harvesting such knowledge, and targeting ways of making it available in organisations. They oppose the notion of 'immanent knowledge' to 'extant knowledge' [2001: 9] and observe that immanent knowledge is 'held in creative reserve'.

5.7 Summary

This chapter has assembled a set of theories to cope with PG's observed ability to seemingly replicate patterns unconsciously. The quest passed through codeswitching, RO sets and markedness, translation theories of intersemiosis and dynamic equivalence, dialogia or narrative polyphony, and studies in language and cognition. Finally the organisational management field of knowledge management was seen to accept that knowledge is not always conscious. The outcome is a set of theories which do not rule out unconscious processing. The component which all the theories have in common is the existence of shifting dynamics which are expressed in linguistic variation.

This study can thus work at the level of linguistic variety or what can be called code. Lambert and Robyns are working at this level too, distinguishing it from levels like that of the syntactic system and the lexicon. They point out that

Translations take place over a variety of systemic borders, not just between two languages... every text, every word contains 'translated' elements. [Lambert and Robyns (forthcoming) quoted in Gentzler 2001: 192]

The extended argument about the translated nature of every text and every word can point to something of what it is that PG operates on when he is code-handling. It is a reasonable conjecture that as The Guild members move and negotiate their way through Myers-Scotton's RO sets, they change and shift into a direction where the organisation comes to cohere rather than to consist of separate elements, and that PG can read this and replicate it in his Reviews.

ADDRESSING THE THREE QUESTIONS

Of the three research questions, one has just been addressed, the tertiary question about the unconscious processing. The primary and secondary questions come next.

The tertiary 'how' case was made through translation intersemiosis relabelled as 'code-handling' to signal the element of unconscious processing.

The primary 'was there a contribution' case can also be supported through translation, coopting the label 'Fractal' to indicate the product of intersemiosis entwined with Weickian equivoque. Chapter 6 addresses the primary question as to whether or not the Reviews made a contribution. The answer suggests the concept of the 'Fractal'.

Chapter 7 addresses the rhetorical structure of the Reviews and describes the genre-hybrid which constitutes the key technical contribution in answer to the secondary 'what' technical question.

Analysis chapters 8–17 identify and demonstrate techniques with examples from the individual Reviews.

6 THE PRIMARY QUESTION: 'FRACTAL' AS WEICKIAN EQUIVOQUE AND SUSPENSION DIALOGIC

This chapter deals with the Fractal and links dialogic theory to translation in order to address the primary question about PG's contribution to The Guild.

6.1 Review as hypernym, Fractal as hyponym

It is useful to think of the label 'Review' [spelt with initial capital] as a hypernym which encompasses the many characteristics open for discussion in PG's Reviews: characteristics such as textual manipulation techniques, narrative polyphony, the genre-hybrid nature of the Reviews, and the intersemiosis just discussed. The label 'Fractal', as its hyponym, particularly suggests the organisational patterns in dynamic equivalence.

The Fractal has been adopted as an abstract concept in a number of disciplines and intellectual traditions, including critical disciplines. The word was coined and the concept described by Mandelbrot in 1975. A current definition runs like this:

Non uniform structures in which similar patterns recur at progressively smaller scales, such as snowflakes and eroded coastlines, can be realistically modelled using fractals, which have become familiar through striking computer-graphic images. [OERD 1996]

There are more Fractal examples in Appendix A5.

In this study, the sense of the word 'Fractal' is that of mimesis, a scale-down of the community event, a replica, something where even the tiniest fragment is a complete, balanced, detailed carrier of the pattern information. Each detail is set in its context. It emerges from reading the cultural agenda in its total complexity and replicating the range of responses and positions in the culture.

The point of adopting a label such as this is to be able to link the notion of the dynamically equivalent text with other useful constructs. In particular, linking the Fractal with the Weickian construct of equivoque [1979] produces a very active

characterisation of text and delivers some fresh perspectives to determine in what respect the Reviews might have made a contribution to the organisation.

6.2 Fractal shares characteristics with Weickian equivoque

A good starting point is to consider in what way the Fractal might be linked with Weick's equivoque [section 3.6]. The first comparison is in respect of patterning. The Fractal is argued to deal in patterns, and the decision environment involves patterns too. The second comparison is as action abstraction. The process view of texts is similar to the idea of 'organisation as behaviour, as action rather than substance'. [Pepper 1995: 247] In each case, the abstraction is a powerful agent, which is ultimately capable of producing physical outcomes. Both the Fractal and the equivoque are ideas. Both extract patterns and reconfigure them in ways which reinforce or alter directions. Both are agents which cause people to act.

6.3 Textual acts

Every text in every culture can be said to be capable of action in the way described, just as every business, every organisation is a decision environment. What is interesting in this study is looking at the given fit of the one to the other.

To state the argument in organisational terms, the Weickian decision environment is realised as patterns of decision-making, interaction, words, cultural artefacts and gestures. Translating from one medium to another offers the opportunity in the Fractal to realise the patterns in different ways. A fresh realisation becomes a fresh artefact, which reinforces the patterns.

Restating the argument in translation terms, the decision environment is seen as a culture, with meaning-making dependent on working in terms of that culture. Intersemiosis means transfers from one form to another. Each individual decision to find alternative realisations of signs in the culture represents a re-sorting of organisational elements, an engagement with organisational details, an integration of organisational features. Each individual translation is thus work. The resultant Target Text is an instantiation of the culture, or a new artefact. That artefact can be

labelled a 'Fractal', because the patterns have re-emerged in new arrangements, showing new relationships, enabling reconsiderations.

The text is an event in the Weickian decision environment, not a still reflection. The Review is an instantiation of the organisational culture. It is active not passive. This is not a new insight into the nature of texts. Every text has the potential to do this. The 'Fractal' label emphasises the translation role and its relation with the Weickian decision role and shows the path to work out in what way the contribution was made.

First the fit can be explained in terms of audience pleasure in recognising the patterns, enjoying the rearrangement of them as one would a jazz piece. Second the contribution can be explained as the educational opportunity which comes with all the rearranging and renegotiation. Showing the community their own knowledge and patterns in new ways enables renegotiation and integration of knowledges. Such renegotiation is important in knowledge management and collaborative learning climates. [section 3.4.2]

6.4 Translation and dialogia: Gurevitch and Hawes to Spivak

Now it is time to link translation with dialogia, also known as narrative polyphony. Hawes [1999] links translation with narrative polyphony, encouraging a focus on using the power of narrative to make material accessible. Gurevitch provides [2000] four dialogic categories of silence, monologia, unity and dialogia. The most important node is that of Hawes' [1999] building on Spivak [1988], where dialogia is seen as translation. Matching polyphony with translation is at the centre of the study's major link of language as a social semiotic with Weickian equivoque.

6.4.1 Suspension versus transparent access

Articulating translation theory with organisational communication theory brings us to a group of postcolonial scholars. Niranjana [1992] and Spivak [1993] work in cultures where simplistic translations are implicated in negative physical, structural and cultural effects.

The uncritical naïve adoption of traditional concepts of translation ie translation as transparent, objective and faithful has enabled colonial politicians and administrators to construct the 'exotic' Other as eternal and unchanging [Niranjana 1992 quoted in Gentzler 2001: 177]

They seek to reclaim translation and use it as a strategy of resistance, one that 'disturbs and displaces' the construction of images of non-European cultures. [Gentzler 2001: 177] The reference to disturbing, and displacing, links with the notion of suspension used in the study to express the complex forms, in contrast to oversimplified, bleached, or culturally neutral translated forms which characterise the transparent access models.

Niranjana [1992] uses the notion of 'source-text oriented' translation which presumes transparent access to the original source. [Niranjana 1992 quoted in Gentzler 2001: 177]. Postcolonial researchers are suspicious of the notion of transparent access, and prefer 'suspension', as a more careful approach to the complexity of negotiating signs in different codes. The idea of suspension is also used in Gurevitch's dialogic classifications to indicate the highest degree of recognition of complexity, where oppositions are not brought prematurely to resolution, but are held and valued for their divergence and separateness.

Although the thesis is dealing with a monolingual set of texts, there are nevertheless ways to link with translation theory through the work of Lambert and Robyns [(forthcoming) quoted in Gentzler 2001: 192], whose intersemiotic approach views translation less as an interlinguistic process and more as an intracultural activity:

. translations thus take place not only between fixed languages and national literature, but also between any sort of competing discourses... with the implications that it [this theory] breaks down distinctions between written and other discursive practices. [Lambert and Robyns (forthcoming) quoted in Gentzler 2001: 192]

Thus translation theories can account for much of the analysis of the Reviews, even including the mode change from spoken through tape to written texts. To complete the contrast of transparent access with suspension, the argument turns now to the use of the suspension term in dialogics.

6.4.2 Gurevitch's categories

Gurevitch's [2000: 243] discussion of Bakhtin labelled four processes of text construction: a monologic process, and three kinds of dialogic processes. In Gurevitch's terms, the dialogic processes are related to kinds of space – unity, suspension and silence.

6.4.2.1 Monologia and the science hegemon

Monologia describes one dominant voice or code. This can be a single accepted code, the domination of one code, or a hegemonic situation. Monologia in The Guild is realised in the domination and non-negotiable status of the dominant scientific register, which is privileged above all others as socialiser and cultural paradigm. It is a hegemon.

Everything in twenty-first century society is measured against scientific credibility and the capacity to manipulate scientific facts and language successfully. This is the reason that PG must include the central technical section of his Review as unalloyed scientistic text. The scientific register is seen as a central source of power for the organisation, as well as of ongoing credibility for individual presenters and members. It is particularly important in professional environmental management to distinguish professional management theory and practice from approaches to environmental sustainability which are based in religious or other non-rational sources.

As revealed in the Gammon text [chapter 12], members are not immune from human feelings, but they are expected to subsume these consciously under the professional rational armour of scientific theories, facts, figures and experimentally validated practice. There is no other effective way to negotiate in the same arena with the entrenched social and economic power of scientifically credulous, environmentally irresponsible structures of government, industry and commerce.

Thus PG adheres to the hegemonic demands, but he also ameliorates the scientistic vocabulary with translated ideas and voices using popular lexis.

In another part of the spectrum of environmentally responsible people, the scientific register is blamed for structuring the damaging and extractive social and commercial over-exploitation of natural resources. This motive lies at the basis of PG's difficulty in putting together the *Fascinating* text [chapter 14] in a situation where PG interpreted the speaker as encouraging such exploitative attitudes by her promotion of scientific and management discourse varieties and genres.

6.4.2.2 Unity and transparent access

Unity, as the first dialogic process, brings disparate voices or codes together to form a new unified community of voices.

the space of a dialogue is a set of relevances which delineates a horizon about it and forms a unity, a common world founded on a common subject, shared background, intersecting interests and so forth [Gurevitch 2000: 244]

The Reviews show unity in two aspects. The first aspect is where the diverse professional groups which make up The Guild are represented as a coherent interdisciplinary community, as in the *Fish* Review [12.2]. The new unified mixture is frozen in a moment, the richness caught in a mirror. The second aspect is where PG has dealt with a speaker who demonstrates some kind of diversity and he has worried about the process of correcting the divergent utterances back to the newly accepted norm, as with *Exchange* [section 10.2].

One can think of the difference between monologia and unity as two different kinds of transparent access. Monologia is the transparent access of the default scientific register, as in the Genre Challenge [chapter 13]. Unity transparent access depends on the silence of the unrepresented Halfspectrum. This is another way to describe PG's interpretation of the *Fascinating* event, where he himself is aiming for Dialogia, while the speaker is aiming for unity.

6.4.2.3 Silence and strategic tact

The dialogic category of silence can be equated to what the study calls 'strategic tact' [2.2.3]. The dialogic process of silence recognises that there is meaning in silence as in the absence of an expected sign. In general linguistics, the absence of an expected sign is as meaningful as the presence of a sign. A silence in a context where a contribution is expected is a powerful contribution in itself. In pragmatics, a

conversational silence is identified as such a dangerous possibility that a wide range of phenomena can be explained simply in terms of trying to avoid silence.

[Verschueren 1999, Scollon and Scollon 2001]

Gurevitch [2000] deals with two kinds of silence, the absence of contribution and the silence of someone who is not speaking. He explains that for Bakhtin, silence marks the middle terms of conversation; silence in the midst of dialogue is silence as a gap, as a break that undoes the text of conversation and returns it into the state of 'untextualised betweenness, where dialogue is at its threshold of indecision'. [2000: 133] Thus the half of the Halfspectrum which is excluded in The Guild is only temporarily silenced, to enable members to interact in a space which is reserved, rather than permanently exclusionary.

One finds, through Gurevitch, that silence can represent that the dialogue is continuing, that it has not stopped.

a pause means not only the absence of sound but the absence of word. It marks the fact that nobody speaks or somebody does not speak [Gurevitch 2000: 133]

In The Guild, the somebody who does not speak is the advocate, the protester and the unscientific or unqualified. This does not mean that those people are excluded from the interaction. It means that they are temporarily not included in the positive reference tact frame, which acts to counter negativity, log jam or aggression.

Exemplars of the notion of silence in the study include the Halfspectrum professional filter and the refusal to countenance a seminar on nuclear issues 'because there would be a lot of irrational people there' and because 'it could destroy the whole national organisation' [section 10.3].

PG does not fully appreciate Gurevitch's dialogic silence. The stifling of dissent achieved through the Halfspectrum, the manipulation of opinion in *Shag Shoal*, the ambiguity of the ethical positions in *Wildlands*, the tax perks in *Tax* all finally offended him. He was not able to read the silences in these texts, not able to decode them as continuing dialogue, interpreting them instead as the extinguishment of voices.

6.4.2.4 Gurevitch's suspension

Suspension means the process of interaction is not resolved. A dynamic interaction of different codes and voices produces enrichment and leaves open paths to further complexity, rather than enclosing the experience in a new unified entity as in unity. Gurevitch is arguing for openness and 'betweenness' and the dialogic encounter as an indeterminate social space:

recent critical theorists [Taylor 1992, Crapazano 1992, Gardiner 1996] have reemphasised the importance of dialogic space and the fact that it pertains not only to how the social order is developed and maintained, but to the way sociality is opened and diversified. [Gurevitch 2000: 244]

These notions of dialogic suspension, social space, and leaving open the paths to further complexity are consonant with Hawes' adoption of Spivak's translation metaphor as a suitable process for dealing with competing discourses [section 5.7].

6.4.3 Organisational complexity in suspension

Having entered the realms of polyphony and narrative, the study has been taken in the direction which intersects with postcolonial studies and other scholarship where the voices of minority groups have struggled to be heard. Spivak's [1988] and Niranjana's [1992] work has been alluded to. The consistent theme is the difference between transparent access and suspension.

The complexity available in suspension processes contrasts with simplistic polarisation, which might result from the quest for lexical equivalence. A suspension text resists resolution and uses techniques to avoid prematurely pushing the concepts into one direction rather than another. It should be possible to make use of this in situations where polarisation contributes to problems, and also where problems require complex answers. The four kinds of dialogic process can be put together to see how polyphony can eventually serve to further organisational functions like the management of diversity, organisational learning and knowledge management. This can be generalised to organisations working for environmental management and sustainability.

The first step is to consider how dialogical or polyphonic processes can manage conflict, in following the path Hawes [1999] describes from dialectic to dialogia.

Dialogics can now be theorised as the praxis of mediating competing and contradictory discourses. [Hawes 1999: 230]

The applicability of his thinking to this study is that he is dealing with organisations and how they operate.

6.4.4 Ethics and essences – keeping the voices separate

The next step is to foreground the notion of standpoint as the most important element of what is valuable about the production of suspension texts.

A good translation maintains complexity. The most valuable aspect of the suspension text is that all the different standpoints are included. They are not prematurely congealed into a simplistic half-resolution. Hawes 1999 quotes Spivak 1988 on the comparison of dialogue with translation:

ethical means keeping the essence of each voice, not straining them through a filter to re-present them in the translator's terms [Spivak 1988 quoted in Hawes 1999: 277]

This can be seen as an explanation of the process of keeping the maximum quantity of data encoded in the implicatures of the pragmatics, in the syntax as explained in Halliday's interpersonal metafunction [1985(b)], in the cultural encoding as Kress [1985] explains it. As with translation, so with writing.

...... dialogics is a kind of multiparty translation an accountable translator speaks with an ethical singularity speakers speak 'essentially'....the ethical objective is to mediate the 'essentialisms' strategically and tactically [Spivak 1993 quoted in Hawes 1999: 277]

The ethical job of the translator is to deal with each of the voices on their own terms, to maintain each separate standpoint. Each person speaks from their own position, and deserves to have the essence of what they are saying honestly represented. This requires the sort of suspension the study has been looking at.

Dealing with the separate positions strategically and tactically means organising the material so that it is not brought to an inappropriate reconciliation.

as a translator of positions and a mediator of interests, dialogue speaks and listens from the multiple positions of essentialised others [Spivak 1993 quoted in Hawes 1999: 234]

This is what PG has to do in The Guild. He has to mediate The Guild voices in their multiplex exchange, and avoid the temptation of muddling the disparate positions.

7 THE SECONDARY QUESTION: RHETORICAL STRUCTURE OF THE GENRE-HYBRID REVIEW

This chapter has two parts. The first effectively begins the discussion of the Reviews, considering them in totality as an oeuvre, with a set of common characteristics. The second furthers the discussion of genre. This establishes the basis for the secondary technical question on which it can be argued that a major part of the Reviews' contribution is constituted by the change in genre. The Reviews are arranged in Table 7 in 10.1.2 and can be read in Appendices B and C.

7.1 The oeuvre: Fish 1999 to Galapagos 2001

The Guild brief was to provide a summary. PG did that very capably, but from the beginning, he produced a dialogic, or multi-voiced text, which included evaluation, and so was more akin to a review. The genre-hybrid is referred to here as a Review, using uppercase to signify the hybridity.

7.1.1 Rhetorical design

The rhetorical structure of the Review is the same throughout the 1999–2001 period. PG established a set of workable rhetorical steps in his first *Fish* Review and stuck with his genre-hybrid until the last selected *Galapagos* Review. The steps of the genre's rhetorical structure are as follows. He produces an introduction to the speaker, a location, member involvement, plain scientific exposition, perspective inclusion and summary with perhaps a coda. Each of these is examined in turn.

For introducing the speaker, PG utilises a range of resources. Interesting introductions include *NEPC* and *Tax*. The *NEPC* introduction was severely cut by the speaker, but PG converted this to bargain for indulgences in other parts of the text [chapter 15]. PG uses the dynamic introduction to the *Tax* accountant [section 16.2] as an interesting character, in order to hold the whole responsibility in confrontation with his deliberately absent audience. The most skilful speaker introduction is the *Strategic Indicators* deferred introduction [section 11.3.1], where the professional writer uses the reader's knowledge of the genre-hybrid rhetorical structure to generate interest in an otherwise very dry and abstract text. Gambling on the expectation of an introduction to the speaker, PG uses the suspense of

holding it back to excite the reader. This is a risky ploy, especially for an audience which generally values convention and enjoys the satisfaction derived from having their expectations realised. He judges the effect exactly, not asking them to wait more than about 50 words, but rewarding them for their faith by delivering a concise but interesting and conventional introduction.

PG executes the location function for the material in geographical or abstract terms. In many cases he accomplishes the task of contextualising an abstraction with deictic markers: that is to say, he uses the names of places and landmarks. This contrasts with the approach by the *NEPC* and *Strategic Indicators* presenters, who like to use other documents and departments as their deictic centres, thus taking the environmental management out of the environment and putting it into offices and filing cabinets. Examining two texts with abstract material shows that PG uses the time locators to do the job in the *NEPC* government regulation text, and for the *GIS* computer material, he takes us to America as a sort of Bethlehem for operating systems.

As discussed further in the next section, PG uses interactive verbs, as set out in the GIS Table 7 [section 11.3.4], to achieve member involvement. This is one of the key characteristics of PG's Reviews in contrast to those of other writers for The Guild, where the points from the overhead slides are simply reproduced, or where an edited verbatim text is recorded.

For the scientific or technical body of the material, PG maintains audience expectations, presenting plainly and making sure not to divert the reading purpose. He usually has a numbered topic sentence early in the body, using the locators firstly, secondly, thirdly.

Just before the end of the main text he allows himself a perspective inclusion somehow, relocating the narrative position in some way. At some stage late in the text he tries to include quirky words from the speaker's own lips [eg the James Joyce novel reference in the *GIS* Review]. This is the explanation for his inappropriate interjection about Wild Ass Creek in the sensitive Gammon night moment, for as he explained he was trying to confirm the quirky words in the

central text, so as to be able to report them as having occurred in the presentation itself.

Each Review finishes on an active note, usually positive, with some kind of forward projection or task identification, for example the experimental [at the time] hot link to the GIS website.

7.1.2 The narrator in the genre-hybrid Review

PG, as the narrator, is himself a character (termed the narrator-persona) who treads the fine line of walking through his own Review in the persona of the summary writer. He dares to develop his persona, a process which flowers in the middle and mature Reviews before undergoing an upheaval in the last Reviews, when he experiments with various exclusion devices.

PG adopts the persona of a member. From the first Review he did this as a technical operating position, not presuming membership, but taking seriously his task, as professional writer, to enter the field as part of the group. It is important to distinguish his performance in this respect from the functions observed in Doheny-Farina [1992], where the professional writer has a straightforward responsibility to record technical data, rather than a role in constructing community. There is virtually no obligation on PG to record the complexity of the data. In another contrast to the positions researched by Doheny-Farina, PG never presumed membership and indeed declined, on financial grounds, the suggestion to become a member. Nevertheless, the author persona is a believable personification of a member from start to finish. Even in the Reviews toward the end of the 2001 period, where he disapproves of the speakers' standpoints, such as *Shag Shoal* [section 16.3], he maintains a firm position as an insider. It is possible to detect a distancing in the financial management text when he refers to the persona as 'the uninitiated', although this is interpretable as a ploy to recruit to his position.

7.1.3 Choice of lexis: verbs as the secret weapon

Verbs are PG's forte, enabling him to show the speaker as active. He deals with each speaker differently. In *Strategic Indicators* he tries hard to render the dull information interesting. With *Shag Shoal* he leaves the speaker exposed in his own

inconsistencies. With *Tax* he gives the speaker a limited exposure to the community but then quarantines him. With *GIS* the speaker commands a troupe of personified computers.

Lexis is the starting place for much analysis of scientific, technical or instrumental writing. An analyst will point to highly technical vocabulary or scientific words to indicate the register for the text under analysis. It might be expected in PG's Reviews that the interest would lie in his processing of technical vocabulary to make the material more commonplace for a wider audience. In fact that is not what happens. He embeds the value of the technical information by repeating it faithfully. He telegraphs the capacity of the group's expertise and flexibility, by requiring them to keep up with the technicalities. There is no false, inappropriate or insulting reduction of this status-bearing lexis. PG knows that the lexis carries prestige. This is a point where INTERPECPEM differs from OUTERPECPEM. It is a very important node at which to establish the distinction register sensitivity required of a professional environmental communicator. Such skills would distinguish them from scientific communicators or professional communicators. Both these groups often presume that the technical and scientific lexis has to be translated into a more popular vocabulary. A professional environmental communicator will recognise the crucial part played by the scientific register in delineating professional environmental practice from general ecological sensitivity, from general environmental responsibility, or from popular ecological orientation to philosophies.

PG cushions the technical lexis by introducing rhetorical stages at the beginning and the end. However, as explained, he meets his technical audience's expectations rather than subverting them. He engages them in Natrat-talk.

7.1.4 Factual material massaged into characters

PG's narrator- persona is formulated as a character in the Reviews. Another chief 'character' is the state division of The Guild, the group itself, the gathering. The reader is subtly drawn in to take a place with this group, by means of the interactive verbs, as outlined in the discussion of the *GIS* Review. This is important for those members whose attendance is irregular. Members were overheard to discuss with others previous presentations that they had not attended, furnishing their apologies,

and talking knowledgeably about the material, in a way commonly found in academe, but unexpected in this sort of context.

The speaker is given the part of hero-presenter and has a set series of functions to perform. As readers become familiar with the rhetorical structure, they can look for such characterisation steps as the experience of the speaker, the technical information, the narrative repositioning stage, and the quirky quotes section.

The rhetorical structures, such as the speaker introduction and the relocation of the narrative position with the quirky words, afford PG opportunities to repeat, contextualise, explain, follow up, confirm and at times question, or transfer the complexity the speaker has worked to.

Other characterisation in the Review includes not only people, but also objects, places and eras, which, depending on the need [see *GIS* and *Strategic Indicators*], have the capacity to be if not personified, then animated.

Doheny-Farina's [1992] role cases, and their task of recording data, contrast with PG's role. While the Doheny-Farina cohort contributed to the organisation and its culture, working through the culture in integration with the collation of data, PG's performance was different. His responsibility load was not so heavy. He had more freedom. He took more risks. PG pulled the organisation with him as he forged a new role for himself, reflecting the organisation to themselves. Part of his strategy was to turn the recording role on its head. Rather than the personal element being included in the factual material, that factual material was massaged into a character, to take its place alongside the other personalities in the material. In the *GIS* Review he personifies the computers. In the *Strategic Indicators* Review, his own textual and format structure behaves as a character anime, as graphic ornamentation.

This position makes it a more complex procedure than it would be for Doheny-Farina's writers to argue for a contribution to the organisation. However, PG's architecture, for a more intricate and integrated culture, is itself the contribution.

7.2 Genre-hybrid Review architecture

Genres can be argued to be templates for established kinds of social processes and meaning-making. This section deals with the notion of social purpose, function and genre and looks at what it means if a genre hybridises. The complexity which the introduction of narrative affords to scientific material leads to PG's using narrative to capture new patterns.

7.2.1 Altered genre as altered social function

PG's personally crafted rhetorical structure for the Reviews incorporated elements from a range of genres, including scientific summary and narrative. For example, PG's Review does not remove from the written genre many of the traces of the oral presentation, as more true generic scientific exemplars do.

Genres are dynamic rather than static and are closely bound to the social and cultural contexts in which they occur. [Swales 1990: 106]

If PG's Reviews are constructed according to an altered template, they can be predicted to be serving an altered social function. This is likely to be convenient if there are new social functions to be served, as is the case with The Guild, as contact community [chapter 2]. To carry out its business in the context of diversity is difficult, renders problematic old ways of meaning-making and possibly requires new social functions. The concept of integration of social function and language implies that making new kinds of meaning requires developing new kinds of genre to manifest those meanings.

Swales [1990: 106] sees genre as an instance of a particular communicative event.

Genre incorporates prototypical idealisations of particular concepts and situations, which may be derived from previous experiences with other similar such events. [Swales 1990: 106]

In this way the study links genre to cognitive frames, and strengthens the significance of a change in genre.

7.2.2 Narrative and chronology reveal new patterns

The Review genre-hybrid implies that PG is altering environmental communication practice. The complexity of PG's technical achievement can be appreciated in terms of Georgakopoulou and Goutsos' [2000] categories for analysing hybrids. They use spatial, temporal, and personal relations, as well as aspects of interpersonal management. Their business is making systematic distinctions between non-narrative and narrative texts, and their categories reflect those of other critical characterisations of narrative, which we can briefly acknowledge.

7.2.2.1 Narrative as an important element of the genre-hybrid Review

Part of the hybridising process is the inclusion of elements of narrative in scientific material for which there is some emerging precedent.

inside every non-narrative kind of discourse there stalk the ghosts of narrative and inside every narrative there stalk the ghosts of non-narrative [Rosen 1984: 12 quoted in DiPardo 1989: 6]

7.2.2.2 Chronological and non-chronological

The temporal category of Georgakopoulou and Goutsos [2000] reflects an older insight into the chronological and non-chronological dimension of narrative. Dipardo [1989] explains how elements of information encoded in narrative genres can be used to enhance non-narrative genres.

Where chronology is metamorphosed into narrative discourse, the stream of events congealing through a process of hermeneutic reconstruction into distinct beginning middles and ends, a richness of meaning emerges which is less dependent on the more scientific forms of rational analysis and empirical evidence than on interpretations of experience - affective holistic and, especially in mature narratives, reflective. [Bruner 1984 and 1986 in Robinson and Hawpe 1986 quoted in DiPardo 1989: 6]

When PG uses narrative, the technical data takes on a shape which fits into peoples' everyday lives.

7.2.2.3 Co-existence of contradictory meanings

Looking for support for the notion that the Review captures organisational patterns leads to a search for elements which mirror aspects of the social situation. Ricouer's

[1981] non-chronological patterns and themes echo the social interactions of The Guild's Halfspectrum sectors, which live in microcosm in PG's genre-hybrid texts.

narratives have a chronological and non-chronological dimension. The non-chronological is patterns and themes melding scattered events into coherent wholes. Overlooked by anti-narrativist historians and structuralists, this configurational dimension translates simple chronology into a 'thought' of sorts [Ricouer 1981: 174-5].

The co-existence of, at one level, contradictory meanings is an important part of hybridising genres, and every other kind of adventure in new kinds of social and textual meaning-making.

The discussion of organisational learning shows that narrative is an important way in which knowledge integration is claimed to take place. The claim is related to the argument for suspension processes in PG's Reviews: that there is value in providing opportunities for hybrid genres which offer different kinds of knowledges, often relating to patterns which are enhanced in genres other than those which attempt to bleach the material of everything but the 'facts'.

7.2.3 What the genre-hybrid achieved

If PG was doing altered social jobs with his altered genre-hybrid, what might those jobs be? The following Analysis sections show PG using narrative polyphony to capture organisational patterns. The outcome is bound to be a new vision of the organisation to itself, an alteration of the culture. Some of the new patterns he catches are new social and political mixes. Some of the new patterns are new parts of the community talking to each other. In some cases this is environmentally responsible people talking to exploiters. In other cases it is young people talking to old people. In many cases it is scientists and practitioners talking to managers from different fields of expertise.

8 THE INDIVIDUAL REVIEWS

8.1 Introduction to this navigation chapter

This navigation chapter sets out the rationale for the analysis and the structure of the Analysis chapters. It lists the Reviews, provides an introduction to the discussion categories and dialogic categories, and relates what has been said to typify the language of the Community of Practice to what is found in The Guild. PG's Reviews are in the appendices, and can be read in full except for the names of participants and organisations.

8.1.1 List of Reviews and what they are about

The Reviews are laid out in Table 1 to indicate their assignment to the cadres in The Guild, along with their Gurevitch [2000] dialogic categories. *Shag Shoal* is about screen plantings, *Tax* concerns planning ahead for the then unfamiliar General Services Tax, and *Wildlands* outlines a commercial approach to conservation of a specific property. *Fish* presents a management plan for freshwater fish stocks. *Strategic Indicators* lists indicators for environmental management objectives. *NEPC* explains National Environmental Protection Strategies, while *GIS* summarises achievements in online mapping and access. *Galapagos* advocates for responsible management of natural resources and guardianship of their beauty. *Fascinating* is about report writing, and *Gammon* is about metrication.

8.1.2 Introduction to text stages

There are in the series observable process stages from naiveté to conscious understanding, from tentative steps to confidence evinced in the fighting for the integrity of the Reviews, from the initial address to the audience to intricate games dependent on the audience's recognition of the structure. We can characterise these stages as early, middle and mature. *Fish* and *Fascinating* are the earliest Reviews. *GIS*, *Exchange*, and *Gammon* are middle Reviews, as is *Wildlands*. The mature Reviews are *Tax*, *Strategic Indicators*, *Shag Shoal*, *NEPC*, and *Galapagos*.

8.1.3 Table 1 Reviews, cadres and dialogia

Guild cadres	Text	Date	Dialogia	Stage	Topic
entrepreneur	Shag Shoal	July 2001	suspension	mature	screen planting
harm minimisation	Wildlands	Nov 1999	suspension	middle	commercial conservation
negotiator	NEPC	Mar 2001	unity	mature	national environmental protection strategies
negotiator	Strategic Indicators	June 2000	unity	mature	indicators for environmental management objectives
core	Fish	June 1999	unity	early	freshwater fish management
science	GIS	April 2000	unity	middle	online mapping
science, critic	Gammon	Feb 2000	suspension	middle	metrication
	Genre Challenge [Gammon]	Feb 2000	monologia	middle	
critic	Galapagos	Feb 2001	monologia	mature	responsible management of natural resources
core	Tax Fascinating		unity		
core	Tax	April 2001	unity	mature	GST
core	Fascinating	Sept 1999	unity	early	report writing
cultural factors	South Africa marine park No nukes seminar Exchange				
culture	Exchange	Mar 2000	[developing] unity	middle	exchange student
culture	No nukes	Feb 1999	silence	non PG	
culture	South Africa marine park	June 2000	unity	non PG	

Table 1 Reviews, cadres and categories of dialogia

8.2 Introduction to the Reviews analysis chapters

8.2.1 Justification of the Reviews analysis – the goal of the analysis

The preliminary step is to think about what the analysis might look to achieve in terms of answering the research questions.

First, as data, the Reviews form a finite set starting in June 1999 and finishing in July 2001. They represent a nascent corpus of work in professional environmental communication of this particular organisational variety, INTERPECPEM or Natrattalk. In this respect, they provoke questions about the nature of environmental communication.

Second, the analysis is a major stage in the study's determination of what constituted the Reviews' contribution to the organisation. The Reviews' construction is at the centre of the practice, and the process of the construction is available for view through the series of drafts and other cotexts. The focus is on the extent to which the Reviews successfully related to their context.

Third, in considering what the successful components were in technical terms, there emerge consistent elements in the Reviews. The rhetorical structure stayed the same, albeit with refinements, flowering in the mature period with games played, as in the *Strategic Indicators* text structure [section 11.3.1]. The dialogic nature of the texts was a constant feature, peaking where PG trusted his audience to the extent that he could use the difference between monologia and dialogia to make his point in the *Tax* text [section 16.2]. Another consistent element was the work PG put into the texts and the time he took to create them, the pride in accomplishment and the enjoyment of the task.

Fourth, there were process stages from naiveté to conscious understanding, which provoked the research question about how tact was handled in the context of conflicting values. This was addressed in a preparatory theoretical way in chapter 5. Now the Analysis chapters provide examples of the stages. The naïve stage of the process shows PG's ability to take threads of material representative of the organisation, and to recombine them in patterns which the community will

recognise, a process particularly observable in the Gumperzian code manipulation of the first *Fish* text [section 11.2], but later more subtly realised in the intersemiosis of the *Gammon* text [chapter 12].

Fifth, the reviewer's naiveté is an important quality of the texts that form the major part of the corpus, because it might explain why the texts show a set of practices which are those of a professional writer, rather than those of an environment professional. The significance of this, as argued in the discussion on outcomes, relates to the importance of recruiting talented communicators to the new job of professional environmental communication. The literature, methodological and constructs discussion characterises these qualities in terms of translation. Analysing the Reviews in these terms was part of assessing in what respect the Reviews were successful in the organisation.

8.2.2 Organisation in dialogic categories mapped to Guild cadres

The Analysis chapters 9–17 deal with the Reviews. The organisation of the discussion selects in terms of the cadres in The Guild [section 2.2.4], and relates to Gurevitch's [2000] dialogic categories [section 6.4]. The Reviews themselves are interpreted in several ways, including characterisation of their development stages. Reviews are discussed in terms of their set of rhetorical strategies, their handling of codes, their utilisation of the knowledge corpus and their construction of community. Another category consists of texts which in some way reveal or expose the developing culture. There are opportunities to notice other aspects such as comparing texts from early, middle and late periods: texts which expose techniques, and the way in which professional communicators and their tasks interact.

Table 1 [section 8.1.3] correlates the Reviews to the cadres in The Guild. Naturally these assignments are simplified, several Reviews unsurprisingly evincing characteristics of more than one category. *Shag Shoal* can represent the entrepreneur cadre. The *Wildlands* operation is harm minimisation. *NEPC, Fish* and *Strategic Indicators* are in the negotiator cadre. *GIS* is from the science cadre and *Galapagos* from the critic cadre. *Tax* is the core because it includes everybody. The South Africa marine park text, the no-nukes seminar text and the *American exchange* Review are selected as starter texts to demonstrate cultural factors.

The Fractal nature of PG's efforts is seen in the fact that the texts do not betray the sector from which they have arisen – they are not assigned to codes on a Gumperzian model. Rather, they form a coherent group with the patterns and dynamics subtly playing in a complex reflection of the organisation's character and culture. For example, there is not in *NEPC* a strict allocation to a negotiation register, such as a legal, business or administrative register. Rather, PG stays within his assigned register of newsletterese, but weaves the specialist register features into the newsletter style with lexical borrowings where necessary. However, he most often uses translation, reinterpreting the syntax, semantics and pragmatics of the source variety into the assigned newsletterese of his audience.

The Reviews analysis does not employ checklists because the analytical tools are not seen as separable. Analytical tools and orientations are all discussed separately in the literature review, and to some extent in the Background and Context chapter 2 and in the Constructs chapters 5–8. Here they are amalgamated into a multivariate practice, which seeks to address some of the complexity PG has achieved in his Review genre-hybrid.

9 ANALYSIS ORGANISATION: DIALOGIA AND CofP

As well as mapping the Reviews to the cadres, one can also think about texts in terms of four dialogic [Gurevitch 2000] processes: silence, unity, suspension and monologia. These are introduced in section 6.4, and are applied here to the texts in their own terms, with subsequent matching against Holmes and Meyerhoff's Community of Practice [CofP] characteristics [1999] in Table 2 [section 9.2.1]. First there is a list of texts arranged to review the Gurevitch categories [section 6.4.2], as in Table 1 [section 8.1.3].

9.1 Applying Gurevitch's dialogic categories

The unity category characterises The Guild texts which relate to environmental management. In these texts it is not considered appropriate or strategically advantageous to treat the matters in any way that diverges from the goals of management for sustainability. These are the core texts. This is the core business. It is in everyone's interests that the matters are dealt with at the highest level of restraint and expertise. This is what the learned gathering offers, the expertise which accrues points for the organisation's members. Nobody wants to play games or do anything other than make the most of each opportunity to hear the various managers outline their individual assessments of the environment. The language is scientific, but also organisational, with a creative edge which that mixture furnishes. It is from these texts that aspects of good and bad practice are judged, and where cross-disciplinary learning can take place, where people can see and hear that they might be doing something wrong and learn how to correct it. Texts chosen for discussion in this respect include *Fish* and *Strategic Indicators*.

The suspension category ensures clarity for the voices of the different cadres. This is the positive frame tact part, the part which needs to be mediated with the skills of the translator, the part which is likely to bring about the most healthy growth and rethinking. The entrepreneur Review *Wildlands* [section 16.1] is chosen as the prototypical representation for this most intense dialogical level. Additionally, the science cadre unexpectedly provides the *Gammon* suspension [chapter 12]. And as

it happens, there is a suspension moment for the two professional communicators in the *Fascinating* text [chapter 14] with PG's inappropriate draft.

The Genre Challenge [chapter 13] is chosen to set out the issues of monologia, in particular the dominance of the science discourse variety. This factor of modern intellectual life is often called 'scientism'. Powerfully in the confrontation over genres, but even more powerfully in that it was hard to find any texts in the critic cadre that were not scientific, the discourse variety of science demonstrates its unassailable place as the prestige variety. *Galapagos* [section 11.4.1] is the sample of monologic advocacy from the critic cadre.

The category of silence was interpreted as the voices which are not heard [section 6.4.2.3]. As with the monologic texts, advocacy texts are not included, unless they can be couched in 'professional', scientific terms. In fact it can be assumed that the Halfspectrum professional filter comes into action at the very point to prevent advocacy in anything other than strictly professional [ie scientific] terms. Naturally there is little textual evidence of which voices are not heard, but the small incident from committee minutes is noted where the committee decided against a seminar on nuclear storage [section 10.3].

9.2 Matching CofP characteristics in relation to Gurevitch categories

Matching the Holmes and Meyerhoff [1999] checklist of characteristics of a CofP against Gurevitch's dialogic categories [2000] turns up further complexity. The CofP behaviours introduced in section 3.4.7 are repeated in Table 2. Then certain behaviours are selected for elaboration in terms of the Gurevitch dialogic categories.

9.2.1 Table 2 Community of Practice checklist

CofP participant behaviour checklist 1–7		8–14		
1	the ability to assess the appropriateness of actions and products	8	a shared discourse that reflects a certain perspective on the world	
2	jargon and shortcuts to communication as well as the ease of producing new ones	9	sustained mutual relationships – harmonious or conflictual	
3	knowing what others know, what they can do, and how they can contribute to an enterprise	10	rapid flow of information and propagation of innovation	
4	absence of introductory preambles as if conversations and interactions were merely the continuation of an ongoing process	11	very quick set-up of a problem to be discussed	
5	shared ways of engaging in doing things together	12	specific tools representation and other artefacts	
6	certain styles recognised as displaying membership	13	local lore, shared stories, inside jokes, knowing laughter	
7	mutually defining identities	14	substantial overlap in participants' description of who belongs	

Table 2 adapted from the Holmes and Meyerhoff [1999: 176] checklist of participant behaviour for Community of Practice [CofP]

See also Appendix A3 with the full comparison of Cof P, social identity, and speech community.

9.2.2 Monologia/CofP information exchange

The ability to assess the appropriateness of actions and products [1] is related to the dominance of the science paradigm and of the organisational paradigm. The dominance science paradigm helps to funnel the disparate varieties into something which will be considered for adoption. One CofP goal is the rapid flow of information and propagation of innovation [2], and this is seen as an advantage conferred by the consistent adherence to science discourse. For the goal of knowing [3] what others know, what they can do, and how they can contribute to an enterprise, the science discourse provides consistency, which enables comparison. PG adheres to this in his maintenance of the central technical section in his hybridgeneric rhetorical structure, where he transfers the material in close to its original form [Chapter 7].

9.2.3 Silence/CofP membership display

Whereas the CofP sees certain styles recognised as displaying membership [5], in The Guild certain styles would be recognised as not displaying membership. These are the activist and advocate professional groups, and of course all non-professional groups. The pond dancing of the American exchange student [section 10.2] is a good example of a style agreed as unacceptable for membership.

This links with the silence category where some voices are silenced. The strategic tact frame requires that, for the sake of the polluter and the exploiter, the dissent be silenced.

9.2.4 Unity/CofP mutually defining identities

CofP 'mutually defining identities' [7] confer an important advantage to The Guild and are a central strategic factor. As the interdisciplinary groups come together in this interaction, they mutually redefine each other. The people of non-scientific background are able to redefine themselves with a certain scientific cachet. The non-organisational people gain valuable organisational perspective, vocabulary and strategic direction. Entrepreneurs observe attitudes and derive integrated information from a range of sectors. Advocates have the reciprocal experience of hearing the issues as experienced by entrepreneurs. With central management issues they can all redefine themselves in relation to something external, the sustainability needs of environment.

The unity aspect is thus achieved in the central professionalism of the Halfspectrum strategic tact. People who might otherwise object to each other are brought together into this positive frame, the unity.

9.2.5 Suspension not a factor in CofP

CofP behaviour is not aligned with the suspension category. In fact the negative correlation is so strong as to remind us that The Guild is better understood as a contact community. [Shields 2000]

The CofP characteristics presume a common cultural context where all the elements can open to each other. Their informal ease in interacting, the absence of introductory preambles [4] as if conversations and interactions were merely the continuation of an ongoing process, the use of a shared discourse [5] that reflects a certain perspective on the world, jargon and shortcuts to communication as well as the ease of producing new ones and certain styles recognised as displaying membership, all these things provoke frank exchange.

A positive frame of reference requires the opposite of that. Informality is dangerous and divisive. Formality provides a protective context in which new understanding can emerge. The required positive frame can take the form of the dominant science discourse variety, which provides protection for the information. The organisational formality constitutes a protective familiar structure which enables friendships and interaction to develop.

The Halfspectrum professional filter offers the recipe for the mingling and the guarantee that the only information that will emerge will be relevant to scientific management. It is understood that members do not share one particular discourse that reflects a certain perspective on the world, because the task is to come into relationship with members from diverse sectors.

Introductory preambles are quite explicit and detailed, providing professional information as at a meeting, implying the professionalism as a point of contact. Rather than discussions working 'as if conversations and interactions were merely the continuation of an ongoing process', the talks are introduced with the implication that what is being presented is the foundation and the basis and the start of what will become an ongoing process.

'Jargon and shortcuts to communication as well as the ease of producing new ones'
[2] is manifestly not the condition. It is given that while basic scientific vocabulary
is taken as a shared lexis, encouraging competence in the specific lexis for the new
field of the talk is the goal of the presentation. The interesting thing is that the
science lexis is not in reality as common as is implied. Some members have arrived
in the environmental management field by alternative paths, but they accept that the
dominance of the scientific register is such that they are required to demonstrate a

capacity to cope with it. Practised and professional speakers know this and patiently explain scientific terms in a helpful manner, hence the success of the organisation. PG insists on this in respect of the 'NEPM's in *NEPC* [chapter 15]. Thus the glossing and demystification of the jargon, and the opportunity to move it from passive vocabulary to active vocabulary in the informal interactions is a central function of The Guild.

10 EXPOSING THE CULTURE

The Review analysis starts with three texts to expose the culture of The Guild. While this is not a goal of the study, it helps to backlight the significant factors in the analysis of the other texts. The notion of 'texts' here utilises the broadest characterisation of text, in that, for example, the South African text went unrecorded. It is thus a cotext to the Review of the night's proceedings, which was the *Strategic Indicators* presentation.

While much of the business of The Guild is making transparent the individual fields, and their ways of doing things separately, there are as yet not many of the CofP diagnostic 'shared ways of engaging in doing things together'. [Holmes and Meyerhoff 1999: 176] Indeed one of the goals of the organisation is to develop such shared ways. But little touches reveal shared assumptions and shared cultural values. One of those values is egalitarianism and meritocratic professionalism. It seems that all hierarchies are irrelevant in this branch of the organisation, except for those with a physical practical purpose. For example, in 1996 there was discussion about whether to have a hierarchy of categories of membership in order to emulate the structure in learned societies in certain professions such as architecture and engineering. There is a communicative reason for this, namely to provide a familiar reputable structure so that members in those professions feel that the endeavours of The Guild rank as professionally and reputably as the endeavours of any other group with restricted professional entry. However, the members of the local Division, which is the location for these texts, laughed this notion out of the national agenda on the grounds that it was snobbish and unnecessary, thereby establishing the local organisation as a rather more modern culture than some of the older professional societies.

10.1 The South African marine park owner

A very small incident captures the almost ruthless anti-snob atmosphere. One of the members of high social and professional profile brought a guest along to attend the rather mundane Strategic Indicators meeting [June 2000] with the report from the worthy, but unexciting, relevant government department. The evening was pleasant enough, but many people were looking forward to the pizza, conversation and mingling. When the talk came to an end, there was polite applause and the mingling commenced with vigour. It was then that we found out who the prominent member's guest was, namely a representative of South African private reserve owners, who had been negotiating at Australian federal government level on an intergovernmental agreement of immense global importance. At many other gatherings, an international guest of such standing, and with such fascinating tales to tell, would have taken precedence over a routine public service policy outline. However, the enthusiasm was such that the guest stayed on, some more bottles were opened, and an intensely interested group stayed back for a few hours enjoying the guest's personal stories against a backdrop of Australian anecdotes, or the rare 'local lore, shared stories, inside jokes, knowing laughter'. [Holmes and Meyerhoff 1999: 176] The only other such incident in the corpus under examination is Gammon night.

So the 'shared ways of engaging in doing things together' [Holmes and Meyerhoff 1999: 176] can be interpreted here in more detail as shared assumptions and shared cultural values, leading to the conjecture that when an unexpected occasion such as this arises, it might result in participants 'mutually defining identities'. [Holmes and Meyerhoff 1999: 176] As the guest of high standing slips unobtrusively into the routine meeting, without the sort of fanfare to which she is entitled, the cultural value of the group is redefined, as though such figures of high standing belong there without any special kind of acknowledgement.

At the other end of the spectrum is the experience with the exchange student.

10.2 Exchange

10.2.1 The cadet

The American exchange student presentation [March 2000] is an interesting event in Guild life. By permitting young people to present material which is sometimes a little unpolished, the community accomplishes three functions. It configures itself as a community with young people who are developing in the context of the community, under its guidance and with a new kind of affiliation. Something that was unformed or disparate becomes unified as a de facto collective, into which a young person can be initiated, in which young people can serve as cadets. Second it permits a window for unacceptable factors, for factors deemed to be outside the guidelines. Such matters can be uttered from a cadet's lips, where they would be taboo coming from a fully fledged member of the group. These unapproved matters can be once again rejected, but in the act of their appearing, they serve to lend perspective, to sharpen lines and to engender unity in respect of the matters which are reinforced as being inside the guidelines. Third, it introduces a bit of fun or nonsense, which might be dismissed as frivolous or condemned as stupid, but which is very enjoyable for all the members and increases the sense of community because of shared laughter.

Such an event sets the professional writer with a difficult task, however, because it is hard to capture the fun on paper and get across all the positives emerging from the demarcation. Under most circumstances it would be best not to attempt the job at all, and to let the live interaction rest as a social event, as is done with the Christmas party, instead of trying to report it. PG's reporting task for Gammon night had such a constraint upon it as well. But the student exchange account was to be reported as validation of the cadet nature of the event. PG did six drafts of the report to The Guild from the American exchange student. These are all included in the Appendix. In *Exchange* PG is wrestling with the naiveté of the inexperienced presenter and with the opportunity of correcting her infelicities, demonstrating his own grasp of the professional unity code.

10.2.2 Unprofessional acts

One problem PG faced in the student exchange report was the overt criticism of activities and behaviours which usually go unmentioned in Guild meetings. The reason they usually go unmentioned is that they do not arise. Activist or non-rationalist approaches to environmental activity are strictly outside the membership criteria.

The student described an activity in the American environment management course, where participants were required to dance around a pond in a quasi-religious expression of commitment to animist principles. The student's public derision and scornful sarcasm about such activities needed to be toned down for the written document. Although older members of The Guild had joined in with the scornful laughter at the meeting, it was considered that the incident should be softened in the final report for four reasons.

First there may have been an unreported element of indigenous spirituality about the observance. Second it is recognised sound educational practice to expose students to a range of community positions, and those community positions are to be respected by professional environmental managers as they carry out their management activities. Such practices are not a routine part of the Australian community experience, hence Australian managers are not likely to come across them and therefore they are not usually part of an Australian educational experience at university level. However, one might conjecture a very sound curricular purpose behind such an inclusion in America. Third it is bad manners for overseas students to criticise or make fun of their hosts. Fourth, in an atmosphere fostered by the Guild to promote cultural contact, lack of sensitivity to other cultural practice is inconsistent with organisational principles.

The problem was solved by attributing to the student speaker an educational perspective which had actually arisen in discussion with the mentor. In Table 3 we see how this served to distance the issue, to frame it, and to link it to community responsibility through readers' own educational experience of preparation for community interaction.

10.2.3 Draft 5

Referring to her Environmental Education subject, H recounted how students at the first lesson were asked to introduce themselves by naming a plant, an animal, and a word, with which they felt some affinity. She reminded us that the subject was designed for those needing ways to engage young children, and she related with some amusement her experiences of dancing around a pond, telling stories to the class, and, as part of a focus on crafts, her carving of a back scratcher that translated into 10% of her subject assessment. On one occasion the teacher brought along a guitar, and a session of communal singing ensued. H explained how she tried very hard to make this subject work for her, and came away with an appreciation of how estranged we are from the natural environment, and also from elements of what she called the 'village atmosphere'. She suspects, however, that many students were put off by the lack of academic structure, and simply missed the point. With no mark for attendance, student turnouts were generally low.

10.2.4 Published draft 6

Referring to her Environmental

Education subject, H recalled how

students at the first lesson were asked to introduce themselves by naming a plant, an animal and a word, with which they felt some affinity. She also related with some amusement her experiences of dancing around a pond, and – as part of a focus on crafts - of carving a back scratcher that translated into 10% of her subject assessment. On one occasion the teacher brought along a guitar, and a session of communal singing ensued. Reminding us of the subject's emphasis on working with children, H explained that despite her reservations she tried very hard to get value from the lessons. As a result, she came away with an appreciation of how estranged we are from the natural environment and also from elements of what she called the 'village atmosphere'.

Table 3 Pond dancing in Exchange Review drafts

The part about low turnouts is expunged for a number of reasons, including Face, register and space. The informal youth-speak varietal lexis of 'tried very hard to make this subject work for her' is replaced with the formal 'she tried very hard to get value from the lessons'. PG is doing the work of a translator here, swapping

exogenous SL lexis for endogenous TL lexis. The overall result is to make the points more measured, more thoughtful, to lend them a certain gravitas. He explained in the mentoring discussion that getting value from the lessons sounds like a more serious endeavour than getting them to work for you. You sound as if you are putting in more effort when you are performing the serious task of getting value from lessons. Trying to make them work for you might sound like the lessons are doing all the work and you are not doing much at all, or you are not responding diligently, that you have some aberrant agenda, rather than the respectful consumer orientation of the more traditional education which appears when you are getting value from the lessons. The formal version also bleaches out the youth-speak sarcasm.

10.2.5 Offensive language

Another part of the problem with the student's report was the use of not only informal language or slang but also offensive language or swear words. The first draft started with a verbatim quote:

They got really frustrated with me, at first, about my observations about the American academic school system – because I found it to be very piss-poor at first. But ... that's just how it is, it's just a different focus ... Also, I've got quite a few friends that have come over here now, on exchange ... and they're finding it really difficult to adjust to *our* system ...[*Exchange* draft 1]

This sees the student speaker committing all the crimes which The Guild is convened to combat: rudeness to hosts, intellectual smugness or arrogance, lack of intercultural sensitivity, lack of tact, language offensive in public interaction. Attendees at the live event would have been able to enjoy the mildly shocked feeling of confirmation that these were unacceptable positions, and a sense of reassurance that the organisation was doing its job in not usually permitting such excess. The final written text censored these offences lest any misunderstanding occur.

PG was aware that the mode change from spoken to written language required a change in acceptability of offensive language. He wanted to include some of the student's 'voice', however, and found that fine distinctions and subtleties emerged about where the borders lay for the introduction of taboo words. Because he was

quoting, it was perhaps going to be acceptable to be a little adventurous and push the envelope to include a new word. Professional writers arguably have the mandate and responsibility to move language standards along in concert with community change, so that prestige standards do not lose contact with general acceptability. Conscious of the window which the young student's report offered, he discussed the opportunities in terms of specific lexical items. It was felt that the strategic nature of The Guild was such that because boundaries between the commingling and sometimes conflicting varieties were a point in issue, the introduction of more stresses and strains in the form of possibly offensive language was not desirable. PG argued that engineered controversy at the level of lexical acceptability, where it can be clearly sheeted home to youth or inexperience, can unite otherwise disparate elements in a solid front of indignation. It was a good point, but not worth losing his job for. The mentor advised in favour of the strictest code of prestige conservatism. The analogies with translation are helpful here. PG was doing translation from youth-speak to CofP unity register. His desire to include elements of the original youth voice can be described as the uncompromising strategy of non-translation [Gentzler 2001: 192], which is used to force commitment from the reader, and thus to confront the Source Text culture on its own terms.

Other issues related to the handling of provocative or offensive language appear in the translation literature with Lung [2001: 267], who notes that non-standard language style 'is often translated literally without any consideration of the linguistic and paralinguistic significance of the stigmatised usage in the source texts'. PG's performance in this respect is impressive. He avoids the Lungian pitfall with his careful approach to the matter, while still not eschewing his pragmatic and functional responsibilities.

10.2.6 The full final paragraph

The final paragraph of the eventual published draft [Table 6] of the American exchange student is a masterpiece of tact. This section considers the story of its construction and how the paragraph appeared in earlier versions.

10.2.6.1 Student probationary manager

Table 4 shows that the first long draft was cut to 'she became active in various campaigns relating to local complacency around issues of waste'.

Fourth draft final paragraph

Concerned about the ubiquitous use of Styrofoam containers throughout the university, she often took her personal cup, plate and cutlery to retail eateries, sometimes drawing unsympathetic responses from those dishing out. And although there was a 'good recycling set up' at Oberlin university, H was again disappointed by the lack of compliance by students, most opting for the convenience of all purpose waste bins. She instigated campaigns on these issues, writing articles in the newsletter and the local newspaper, sending emails to administrative staff, and holding protests in front of the administrative building, all in a bid to highlight the University's contribution to Cleveland's serious waste disposal problems. She handed these campaigns over to other students when she left.

Sixth [published] draft final paragraph

she became active in various campaigns relating to local complacency around issues of waste

Table 4 Styrofoam in Exchange Review drafts

The final version downplays the student's inappropriately monologic gesture of delivering enlightenment to her hosts and admonishing them for their poor performance, in favour of allowing both pragmatic and literal space to develop a more balanced account of what went on. The issue of Face [Scollon and Scollon 2001] is causing a problem for the professional writer. On the assumption that it reflects badly on the young representative and thus on Guild culture, where there is found to be an attack on the overseas host's positive Face, the text needs to be corrected. One way in which the seriousness of the Face threats can be reduced, while at the same time retaining the insights derived from the experience, is to reduce the overall proportion of Face threats. The threat reported here is of no particular significance to the way mature managers run things. Waste, pollution, thoughtless over-consumption and non-compliance are what all environment managers deal with in the environmental management working life and the student is simply reporting a routine example. It is expendable.

An important point in connection with this is that because the student is an environmental manager, her actions are not interpreted as 'activism', which would be a justifiable characterisation if they were carried out by others. They are

considered as cadet management practice, as an exercise, a placement, a practical field experience.

Getting rid of the canteen campaign enables the professional writer to retain Face threats implicit in the references to more important issues. These are the kind of education offered, the place of the department in the university community, and the images and icons which constitute the identity of the young Australian in that group. Most importantly to confirm the Guild's scientific standpoint, the scientific nature of the Australian training is set out as the positive feature, in contrast to the American cultural scholarly framework. This is not interpreted as a Face threat, but as a corollary of the disparate intellectual backgrounds.

10.2.6.2 Intellectual paradigm bakeoff – cultural versus scientific

The fourth draft gossiped at length about the department [Table 5], but was chopped severely.

Draft 4 American exchange student

H's course, however, was within the Environmental Studies Department (ESD). Established for around five years, the ESD had only recently produced its first graduates. Claiming a strong feeling of bonding and support within the Department, H gained the impression that its status among the established Academe was generally poor: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time'.

Draft 6 published

She also felt that the ESD enjoyed meagre status within the University institution: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time'.

Table 5 Status of university ESD department in Exchange Review drafts

Not only was the content altered, but the position was shifted from the early part of the document to the final paragraph, so that it sat in relation to the 'key' section which is investigated next.

10.2.6.3 The key

In the fourth draft, the writer provides us with a key as to interpret the exploits of The Guild cadet.

And in that comment, I think she identified a divide that is still in dire need of bridging; that is, the academic divide between the physical and social sciences. It seems important that one group doesn't see the other as narrowly focussed and impersonal, while the other sees an undisciplined community of radicals. In terms of creating a sustainable environment, we must remember that the

technologies we use, and our consumption and management of resources, are integral with our politics, our economics, our pedagogics — in short, our social attitudes. Science exists within this environment. These are abstract terms and difficult to pin down, but they are also the driving force behind programs of educational exchange. Enormous amounts of information can now be transferred across the world by simply pushing some buttons, but to more fully appreciate a different culture, there is no better way than to immerse oneself in it. [Exchange draft 4]

The writer has personally taken on the whole agenda which The Guild seeks to accomplish in the long term, that of bringing the intellectual disciplines into fruitful contact with each other, rather than contention. He spells out the argument which is tacitly understood by Guild members and which is manifested in all the effort which goes into ensuring that environmental managers and organisational representatives are meeting each other and exchanging information at a high level of intellectual complexity, while forging relationships which are tolerant and flexible.

10.2.6.4 Saving the writer's Face

In the fourth draft version, PG paddles against the science monologic position, and fights against the hegemonic position which marginalises cultural approaches it does not understand:

In terms of creating a sustainable environment, we must remember that the technologies we use, and our consumption and management of resources, are integral with our politics, our economics, our pedagogics – in short, our social attitudes. [Exchange draft 4]

When he gets to the end of that paragraph we know that his

to more fully appreciate a different culture, there is no better way than to immerse oneself in it. [Exchange draft 4]

is an admonition to those who would thoughtlessly join in with the scornful derision of another culture, to think again, to step back and try to learn about things instead of prejudging. The implication is that the speaker did not in fact immerse herself in it, but stood back in a monologic position and learned little. In draft four he seems to be lamenting H's lack of appreciation and learning, mourning the lost opportunity, sharing with us the caution that when we look at something we do not understand, we should ponder the lessons in it rather than reverting to our own hegemonic and xenophobic position.

Final paragraph fourth draft

When asked her opinion on a comparison between the Australian and American approach to environmental issues, H observed: 'It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system] - it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception'. And in that comment, I think she identified a divide that is still in dire need of bridging; that is, the academic divide between the physical and social sciences. It seems important that one group doesn't see the other as narrowly focussed and impersonal, while the other sees an undisciplined community of radicals. In terms of creating a sustainable environment, we must remember that the technologies we use, and our consumption and management of resources, are integral with our politics, our economics, our pedagogics – in short, our social attitudes. Science exists within this environment. These are abstract terms and difficult to pin down, but they are also the driving force behind programs of educational exchange. Enormous amounts of information can now be transferred across the world by simply pushing some buttons, but to more fully appreciate a different culture, there is no better way than to immerse oneself in it.

Final paragraph sixth [published] draft

Asked for a comparison between the Australian and American approach to environmental issues, H observed: 'It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system] - it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception'. She also felt that the ESD enjoyed meagre status within the U university institution: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time'. Nevertheless, she found the camaraderie and support within the Department to be very strong, and she became active in various campaigns relating to local complacency around issues of waste. She was also active socially, including her work at the weekend clashes of grid-iron – both preparing the venue for the match, and as a runner during the game. H's presentation illustrated that one of the best ways to get a taste of a different culture is to immerse oneself in it.

Table 6 Final paragraph drafts Exchange Review

10.2.6.5 Simultaneously engineering text and context

Setting the fourth and sixth drafts against each other for the final paragraphs, we see that the long framing discussion of how to interpret the stumbling efforts of the student exchange presentation has been given a different footing, that of the student herself.

H's presentation illustrated that one of the best ways to get a taste of a different culture is to immerse oneself in it. [Exchange draft 6]

The business about travel broadening the mind is now not an admonition about how readers should be cautious in interpreting her version of events, but in a complete reversal of the first interpretation, the wise traveller position is even attributed to her, as having been a quality of her talk, instead of the demonstration of naïve and clumsy infelicities which PG wrestled with in earlier drafts. This achieves the purpose of reassuring the community about the excellence of the attributes and the

success which adherence to those values will bring. It brings honour and prestige to the whole community.

While the student could have been unkindly judged in the live encounter as possibly intolerant, inflexible and brash, by the time she emerges from PG's sixth draft account her positive virtues of scientific rigour, sporting prowess and multicultural flexibility have been distilled. A local girl, someone all Australians can be proud of, she has bravely ventured into an alien land and survived her encounter with the strange local customs, shown them how to do their jobs, applied her Australian Rules football stamina to their exotic gridiron, and illuminated their intellectual darkness with her science.

The relevance of this process to our study is in the relation of text to context. The interest lies in the engagement with community which can be observed in the progress through the drafts. PG is making judgements about what kind of community the organisation is, how this young person fits into it, what the reflection of the community is going to look like. He makes the effort to see the potential of the young person and to protect her from the infelicities of expression which would spoil the impression she makes as she starts her career. He takes seriously his task as professional writer to make consistent meanings in the community, not only for those meanings themselves, but because his responsibility to this bit of matrix engineering will pay off for him in subsequent Reviews. As he engineers the reflection of the culture, he is securing his grasp on how to make meaning for himself, he is enabling further bold moves which he will need to draw on as he approaches the other difficult tasks of turning the mundane presentations into interesting pieces which will take the imagination of the community. The more he knows about that imagination, the more he has had a hand in defining it, the easier it will become for him.

10.3 Silence: the no nukes seminar

Next there is a return to factors which reveal the culture of The Guild community and a decision made in the executive committee on a seminar topic.

The existence of the Halfspectrum professional filter is the means by which silence is imposed on sectors of the community whose free expression of opinions would be considered counterproductive to the organisational goals of The Guild. Usually all this is unspoken, the groups are indeed silenced, but there is a glimpse of the process of silencing in committee minutes, for example where the topic of the annual seminar was up for discussion [February 1999].

The annual Guild seminars are extremely popular and make a lot of money for the organisation, with attendees coming almost entirely from outside the membership. Seminars are reputed as well organised and as having a high degree of academic, scientific, organisational and practical credibility. The choice of topic is important for a number of reasons, policy reasons of course, but also commercial opportunities and political or strategic points which need to be made. At the time of the committee meeting in question, the state conversation centred on several matters concerning nuclear energy and waste. These included the proposal of a new mine with controversial technology, a proposed national waste dump, and the safety of transport and storage of nuclear waste.

It was suggested that the topic of the seminar should be this raft of issues related to the nuclear industry. The topic was uniformly rejected by other committee members, because of its hot political status. The point was made that it would 'attract unwelcome attention' and threaten the collapse of the whole national organisation. In activist and advocacy circles such attention would be considered a positive indicator. In strategic terms it would be exactly the wrong thing to do. Members whose jobs are in the nuclear industry need to have their membership status confirmed and their sensitivities protected if the organisation is to serve its purpose as a forum to include the whole spectrum of professional managers. The thing they need from the organisation is for the clamour and attention, which the matters attract in public, to be silenced so that they can hear what it is that their professional peers have to say. It is this aspect of the organisation which would transgress PG's political standpoint. The fact that he was able to do his work, without being offended by this cultural component, provokes the suggestion that it is the patterns of the organisation that he reads rather than the detail. Naturally he was not present at this committee meeting. What PG thinks about this specific issue of silencing dissent is discussed in the Shag Shoal discussion.

11 FISH, INDICATORS, GIS AND GALAPAGOS

11.1 The range of cadres and stages

First comes a set of Reviews to show the range of cadres and stages. The unity dialogic category of The Guild organisation is seen in the harm minimiser texts. These texts represent the core activity of members, and deal with the central part of what constitutes professional expertise. In terms of the positive tact frame, these activities form the set of technicalities which everyone is agreed upon, and thus a neutral space is created in which interaction can take place. First there is a look at the initial *Fish* Review to note that it traverses several cadres, having elements of the science, harm minimiser and negotiator cadres. It was this Review in which PG established his successful rhetorical structure and prompted the committee to double the fee.

11.2 Fish June 1999

The *Fish* Review shows some of the basic Review design features and prompts further address to background and context issues. *Fish* has the pioneer genre-hybrid rhetorical structure, which PG invented and kept consistent throughout, and which became increasingly subtle through the progress of the texts. As outlined in section 7.1.1, the structure follows the format of an introduction to the speaker, a location, member involvement, plain scientific exposition, perspective inclusion and summary with perhaps a coda.

The various drafts of the *Fish* Review show the scope of the task, the evolution of the question and answer section, and the challenge involved in moving from speech to writing.

11.2.1 Trying for openings

The title of this inaugural Review is 'Environmental Leadership from a Commercial Fishing Industry: Amazing but True! (The Environmental Management Plan of the Subiaco Fishermen's Association)'. It is the sole repository for this compacted block of information. The presenter, DM, is a natural resource economist with the

Inland Waters Program of the Australian Research Institute (ARI): Aquatic Sciences.

As PG works on the openings, he experiments with how he sees the task, and what he wants for his audience to enjoy. He uses biographies to emphasise the human characters and thereby puts a human face to the fish. PG theorised that readers were likely to be more engaged by people than by fish. He had very little opportunity to make characters out of the fish, but a lot of scope to puff out the human members of the cast.

The first analysis of about 250 words which were deleted from the final version shows him roaming around in the territory getting to know it. He explores narrative techniques which enable him to make the material more entertaining, He extends and enriches the personality of the presenter, gives him a history, and thus provides a stratified temporal aspect characteristic of narrative. To stretch the presenter out in time is to make his character richer and more interesting immediately. PG gets DM out of the water, removes him from behind the desk, away from the overhead projector screen, and presents him elegantly as an eager, intelligent young man standing outside the lovely old heritage treasury building.

DM has a broad understanding of economic principles. Having worked in the Treasury Department from 1986–91 he refers to himself today as a natural resource economist. His business card promotes as his speciality: 'innovation in fisheries environmental management'. [Fish 1999]

DM has a card in his hand. That is something the audience can visualise. They are less likely to be able to see an idea in the presenter's head. PG is using concrete images to make the reader work at creating an imaginary world, thereby engaging commitment. Furthermore it is a cityscape which they all have in common, thus stimulating a sense of group involvement. Tonight's talk takes place at another location in the city which members know.

During his presentation at 187 William Street, D highlighted the unexpected situation wherein a commercial fishing community has actively taken responsibility for managing their commercial practices with an environmental focus. This situation is no mere fluke of course, and D has been largely instrumental in developing an Environmental Management Plan (EMP), and in working with the fishers of the state's Lakes and Delta region to encourage a cooperative attitude toward managing their environmental resources. [Fish 1999]

'Fluke' is a pun which depends on the word's additional sense of a water organism as well as its meaning of chance. Puns are usually avoided in serious writing, because while they are amusing, they can by their very nature cause confusion. PG discussed the fluke pun with the mentor, arguing that it was just obscure enough for him to feign ignorance for people who would judge it harshly, while it was naughty and risky enough to tickle the fancy of punsters who enjoy such things. This may seem trivial, but it is not. It demonstrates his determination to provide pleasure and engagement for his audience and to walk the dangerous line between acceptability and unacceptability. Further it shows him to be free of any writerly snobbery about whether such techniques are childish or not. He knows that there is a group of readers who revel in the simple pleasure of the connections, and he is not about to forgo a pleasure on their behalf for the sake of frowns from those who would set themselves above such harmless old-fashioned fun. The antiquity of the pun strategy also helps to frame the equity driven renewal of what was in 1999 the antiquated 'fishers'. PG muddles all the factors together to provide such a rich mix that it is hard to extricate any one particular element which the reader might want to feel resentment about. PG does not want anyone in the audience to feel awkward or upset, including reactionary readers.

11.2.2 The first cut

All of the draft quoted so far was discarded. On his own decision, with no advice on this matter, PG demonstrated his professionalism by cutting the draft down to the succinct

Dieter Menahir has played a key role in developing an Environmental management Plan [EMP] and in working with the fishers of WA's Delta region to encourage a coordinated approach toward managing their environmental resources. [Fish 1999]

This is the definitive topic sentence which appeals to his scientific readership and provides a guide to the contents. He is then free to do some of his important work of bringing the characters to life.

11.2.3 The real opening gambit

Now he plays another language game of reverse definition, knowing that readers enjoy engaging in such delicious diversions.

To put the record straight Dieter began by telling us what he isn't. Firstly, he is not a fisherman, and claims he would rather spend a day at the dentist than to go recreational fishing. Secondly, being a vegetarian he doesn't even eat fish. He also admitted to a once-held prejudice toward commercial fishers, a prejudice he perceives as common among the public; that is, that commercial fishers are responsible for depleting fish stocks and damaging the aquatic environment. His experience with the state's inland fisheries and his involvement with the fishers of the Delta region of WA, has dramatically altered his opinion. [Fish 1999 draft]

The dentist is not just incidental. He is another character to provide relief from an otherwise homogeneous society of fisher folk. Our hero, in narrative terms, has gained another dimension too, that of a vegetarian. This is a dangerous move. Vegetarians risk being identified as part of the radical advocate group, but DM's conservative treasury credentials will counter any hint of extremism.

The 'prejudice' in the next sentence briefly hovered over the presenter-vegetarian, but when DM 'admits', we learn that it is the entrepreneurs who had suffered from prejudice. This written fragment of shifting and sliding agency captures the patterns of behaviour of the organisation itself. The theoretical position of the thesis describes this as a Fractal making visible The Guild's Weickian equivoque. The Review, in its capacity as Fractal, makes manifest the organisation's strategic tact. The strategic tact is the need to extend to those characterised as exploiters the same linguistic consideration as has been extended to marginalised groups. The claim in the thesis is that at this early stage and well into the mature phase, PG was not consciously aware of this policy, that he was simply reflecting and recording threads and traces of these attitudes and managing to tie them down in his Reviews. There is further evidence of this in *Shag Shoal*, [section 16.3.9] where PG has the strategic tact organisational element brought to his conscious attention, where he alters his established procedures, and where he is obliged to repair some damage. Returning to Fish, the 'dramatically' altered opinion of the presenter might suggest to readers the need to change their own attitudes to commercial fishers.

11.2.4 Colour

First PG gives himself scope by pulling the frame out into a wide state location shot and then draws back further into a national picture. In the same way that he likes to give his presenters a history and thereby make them three-dimensional, PG also likes to extend the time frame for locations. Colourfully named familiar state locations decorate the text with their histories and their own three-dimensional personalities.

In a historical overview Dieter identified the region – Lakes Elizabeth and George plus the entire length of the Delta and Knight Peninsula – as a heritage fishery that has been commercially active since at least 1846. Until early this century the area was the state's major fishery, supplying up to half the scale fish sold in the Perth markets and also exporting to Melbourne. Today very little of the fishery's output reaches the Perth market, some being sold locally, some for fish bait, but the majority going to Sydney and Melbourne where the demand and prices are higher. [*Fish* 1999]

Suddenly we are in the busy markets of Sydney where the people will pay highly for our local fish. And we are just using it for bait. That was a change of shot – the rich eastern states markets are cut with a frame of casual locals enjoying their holiday fishing. It is no longer just DM and the fisher folk. There are people everywhere, smart Melbourne merchants and easy going Western Australians. The farmers, boat owners and public servants are coming in too.

During the 1930s and 1940s fish stocks decreased severely in the region, with some species today down to 4–5% of what they once were. However, as D explained, these reductions were not due to the actions of commercial fishers but to other changes in river management. A progressive impact has been the installation of weirs and the increasing demands of agricultural irrigation throughout the catchment of the Koori River. The installation of barrages near the Koori mouth in particular had a large impact, changing what was once an estuary into a large freshwater containment. Before the barrages were installed, fluctuations in water flow meant salt water would sometimes ingress as far as Hamilton Bridge, while at other times fresh water could be found five miles out to sea. Stabilising these dynamics has severely affected the movement and effective breeding of certain fish, which were naturally adapted to the cycles. [Fish 1999]

It all seems quite far away until he mentions Hamilton Bridge, only one hour from the capital city. Now it is not just the responsibility of the managers and rural people. City dwellers can be involved too. The scene of city enterprise sets the frame for thinking in proper business management terms about the commercial fishing operations.

Fishing licences are currently issued to 38 individuals in the region, although each licence represents what is ostensibly a small business. Family members are typically involved in such activities as processing, packaging and transport; in fact, many of the operators are third and fourth (one, fifth) generation fishers of the region. D described the fishing practices as low-tech, most fishers operating from small aluminium boats with mechanisation generally limited to an outboard motor. He also acknowledged the work as tough – not only physically demanding, but also, for an owner-operator, a sick day means no income. [Fish 1999]

The analysis of the business management, links to heritage and family values. Now we are back in our own homes with the fish on the table, family values and holiday happiness recalled in the evocative fish and place names:

The Delta region is a multi-species fishery, a point in its favour in terms of being able to harvest fish in accordance with variations in availability. Some of the main catches are callop (perch), mulloway, mullet, bony bream and Gondwana cockles. Among the introduced species are redfin (a popular eating fish) and carp, which is generally considered a pest. [Fish 1999]

11.2.5 Factions and fishers

First the factions are separated into the familiar dual polarities and afterwards that dualism is reinterpreted into a more complex picture, another Fractal feature replicating the organisational paradigm, supported with structural and legislative frameworks which shape the working lives of members, and which PG had studied in his introductory environmental politics subject.

The fishers of the region are represented by the Subiaco Fishermen's Association (SFA); however, not all licence holders are members and membership has tended to vary in relation to political trends and social attitudes. A few years back the feeling in the community was that their industry was threatened by the ascent of environmental pressures. Both government and non-government organisations (NGOs) were seen as advocates of fishing restrictions, and many locals had already assumed that the days of commercial fishing in the region were numbered. When the area was declared a RAMSAR site (concerning an

international treaty on the migration of birds) the alarm bells sounded. This is when the SFA approached the Inland Waters section of WARDI (consisting entirely of Dieter and a senior fisheries scientist) and asked for their assistance. The SFA basically wanted to know what the impact of their practices were, and how they could modify them to satisfy the demands of environmental integrity. [Fish 1999]

The brief sardonic reference to how the department consists only of two people who have to shoulder the responsibility for all the work is another Fractal of the organisation. Most members endure an unmanageable workload because of underfunding. PG sees these threads and rebuilds from them the patterns, which reflect the patterns of the people in the organisation. The subliminal echo of 'SFA', which is also an acronym for a common vulgar expression meaning 'nothing', is intentional and discussed by PG with the mentor.

What Dieter discovered was that the situation was not so gloomy. The major element lacking in the practice of the fishers was that of a coordinated approach. The fishermen generally did not communicate about their operations or observations – sometimes tending to outright secrecy – and were apt to tackle problems only as they arose. As Dieter was studying Environmental Management Plans (EMPs) at the time, he tentatively considered applying the concept to the fishery. When he approached the SFA with the idea he was surprised at their acceptance. [Fish 1999]

Now the Fractal patterning is again evident with the report of the good practice, which insists on participatory development of process. PG is picking up threads again and weaving them into the fabric of the text, making repetitions of the patterns in members' working lives.

The SFA's initial response was, *OK*, go and make us an *EMP*, to which Dieter explained that the costs were not only *his* time, but also theirs, an *EMP* being essentially a participatory process. When the SFA agreed, he realised how serious the community was about looking after there own patch. [*Fish* 1999]

The spelling error of 'there' went unnoticed, possibly because it relates to a place. The most important element though is the commencement of the dramatised dialogue. This is a very controversial way of handling a summary of scientific and economic information, thoroughly non-traditional, non-conservative and informal. PG confidently gambled on his own proficiency and plunged on into the drama. One of the signals that the genre has changed is the altered lexis – the fishermen are back. The fishers have been consigned to the formal process along with the rest of

the red tape. Now everyone is really fishing. Now the real operators, the fishermen, the ones who were suspicious of all the talk, are doing real environmental management, getting their hands in the dirt and their feet in the water. This is a thread which all members would be familiar with in their daily working lives – one set of linguistic practices using one linguistic code, with possibly minimally educated people, and the change of code and practice on return to the office to write up the reports.

The process began with a lot of talking: to the community, to government bodies, to NGOs ... talk, talk. In fact, there were times when the fishermen thought it was another conspiracy to keep them at meetings and stop them from doing their work! The next step was to get the plan down on paper, the eventual outcome being a substantial document titled *Wild fisheries with a future*. Dieter proudly displayed to us his own copy and informed us that the initial print run of 300 had all found owners. He was quick to point out, however, that the book itself does not constitute the EMP, which is more usefully defined by the way the commercial fishers conduct their business. [*Fish* 1999]

The ones who are doing all the work are the owner-operators, the ones for whom a sick day means no income. They turn back into fishers as soon as they start talking books. The professional writer in PG closely links the document with the active work. He makes sure that the presenter's bestseller publishing feat is acknowledged, on the same level and in the same context as the outdoor work of the owner-operators. The fisher-fishermen switch seems to work as a tag to make that link even more evident. In discussion with the mentor, PG expressed admiration for the speaker's publishing feat, and commented how these acts of writing excellence are unfairly buried in obscurity, while works with meagre claims to either talent or utility are trumpeted.

The fisher-fishermen switch was also discussed and the mentor advised against it on the grounds of inconsistency. In a bravado display of confidence in his own code-handling ability, PG fortunately ignored the guidance. This is possibly an example of a type of Gumperzian style code-shift, where isolatable elements of one code rather than another are used for character and role functions. The study contends mostly that the code-handling is not as clear-cut, nor as Gumperzian, as this. Rather it contends that the code-handling is usually at a deeper level of system.

The desired features of the plan were that it be coordinated (committees formed); formal and inclusive (encouraging of SFA membership and addressing associated industries); proactive (forward thinking and assertive); transparent and demonstrable (providing a public document promoting practical strategies); comprehensive (covering aspects other than fishing); and practical (containing achievable goals explained in 'plain English'). On this last point Dieter alluded to the only other document previously available to commercial fishers, The Fisheries Act - a notoriously convoluted and, one suspects, largely ignored bureaucratic tome. [Fish 1999]

To continue with his determination to celebrate the professional writing feat, PG elaborates the picture of the slim and successful sell-out *Guidelines*, by caricaturing their plodding oversized rival, *The Fisheries Act* as a convoluted and rarely consulted bureaucratic tome. This contrast matches the fisher-fisherman contrast. Note that the possible caricaturing of members involved with legislative drafting is avoided, by having the indexical presenter member linked metonymically with the slim *Guidelines*.

In a further dramatisation of this contrast, PG uses brackets as he translates the official jargon such as 'transparent and demonstrable' into plain English '[providing a public document promoting practical strategies]'. Thus he brings format devices into active service to dramatise the adventure. Now he introduces some women.

In terms of the EMP's structure the SFA established six programs: Fishing, Processing, Travel and Storage, Marketing and Sales, Administration, and Community Liaison. This meant six fishermen and two of their wives were now involved in running committees, and community involvement was considerably enhanced. [Fish 1999]

11.2.6 Community leaders

With the community assembled, PG needs to find a contrasting figure against which he can establish their qualities. A politician can represent a figure of harmless establishment fun at one extreme, while the rock singer, then Australian Conservation Foundation President, Peter Garrett, is at the vigorous advocacy extreme. The middle common sense position is where the managers and the community members are.

Dieter recalled how they knew they were on to something when politicians showed such interest in the official launch of the plan. He described a situation wherein a surplus of ministers were vying for the opportunity to give an address

at the opening. In fact, the response to the project has been impressive, including a recent WA Fishing Industry award for environmental excellence. Enquiries have come in from other fishing industries and agricultural bodies both interstate and overseas, and there have been several 'media hits' on radio and television, including in Victoria and the US. With certification of the fishing industry a current issue, those setting up the Marine Stewardship Council (MSC) have also shown interest in a fishery in the unique position of having an established EMP. Well-known environmental campaigner Peter Garret has also ventured to the region to check things out. [Fish draft 1999]

PG has made an extra effort with the politicians, quoting Dieter's neologistic collective noun 'surplus', which whispers of prosperity and plenty, yet of not much practical work. In quoting it, he exercises the professional writer's prerogative to validate new coinages and make them part of the currency of the nascent variety. The good-natured humour and simple homespun perspective serves to make the international media accomplishment even more praiseworthy, and to substitute any suspicion of bragging with a simple expression of bewilderment at all the attention. This sets the reader up for some solid practical guidelines. They are credible guidelines, because they are accepted by all of these international sources.

From his work in the Delta region Dieter was able to present to us a different picture of the commercial fisher. He now sees causes other than commercial fishing to be responsible for the decline of productivity in the region. He conservatively estimates, that with proper water flow management, fish stocks of certain species could be raised by a factor of at least 15 (his scientific partner suggests much more). This would require an upgrade of the barrages to a more efficient method of operation, but importantly, would not adversely affect current water demands for agriculture. The SFA are now actively lobbying for such a development and there is hope that State Government funds will soon be forthcoming. [Fish 1999]

The team has been successful already. With more money they can do more. They can expand outside their original area

Dieter acknowledges the fishers of the region as embodying collective expertise in such matters as water flow and its effects on fish stocks. Furthermore, they have been instrumental in managing the carp population. In their work, they are also ideally situated for monitoring the environment and have potential for assisting research. Most importantly, members of the SFA now see themselves, and are seen by others, as setting environmental standards and being proactive on a world scale. From a position of representing a threat to the environment, many of the fishers now see themselves as environmentally responsible leaders. [Fish 1999]

This indicates that there has been a change in identity, and is another Fractal feature. On a daily basis, Guild members are concerned with reframing issues related to the natural environment, so that others can understand them more readily.

11.2.7 Funding

Dieter and the SFA are now being funded by the fishing industry to investigate directions for environmental certification of commercial fishing. While the MSC represent a certification approach that focuses on the product, the environmental arm of the International Standards Organisation (ISO 14000) approaches certification from the perspective of production processes. Dieter sees that both approaches are important and should be mutually operative in the process of certification. Looking ahead, he sees an important goal in educating other fisheries about the potential benefits of an EMP, and stresses that the plan is always a work in progress, wherein the participants should continually be looking for improvement. In concluding, he invited us to recognise that whatever our opinions of commercial fishing might be, there is at least a state fishery that is showing the world how to manage the environment better. [Fish 1999]

With the funding secured, the tricky job, a Fractal feature which the members will recognise, is to get the reinterpretation into the functional documents.

11.2.8 Scope

In the initial draft PG included an informative couple of paragraphs on Ramsar, the 1971 Convention on Wetlands. Here PG's initial orientation is in terms of the default position, where the assumption about environmental communication is that it deals with notions related to environmental management. This is characterised in the present study as the OUTERPECPEM position. If the task were to be seen as dealing with those external public communication tasks [OUTER], then PG's neat 100 word gloss to the label Ramsar, which is attributed to the IUCN website and includes a mission statement, would be welcomed.

However, that is not the way the task was interpreted. The task turned out to be that of reflecting the organisation. Knowing what Ramsar is would be one of the indicators of professionalism. Even if members do not know what it is, omitting a gloss is an indication to them that this is core knowledge and that they should look it up for themselves. It is a political gesture with the effect of valuing the international agreements on natural resources at the sort of level that the rest of the community might value NATO or OECD. PG's gesture of relieving this tension would no doubt

have been welcomed by some readers, but the fact that it did not make it past the gate-keeping executive indicates that there is more going on than just information. The task at hand is a matter of structuring the organisation, manifesting the Weickian equivoque, and matching the collective expectation of quality and standard. Not knowing what Ramsar is would be substandard. Informing oneself about it is the start of updating one's information about other environmental issues. We will see in the forthcoming discussion of the *NEPC* Review that organisational trust and delegation of responsibility to PG increased so much over the 2 years under consideration that his decision to include 'neppums' was allowed through despite the protest of the speaker.

Looking at small text alterations such as

With certification of the fishing industry a current issue, those setting up the Marine Stewardship Council (MSC) have also shown interest in a fishery in the unique position of having an established EMP. Well-known environmental campaigner Peter Garret has also ventured to the region to check things out. [Fish draft 1999]

PG is struggling a little with the vast cast of characters he has assembled. By chopping out 'those setting up', he clears a space for his more important characters like Peter Garrett. In the final draft, PG included as an added bonus, 'well-known ...', giving the campaigner an introductory fanfare, using the full resources available in the information structure of the sentence to delay the entrance of the celebrity and thereby make it more significant. The typographical error of the single 't' in the celebrity's name survived through to the final print without demur. It was clearly not noticed by the gatekeepers. This slip reveals something about the nature of Garrett's celebrity, in that rather than being an established celebrity, it is a popular celebrity, as evinced by PG' s use of the informal phrase 'check things out'.

PG has gone to some trouble to marshal his cast of characters and to ensure that their characterisation is consistent. The SFA has been presented as a vigorous, practical group and when he chops their scoping paper out of the following sentence, he restores their action status. Rather than sitting around producing a paper and vaguely looking at things, they are out in the field actively investigating, behaving as the 'leaders' they were presented as in the previous sentence.

Dieter and the SFA are now being funded by the fishing industry to investigate produce a scoping paper, looking at directions for environmental certification of commercial fishing. [Fish draft 1999]

This is an indication that intersemiosis is on PG's agenda, that he intends to convey the effect of the Source Text, the spoken presentation, rather than faithfully reproducing every single word.

When PG submitted the draft to the President for approval, he had described the Fisheries Act as 'the only other document previously available to commercial fishers'. The President inserted the word, 'guiding' to qualify the 'only' document, presumably because the fishers had access to many varied documents. If this is interpreted as a correction, it seems pedantic, but seen in terms of the Weickian equivoque, it exploits an opportunity to emphasise the participation in consulting, learning, researching and guiding. It inserts the notion of collaboration and enriches the matrix on which PG then celebrates the arrival of the newer, more usable document, the bestseller *Guidelines*.

11.2.9 Speech to writing

Another Presidential alteration was an adjustment to correct public service terminology. The draft hope that 'state government funds will soon be forthcoming' was changed to a more standard 'this initiative will go forward in the near future'. This is a considerable change, because the draft 'funds forthcoming' is a quote from the speaker, showing his position where there are some things to do and a set of people to do them, held up by waiting for the funds they need to start. The public service change packages up the people and the thing with the requisite money, and pushes them all forward at the same time. It makes it seem as if the public service has the energy and the initiative, rather than the people. The final approved version is public service equivoque, whereas the draft version had a hands-on people-generated community equivoque.

11.2.10 Speech to writing: Q and A

The questions offer more scope for the Weickian decision environment to emerge as the Fractal. First, they are generated from members themselves, and thus represent the roles and patterns of the organisation. Second, they are the sorts of questions which members have to ask all the time. The Fractal recognition comes in watching someone else ask a question one would like to know the answer to. Third, the most important question and answer, the one on scientific input, is a Fractal of the organisation in itself, with the locked scientific knowledge being unlocked by means of community and legislative processes. In narrative terms, the questions bring new characters as each audience member identifies herself.

PG introduces the questions:

At question time the interest in Dieter's presentation was apparent by the number of questions asked. Only a selection of the generated discussion is presented here.

Question: Is the plan's success perhaps due to it being a cottage-type industry that is not capital intensive?

In his response Dieter alluded to the marginalisation of the group as being important in motivating their actions. As a regional community they had an interest in protecting their reputations and disassociating themselves from the negative public image of the commercial fishing industry at large. They were, to a large extent, doing the right things already. Once aware of this it was important, and relatively unproblematic, to formally consolidate their practices and demonstrate a responsible attitude to the public.

Question: How much scientific input is used in the plan and what is the SFA's response to scientific results related to stock assessment?

Dieter has observed that many inland fishers are generally wary of scientific advice. In some cases they would prefer regulations that are *more* restrictive, and hence more protective of fish stocks. If anything, they would prefer more scientific research than is presently provided by funding.

Question: Why should the government pay?

Dieter sees the fishery as a community resource and suggests that society should be prepared to put money into research. Present research is largely payed for by commercial licence fees. He pointed out that recreational fishers enjoy any benefits gained from research, without contributing directly toward it, sparking further discussion about the complex issue of licensing. [Fish 1999]

This first Review was the only one in which PG utilised the opportunity to present the questions and answers at the end of the session as a small *quem quaeritis* trope. In subsequent Reviews he took command, as the narrator, of characterising the

questioners, rather than leaving it to the reader to impose characterisation from their deductions of who would ask what sort of questions. Overall, he traded the visual surface format excitement for much more powerful narrative dynamics. This can be argued as testimony to a growing confidence, in that perhaps he later felt no further need to use format tricks after the first issue. As he developed his skills as a reviewer, he began to trust in the power of his linear narrative, knowing that he was developing and cultivating a following readership.

In the *Fish* Review, PG was employing every trick of the format trade to get maximum effect. The second question he chose to report caused him some trouble in that the answer was the most controversial and difficult to transfer successfully from speech to writing. Here is the first attempt:

Dieter has observed that inland fishers in general are suspicious of scientific advice and many would prefer regulations that are more restrictive, and hence more protective of fish stocks. If anything, they want more scientific advice, for which government funds are not available. [Fish draft 1999]

The first change was 'suspicious' which turned into 'wary'. This is significant when contrasted against the *Wildlands* Review, [chapter 16], where the word 'suspect' has an accusatory meaning. The argument rests on the fact that 'suspect' or 'suspicious' are both unpleasant words, which PG's standard practice, established in the *Fish* Review, avoids.

Next he worked on the inland fishers. First he described them as 'some inland fishers', and then finally as 'many inland fishers', who 'generally' are wary, trying 'wary of scientific advice in general' as an intermediate step. The scientific advice itself had a brief incarnation as 'bureaucratic advice based on scientific evidence'. However, this and the final bit about how 'they want more scientific advice, for which government funds are not available' were self-censored, or Code-handled, into the more public service style version as 'they would prefer more scientific research than is presently provided by funding'. He did this by himself – this was not a Presidential intervention, although it followed on from the return of the President's alterations. It shows PG's sensitivity to one of the dominant codes and his professional capacity to adapt quickly and effectively to the needs of the client.

His printed version, 'many inland fishers are generally wary of scientific advice', avoids the trap of making the fishers seem ill-educated or unscientific, which the word 'suspicious' might have implied. The 'wary' does not make them wary of 'scientific advice in general', which would have similarly made them look illeducated, but it emphasises their practical skills in rendering them 'generally' wary of scientific advice. That is, the 'generally wary' presents the fishers as prioritising their practical experience over scientific knowledge, but not as dismissive of the knowledge. It is a kinder and more inclusive picture, a politically strategic picture, which encourages research funding. It also serves an educational purpose for the organisation by highlighting the value of different kinds of operational knowledge. It is skilfully done so as not to alienate the monologic scientific readership and it is also encouraging of the other members who place greater reliance on field practicalities than on laboratory experimentation. He did not appear consciously aware of any of this, because he did not speak of it, despite the fact that he spoke, in the mentoring conversation, for about three quarters of an hour of various other aspects. It seems that his decisions about adjustments happened at the code-handling level, ie watching the dynamics of how people deal with each other, and turning the spoken account into something that would more closely reflect these dynamics. With access to the verbatim account all along, he reconfigured the material because he wanted to achieve that mirroring. He said he spent about five hours on the task. For example, for the last question, 'Why should the government pay?', his verbatim transcript, with the correct spelling of 'paid', later hypercorrected to 'payed', had Dieter's words

Its our resource, a community resource, . . . society should put some money into research. Fishers want more research and are scathing of that provided.

Research is paid for by licences.

Licence costs are complexly computed and fluctuate to some extent according to the financial needs of the regulating authorities, including their research expenses. [Fish draft 1999]

which he translated and worked through for his readership. In his reworking, he activates the recreational fishers, bringing them to life as individuals who 'enjoy' while they do not 'contribute'.

Question: Why should the government pay?

Dieter sees the fishery as a community resource and suggests that society should be prepared to put money into research. Present research is largely payed for by commercial licence fees. He pointed out that recreational fishers enjoy any benefits gained from research, without contributing directly toward it, sparking further discussion about the complex issue of licensing. [Fish 1999]

The verb 'sparking' adds light and action to the licensing. The original scathing and demanding fishers of Dieter's words have been replaced by the opposing team of freeloaders who should be asked to pay. He experimented with a final paragraph:

As the presentation came to a close I was left with the word 'society' lingering in my thoughts, and the potentially divisive [public/private] arguments about how it should be structured and who should pay for what. But of the many inspiring aspects of Dieter's presentation, one stood out for me, It reinforced my observation that the understanding around 'economics' are being reassessed, as we increasingly acknowledge the *nature* of its resources. [Fish draft 1999]

PG followed mentoring advice not to labour the point, reassured that he had indeed demonstrated the argument in his construction of the material and in the decisions he had made from word to word, and sentence to sentence. The draft last paragraph was omitted, and the piece ended on the strength of 'sparking'.

11.3 Utilising the inertia of the rhetorical structure

Strategic Indicators and GIS show the core culture from two separate cadres, the scientific and the negotiator. The GIS Review also represents the science cadre and is an example of Gurevitch's [2000] unity category. The Strategic Indicators Review joins it in the unity category, but represents the harm minimiser cadre.

In both these manipulated texts, PG's hard work in establishing the rhetorical structure has paid off. He is able to assume it as the underlying structure - an organising feature for the reader which enables him to introduce complexity into the interaction. He expects the reader to comply in order to solve the puzzles and implications of deferring some elements.

11.3.1 Strategic Indicators June 2000

This sample from PG's mature period reviews a routine management reporting meeting. The rhetorical strategies are used at full capacity to make an interesting piece out of an undistinguished presentation. RP's *Strategic Indicators* session required all his skill.

He shouts a direct question to wake everyone up at the start.

where are we going and are we on the right path? [Strategic Indicators 2000]

Then he dives into Gammon territory with the shocking word, 'spiritual'

potentially a spiritual conundrum for the individual [Strategic Indicators 2000]

but just as a priest might say the Devil's name in church and then reassure everyone with a word from the Gospels, PG knows not to tease his audience for long. He follows his provocation immediately with

this composite query is equally fundamental to any form of governance. [Strategic Indicators 2000]

This is an old ploy, but PG uses it brazenly and of course it works. The public service lexicon of 'governance' and 'composite query' serve to set the destabilised vehicle back on professional track. The member reads on to the series of questions, which allow him to progress through RP's overhead slides in an orderly manner:

how does a local government ascertain the directional goals of the community it represents? How do the decision makers then design policies and programs that manifest those goals? And how is the community's progress monitored? [Strategic Indicators 2000]

Only now does he introduce her, having exploited every opportunity in his opening paragraphs to create interest, rather than to fritter them away on the introductions. He makes use of the new paragraph indent to break up what is going to be a rather tight text.

The [Guild's] guest presenter at the June meeting was Renee Planter, project officer for the city of Katajuta.....the aim of theproject is to develop a suite of indicators for the ongoing measurement of the progress and sustainability

of a local government area in terms of social, economic and environmental parameters [Strategic Indicators 2000]

But now, just as he once tried unsuccessfully to do in *Fish* with revision about Ramsar, he calls in the whole community and all the experience members have so far of their interactions. This is a general call to the Community of Practice, a rallying of everyone who has been following the talks:

many members will recognise the concept the 'triple bottom line' in the aim cited above. [Strategic Indicators 2000]

What is of interest is that this is his own translation. He is learning along with the members and he is taking, as his narrator-persona in this Review, the class-leader position, out in front, enticing everyone to come with him, dragging the reader through not only this Review, but making it a bit more interesting by doubling back to former Reviews as well. The game is on. He brings it back to *Strategic Indicators* by weaving in another text almost as another character. This text is active. It is the project's published discussion paper. It has a life of its own as *Tracking Progress Using Indicators* and PG gives them the reference as an encouragement to delve further.

Thus by the end of the first hundred words or so, instead of having one rather inexperienced presenter, alone with her overhead slides, she is surrounded by a cast of active community identities. She has as her companions the Triple Bottom Line presenter, the documents which relate to his presentation, PG himself as the eager learner, the indefatigable document – *Tracking Progress Using Indicators*, and the audience, who have also been asked to join in.

The next paragraph is one of PG's regular rhetorical structures, which he usually includes somewhere in every Review, the numbered list of firstly, secondly, thirdly. He then goes through the questions and gives the answers. He needs the presenter to be up and active, because we are going into a dense patch:

Renee showed us that many balancing acts are required in formulating such indicators, including [an indented list]

This first point alludes to perhaps the greatest balancing act – that between complexity and simplicity. While indicators are intended to simplify information

so that trends can be readily understood, such simplification itself relies on analysing complex and overlapping systems... Renee identified some of the key drivers of the project [Strategic Indicators 2000]

This is dangerous territory. The tension of 'complex and overlapping systems' is a routine part of the experience of every member and so PG does not risk staying with the complexity long, getting Renee to identify those drivers, which turned out to be, as he had foreshadowed, good governance, strategic management plans [SMP] and Agenda 21. By increasing the coherence of the text with these anaphoric links, PG increases the internal processing rewards for the reader. He makes as much use of indents as he can to generate excitement, but it is an uphill battle with

another part of the simplification issue is deciding how many indicators to include in a usable suite. Case studies show it is not difficult to identify hundreds of parameters that might be helpful indicators of a community's progress; however it is important that the end users of an indicator-suite are not overwhelmed by its size and complexity. [Strategic Indicators 2000]

PG reported in a mentoring conversation that he found this presentation very hard to make interesting, and that he had used every possible format variation including intext asterisks, quotation marks ['index'] and even Saxon Genitive apostrophes ['City of Katajuta's project'], dashes and a range of different brackets [curly, round and square]; acronyms [such as SMP above] which would bring upper case characters as their dowry, and Latin abbreviations [e.g.] for the decorative value of their full stops.

His final paragraph shows his frustration in that Renee 'reinforced', rather than doing anything more collaborative. His determinedly dialogic direction, however, appears with 'as most of us would agree' and his little joke. There is a colon in the first sentence there for decoration too.

In closing, Renee reinforced the notion that indicators should be used with caution: they are neither universal in their application, nor perfect in their design, but they do provide very useful signposts, and as most of us would probably agree, navigating without signposts can be a very frustrating experience. [Strategic Indicators 2000]

11.3.2 GIS April 2000

GIS is another Review to illustrate the core activity of management for The Guild organisation, and the ways in which PG was able to manipulate the rhetorical structure. PG uses the endogenous variety's rhetorical formulaic, neutral, scientific standard introduction, with definition and development path.

GIS stands for Geographical Information Systems. This field of information management uses computer systems designed specifically to handle spatial data; in particular, data relating to our geographic environment. GIS began as an ambitious and innovative computer-mapping exercise in America during the 1960s. It has now developed into a commonly-used branch of recording, analysing and displaying geographical data and information. [GIS April 2000]

He has deferred the speaker introduction in favour of an introduction to the software. He made a deferral in *Strategic Indicators* in order to generate interest based on the reader's familiarity with his usual rhetorical structure. Is it possible that his deferral here has a purpose? The rest of the piece shows the effort he has made to animate the machines and software, and offers the interpretation that the deferral is an animation move, a personification move, treating the GIS as a character of equal importance to that of the hero-presenter.

The biographical anecdote for the presenter, Quentin Walker, would strike a chord with many environmental managers because, in a new, interdisciplinary profession, people are often not in their original areas of training, but are unexpectedly deployed in jobs which arise from sudden funding initiatives and which they happen to be able to cope with.

Quentin Walker is the Principal GIS Analyst with the Geographic Analysis and Research Unit of State Architecture, which is part of the State Department for Urban Planning (SDUP) in Western Australia. With a PhD in Botany, Quentin became involved with GIS in the 1980s, as an indirect result of a short-term contract with the (then) Department of Planning and Environment (DPE). He now has over fifteen years of experience in applying GIS to a wide range of environmental, planning and socio-economic projects. [GIS 2000]

PG is continuing with the incidental details about the history of the technology. He mentioned when asked that this was because the sophisticated technological presentations did not translate easily to the page. Instead of avoiding the difficulty, PG felt he had to conjure up a narrative world inhabited with these computers and

software systems and personify them as has been done in film and science fiction. He plunges fully into the centre of it, making a virtue out of the awkward endemic lexis, eg 'inputted'. We learn to love Arc/Info and feel warmly for its capabilities, as we would a stock horse or sheepdog, fondly wandering in the vales of nostalgia hearing the old familiar names. It is a ceremonial lexis. Even if they were not systems we used personally, the names are part of the lore, and the repetition of these names in a liturgy binds the organisation through its generations. PG was aware of this as an aspect of how he handled the software systems, but it is also a factor of the names of old public service departments, where name changes are political and strategic, linked to the policies of various ministers and the initiatives of various senior public servants. Thus old names are part of the liturgy too, and PG's automatic code-handling appears in his seemingly unnecessarily fastidious replication of 'the [then] DPE', perhaps reacting to the feelings of pleasurable significance rippling through the audience, much as war veterans react to the names of old battlefields. This historical stratification gives richness and depth to the scene, fleshing out the third dimension of involvement and engaging the reader's complicity in that task.

Quentin began his address to Guild members with a brief history of GIS, from its American origins through some of its system variations; namely, SYMAP and ESRI (the mid-1960s), Intergraph (1969), Arc/Info (1980) and Map Info (1987). He described Arc/Info as the first off-the-shelf type GIS to be commercially available, and it was this system that the DPE purchased in 1984, chiefly to assist with the numerous environmental impact assessments occurring at that time. The original Arc/Info site – ostensibly the first in Australia – had a project staff of six. Today, under the umbrella of SDUP, the project employs around forty staff, about two-thirds of whom are permanent. [GIS 2000]

The messages are of a proud state record of innovation and application, employment success, expertise and important modern work. The format provides interest.

PG imposes a narrative temporality on the presentation not only by utilising and repeating the inherent basic linear structure of the talk, but also in making the most of any other linear structures such as the historical background. Most effectively, PG assigns functions to the stages of the talk. This activates the mental schemata of other professional presenters in the room, who also design talks with a set of functional rhetorical stages. But PG goes further than the normal functional headings list from introduction through to conclusion. In another move which

characterises the presenter as an expert and innovator, the water catchment and shoreline sand movements are turned into a 'treat' function:

members were treated to detailed schematics of water catchment areas, shoreline sand movements, crop and irrigation dynamics, vegetation coverage and more. A noticeable feature of the displays was the ability to show developments over time, with sequenced data-histories appearing like time-lapse photography (a la current TV weather maps) [GIS 2000]

He takes advantage of the TV comparison to thrust the text into the reader's own lounge room. Now everybody is working. The speaker is busy thinking up new functions such as the innovative 'treat', while the reader is astride his lounge room chair watching moving images. The piece is no longer about static data trapped inside a computer, but it is living and moving, and everyone is going somewhere. A roll call is about to commence.

Similarly apparent was the potential for GIS technology in environmental management. For example, much of WA's vegetation coverage has already been mapped as part of a national survey program, while other key applications include coastal management, wetlands inventory, analysis of land suitability and biodiversity, hazard mapping, and modeling of catchment areas. [GIS 2000]

Just about every manager can find a place in that list of job descriptions, and if they are not out there in the fresh air, they are in the negotiation and administration corps, who are mentioned next.

In this regard, Quentin acknowledged the enormous number of GIS projects currently in progress in WA, with nearly all Government Departments using the technology in some form or other. As further examples he showed us several images produced by the Coastal Management Branch, commenting that a great deal of this sought-after information is now available on people's desktops via intranets. [GIS 2000]

By the time members finish reading this newsletter, they feel like a well-coordinated team. They have flown all over the whole state, assessed everybody else's desk, and feel as if everybody is working hard together. But are they the only ones doing all the work? What about asking everyone else to pull their weight?

While most GIS output is currently available only within Government networks, there is a move to make more information publicly available through the Internet. As Quentin observed, 'environmental data' has typically been provided free in Western Australia, or at most, for a cost-of-service fee. Interesting questions

spring to mind on this issue, such as the distinction between 'data' and 'information', and when does one become the other? And the cost of providing either seems about as open to interpretation as a James Joyce novel. [GIS 2000]

At last absolutely everyone is involved, including advocates, negotiators, entrepreneurs and their information politics. James Joyce is in there to show that the unified Guild participants are not monologic, but broadly educated human beings with a wide range of media as sources of wisdom. It was Quentin himself who used the James Joyce reference. Now PG utilises the multimedia capability, knowing that everyone receives the newsletter electronically, that the pleasure and professional reward will ensue from the link, and that it will merge into the reader's mind as part of the whole newsletter experience.

Quentin reports that, among future developments in general, an Australian National Atlas project is nearing fruition and should be available on the Internet within the next few months. Meanwhile, some basic samples of GIS imaging can be viewed by clicking the Online Maps icon at www.planning.wa.gov.au.

The Guild professional can click straight on to the site to personalise the experience, to enter the world her colleagues are working in, and to feel part of the community of professionals who are supporting each other and doing work to be proud of.

11.3.3 The presenter as a persona

This *GIS* Review was prepared at mid-point in PG's 3-year span. It reveals the presenter as hero, as he was in the first *Fish* text. However, now it is not only because of the work he has accomplished. The emergence of the hero-presenter relies to a large extent on the range of verbs which PG deploys in describing the presenter as he moved around the room of the meeting on the night. Now he is not only reporting what he did months ago, he is directing his rhetorical effort at his audience, and that brings the audience into the Review. The reader does not have to wait until question time as they did for the *quem quaeretis* trope in *Fish*. They have the hero-presenter constantly pottering about in the meeting room, actively engaging his audience in activities. In this respect, the *GIS* Quentin contrasts with *Fish*'s Dieter who only did four things [Dieter began, recalled, discovered and described].

To suggest the extent of the active engagement evinced from the audience, Table 7 matches Quentin's verbs with a conjectured set of appropriate active audience responses.

11.3.4 Table 7

hero-presenter's task list	conjectured audience involvement
Q became involved with GIS	audience think about their own
	careers
Q began his address	audience listened
Q outlined the numerous applications	audience followed the outline
	audience counted how many there
	were
he described Arc/Info	audience watched the description
Q projected some impressive samples	audience viewed the samples
	audience were impressed
he showed us several images	audience looked at the images
	audience looked at some more images
Q showed the compatibility	audience were enabled to apply it to
	their own computers
Q acknowledged the number of GIS	audience counted the projects
projects	2 5
Q observed environmental data has been	audience felt their hip pockets
provided free	
Q reports future developments	audience looked to the future

Table 7 Quentin's verb functions GIS Review

That was not all. In order to vary the approach, PG provided a range of passive sentences, and sentences with dummy subjects such as 'it' and 'there', in order to break up this catalogue of activity. This technique has the effect of emphasising the active nature of the hero-presenter. The reader processes a sentence, such as 'similarly apparent was the potential for GIS technology in environmental management', which is written in the scientific register. Its successor, 'much of WA's vegetation has already been mapped' echoes the scientific register. But these are followed by a shift to the informal register where 'Quentin acknowledged'. The contrast serves to emphasise Quentin's active nature. In the 2001 *Shag Shoal* electricity Review on vegetation management, a disillusioned PG makes even more crafty use of verbs to express his disapproval [section 16.3.4].

The interpretive moment, which is the routine rhetorical feature in the penultimate paragraph, contains an uncertainty about when data is or is not 'environmental'

It is also interesting to consider how one determines when data, or information, is environmental? Information politics and economics aside, there's no doubt that GIS technology has a major role to play in future environmental decisions, and in the scientific drama of saving or destroying the world. [GIS 2000]

constituting a challenge to the reader to consider their own data in such terms, and whether or not the GIS functions can help them to activate the data and make it more useful. PG encourages a science-fiction flavour in this Review which accommodates the grand epic themes of 'the scientific drama of saving or destroying the world'. Additionally, the high drama risked here is an exploitation of the figure-ground situation. The basic dry nature of the material affords more opportunity for exaggeration, arguably because the dullness of the material will absorb any excess glitter. Thus PG turns what another writer might find a disadvantage into an advantage. Furthermore, PG is able to trade on his impeccable record so far, putting his dependence on the loyalty of his readership, knowing that they trust him not to go too far with the extravagance. He pushes them right to the limits of what they could stand here, just as he does with the deferred introduction of the *Strategic Indicators* Review. They accept it and appreciate it. It was around this time that they told him they wanted him all the time as a default service, that he should not wait to be invited, and that the job was a regular engagement.

Across several Reviews, PG, in the role of CofP/interpretive organisational knowledge manager, takes the opportunity to recycle concepts, such as TBL and Ramsar, which had been introduced in former texts. In a further teaching and learning function for this Review, PG unpacks material for the reader

manufacturers are tailoring software packages to accommodate spatial information, producing what might be considered discreet GIS in their own right. [GIS 2000]

where 'what might be considered' constitutes an analogy which reinforces learning and helps the reader to construct their own interpretive framework. The same applies to the previous sentence the amount of data has already grown, meaning that those seeking synthesised information from GIS packages now have much shorter waiting periods [GIS 2000]

with 'meaning that' signalling a point where information is spelled out, unpacked and extruded, so that the members are continually encouraged and rewarded while they are making their own assumptions. This has the effect of engaging the reader and getting them to make a commitment to the material. As Wenger [1998] observes

Communities of practice develop around things that matter to people. As a result, their practices reflect the members' own understanding of what is important. [Wenger 1998: web site accessed 10.2.2002]

and when the CofP participant commits to a knowledge unit or process, there is likely to be a transfer of commitment to companions as well, resulting in the positive side effect of increased cohesion in the group, along with increased learning.

PG facilitates such transfer by drawing the reader in with teasers such as

with colour-coding a core function, the modelling and analysis potential of such a system was very apparent [GIS 2000]

The reader is tempted into an imaginary vision of using the equipment for their own material. At this point they are only 200 words away from the active URL at the end of the page, and the intervening paragraphs contain examples from other peoples' desks of what can be done.

11.4 Galapagos

The *Galapagos* Review [February 2001] represents the critic cadre in The Guild. It sits at the very outer edge of the spectrum, at the point where a minimal injection of advocacy is permitted. It is not easy to find presentations from the critic cadre of the Halfspectrum membership, mainly because the goals of the organisation require members to interact in a way which encourages all cadres to participate. Advocates who do present have a firm position in some other respect and are obliged thereby to adopt their strictest professional neutral demeanour. The *Galapagos* Review demonstrates these characteristics, the main one of which is its scientific credibility.

It can thus be expected to show a high level of formal scientific lexis and be well received as a monologic text.

In chapter 6, the Gurevitch [2000] definition adopted for monologia was that it characterises those language interactions where there is one dominant voice or code or variety and that this can be realised as a single accepted code or a hegemonic situation. The *Galapagos* text utilises the scientific register which, it might be argued, is worthy of all those labels.

11.4.1 Galapagos

The *Galapagos* presenter is a scientist whose credentials of objectivity are to be upheld. Some of the points refer to animal welfare and international responsibilities, but as would be expected of a thoroughly professional scientist, such representation is characterised by data, details and a close adherence to facts. These facts are permitted to speak for themselves. They provide warnings about population, and about ecotourism threats to fish stocks and species diversity which are exacerbated by a political will turned in the opposite unsustainable direction.

The critic classification comes from the choice of topic, which deals with matters outside the reach of the individual Australian natural resources manager. Because it is distanced, it offers an opportunity to touch on some of the matters which are never spelt out among members, but are taken as givens of the working context. They are factors in all decision-making situations, especially that relating to local action involving global climate change, management of marine resources, exploration and drilling, management of local biodiversity as well as ecotourism.

The choice of topic also permits the same unusual relaxation of the group's professional detachment that is permitted with the *Gammon* Review. Members can relish the luxury of enjoying an array of beautiful creatures and locations which one does not personally have to make tough decisions about. For the group goals, this is a healthy and permissible way of reminding one other of the standards and inspirations which led them into the job in the first place, and of taking the mind away from mediocre achievements in the face of overwhelming odds. The mind is taken so far away that the member can luxuriate in beauty and scientific details, and as with the *Gammon* Review, PG seasons the text with spiritually evocative words

such as 'Mecca' and 'Santa Cruz', which, although they are in foreign languages, import for us echoes from religious literature and tradition. He said this was deliberate in his mentoring conversation.

To ensure the peak aesthetic experience, PG takes a tough stand on species. The temptation with these displays of beauty is to cram in too many star acts. PG knows that less is more, and he starves the reader in the first 200 words, teasing with references to Darwin's historical voyages and not mentioning any creatures until he gets to the tortoise. Then there is another long wait until he mentions 'albino crabs and mussels' from the depths of the ocean. There is an average of only one species mentioned in each paragraph, but the reader's professional register brings the other creatures into play because of general knowledge, coinciding community discussions of Darwin, and widely exposed illustrations in concurrent television specials. At the time of writing there was a published book and film under production by the name of Mr Darwin's Shooter, which ensured that there was a high level of exposure to these ideas in the press. PG made use of these as an ancillary resource to build on a base for the CofP/interpreters' learning and pushed them further. Thus the Review discusses the seismic profile of the islands and the effects of ocean currents. Explaining the basis of Darwin's voyage would have been unnecessary, and a waste of time.

PG leaves all negative aspects until the end, providing the reader with a lovely first half, unspoiled by gloomy issues. In a phone conversation, PG and his mentor discussed whether it was necessary to include the gloomy points. It was decided that to do so would be the best reflection of the speaker's purpose, that the professional learning would be related to the issues, and that, ethically, there was a responsibility to include them.

For the first half, however, PG makes the most of the beauty of the creatures, using all his usual techniques to enliven them. He includes little jokes, such as when he chooses to refer to one of his sparse creatures as the 'blue-footed and red-footed boobies'. Here he knows it will cause a harmless chuckle in the audience, without his needing to draw attention to it.

He is busy in the first couple of paragraphs assembling his cast, which is going to include more than just JP and his wife. Darwin is there with the biologists and so is Christopher Columbus. The tall sailing ships are there, as well as the famous books. He has managed to push the timeline back to Darwin in the first instance, but then he even travels further back in time to 1492. It is a very romantic picture.

This ploy was of course dependent on JP's having used it in the first place, and PG spends some effort in telling us how good JP's presentation was. This is a most important part of the Review, because of the contribution it makes to the Guild's view of itself. If one [two in fact] of our members are as good as this, we all must be capable of such a production. Here is the original from PG's presentation.

JP... travelled to South America in November – December last year, accompanied by his sister (and current Guild-WA Secretary) GC. Most of their time was spent in Ecuador including an eight-day stay at the Charles Darwin Research Centre, nearly a thousand kilometres off the west coast on the famous Galapagos Islands. A biologist, ecologist and educator of many years, J... had a keen interest in the unique nature of the islands, and he delivered to Guild members a presentation with a healthy mix of scientific substance and aesthetic appeal. As he said in his opening, it's not every day you get invited to show your travel pictures, and despite acknowledging the futility of competing with some of the heights of documentary excellence Galapagos has spawned, his humble PowerPoint effort was, nevertheless, a stylish production. [Galapagos 2001]

The 'a healthy mix of scientific substance and aesthetic appeal' is high praise indeed from the professional communicator, PG, and the use of the professional communication acclaim inherent in 'stylish', ensures JP a place of honour in terms of communication competence. Note how PG compares the presenter's work favourably with that of the documentaries. This is the Review as Fractal, the Review doing cohesive jobs for the Community of Practice/interpretation. By showing the competence of one of the group, it heartens everyone and spurs them to higher efforts. Note also the local pragmatics of the presenter's denigration of his own efforts in characterising them as 'travel pictures'. PG's care to report the context of the research centre location warns us that they are not just an average set of snaps. The self-minimisation is an expected Australian practice in the live context, but PG chooses to report it, because it serves to emphasise the excellence. As PG loots the presentation for the jokes and carefully attributes them, there is a favourable impression of JP in terms of local presentation criteria, as there is with

the *Tax* presenter. In a move which testifies to his professionalism, PG carefully acknowledges the joke that the Archiepelago de Colon does not refer to the intestine, but to Columbus. PG always makes sure to attribute his jokes and quotes, because, as he explained in a mentoring conversation, his goal is to make the speaker look good, for his own hand to be invisible, for the people who were there to be the active ones, and not for him to be seen to be doing all the work. PG's integrity pays off handsomely. His speakers come alive on the stage, so that every month he manages to make a different personality dance for us. PG's world is peopled with a range of characters, rather than limiting itself to whatever he manages to put across about himself. These points enable some judgement of PG's contribution to the organisation, in constructing community, generating open interaction, and making the knowledge go round.

12 GAMMON

This chapter revisits the nature of environmental communication. The literature review noted the danger of straying into the spiritual and aesthetic domain in Natrattalk because of the need to maintain scrupulous scientific credibility. A good policy seemed to be that the time to include non-rational material is as support for the rational. The *Gammon* Review [January 2000] opens these matters again.

12.1.1 Significance of the Gammon text

The Review of the Gammon presentation [Appendix C5] is significant for two reasons. First the *Gammon* Review is an excellent representative of the codehandling process, a convincing demonstration showing the Review as Fractal, or Weickian equivoque.

The second significance of the *Gammon* Review is that the penultimate version was the object of the Genre Challenge. There was a request to reduce the length of the Review from 700 to 500 words. This request was overturned by the President. The conflict about length had occurred previously, and there is nothing in particular in the *Gammon* Review to provoke the request for reduction, unless the unusual nature of the meeting led the Secretary to become uneasy. Let us explore the circumstances of that strange night.

12.1.2 The unusual session

Justification for investment of interest in Gammon night can be found in the orientation of environmental communication to the arena of organisational communication. On Gammon night, the emotions of Guild members became heightened, highlighted and thereby unusually available for scrutiny, in a situation which might excite the interest of Forgas and George [2001: 3], who observe the positive influence of affect on interpersonal judgments and communication, organisational spontaneity, motivation, creativity and performance in organisations. The night of the Gammon Ranges was an extraordinary session where various participants took on unaccustomed roles. The physical circumstances of the meeting seemed to bring release from normal roles, and enabled some of the underlying diversity and flexibility among the members to be unusually displayed.

Members had last convened for an outrageous December party in the lead up to the Millennial Christmas-New Year celebrations. There were reports of the invited Indigenous dancers, who had shaken the building with loud calls and rhythmic ceremonial stamping. This February meeting was the first for the new working year, and very few attended. Many people were still on holidays, and others sensibly avoided going out in what had become very unpleasant hot weather conditions, especially given that the meeting space is not air-conditioned. It was one of the hottest evenings of the summer of 2000, at the climax of a fortnight-long heatwave, with temperatures well above 40 degrees Celsius in the daytime, and little relief at night. However, the few who did gather were privileged to a special treat. Since an Arts Festival was about to open, the Writers' Centre were committed to mounting their festive presentation of the forthcoming celebrities, and they were expecting loyal crowds with compelling motives for attendance in spite of the heat. They negotiated with The Guild to swap venues. They were prepared to brave the heat and trade their small space for The Guild's large space. The numbers for the respective meetings vindicated their decision. The spin-off for the select group of Guild members was an unusually intimate, air-conditioned space, where the speaker relaxed and was able to communicate easily in a quiet voice. All the appropriate facilities were available to show the slides in comfort, in refreshing and luxurious relief from the relentless heat. The group could indulge in fine wines left over from the Christmas party, including champagne and vintage reds, along with food such as pizza and olives. This was the starting point. The meeting ended with the carnival of the millennium Arts Festival crowd, rubbing shoulders with famous writers. They were all a part of the compelling atmosphere of excitement and artistic fervour, where there was the opportunity to take ringside seats at one of the biggest shows in town, enjoying it all in an exclusive air-conditioned box, and feeling smug about having done it all in the name of professional development. As a change from the usual practice, members were asked not to clean up after the refreshments, in case the noise upset the Arts Festival guests.

12.2 PG handles the roles

12.2.1 Scientific-monitoring versus the aesthetic

The presentation itself was advertised in the Newsletter as dealing with the topic of measurement and monitoring. Members interested in mathematic modelling, computer modelling, measurement and valuation were in attendance, as were members interested in field techniques generally. A subgroup of members, one of whom was the President and Chair for the evening, had research interests in the assessment and valuation of scenery and visual beauty. The mode of presentation was slides.

Under the unusual conditions, the first sacrifice was the topic. The notion of measurement was almost entirely ignored. Members relaxed into the beauty of the scenery in the slides, the sense of common practical experience in professional exposure to places of beauty, and responsibilities related to that very beauty.

The Chairman's area of research is the valuation of natural landscapes. As the members' conversation converged into this area of his expertise, his focus changed from that of Chair to that of professional theorist. This was underlined when one member asked 'what's that instrument?' [in accordance with the advertised topic of the evening] and the Chair interrupted him with 'no, we haven't got time for that, we have to get through the rest of these slides or we won't finish on time', shifting the evening back to the substitute aesthetic focus.

The common professional experience can be expected to lead to a conviction of a common professional set of criteria for aesthetic valuation of natural landscapes. This was not expounded, but is available in the banter and the asides and interactions, especially where PG does not understand the unusually informal and fast-paced interchanges, and asks questions which require participants to spell out what was an unspoken understanding.

12.2.2 Community selves

One important respect in which Gammon night is significant is that of the aspect of 'local lore, shared stories, inside jokes, knowing laughter' [Holmes and Meyerhoff 1999: 176]. These are indicative of the behaviour of a Cof P/interpretive which is

sharing knowledge and undertaking organisational learning [section 9.2.1]. As other community theoretical entry points for observation of Gammon night, we have the notion of case ethnicity, as discussed in the literature review, and a balancing notion of diversity. Edwards [1992] provides the concepts of social identity and the multiplicity of selves. Social identity is a multiple construct, with one's relation to the social group consisting of a multiplicity of 'selves' and facets. Each member has a variety of representations and there will be a linguistic manifestation for each [Edwards 1992: 129]. The multiplicity of selves is one way of explaining what it is that PG is managing when he is code-handling. PG must 'read' this multiplicity to replicate the pattern. Thus code-handling might be reading the continuum of code variation, unmixing the mixed discourse. PG has to chart, to track and to make decisions about how to replicate the multiplicity of selves and roles.

Gammon night's unusual circumstances offered a unique opportunity of showing a different set of selves from the set that PG had become accustomed to working with. He is able to add the new configurations to his parallel or reciprocal set of accustomed configurations and to bring his three dimensional sets of relationships into sharper focus. On Gammon night, PG can 'read' each of the released roles to weave the tapestry and replicate the pattern from a different set of angles. The resultant pattern is a Fractal of the organisation, a replica of how the different elements of the organisation relate to one another, a picture of organisational integrity.

PG himself was in an unaccustomed situation. Members quickly moved from presenter-audience configuration to a sharing configuration, where the presenter was integrated as one of the group of professionals. The exchanges swiftly changed from the formal to the shortcuts of professional shop [CofP section 9.2.1]. At one stage there was a catalogue of crimes committed by intrusive campers' environmentally degrading practices, which included wood-burning. As a camper who enjoys campfires, PG asked about the wood burning, in a revelation that he is an outsider. His outsider status serves to cohere what the group have in common. It is also educational, an opportunity for CofP/interpretive organisational learning and knowledge management. In terms of the functions of the group, there might be the occasional member who does not know why wood-burning is harmful to the

environment, and having the speaker explain kindly to the 'outsider' about the destruction of habitat is a nice way for another member to learn without having to lose face by asking. This is a suspension dialogic process in that members are continually learning from each other in ways which they cannot admit, in the dialogic corrective to the monologic nature of the scientific register, where there is a low tolerance to the admission of ignorance. Members are deemed to be expert, and yet often feel their inadequacy in details of fields they cross which are outside their own specialisation. There is an extensive literature on this aspect of the professional and scientific discourse, but with the focus here on how to interpret this for a Professional Environmental Communicator, the most important factor in that case is sensitivity to the issue, understanding of the pressures and constraints of the life in applied, interdisciplinary science.

12.2.3 Framing The Guild member – unity in physical endurance

Part of the organisational function which PG's texts carry out is the framing of identity. The discussion on membership [chapter 2] sees The Guild as coming together for the CofP and also as a contact community. This is related to the unity dialogic process, in that a new whole is formed from the disparate parts, where items of common experience across the grouped diverse disciplines are highlighted. It happens in terms of the common discomforts which people endure, the things they can share as challenges which they have overcome. In the case of The Guild, the discomfort is part of the job, and the experience and endurance of physical hardship results in a high level of bushcraft and survival knowledge and skills, along with a philosophical approach which complements those virtues.

One eighth of the eventual Review is given to Wild Ass creek; such a high proportion of text is more than the indulgence of a risqué snippet. It is part of the framing of identity of The Guild member, and stands as a representation of three important elements in the live presentation: some shooters, a beautiful woman scientist and some badly behaved young people.

Earlier in the Review there was a mention of professional shooters whose methods are not as effective as the more directly practical methods of the farmer, managing the goats as a resource. This management observation was delivered in the Review

as an item of data. It was filtered from the much higher emotion of the evening itself, where the robust natural resources manager was contrasted with soft-life shooters. These men, while claiming a macho identity, found the 'heat too much for them' and sat by the cooling creek all day waiting for the goats to come to them, shooting at targets and leaving their bottles and cans as litter. The natural resources scientists, meanwhile, were out in the heat collecting data and living simply with the caches of water in emptied wine bladders stored in rocks. Members enjoyed joking at the expense of the shooters, but all that banter was excised from the Review.

Likewise the report of the attractive woman, the scientist from Holland, did not appear in the Review, but it had a profound effect on the mood of the evening. The Dutch woman is reported as having had 'a real experience' as opposed to a fake tourist experience. She is helping to frame the Guild's identity in a package which includes ideas that health is related to beauty. The values of the outdoors, the natural life, the rugged endurance produce a beauty which is in all Guild members, but can be appreciated in conventional terms as the beauty of a goddess character in the slide presentation. PG chose not to include this in any of the written drafts, judging that the written word could not hope to emulate the effect of the visual beauty in the slide presentation. He explained in the mentoring discussion his intentional removal of the beautiful woman because of her potential to disrupt the balance in a number of ways.

All detail about the badly behaved young people [eg referring to taking them on the expedition as 'pit bull trapping'] is omitted. In the presentation it was part of the story cohesion, and complemented the role of the beautiful woman, in that her goddess quality is redemptive and inspiring. She symbolises the potential which the troubled young people might realise by means of the expeditionary discipline. PG does not include the young people, but they all end up as the framing, as part of the ability to cope with the 'dangerous' and the endurance identity. It assures the members of their own identity, at the same time as it sets an altruistic target, an evangelistic motive which goes with the religious awe, which is discussed in more detail next.

12.3 Framing The Guild member – suspension in philosophical admissions

12.3.1 Rational /religious

Along with the experience of beauty came an acknowledgement of deeper, more spiritual feelings towards the natural values of the land, to life itself, to nature as an entity. The religious nature of the dedication required, and the religious framing of the cultural context, can be seen in a variety of positions in the Review, even in the word 'ritual', which creeps into the final draft to describe how campers must burn their toilet paper.

The presenter early in the presentation speaks in an unashamedly appreciative manner about the aesthetic values of the location. His language is reverential and shares echoes of formal and traditional religious lexis in 'we can only contemplate the power'.

12.3.2 PG's intrusive question/religious atmosphere built by the speaker

The Guild members felt the awe and inspiration of the moment. They enjoyed it as an indulgent thrill of something which professional requirements demand that environmental managers do not permit themselves to feel usually. Then PG disturbed the reverential mood with an interruption about 'Wild Ass Creek'. It was intrusive and members experienced it as such, to the point that it became an issue in a mentoring conversation. It was a moment when the professional communicator's agenda took over from his participation. As members felt the intrusion, they also felt a sense of common experience, which excluded the intruder. PG again made himself an outsider in that moment and demonstrated the cohesion in the group.

ingroup/outgroup relationships of solidarity/differentiation are a product of in part the discourse that constructs and names [thereby giving meaning to the relational matrix in which a social identity is located [Brewer 1991 quoted in McKerrow 1997: 51].

The confirmation of insider identity might be diagnosed as Gurevich's unity if it were not for the uncomfortable and clandestine nature of the emotions which were experienced that night. Usually the luxury of enjoying the landscape beauty, and

letting in the emotional and spiritual inspiration, is denied to The Guild member in professional contexts. While they are experienced at using the affective factor as an argument, or a device in their professional work, they cannot permit themselves to feel the strong attachment, because the attitude must be ruthlessly scientific in order to be credible, the language exploitative in order to reach the target audience. However, the unusual circumstances of the night and the skill of the presenter were such as to break those barriers and there was a sense of communion. PG's question seemed intrusive, and the intrusion drew attention to the existence of the communal orientation it had disrupted, bringing the group even closer together for a moment, with glances and murmurs. The incident highlights PG's lack of conscious, and even unconscious, knowledge about the Guild's cultural values. This emphasises how remarkable is his usual ability to read and reproduce the patterns. The fact that this ability did not extend to the atypical Gammon night, makes his usual sensitivity even more noteworthy. Although this sensitivity was absent in the Wild Ass Creek interjection, PG was sensitive to the amount of enjoyment which members derived, and he reported that enjoyment in critical terms which suit his own status as a professional communicator. First he recorded the entire spectrum of Guild members' reactions as 'wow – look at that'. Everything from the seductive physical circumstances of the meeting, to the slides of some badly behaved young people, the shooters, the beautiful woman, the exquisite landscape, the endurance of extreme temperatures, the cache of water in empty wine bladders, is excised from even the earliest drafts.

This seems like a misrepresentation at first. Surely a far more exalted expression than 'wow – look at that' would be more appropriate. However, PG is the essential professional writer. He knows his audience. The Guild member reading the Review online did not experience the profundity of the evening. It is out of their range. They cannot experience it now, and his Review in the otherwise workaday newsletter is not a viable place to try for a tacky, ineffectual, purple prose imitation of what went on. He produces a suitably debunked account of the profound emotion. Most importantly however, he gives the slides a critically positive rating, a high honour for PG, who was an artist before he became a writer. While his hands are tied in that he cannot hope to evoke the religious awe of the evening, the exhilaration, the excitement of the gathering millennial writers outside the glass windows, the taste

of the cold champagne on the hot night, PG can critically assess the slides as an objective process, in keeping with the contextual objective tone. He gambles that readers have slides of their own which they secretly reverence in like manner, and that as they picture their best slide, they remember the beauty of where they were when they took it. He is right. The only way to go with this illicit religious awe is with his dismissive 'wow – look at that'. Thus he accurately captures the suspension, the irreconcilability, the struggle, the reason for choosing the profession in the first place – the emotion that cannot be named.

12.3.3 Roles: vegetarians/meat eaters

The problem of vegetarianism arose earlier in the *Fish* Review. On Gammon night it came up again in interactions, an indication that there are subsurface contact issues of commitment, personal standards, emotion and spirituality. These cannot usually be explored, because of the risk of appearing unprofessional or 'Deep Green', a position outside the Halfspectrum. After the pizza arrived, one manager mentioned his vegetarian status, then in the second half of the slides, another member alluded to meat consumption with a self-identification that 'my father was a beef man'. This sort of dynamic does not escape PG's attention and he pursued it with a question about environmental difficulties with beef, presuming that the vegetarian approach was related to issues of Bovine encephalitis, or of rainforest biodiversity. The Presenter took the opportunity to introduce him to the idea of cloven-hooved animals and soil erosion.

The quality of PG's grasp of the grazing and pastoral issues is not the point. The important thing was that he detected the subtle plays of positions, concepts, identities and emotions. The subsurface energy in the group, the 'suspension', the nexus of values, the diversity and richness is seen in these fragments and threads which PG manages to weave into acceptable patterns for the group. The beef did not make it into the final text. The pastoralists were presented in a favourable light, with their efficient mustering of the feral goats, but no mention was made of erosion issues or the threats to native vegetation of grazing and pastoralism. This is testimony to PG's professionalism and code-handling sensitivity, because there was a great deal of discussion of this and it is all on the tape. PG is sensitive to The Guild's agenda of strategic tact and wisely avoids characterising anyone negatively.

Even the shooters are given respect, which they certainly did not receive in the live interaction.

In terms of fauna, the National Park has its share of problems with introduced species, including cats, foxes and goats. Some culling of goats is carried out by licenced shooters, but Marty believes the mustering by local property owners is a far more effective method of control. The live goats, rounded up with helicopters, are sold to market. [Gammon 2000]

12.4 Management issues and Australian heritage

To appreciate fully the impact of the presentation to the group and the interactions, it is important to draw attention to heritage values and references. In the final draft this has all been reduced to the names Arkaroola, Leigh Creek and Gammon Ranges. But in the spoken presentation there were references to historical figures and identities from the history of the public service, the museum and other heritage institutions. There are names in the Review redolent of the sort of philanthropic, educated, explorative and curatorial approach which many of the settlers adopted. Alongside the exploitative history of clearing and degradation of native vegetation stands the intellectual contribution, ever since settlement, of privileged middle class, thoughtful and erudite people in the early settlement years. The pioneering vision attracted colonists who were enlightened, forward thinking and interested in radical nineteenth century intellectual developments and scientific taxonomies. One of the identity functions which took place on Gammon night happened when the speaker and the members reminisced about intellectual identities and the place they held in the state. This procedure is a recognised step in literary and cultural terms and is comparable with the genealogical catalogues in heroic and epic poetry.

Situated between Leigh Creek and Arkaroola, the Gammon Ranges is a remote and rugged terrain of steep valleys and gorges descending from a central plateau. The area is known for its extreme conditions – bitterly cold during winter nights, dangerously hot during summer days (potentially 40-45 degrees in the shade, up to 65 degrees on the Gammon Plateau!). The Ranges are also a focal point of water catchment for the surrounding country, experiencing heavy falls of rain associated with the monsoonal patterns of northern Australia. [Gammon 2000]

PG does not mention any of the heritage figures individually, but he substitutes the place names for the live intoning of the genealogy. In the phone conversation about the evening, he brought up the catalogue of historical figures, and confessed that he

was at a loss to know whether they were current researchers whom he should cite, or members not present, or people who were long dead. What is interesting about this is not his acquaintance or lack of it, but the fact that he noticed the importance of this play of references to historical, heritage and prestigious figures. In ancient poetic interactions there would be a place for the listing of great heroes, mythical and real, all evocative of the values and traditions about to be upheld in the retelling of the tales. This whole tradition is parcelled into the names Leigh Creek and Arkaroola, and it is so slight as to pass notice, but the care with which PG approached that task is the important thing. The repetition of the names captures the heritage importance of the area and the science associated with such endeavour, linking it to that proud scientific tradition and to the experiences of those who have ventured to this terrain of extreme temperatures and violent water forces. The Secretary, as a recent immigrant, was not able to enjoy the retelling of the famous names, which perhaps explains her initiation of the Genre Challenge [chapter 13].

12.5 Dialogic categories

It is fruitful to apply the Gurevitch [2000] dialogic categories to the *Gammon* Review.

12.5.1 Three silences

In the Silence category there are three silences – religious, enjoyment and aboriginal. There is tension between the religious function and the function of amusement over Wild Ass Creek. The information function atypically competes unsuccessfully against the enjoyment and awe function. There is embarrassment about the issue of aboriginal people, their success in coping with the extreme conditions, and the issue of their continuing use of the region and the pressures for development. They do not appear in the final version, and we can therefore treat this as a dialogical silence, because there was considerable discussion on this topic in the session.

12.5.2 Monologia compensation

PG's choice of register in *Gammon* seems to have been motivated by the need to counter the relaxation in the members' behaviour, and can be read as compensatory monologic lexis. For example he included the tolerance of the equipment, which was neither in the draft, nor in the transcript, but which he researched in his discussions with the presenter beforehand. Aspects of the dominant science variety are evident in the absence of detail about what the monitoring equipment is and does. Members are supposed to know the principles monitoring a range of environmental phenomena, to recognise the pictures of the equipment and to be able to utilise that information.

PG originally omitted reference to the temperature readings figures because, as he explained in a mentoring discussion, he thought they did not sound scientific enough. In the transcript the presenter had given figures as 'over 50', and 'way below zero'. PG replaced the number of degrees cited with the descriptors 'dangerously' and 'bitterly'.

12.5.3 Unity and identity

The unity dialogic category draws out factors which the group emphasises as common, aspects which have led to satisfaction with the group in its current state. Another way of thinking of unity is as the culture of The Guild, which might define members in contrast to non-members. This seems to be the case on *Gammon* night, when some of PG's comments and actions telegraphed his outsider status, for example his request for an explanation of 'photopoints'. Of more interest though is the way that his professional writer status required him to translate into dynamic equivalence the communication events of that evening.

There has been some discussion of cultural factors relating to feelings of appreciation of natural beauty. Environmental managers are not able to indulge their deeper feelings of appreciation for landscape and other kinds of natural beauty, because they have been socialised not to permit those feelings to intrude on their management decisions. Despite this, many environmental managers would describe their original motivation for undertaking the profession, as a sensitivity to landscape

values and deep conviction about the worth of natural systems, or at least a preference for the outdoor life. This sets the professional up for conflicting emotions which have to be controlled, because most of the paid work involves dealing with circumstances where the conditions for natural systems are compromised. One way is to judge harshly the people one is dealing with, if they demonstrate lack of respect for natural systems. This way characterises the feelings which emerged on Gammon night.

A second way is to reject the sensitivity, and adopt the tough cultural appurtenances of those who do not treat the environment with respect. A third way is to regard the whole thing as a set of systems which include human systems, and treat them all with the same attitude.

The third way, the systems way, represents the professional approach, but there are glimpses of the first two approaches in meetings such as the Gammon gathering. There is harsh judgement for those who litter with cans and bottles, who burn wood, who churn up the soil with four wheel drive vehicles. The systems approach is evident in the scientific agenda, the measuring and monitoring, the bushcraft, the water cache, the respect for the people who run the homestead, who live in the harsh climatic conditions all the year round, themselves forming part of the natural systems. It is partly in relation to the systems approach that the spiritual awe is functional, because it contributes to the sense of involvement and facilitates the attitudes required to go with the natural phenomena rather than to fight them.

The second way of taking on the appurtenances of the dominant paradigm is matching toughness with toughness. While many environmentally respectful people adopt a gentle, non-violent, peaceful and collaborative demeanour, many professional managers have successfully gone into the negotiation space with the demeanour of those they are negotiating with. This is seen in the comments about the shooters, the tough approach to the disadvantaged youth, and the politically incorrect tinge in the references to the beautiful female scientist and the car thieves. It is the tough approach that PG misjudges in *Shag Shoal* [section 16.3].

12.5.4 Suspension and substitution

The *Gammon* Review illustrates something of what is meant by the dialogic process of suspension. Suspension is present in the tension between the self-image of the natural resources manager and the macho of the shooter, between the scientific-monitoring and the aesthetic experience. These emerge in the transfer from spoken to written text.

The Arts Festival event outside the glass, air-conditioned space, added to the poignancy and beauty. The members were experiencing the extremes of visual pleasure and emotion in recognition, in an artistic experience. Measurement was a poor substitute for the presenter's quasi-religious directive to 'just contemplate the majesty and awe'. The slides showed how markings on rocks were the scratchings of huge boulders carried in the river. PG reports this, but does not try to replicate this in the text, wisely deciding that the visual cannot translate to the written page.

This set of translation strategies might be interpreted in terms suggested by Linder [2001: 275], who reports that a common strategy among translators is to render Source lexis in the Target text. Varietal terms appear in places where the Source contains no such lexis, in order to compensate for those terms which cannot be rendered at exactly the same linear passage. On Gammon night, PG arguably employed a similar process at the level of pragmatic function. He code-handled the whole event and decided to substitute the Wild Ass creek for the intimacies which he could not relate. Another tool possibly in this category might be the high level of assonance which PG said characterised the night, and which informed his phonological choices.

13 THE GENRE CHALLENGE

The Genre Challenge [February 2000] is a contest of positions. It arose when The Guild Secretary asked PG to reduce his 700-word *Gammon* Review [February 2000] to 500 words. After some negotiation, the President ruled that PG had creative control and could make the Reviews any length he liked. The Genre Challenge offers the opportunity to focus on some details of the nature of environmental communication in its Natrat-talk manifestation, in thinking about mismatches of assumptions about register, discourse variety and genre.

13.1 Conceptions of genre

13.1.1 Rationale for analysis

The Genre Challenge highlights the differences between the hegemonic scientistic model of professional environmental communication, and PG's participation in the CofP/interpretive with his polyphonous approach to the construction of text. It is an example of a monologic position superseded by a dialogic position.

The basis of the disagreement concerns assumptions about the nature of scientific register, discourse and genres. The assumptions arise in the widely accepted default realisation of environmental communication as scientific communication. In the quest to elaborate the nature of professional environmental communication, the Genre Challenge provides an example of where a theoretical base in linguistics, sociolinguistics and text study can provide a more satisfactory result than that based in transmission communication theories.

An indication that the Reviews were felt to be making a contribution in the organisation can be seen in the Genre Challenge outcome, with its further indication of the approval which PG's Reviews earned in the Executive. It provides additional support for the motivation to question what it is that PG is doing right.

13.1.2 Discourse variety, register, genre and cognitive scripts

To clarify positions on register, variety and genre, each can be viewed in terms of cognitive scripts and context. Register is a kind of language used in given situations. Discourse type refers to the variety of language used by a particular group, its typical grammatical forms and its characteristic lexis. Genre refers to text type [section 7.2]. Where certain documents have been found especially useful for their purposes, a community will hone and regularly reuse the text type. An example of such a genre is the scientific abstract. Genres are encoded in the appropriate discourse variety and are related to the target situation in terms of rhetorical structure.

13.1.3 Register and genre as social contract

Genre can be treated as an aspect of discourse variety. Swales [1990] affords examples of this, considering genre along with and in terms of other varieties. So does Morgan [1999].

It is not only the meaning of lexical items which represents cultural schemata. There are other relevant factors which relate to the way discourse is framed: the codes of discourse delivery, the appropriacy of registers, the valuing of different kinds of discourse and language learning. [Morgan quoted in Harris 1999: 494]

Halliday's [1978: 32] definition of register such that 'the way we speak or write varies according to the type of situation' gives rise to guidelines such as that of Thomas:

we have little real choice about whether or not to use formal language in formal situations [unless we are prepared to risk sanctions such as social censure] [Thomas 1985: 154]

That is the position adopted by the Secretary, who tries to impose social censure, but who does not take account of the fact that there is more than one acceptable register in the discourse community. The President's support of PG's genre-hybrid might be sourced to his judgement that different kinds of text permit different kinds of social action. Such a muscular view of genre is explained by Jameson:

genres are institutions or social contracts ... whose function is to specify the proper use of a particular cultural artifact ...genre is the exclusion of undesirable responses. [Jameson 1981: 106-7 quoted in McKee 1997]

The Secretary is familiar with the exclusory function of the scientific abstract, but is unaware that the President's position is more strategic, less exclusory and more inclusive.

13.1.4 Genre as information about social context

Building on the picture of genre established in sections 7.2 and 13.1.3, and cognition in section 5.5, genre can be described in terms of linguistic expectations. Cognitive linguistics has linked genre to cognitive frames and emphasised the cognitive, cultural and operational power of genre. Paltridge [1997] outlines Fillmore's contribution to cognitive modelling:

frame semantics seeks to establish a model of language which incorporates a description of cognitive and interactional frames according to which language users interpret their environment, formulate their own messages, understand the messages of others and accumulate or create an internal model of their world. [Paltridge 1997: 106]

The key point here is that genre is a real unit in this kind of cognitive modelling, including, as it does, information about the social context of the utterance. Paltridge's explanation brings alive the close interlinking of genre with all levels of meaning-making, including its direct relation to syntactic meaning.

Cooccurring with this interactional frame is also a cognitive frame which incorporates a certain conceptual scenario. This scenario may include certain roles, cooccurring patternings of textual organisation and shared understandings or protocols of how the text might proceed. [Paltridge 1997: 106]

Interlocutors work to a set of expectations about genre just as they do to expectations about phonology, syntax and lexis. The more these expectations are confirmed, the easier comprehension becomes in the language event. Where expectations are challenged, meaning-making is made more difficult, often with rewards in terms of interest or fun, as in the practice of professional and creative writing.

13.2 Genre as utility

13.2.1 Summary, abstract and review genres

Contrasting the three options of review, summary and abstract provides a good representation of how PG's Review genre-hybrid differs from others in its genre stable. The abstract has as its goal the elimination of everything except the logic path and the crucial method and data findings. The abstract is directed at insider readers, and increasingly at machine readers. The summary can provide a little more detail, but it is more likely to afford a gentler path into the complexity than the abstract. A review implies some kind of valuation, a characteristic to be encouraged in Gurevitch dialogia [2000].

13.2.2 Genre on the basis of use

PG's judgement of the genre and hence of the social function requirement can be seen in his immediate reinterpretation of the summary as a review. He mentioned in a mentoring conversation that after a few months' familiarisation with the task, he had felt that the time he spent was worth recognition in the more descriptive label of 'review'. This is a confident claim to professionalism in professional writing terms. PG regarded with disdain the practice of his predecessors in either summarising without questioning the speakers' overhead slides, or providing a shortened verbatim record.

PG's genre-hybrid of technical detail, personal and interactional reporting, evaluation and characterisation was not intended to be a scientific abstract. The President judged that The Guild could substitute neither an abstract nor a summary for the Review. The Secretary, in contrast, had interpreted the summary task in terms closer to those of the abstract, where every extraneous word should be excised. She had a mental limit of 500 words on a summary, derived from her scientific professional experience and worn as professional insignia on her part. PG had been working under the instruction to produce about 700 words, and had stuck within that limit. The Secretary took it upon herself to criticise his *Gammon* draft and to ask PG to reduce it to 500 words. This is the point where the Fractal nature of PG's genre-hybrid makes its most dramatic appearance. As usual, it had taken him hours to produce the 700-word piece, and it would take him the same amount of

time to produce a 500-word piece from the 700-word piece if they wanted the same kind of quality. Comparisons with the production of poetry are apt here. PG was proud of the effort and care he gave, of the time he took over the creative process. The idea that someone would arbitrarily cut 200 words out of his perfectly proportioned piece, he felt, was an insult. It was a clash of professional perspectives. PG consulted the mentor and the mentor, as committee member, consulted the President, who mediated and negotiated that PG should produce whatever length piece he felt was appropriate. This was another testimony to the President's confidence in PG's effectiveness, arguably indicating a developing contribution to the CofP/interpretive.

The Secretary had wanted him to cut the *Gammon* text and to keep all future texts to a maximum 500 words. The President's intervention meant a change in circumstances, for as the final draft of the *Gammon* text, he produced the first of his 1000 word genre-hybrid Reviews. He had actually added 300 words to his original draft.

Paltridge [1997: 106], in discussion of linguistic variation within particular genres, favours Biber's [1988] notion that genre categories are assigned on the basis of use rather than on the basis of form. This model leads to the claim that genres are defined and distinguished in the basis of systematic nonlinguistic criteria and that they are indeed valid in those terms. Hence PG's firm conviction in the validity of his genre-hybrid, and the President's powerful support of it, are functional standpoints, as opposed the formal standpoint of the Secretary. It was the functional decision, or the decision on use that won. This reflects the CofP characterisation of The Guild and categorises the Review genre-hybrid as a CofP/interpretive functional document, or Fractal.

13.3 Natrat-talk renegotiation

The Genre Challenge, with its opportunity to diagnose mismatches of assumptions about register, discourse variety and genre, exposes gaps in PG's understanding too.

PG's cognitive frame for ecological sustainability was anti-consumerist. His entry point to The Guild discourse thus assumed that because members were environmentally responsible, they would have an anti-capitalist ethos. His surprise

at the market rationalist position is evident in the *Wildlands* and *Tax* Reviews. There is also the tension between Deep Green values, set against the management vocabulary of the *Wildlands* Review [the 'wildlife resources'], and even the scientific botanical names in the *Shag Shoal* Review. PG had been socialised in critical scholarship to consider such lexis with suspicion and to react to it with deconstruction techniques which would problematise the implicit assumptions and values. In the entrepreneur texts, PG struggles with these conscious tensions.

The strategies discussed in relation to those political issues stand in contrast to the issues in the Genre Challenge, which are more trivial in terms of the material interpretation part of the CofP/interpretive, but which fall rather into the category of manipulating the discourse, or talking the talk. The Genre Challenge is a defining moment for INTERPECPEM. It is a Natrat-talk renegotiation point. At the entry point, as the scientific register is one way for the community to use language in the expression of their group values, there were formal structures of the scientific discourse variety taken for granted in this engagement. At the exit point, PG's writerly renegotiation of language registers and genre opened the way for fresh forms and a hybrid variety. In the middle, the President's prestige socialising position empowered him to push Natrat-talk in a new direction.

14 FASCINATING

The *Fascinating* Review [September 1999] holds interest in issues surrounding an unacceptable draft. Some of the discussion refers to material derived from experience of the live event and from the tape of the live interview in order to explain positions adopted in the drafting process. The draft at the centre of the controversy did not survive the editing process, the only remnants being quotes used here. The published version is in the Appendix C6. *Fascinating* is a dialogic suspension text in Gurevitch [2000] terms. It holds conflicting positions in suspension and is a developmental text in professional writing practice, in understanding The Guild, and in the evolution of the genre-hybrid.

Professionally compromising subversion of the speaker was averted at the mentoring stage.

The difference between writing on behalf of members, and the writing the members do, came into focus. The Review was an awkward zone in the interaction between environment professionals and communication professionals, with the three different tasks of reporting, reviewing and facilitating, in unresolved relation.

PG's judgement about the degree of Guild members' interest in writing, and their flexibility in response to genre adventurousness, was opposed to the mentor's warning that genre conservatism was advisable.

14.1 Subversion

The night of the *Fascinating* reports was a moment when PG, as a professional specialist environmental communicator, serving The Guild as his specific matrix, was confronted by an exogenous professional communicator, SZ, treading his territory, coming in to tell the group he is accustomed to serving how to write reports. She was about to cross him in two ways – as a professional communicator with a theoretical position different from his, and as an interventionist with a group he felt he knew. The conflict unravels under a set of considerations such as dialogic characterisation, practitioner versus facilitator and theoretical position, intervention and genre.

It starts with a role and function misassignment, turns on a muddle between INTERPECPEM and OUTERPECPEM, and develops into a mentoring disagreement about genre.

The role and function misassignment originated in a lack of understanding of the difference in the roles of facilitator, review writer, and report writer.

The muddle between INTERPECPEM and OUTERPECPEM was founded in inappropriate assumptions about the role of writing in the life of a professional environmental manager.

The mentoring matters were the appropriate concern that the speaker should not be undermined, but the overcautious warnings about the need for conservatism in genre. PG corrected for the subversion, but used his own judgement in innovating with the genre.

14.2 Misassignment: professional writers and their tasks

The topic of the evening was how to write reports. The speaker had previously done a successful session and a repeat was requested. The slot for this repeat session was gained at the expense of other potential technical sessions, where the audience might have heard talks on issues such as water salinity, greenhouse gas reduction or similar topics. The committee meeting arranging the year's topics rejected a technical presentation on pesticides, in favour of enjoying the same speaker's repeat session on writing reports.

PG's ideas and attitudes set him up for conflict as he drafted his *Fascinating* Review. He produced, at a mentoring session, a draft text for his Review of SZ. It was decided that the draft was unsatisfactory in that, instead of providing a support text for the verbal presentation, the draft Review overtly and aggressively subverted it. The mentoring discussion on the *Fascinating* text directly related to PG's honours thesis under preparation. Disagreement over the contentious draft provoked interesting interaction in the mentoring session, because the texts were the result of two professional communicators coming into contact, in fact three if the mentor is counted. It seemed that there might be indications of underlying professional dynamics at the centre of the conflict. In the draft, elements of his professional

writing theorising role intruded into his practitioner role. A record of the mentoring process appears in a fragment of an email, acknowledging that changes had been made. The real power of the incident lay in the way it provoked thinking about the constituents of professional writing practice, which were forming the topic of PG's honours thesis.

The Genre Challenge saw a Guild member, the Secretary, muddling a range of writing tasks in trying to insist that PG conform to her scientific professional protocol. Now the contention over the *Fascinating* draft is the reciprocal of that process, as PG inappropriately seeks to impose his own professional orientations on the reports the community produces. The three tasks are reviewing, facilitating, and reporting. PG's professional Reviews of INTERPECPEM interactions are a completely different task from the facilitator's of assisting The Guild to write their own professional materials, or OUTERPECPEM tasks. The writing of those reports is a third category of task.

The way in which PG subverted SZ in the draft was to make metapragmatic comments about the presenter's style. Mentoring consultation warned that this was like revealing the rabbits concealed beneath the magician's table. Her job was to inspire confidence. He was undermining it. He had to alter his draft.

14.3 Practitioner versus facilitator

This section teases out the differences between PG and SZ and thereby unravels further differences between INTERPECPEM and OUTERPECPEM. While it looks on the surface as if there should be a marriage of minds between the two professional communicators, a gulf separates them in terms of function and purpose. PG is characterised as a practitioner, and SZ as a facilitator.

14.3.1 INTERPECPEM vs OUTERPECPEM

This section profiles the professional communicators and separates their functions. PG is the reviewer and SZ is the facilitator for practitioner members. This dichotomy matches that between INTERPECPEM and OUTERPECPEM.

PG is a professional, working for this one group. Section 13.3 confirmed his speciality as writing his own piece in response to what he experiences of The Guild.

He has developed a sense of how Guild members interact. He approaches the task of listening to the speaker, in terms of reflecting the group level interaction for his group level Review. He is a practitioner. His level of practice is that of INTERPECPEM or Natrat-talk. He is writing the CofP/Interpretive, constructing community through his Reviews, reflecting them to themselves, enhancing their interactions with each other. He is reflecting the insider interactions.

SZ is a professional working across a multiplicity of groups, often at one remove. While she deals directly with some groups, she often deals only with the communicators, professional and unprofessional, for those groups. During the presentation, SZ is encouraging tonight's Guild audience to be thinking of themselves not primarily as Guild members, but as the professional [two audience members] or unprofessional [all the other audience members] communicators for their originating groups. She is a facilitator. Her level of practice must be that of the unity of the professionals who have to deliver texts to their audience in turn. They do not want to see themselves reflected to themselves, but to become more confident at delivering what they have to give to their audiences in turn. SZ is working on how they interact with their outside audiences, at the level of OUTERPECPEM.

14.3.2 SZ frames OUTERPECPEM in genre and register

In the telephone conversation discussing the preparation of PG's summary, he complained that the facilitator, SZ, seemed to have been characterising the audience as exploitative, and as complicit in the capitalist system, which he sees as at the basis of over-consumption, and an important cause of environmental degradation. He took this as an insult to them, and an indication that SZ was not in touch with the audience whom he felt he knew. Yet as *Shag Shoal* shows, entrepreneuring is indeed one of the characteristics of the group. Even so, in the *Wildlands*, *Shag Shoal* and *Tax* Reviews, PG was to treat his audience as unsullied, despite what he perceived as exploitative attitudes on the part of the speaker. Here he is faced with the facilitator, SZ's own assumption that her deliberately market-attuned language was a default register to be used with all professionals, including these environment professionals.

SZ was right about the general acceptability of an organisational register for OUTERPECPEM communication, and PG was naively wrong in this specific aspect. However, as the practitioner who was to go on with three years of responsibility for the group's INTERPECPEM interactions, PG was right in his own area of linguistic judgement, because the Natrat-talk discourse variety he was developing in the Newsletter needed to be distinguished from the kind of language which the members were using in their own professional lives.

This is a fine demonstration of the Fractal in practice. Despite the professional responsibility of members to adopt SZ's default formal, organisational and entrepreneurial language, many members do not privately espouse the values inherent in that lexis. PG's sensitivity to the diversity of values in his longer-term code-handling experience of the members and the meetings enables him to tailor a register which is the unity language of the group, and he finds that the language of the facilitator, SZ, jangles.

14.3.2.1 Observations of participant and role strategies

Personal role presentation strategies form part of the facilitator/practitioner contrast. In the taped live interaction, SZ appears with a dramatic persona, with phrases such as 'I'm passionate about communication', as her interpretation of the role of a professional communicator. This differs from her everyday personality and is evidently designed by her to conform to audience expectations of what a professional communicator is. She is then free to adopt a caricature vocabulary. Her use of a caricature 'ruthless' vocabulary helps to clarify positions for her audience and instil confidence. The adoption of strong, polarised, 'dynamic' vocabulary is a routine instrument in a pedagogical set of strategies and is also shared by many effective presenters. It is exaggerated. Such strong, confident, even autocratic lexis helps to telegraph to her audience that she knows what she is talking about. She stimulates levels of activity in the audience, requiring their commitment and contribution. She does not tell them what to do, yet she exerts influence. As PG observed in a telephone conversation, 'she didn't say much; she just told them what they should have known already and asked them to tell her about their own experience'. But the responses SZ gives put the client's experiences into a framework which can be recognised and understood. She dramatises their

experiences to them. The caricature of professional communicator helps them to assign roles to the participants in their own private professional dramas. That is why they love her sessions and schedule her regularly. She seems to speak directly to each one, and they can take home her framework, which makes sense of their experiences. Even the mentor was surprised that the committee scheduled a repeat seminar with the professional communicator, in preference to the suggested overview of pesticides.

PG found the caricatured role very distressing and offensive. His training had been entirely different, with 4 years of solitary writing and a few low-key seminars, his nose in a book or a learned journal at those times when he was not honing his own writing in a lonely, writerly journey to excellence in and of the word. SZ's prancing enthusiasm and her invigorating effect on her audience seemed to him to be perpetrating the old lie about writing. He knew from his four university years, and from all his other years, that there is no easy way, yet here she was making it sound easy. His concern here is with the falsehood, which is the same concern that signals his final phase. In the *Shag Shoal*, it is the gagging of public dissent, in *Tax* it is civil dishonesty. Here he emphasises the grinding reality of achieving writing excellence, set against the possible charlatanism of telling the audience it is easy and setting up unreal expectations.

14.3.3 Facilitator's expertise

In what way is SZ's expertise different from that of the other professional communicators in the audience? While PG, and an audience lawyer, practise professional communication and, in PG's case, theorise it as well, SZ has the experience of facilitating for other professional and unprofessional communicators. While PG and the lawyer in the audience practise in their limited matrices, and theorise their own and others' practice in those limited matrices, SZ scopes all the different matrices and is exposed to specific difficulties in all of them. Thus not only is SZ in active practice familiar with the broad scope of such a wide range of matrices, but she necessarily specialises in the difficulties and tricky parts, because that is what her audiences bring her. They ask her for help with the tough decisions. Not only does she have experience in observation of giant obstacles, general hurdles

and specific niggles, but she is also ready to match them against her treasury of tried and true solutions. She is the doctor. She will tend those who need her.

PG and the legal advocate are secure in their own success. They have interesting problems, but they are flourishing practitioners. SZ is not there for them. She is there for those people who are not thriving, who enjoyed her facilitation last time and who wanted her back. Now she is here, she judges that they are her real responsibility and she knows she can help. How she helps is to diagnose, prescribe and exude the confidence of sound practice, dependability and good cheer. SZ knows what the doctors know, that they can diagnose and prescribe, but that unless the patient is committed to following the regime, unless they actually do something, no improvement will happen. Thus SZ has her treasury of cures, but she knows there is no point in doling them out at random. She must diagnose and interact with each participant. First she displays her wares, then flashes her prescription book, and proceeds to ask them each to reveal their habits and practice.

SZ listens to the participant, diagnoses their problem, gives it a specialised name (in a reassurance that she knows what she is talking about, that she is experienced and will prescribe accurately), and then reaches into her set of cures to fix the problem. She can be quite direct and bold and give rather normative advice. Her assuredly firm hand inspires further confidence in the audience, and empowers them to act in their own realm.

Whether or not the complainant acts is irrelevant. What SZ achieves in this process is the metamessage that there are solutions. A non-professional participant often feels that there are mysterious reasons for their writing failures, that they are working in an irrational setting where they are the hapless victims of chance. A simple demonstration by the facilitator that there is a rational approach to it all is in itself a reassurance.

14.4 Interpolation

14.4.1 The text and the conflicting attitudes

PG was challenged, in the mentoring interview, as to the inappropriateness in genre terms of interpolations he put into the Review of SZ's session. He replied 'I don't believe in genre'.

Genre is not something one can choose not to believe in. In our discussion of the notion of genre in respect of the Genre Challenge, we have seen that there is a relationship between a text and its context, which exists independently of any observers or believers. When PG says, 'I don't believe in genre, he means that he is suspicious of the influence of one kind of genre. In his professional writing classes, PG has encountered the idea that genres construct society and that genres can be responsible for limiting choices, or marginalising groups of people. There is a predominantly negative conversation in some critical disciplines about the link between genre and social action. PG's 'I don't believe in genre' in this case is not a reference to the more general meaning of genre in linguistics, but to this more specialised critical concern with the dominance of scientific, rational, organisational genres, of which the report genre is one.

PG explained that he had been offended by SZ's uncritical assumption of the report as the default genre. He ventured to 'correct' what he perceived as her hegemonic influence. PG is claiming with his bold 'I don't believe in genre' that he himself is not unthinkingly manipulated by genre types and is prepared to interrogate them and problematise them, and to do this on behalf of his readers.

However, he agreed that he had not analysed the set of tasks in sufficient detail, ignoring the requirement for Guild writers to respond to a different set of social purposes, and for their facilitator to work to those purposes. He agreed to remove some contentious passages which subverted SZ's confidence-building practice. However, he did not alter the interpolative, interpretive procedure he had adopted for the Review.

14.5 Conservative mentoring position

Perhaps the conservative mentoring judgment overlooked the dramatising dynamic. Running through some of the elements which informed the conservative mentoring position, the first imperative was to think about whose text it was in the first place.

14.5.1 Is it a one-owner text?

When the reviewer does not review, but rather interpolates to the extent that the presentation becomes simply the matrix for his own opinions, the nature of the original text is changed. Who owns a text? In respect of the original standpoint, whose ownership is paramount? The author's? The audience's? The reviewer's? The employer body's, in this case The Guild's?

The first thing to acknowledge is that there is no such thing as a one-owner text. The meaning of a text is negotiated at least between the author and the audience. If there is to be a reviewer, he is part of the fabric from the start, and it might as well be admitted that he is an author in his own right, with as much power as the original author. Critical approaches to text emphasise the notion that there can never be a neutral summary, that editorial intervention necessarily involves using a point of view or perspective which is amenable to interrogation.

all language is inherently rhetorical - there is no such thing as a rhetorically neutral text [Lunsford and Connor 1989: 390, quoted in Putnis and Petelin 1996: 223-263]

Therefore, no matter what, there is going to be interference from the reviewer. What professionalism demands of him, however, is that he temper his techniques to wield that power subtly, to be unobtrusive about his interference. Nevertheless, there is a certain deceitfulness in that position, and PG was interested in being honest about his intervention. Many professional critics advocate the use of overt procedures to elicit the hidden dimensions in the text intervention process. The notion of problematising is set up as a method for interrogating hegemony, for interrupting the smooth flow between the author and the public, for intervening in generic processes which encourage docility, conformity and the easy understanding which is a product of the hegemonic structures.

writing is more than socially embedded: it is socially constructive. Writing structures our relations with others and organises our perceptions of the world [Bazerman and Paradis 1991: 3]

14.5.2 Stakeholders – how interested are they?

However, the mentoring position was conservative, judging that the community was more interested in a professional looking piece, than in something which might expose the workshopping aspects. If the mentoring judgement was wrong, it might have been in underestimating the appetite of The Guild for such workshopping, for conceptualising themselves as writers.

The mentoring position took the view that the interpolations complicated the reading process for the wider audience of the membership, who rely on the summary as a succinct and easily digested method of access to the material. PG's interventions in SZ's text are a self-consciously complicating feature, intentionally designed to problematise concepts within the material itself. They are thus difficult to read.

14.5.3 Strategic tact in danger with political polemic

Another factor behind the conservative mentoring position was that The Guild's strategic tact would be compromised if there were an exposé of compromised positions in overt political rhetoric, or if there were any hint of preaching. PG included these passages in his draft:

SZ acknowledges that she is no expert on environmental issues – but then who is? ...although I agreed with her about the importance of purpose, persuasiveness and action as attached to writing, the terms were meaningless to me without considering their social, political and ethical implications. If anything the environment is as much a product of our purposeful minds as we are a part of its ecological indifference. [Fascinating draft 1999]

The final version eliminated everything after the question mark. The problem lies in an unintentional slur to the audience's level of expertise. The Halfspectrum filter produces a high level of audience environmental knowledge, and while professional modesty and caution based on real scholarly humility will result in disclaimers about capacity, the members gathered to hear the address, including some eminent figures in national environmental expertise. The statement about the product of

purposeful minds is axiomatic to professional environmental practice and runs the risk of being taken as inappropriately patronising.

14.5.4 Who to send the report to?

PG's suspicion of the idea of management of the environment rests in his equation of the entrepreneurial with the exploitative. A sample of his related political opinions from the first draft can be found in the following:

I imagined writing a report that recommends the demilitarisation of all governments, the levelling of global imbalances of wealth [that is, the sharing of resources] and a resurgence of sustainable human cultures [that is, ones that respect the environment]. I wondered who I would send it to. [Fascinating draft 1999]

This seems to indicate a view that change in the direction of ecological sustainability is unlikely without prior widespread attitudinal, political and paradigmatic change, a view which is outlined in Aplin [1999], one of PG's textbooks. This view runs counter to that promulgated in the influential 1987 document *Our Common Future* and in the documents produced from the Rio summit, all of which emphasised that change was possible at the local level alongside the broader scale changes attempted at the global level. Guild members would all be familiar with the philosophical path which begins at the stage evident in PG's draft and progresses from the sense of helplessness to the accumulation of knowledge and techniques to apply measures for management of local environment and small scale contribution to global management. The paragraph betrayed an inappropriately cadet standpoint and was excised. The irony is directed to the wrong audience. Guild members are the ones who are indeed working at government level and who make decisions about where to target their actions.

14.6 Interpretive collage

PG's *Fascinating* Review is an interpretive collage, an overtly dialogical piece, exposing the machinery of dialogue in a way he had not done since the *quem quaeretis* of *Fish*. It looks different from other Reviews, but it nevertheless contains all the stages of the regular rhetorical structure. PG uses a problematising strategy of self-reflective insertions, pointing to differences between his own ideologies and those of the presenter.

The interpolations do their work by extruding and separating a set of voices and then dramatising the dialogic themes of the problematised text. PG uses interpolation to extrude new information from the probing and interrogation process, and to uncover new themes as the disjunctures and disharmonies are forced to reveal themselves.

It is hard to decide how to judge the resulting text. Is it the obverse of the usual Review, in that instead of prioritising the audience's requirements, PG has met his own needs? If he has not been able to resist the temptation to engage on the professional principles, perhaps he has ignored his duty to the audience, or to the employer or to the speaker. Does the extent of the dialogical and even dialectical engagement turn the Review into a vehicle for PG's ideas, rather than showcasing those of SZ? This was the mentoring warning.

The Review is an effective intersemiosis from the spoken presentation to the written mode. The dialogical explosion in the text somewhat reflects PG's effort to recapture the excitement of the evening, with himself in the role of prototypical member. It turns out as an effective flowering of the genre-hybrid to activate SZ's ideas through PG's expert mediation. The Guild community seems to hunger for the technicalities of the writer's craft, and that is what PG uncovers and feeds.

INTRODUCTION TO TEXTS OF CONTENTION

The next two sections deal with four texts which were sites of contention, where PG had decisions to make and which initiated mentoring consultations. NEPC provoked issues relating to speaker alterations in the draft text. Wildlands, Tax, and Shag Shoal concerned moral standpoints which he considered offensive. This is an immersion into issues relating to The Guild positive tact frame, to how PG processes the information, and to the extent of his adherence. First there is another look at the question of what PG was contributing to the organisation.

15 NEPC

NEPC [March 2001] invites a return to the primary research question to consider the nature of PG's contribution. The presentation is from the negotiator cadre of The Guild, which is largely drawn from the public service. It is this cadre which sets the agenda and the standards of strategic integrity, which is the secret of efficacy and the raison d'être for the organisation. The NEPC Review, taken from the mature period, offers us a chance to focus on negotiations between the speaker and PG. PG is seen sticking to his own judgement, under some pressure from the speaker, and conceding only what he considers as emendations which do not impinge on his own conception of what the job is.

15.1 Further differentiating the tasks

Despite the speaker's experience and judgement, despite his high position in a federal government negotiating position which requires extremely proficient interaction skills, speaking ability, writing ability and general communicative competence, PG's bold and confident professionalism permits him to trust his faith in his own audience. From the analysis in the last chapter of the factors operating in the *Fascinating* Review, there emerge three separate tasks, the report writing, the facilitation, and the reviewing. Community building can be added to this set in order to distinguish how PG's task differs from that of the NEPC presenter. This additional factor brings a closer understanding of what is being contributed in the CofP/interpretive document. PG's decisions as a writer are related to the Fractal function of the Reviews, the Weickian equivoque of the organisation, and the

collaborative CofP. The presenter's decisions are targeted for the more general formal national undifferentiated audience. They cannot hope to enter into the depth of intimacy that PG can achieve. PG's contribution is to bring the concepts home, to involve the community familiarly with the information, to digest it, to highlight important bits and relate it to their lives. PG is dealing in INTERPECPEM, the NEPC presenter is dealing in OUTERPECPEM.

Here is something of what it might take to prepare writers to become professional environmental communicators. It is obviously something different from the sort of communicative competence needed to become an influential negotiator. Interrogating PG's work leads to the suggestion that the defining factor for a professional environmental communicator might be a clear idea of the collaborative requirements of the CofP/interpretive group, an understanding of which would ideally result in real membership of the group as they learn together and grow together. This links to tasks like the revision function PG undertook in the *Strategic Indicators* Review.

15.2 Contended sections

In particular there are two sections of the *NEPC* Review which the speaker, WL, chopped from the draft, but which PG reinserted without discussion, later explaining in a phone mentoring conversation that he thought WL's idea of what he was entitled to remove was overblown. PG had reinserted the material in question, on his judgement of what the community, the CofP/interpretive group, The Guild as decision environment, had the right to see. Those were not his words. He used personal names of individual Guild members and characterised subgroups, distinguishing operators and practical people from policy makers.

15.2.1 'Neppums'

The first item in this category is a simple guideline on how to pronounce NEPMs [National Environment Protection Measures]. The full paragraph reads

W then spoke about the NEPC's specific activities. Its main task is the production of National Environment Protection Measures, or NEPMs (pronounced neppums). NEPMs are guidelines, but unlike the ANZECC guidelines mentioned above they have legal status. NEPMs on specific environmental issues are adopted by the states and territories and structured into their particular legislative frameworks. [NEPC 2001]

The NEPM is thus an important new law, which will come under further discussion as the idea reaches the community. PG knows that The Guild member is not going to recognise the pronunciation when they first hear it and that the transfer from written to spoken form is an educational activity which members are entitled to expect from their organisation. Drawing on his experience as a participant in the session, he can tell that this will be handy information. WL cut it out. PG put it back.

WL's reason for removing it was a matter of register, the public service register not admitting of such informality. WL is seen to be attending to matters of prestige, judging that the audience likes to be treated to the respect attendant on the highest prestige language forms, an attention to register formality as a mark of acknowledgement of high status. This would be designed to bring credit to the organisation and to signal the welcome acceptance of members at the highest levels of discussion. Any indication of unfamiliarity in the register would be counterproductive usually, and such a translation of the terms would not indicate a comfortable relationship with the terminology. The principle is the same as that which led to the removal of the gloss for Ramsar in *Fish* [section 11.2.8]. Thus the translation might signal outsider status, with insider status being indicated by the expectation that the reader will cope with the language tasks required at this level of interaction. This is good thinking. It is accurate, and PG judges this quite finely in the scientific texts, in the computing text. But NEPMs is a neologism, and prior acquaintance is not assumed.

Furthermore, PG has a different set of decisions to make about where to draw the insider/outsider lines. His insiders are Guild members, and he knows that they are not the same set as the public service negotiators. His loyalty is to his Guild insiders, and he knows that an indication of the public service jargon as being opaque is an old joke which he can allude to, with the intention of redrawing The Guild's boundaries, overlaying them by defining them in contrast to the public service lines. This is a strong gesture of coherence for The Guild group – it is an inclusive gesture which he is absolutely certain will be welcomed by many of the members he has met, many of the speakers he has seen, many of the young inexperienced people who are just coming into their professional association with the very purpose of having some of the difficult language translated for them. He said in the mentoring conversation that he sees his job as a translator. He sees his task as a professional writer to cut through snobbery which stands in the way of comprehension, to stride past gatekeepers who would guard the entrance to understanding. This is a role which he as narrator-leading-learner has taken before in Strategic Indicators when he made links with Triple Bottom Line [section 11.3.1], boldly standing up as what is known as a risk-taking learner in education terminology. A risk taker admits when they do not understand something, tries applications which may or may not be right, risks ridicule in order to pursue the path of interest in the topic. PG takes on this role-modelling in a gesture of encouragement to other CofP/interpretive collaborative learners, the greater goal of organisational knowledge management superseding that of a snobbish fear of revealing ignorance.

The inclusion of 'neppums' says something about The Guild itself – it says that the organisation has such status and confidence that it eschews the old goals of fearful subservience to single groups, that The Guild is an interdisciplinary organisation, a broad church, a contact community [chapter 2].

PG's professional writer role gives him a confident authority in managing the language development of the group and the case ethnicity aspect of The Guild is visible in this development of a group glossary, a group pronunciation, a group attitude to language, which stands in contrast to that of other groups. This is Natrattalk corpus building and standardisation.

15.2.2 Questions from the floor

The other paragraph which the speaker eliminated and which PG reinstated was more controversial. In this event there is a reflection of The Guild's Weickian equivoque. Strategic tact [chapter 2.2.3] is at the heart of The Guild, and the paragraph eliminated was judged by the speaker to transgress. PG judged it otherwise and reinserted it. It passed through the Secretary and President as gatekeepers, thus confirming PG's judgement against that of the speaker. The Guild culture had produced a product under challenge. The paragraph is as follows

The Environment Protection and Biodiversity Conservation (EPBC) Act is an example of *Commonwealth law* that gives the federal Government a great deal of power to regulate uniformly on a national scale. Another is the Fuel Quality Standards Act, recently passed to allow the Commonwealth to set uniform standards for the quality of petrol and diesel fuel.

(At this stage, an audience member asked why Queensland farmers can continue extensive land clearing in the face of such Commonwealth powers as the EPBC Act. W... suggested that it was largely a matter of the political will of the Environment Minister. While W... was uncertain of exactly how the particular issue was being addressed, he acknowledged that under the EPBC Act, someone could refer a proposal related to the clearing of trees in Queensland to the Commonwealth. The Government could then implement an environmental impact assessment according to Commonwealth standards. Ultimately though, the federal Minister would authorize the final outcome.) [NEPC draft 2001]

The direction of this discussion obviously prompted its removal. The speaker would have been unwilling on two counts to have this included. First, it was a diversion from his design direction for the talk. He would have interpreted it as an interruption, an unwelcome intrusion. The second reason is the reference to the Minister, which might invite extra activity, but which PG, the Secretary and President, all judged as a valid and relevant outcome, of interest to members. In the hurly burly of the interaction, the talk comes alive. As the members participate, the offering is changed from monologic to dialogic. This is what PG has insisted upon, and it is what the Secretary and President approve as the focus, direction and nature of The Guild. It is The Guild in action and it shows the resilience of the organisation, its active and vivid presence, in contrast to that of an organisation which might accept everything the speaker said as gospel.

The part which PG agreed to excise referred specifically to the speaker. The original passage included an extra sentence

... environmental impact assessment according to Commonwealth standards. While W... was unsure of how the particular issue in question was being handled, he had experience of such referrals being put into process. Ultimately though..... [NEPC draft 2001]

By removing the specific reference to the speaker, PG removes any discomfort associated with lack of professional tact and retains the advantage of helping the community to come into relationship with their politicians, showing where responsibility lies, opening paths for Guild members' action. In a phone conversation he said that he thought The Guild had the right to report members' questions, that it was not part of the territory which the speaker had the right to censor. The President and Secretary obviously agreed.

15.2.3 Conceded emendations

Some minor adjustments were made by the speaker and accepted by PG. The speaker's adjustments are shown with lines through them.

Summing up, W... said that the NEPC is not a Commonwealth agency. He highlighted the importance of the states and territories being involved in forming environmental protection policy. Being 'closer to the ground', he felt they had a better understanding of what was possible in terms of implementation. The NEPC brings together the nine governments of Australia to negotiate workable national standards, with legal status, that can be implemented by the Commonwealth, states and territories. [NEPC draft 2001]

PG's original was clearer. The uncompromising statement perhaps offended the speaker because it seemed to allow no further room for development. He turns the final paragraph into something which he would be happy to work with in his own future professional life, rather than a document directed at The Guild. PG's professionalism allows interference and downgrading in what a professional writer would regard as one of the most important rhetorical segments, in order to refuse other emendations and maintain his position at points which he considered at a higher order of priority. He also knew that the final paragraph would be one which would be closely checked in order to ensure that the corrected draft was the one

printed. The high profile of the sacrificial final paragraph was to ensure the passage of the more delicately constructed central section.

The first section was also open to analysis:

At the March meeting W... L... spoke about the National Environment Protection Council (NEPC). W... is Executive Director of the NEPC Service Corporation, housed in Baudin Street. [NEPC 2001]

In the original there were about 100 words of WL's biography which the speaker excised. It is obvious to see why. The speaker feels that his past is of no relevance to the purpose and direction of his professional responsibilities when you come to transfer them to paper. PG, however, always likes to humanise the speaker by giving a rounded picture of their interests and backgrounds in the first paragraph, thereby ensuring that they become a character in their own presentation. He agrees to sacrifice this treasure for two reasons. First the speaker's biography is certainly his own personal information and respecting his right to privacy is paramount. Second, the introductory paragraph is another high scrutiny section. Third and most interesting for us, it sets PG up with a deficit, which he looks to recoup at a later stage. The speaker would have been unaware of this debt caused by his instinctive cutting, but PG took out his value in the two paragraphs he reinserted.

The last section for consideration is one where the speaker eliminated PG's dialogic textual construct and returns the text to the monologic formal register which he personally prefers.

W... noted that state governments typically take between one and five years to develop policies, whereas NEPMs are achieved in less than two years Some people are concerned that the differing legal frameworks between jurisdictions allow too much variance in how seriously a particular NEPM is implemented by each state or territory. B... notes that such variance is substantially checked by the requirement of each state and territory to report annually on their implementation of NEPMs. [NEPC draft 2001]

PG explained in a phone conversation that he was able to empathise with the removal of the people from this because he could see that the active concern which he had reported had been removed, and replaced with an almost imperceptible intellectual abstraction, which is then managed by the speaker into an uncontroversial complexity. PG was accepting of this loss of minor drama in the

interests of accuracy. The mentor agreed as mentor, but privately judged that the speaker had been the loser, shortsightedly substituting conventional abstraction for the vital polyphonic interaction which PG had generated.

NEPC shows PG as a confident, fluent writer, secure in his genre-hybrid rhetorical structures, fluent in his unity discourse variety which he has developed in interaction with The Guild community. In the next section this confidence comes under question.

16 SHAG SHOAL, WILDLANDS AND TAX

This section considers a set of presentations that PG reported as having challenged his interpretive paradigm for Guild people, their organisation, and how it fitted in with his political ideals. In these encounters with speakers whose moral positions differ from his, it is no surprise that PG's automatic code-handling is disrupted at points, his sense of what is required is diverted, and his performance in terms of the Fractal compromised.

16.1 Wildlands: a private conservation

The wildlife management talk [November 1999] began by characterising the speaker, as usual.

MN began her academic career at UME University in Orange (NSW) where she gained an Applied Science degree in biology. She subsequently worked at Toowoomba where she graduated with a Masters degree in Wildlife Management. She has been involved extensively in field research, and has lectured in Conservation and Park Management at the University of Western Australia, where she is currently a research associate. M... spoke to the [Guild's] monthly gathering about her involvement with an environmental company called Wildlands, and shared with us her views on why the private sector has an important role to play in conservation. [Wildlands 1999]

PG adopts his routine dialogical ploy of engaging the audience with the 'shared with us' phrase, but with 'her views' he carefully distances the audience and his narrator persona from the private enterprise claim of contribution to conservation. His political philosophy does not accommodate such sentiments and he is deeply suspicious of the capitalist motive. His social group includes friends with close northern hemisphere connections, who participate in international conservationist discussions. One traditional link between PG's philosophical position and its opposition to the conservative capitalist sector often centres on issues of hunting in the northern hemisphere, and is linked with concepts of privilege and aristocracy in England. This link makes an appearance in PG's response to this speaker.

He explains the justification for private investment in conservation as insufficient government funding for management. While the provision of land has been extensive, the management has been left to itself. He keeps the speaker active with his series of speaker action verbs, 'outlined' in this case, but here there is the double effect of attributing the opinions. PG's narrator persona is able to keep his distance.

M outlined the traditional attitude to conservation. Since the inception of Australia's National Parks system a little over one hundred years ago, and up until the 1970s, the dominant public perception was that conservation should be handled by government. [Wildlands 1999]

PG employs a technique which was to come to its most complete flowering in *Shag Shoal*. He uses, without translating, unpleasant lexis from the original spoken version, and allows this to colour the expression of the speaker he is reporting.

Private enterprise was not to be trusted with such responsibility, and certain industrial sectors, particularly farming, were often seen by conservationists as the enemy. [Wildlands 1999]

This is the same technique as he uses with the 'glorified gardening' of the *Shag Shoal* speaker. He permits the speaker to damn their own cohort with the suspicious and unpleasant language of the accusation. PG's normal code-handling practice is to expunge such negatives and present the clear positive picture. In Fractal terms the reduction of negativity works to the positive tact frame and the goal of CofP/interpretive learning, a positive text encouraging positive action, and guarding against inattention or the likelihood to misunderstand. Here he exposes his text to just such the risk that he usually avoids.

The outline of the problems in park management conforms with PG's political philosophy that government should be funding national parks. He gives a lot of space to these problems, keeping the interest of the reader with the active verbs again, and even though the actions are interpretation, invisible action, they are thinking and research, and PG brings them to life. M 'notes' and twice she 'observes', twice she 'sees'. Her human voice is heard in the 'nasties', the graphic convention of quotation marks leading the reader through the text.

But M.... **observes** that this approach has not always been effective, and a missing element in the system has been the adequate allocation of public funds for the management of parks. In recent times, she **notes**, fewer and fewer government resources seem to be available for conservation purposes. M... also **sees** the Parks system as having created problems of patch-segregation, wherein separate islands of habitat work against the principles of ecological sustainability. She **sees** similar problems with some private approaches to conservation, whereby a large fence is put around a tract of land and all the unwanted 'nasties' are removed and kept out. Such controlled management can be very expensive, she **observes**, and genetic isolation is just one of the problems arising from the restricted movement of the animals contained by the fence. Neither is it a form of management that the public can be readily involved in. [Wildlands 1999]

Now private responsibility is introduced, and PG approaches it with another active verb, but the subject-verb inversion attracts the reader's attention as a marked form, usually confined to fiction, and indeed to fiction genres such as the fairy tale, the definitive setting for stories of privilege outside the experience of normal folk. PG himself noticed it and suggested this point as the portal to a political construct he is uncomfortable with – the private ownership of huge rural properties and stations. In the mentoring conversation, he talked of the Grimm's Fairy story world of cardboard queens and kings, a feudal world that looks romantic and attractive at first sight, but which is supported by cruel, ruthless and brutal political and physical acts of violence.

What more people can be involved in, **said M**, is setting aside tracts of private land that form links between established parks. [Wildlands 1999]

The fairy tale genre link is taken up at the end of the next paragraph with the 'magic'

She then presented to us a selection of slides illustrating some of the environmental assets of W, some of which are providing these valuable links. We viewed scenes of the McDonnell Ranges property Wandjina, a former sheep station of 355 square kilometres, destocked in 1996 when the Company bought the lease. Students from the University of Western Australia are currently investigating the potential for setting up widely scattered campsites at Wandjina, which M described affectionately as 'a magic place'. [Wildlands 1999]

In contrast with his treatment of students in *Shag Shoal*, the students in this project did not excite negative comment, PG finding these links between the community and the university healthy in this project, seeing the campsites as a possibly pleasant

opportunity for the students. He contrasted their campsite activities favorably against those of the private hunters.

He sets up the reader for the hunters with an idyllic picture of the birdlife.

M commented on a vista of Melaleuca swamp 'in its dry phase', and noted how the scene contrasted with others typical of the region – dead sticks protruding from salt encrusted earth – where mismanagement has caused extensive dryland salinity. The depicted area, often covered by a metre of water in late winter and spring, is a favoured habitat for freckled duck. We saw also a sky filled with ibis above a rookery near Parndana, M informing us of the 10–15,000 nests in the area at the time the image was taken. Other pictures showed lakes and marsh areas that have been restored through rediverting drainage, and M spoke proudly of the waders, shovellers and pink-eared ducks that can now be seen going about their business in these areas of renewed biodiversity. [Wildlands 1999]

But the ecotourist's thoughtful appreciation of the pink-eared ducks is shattered by the revenue-raiser duck shoots and goat hunts. In a phone conversation PG reported his feeling of distaste at this contradictory set of activities. One day the ecotourist is paying to see the beauty, tranquillity and sanctuary with the birds protected and cherished, but then the next party comes in with their guns to pay for the perverse enjoyment of shooting these 'sitting ducks'. Someone was being made a fool of, he complained, and 'it wasn't the hunters'. The inverted 'said M' again signals the Grimm's world in

Besides a generous benefactor, W relies on elements of ecotourism to raise funds for management. Funding has been difficult in this new area of private conservation, but revenue raisers so far have included tours, camping, and the hunting of ducks and goats – the hunting being a somewhat contentious issue depending on philosophies of ecological management. Ideally, **said M...**, the Company would be paying professional conservation managers, but this is out of the question at present with all management work being done by volunteers. [Wildlands 1999]

PG found it commercially dishonest and morally objectionable that the dollar of the decent, humane, often vegetarian and 'Deep Green' ecotourist was taken to support a place where ducks would feel safe to breed, only for those ducks to be the target of the hunter who enjoys shooting them so much that he is willing to pay for the privilege. The mentor was in a difficult position here, agreeing with him, but needing to play the consistent role of environmental manager and having to point out the dynamics of the situation in terms of vegetation management, predation and

trophic relationships. PG and the mentor discussed the philosophical issues involved in paying someone to kill the creatures, versus charging people for the malevolent 'pleasure' of killing them. We worked out that they were just as dead either way. In a community where society cares so little for conservation, desperate measures and their concomitant moral duplicity are the price you pay for doing anything at all. He was nevertheless disgusted at the idea of the students' being exposed to this double standard, and he entered a period of questioning.

He embarked on the theme of privilege, private ownership of land and issues of hunting and found an unpleasant link with what he perceived as politically destructive philosophies. He also ventured onto themes of the sanctity of life and animal welfare. He arrived at a negative impression of ecotourism, which he had previously interpreted as a positive activity, finding it now an indicator of a deep-seated hypocrisy in society, an unwillingness to face uncomfortable truths, an indication of rich national privilege. People who could afford ecotourism, he concluded, had disposable incomes, which indicated that they were privileged and open to political criticism. PG concludes the part about ecotourism by integrating it with the entrepreneurial side of the private conservation company in what he now interpreted as a distasteful marriage

Organisations such as Landcare and the National Heritage Trust are wonderful, she said, for providing substantial funds for one-off developments such as the erection of a fence, for example. On-going management costs however, have to be borne by the Company. M.... sees the tourism aspect as the area where they must concentrate their energies in the future. [Wildlands 1999]

PG spends the rest of the Review in detailing aspects of financial management, presenting the practicalities in a clear and analytical fashion, emphasising the commercial nature of the operation, clearing a way for the reality to emerge from the Grimm's fairy tale façade.

Wildlands has two main interacting elements – the Company, and the public trust fund. The Company is controlled by five elected directors who retire in a four-year rotation, and it must have a required minimum of shareholders (who don't actually 'own' shares). The public fund is controlled by trustees, one of whom must be Chairman of the Company. [Wildlands 1999]

In clearing the façade, PG becomes interested in the multi-layers of contradiction:

Although donations of land are tax-deductible, M pointed out that there is a paradox here, wherein the incentive to give over land is often diminished. This is because rural land values are traditionally based on the land's capacity for agricultural production. If land is lacking in this commercial regard, the owner has less incentive to contribute, either through the tax-incentive to donate it, or even the direct incentive to sell it. For this reason, Wildlands are interested in establishing an alternate model of valuing land that might be donated (or sold) to environmental companies. The possibilities are that land with poor agricultural value might have a premium added, according to a schedule based on the land's degree of pristine quality. By raising assessed land values, owners might be further encouraged to participate in conservation objectives. [Wildlands 1999]

But all in all he remains suspicious of the integrity of a private company, and dubious about their claimed status as non-profit organisation.

Some tentative investigations have been made in this area, and M displayed two environmental score-sheets – one terrestrial, one for Wildlands – each with a graded list of ten environmental conditions that might raise a property's value. She concedes that this notion of environmental weighting needs some development.

It was noted by G [the President], during question time, that the accounting profession has devised a new standard of accounting for biological resources – AASB 1037. In the company Earth Sanctuaries, John Walmsley has applied this standard in order to attach a monetary value to wildlife assets. There was some speculation as to whether such a standard could be applicable to Wildlands, which, M.... stressed, is a strictly non-profit organisation. [Wildlands 1999]

He reported including the term, 'wildlife assets' as an ironical term, emphasising a commercial attitude to the fauna, rather than an appreciative and respectful relationship. He also reported his suspicion that so called non-profit organisations can start out that way, sourcing funds from the public purse, and then when they are established on taxpayers' money, they can decide to start making a profit. In using irony, he is perhaps embarking on a new phase, writing for two different audiences, one which will share his point of view, and the other the readership who will read unquestioningly. The choice of irony and double meanings is not what Hawes [1999] recommends, but instead is the only path PG sees open to him in the outsider role in which he has situated himself. This is a Fractal gesture in itself. He knows that the job requires the positive tact frame and he is unable to move in the direction of expressing his opinions.

However, he can approach the task of living out his private life as the text he would like to produce. The moral duplicity is something which PG takes seriously, and in 2002 his friends saw his personal circumstances morphing into a new phase of personal political honesty, with the chickens and the job in the abattoirs, outlined in Chapter 2.

16.2 Tax

RT's taxation talk [April 2001] constituted a confrontation for PG. He came face to face with capitalist theory and unabashed interest in money as a commodity. His political views, which tend toward public ownership and sharing, were tested in the face of the political position which resents a high taxation level. PG's mentoring discussion raised the issue of whether tax minimisation could be considered ethical. His own social justice perspective values a government which is adequately funded, to cope with the job of redistributing resources, and working for equity. Tax minimisation seems selfish and greedy to him, and seems an indication that the tax minimiser has not embraced the equity goal.

In the Tax Review the taxpayer is not equated with the audience. He reported this in the phone conversation as a deliberate ploy. Usually PG freely uses 'we' and 'members', but in the body of the report where he deals with the actual money mechanisms, he sticks firmly to the terms which might be found in Australian Tax Office documents, labelling everyone as 'taxpayers', 'people' or 'the person' or 'those' or 'businesses'. In the introduction and conclusion the members are there, but in the body of the Review they are not – they are replaced by 'people' and 'taxpayers'. The speaker was the strong linking presence, playing an exceptionally active role in this Review, by means of a whole raft of new verbs. The speaker, R... 'responded', 'second-guessed his audience', 'opened with a joke', 'diffused expectations', 'proceeded', 'punctuated', 'began', 'pointed out', 'advised', 'moved', 'observed', 'revealed', 'recommended', 'noted', 'showcased', and 'declared'. The speaker, R, was the one who led the reader through the Australian Tax Office minutiae, and a set of technical terms such as 'entity taxation' and 'depreciating assets'. It was the depreciation and write-offs which PG found worrying, going so far as to enter the Review in a new narrator-persona, this time as 'the uninitiated' and confirming the negative judgement with the phrase 'financial

sleight of hand' in the conclusion, one of the most powerful parts of the Review. After that sentence he turns the moral dilemma over to 'those serious about creating financial wealth', leaving the way open for The Guild member to distance herself from that label, as he provided distance from the 'taxpayers' in the body.

This comes close to the Hawesian demand to name the conflict.

dialogic utterances differentiate between affirmation and negation and as such are value infused – such utterances assume responsibility for both evaluating and interpreting Hawes [1999: 277]

PG's 'financial sleight of hand' can probably count as the assumption of responsibility for evaluating and interpreting, because it is done in the new narrator-persona of 'the uninitiated'. Note that he does not reduce the power of the narrator-persona with an admission of naiveté, but presents the position as valid. The thing that distinguishes this persona is that he has not undertaken initiation into what is implied as secret and questionable practices. This is a change from the code-handling pattern reproduction to a discreet, more Gumperzian set of positions where the audience is given the chance to adopt a counter position and a counter code. Those who would like to go with the speaker can see themselves as 'taxpayers'. Those who would like to stand outside the cabal can count themselves as the usual 'us' and 'we'.

16.3 Shag Shoal

16.3.1 The significance of this Review

The final Review is notable for what it does not do. Now that the range of PG's techniques has been displayed, it is easy to appreciate what is missing in *Shag Shoal*. This is the text which sees a rare struggle for PG between the dialectic and dialogic positions [Hawes 199: 277]. PG felt offended, and expressed this in irony and neglect. In translation terms PG's process seems to neglect intersemiosis in favour of a sort of lexically equivalent version of what happened. There was failure to translate at the levels of lexis, grammar, information structure and genre. PG separated himself from the speaker, offered him no assistance and abandoned him to his fate.

TJ's July 2001 Shag Shoal project presentation is where PG realises that part of the agenda, in environmental management, is to manipulate public sentiment. He had faced this issue before in the global context of where effort is placed – how the damage limitation focus is preferred to a disaster interpretation. However, the local nature of the power station and perhaps the fact that he lives on that side of the city brought the moral issue right home. The situation was not helped by his atypical pre-meeting mingle at the drinks and snacks stage. It was a once-in-three-years' social encounter and it went wrong. Usually PG would quietly enter during the drinks and nibbles, meet the speaker, get her permission to record and write up the talk, set up the recorder and unobtrusively take a seat in close range but not prime placing. After the talk he would consult with the speaker on anything he was not sure about and get to know the person better, unless they were surrounded by members asking questions. On this occasion he arrived particularly early and decided to relax with a drink. He opened a conversation on globalisation with a very conservative member and was startled by the atypically rude and hostile reception of his left-wing views. He was somewhat surprised by this and it put him in a critical mood for the rest of the evening.

16.3.2 Speaker's standpoint

Standpoint is not always consistent with opinion. PG's usual practice is to make the speaker look good, which sometimes involves smoothing out infelicities or awkwardness, and translating it into the developing unity register. In this case the speaker's presentation took an exploitative standpoint. This is not an unusual ethos to work from professionally, but it does not always reflect the private motivation of managers. The exploitative position is often the diametric opposite to the genuine personal approach of vegetation managers. However, they are accustomed to speaking professionally to groups of farmers and industrialists, and so their professional register adopts the lexis of the overtly exploitative. The speaker took a free and frank approach to explaining that part of his job was to persuade the public that everything was all right at the power station, which was thereby enabled to continue its exploitative practice of generating electricity for domestic and business supplies. Vegetation managers often have the attitude that they prefer to have such tracts of land to conserve, rather than to alienate their employers by setting

impossible conditions. Vegetation managers might adopt a goal of damage limitation, rather than chasing after unattainable conservation ideas.

16.3.3 PG's objection to stifling dissent

PG reported in a phone conversation feeling less than impressed by what he considered to be the low standards evinced by the presenter, low standards of conservation goals, low political standards and low moral standards. He was particularly offended by the suggestion that any manager might include the stifling of dissent as a professional responsibility. The night of the presentation had seen him unusually sensitised to this position by his earlier conversation with the conservative member about globalisation protests. His political sensibilities were further outraged during the presentation by what he saw as the exploitation of 'work for the dole' employees.

There was a mentoring discussion in which the issue of public perception versus ecological integrity was discussed and the situation was stabilised, but a certain amount of disillusionment and distaste was evident. PG had not enjoyed the social interaction and he felt that he might have a better time in other company. This is the penultimate Review of the set under consideration, and it was expected that it might herald the end of his association with The Guild. Integrity was so important to him because he was working at the level of community construction and interaction. These were not just Reviews to him. They were the voices of his people.

16.3.4 Not translating words

Ever the professional, PG made sure that there was nothing to criticise about his Review of TJ, but it has interesting characteristics, revealing the reciprocals of the positive strategies he employed for other speakers. A variety of lexical choices give an overall impression of shiftiness and untrustworthiness. We noted that in the first *Fish* Review PG was careful not to say that the fishers were 'suspicious'. Here in the penultimate Review he lets the speaker's own word 'suspects' sit unmitigated in the report of a judgement he does not believe in.

By getting people outdoors and involved in such tasks as tree-planting, he feels public opposition to industrial developments might be tempered by a wider understanding of the realities involved. In fact, one of the most rewarding aspects of the project was involving groups of students; students, he suspects, who have taken more practical and positive perspectives back into the community. [Shag Shoal 2001]

PG does not approve of this. He believes in maintaining the rage. If the people have something to complain about, such as industrial developments, the last thing PG would sanction is the meek compliance and dishonesty he sees in 'positive perspectives'. The word 'suspects' in that sentence, a passing pragmatic function in the spoken presentation, takes on a sinister aspect when translocated. Under other circumstances, in his code-handling persona, PG would have been careful to process the passage as he did in *Fish*, to remove the negative, to perform the translation task inherent in the move from spoken to written mode.

The hapless speaker TJ provides more scope for PG to employ a similar strategy. TJ makes a complaint about how his practice is viewed and PG translocates the complaint. In the written form this has the effect of underlining and confirming the judgement, especially as these words appeared at the bottom of the page:

Having had his work perceived by some as glorified gardening, or just prettying up the place with plants [Shag Shoal 2001]

If the reader did not bother to turn over the page, she would have walked away with the impression of TJ's glorified gardening, oblivious of TJ's justification on the next page:

T... was keen to point out that restoration ecology begins with restoring primary habitat [Shag Shoal 2001]

In the previous paragraph he sets the reader up to make the negative assessment by characterising TJ as bumbling and boring. He does this by emphasising the catalogue of botanical names and showing that TJ obviously enjoyed listing them, imputing that the man is rather more a theorist and a hobby gardener, as charged, rather than someone serious about conservation and vegetation restoration.

As T... displayed images of various plantings and provided a running commentary of botanical names, it became evident that the selection of vegetation and its introduction across the landscape was an aspect of the project he particularly enjoyed. [Shag Shoal 2001]

This ploy contrasts with the care he took in recasting QW's presentation on GIS. He went to a lot of trouble [and enthusiastically told the mentor so in the phone call] to try to capture a *Star Wars* flavour, where characters like the computer, 'C3PO', are part of the set of personalities. By appealing to all the old ArcINFO users to remember the good old days [which they did – their appreciative hum is heard on tape], the speaker engaged his audience and led the way for PG to continue the process by giving the whole GIS text a lively, modern, animated feel. It would have been quite possible for him to do this for *Shag Shoal* with the catalogue of plant species, but he did not do so.

PG's ploy is to leave TJ's own words to do the critical revelation. He sees him as an exploiter of coerced labour and a corrupter of students. PG is concerned that the university that permits their students to work with the likes of TJ is turning out graduates with, at worst, an agenda of exploitation and, at best, the destiny of dumb compliance, rather than examined lives.

16.3.5 Not translating grammar: reported speech

The next level to consider is that of grammar. A routine task in any kind of reporting is to assemble strategies for dealing with reported speech in some way. There is often a verb change in a formal syntactic realisation of reported speech. Another way to handle it is to use inverted commas. There is a range of results from the choices to be made in this task. By strategically exploiting this level of text manipulation, PG lets other negative characters in the piece damn themselves with their own words, or those attributed to them.

T... briefly acknowledged the controversy surrounding development of the Power Station, including a degree of public opposition to the contract going to a trans-national company. However, he feels that Federal Electricity is a company that has taken its responsibilities of corporate citizenship seriously, and that it has 'bent over backwards' to consult with the local community. He noted the company was working under stringent environmental audits, and also acknowledged Federal Electricity's significant financial backing of the ecological restoration project. [Shag Shoal 2001]

Leaving the inverted commas around 'bent over backwards' is an effective warning to the reader that the company is telling lies. If PG had wanted to believe the company, he would have removed the quotation marks, and translated the sentiment

into something which would integrate better with the rest of the script. He chooses to leave the last sentence, about the financial backing, in a position where it looks like bribery and blood-money.

The previous paragraph unashamedly makes use of the phrase 'yet more electricity'. PG is preparing a transparency, and one can glimpse the other, truly conservation agenda to reduce, reuse, recycle, residually underneath these dissembling statements of honour, which one is then obliged to read as dishonour.

16.3.6 Not converting genre from report to talk to review

The most damning statement comes earlier, in the bit where he reports having used the students.

Another functional objective was to reduce adverse public sentiment toward the Company and the Power Station, and T... approached this mainly through his personal agenda of encouraging community participation in environmental projects. By getting people outdoors and involved in such tasks as tree-planting, he feels public opposition to industrial developments might be tempered by a wider understanding of the realities involved. [Shag Shoal 2001]

We are left with an overall impression of artificiality and insincerity – that it is all window dressing. The justification is buried in the long rambling exposition, using the familiar professional vocabulary of hundreds of applications and forms and procedural documents. The only light touch is 'T... notes', but the rest of the list of claims for the project seems to be taken right out of the latest report, not translated for the audience nor made particularly attractive, and thus having about the same low degree of credibility as the official report.

Reviewing the broad outcomes, T... notes there has already been significant restoration of habitat. From observations of 20 sample sites in August and December last year, the rates of vegetation survival have proved to be very high, especially considering that no artificial watering has been used. Insects and invertebrates are returning to the area, which will inevitably support native bird and other life. The restoration project also complements the larger scheme of the Handel Wetlands. With the revegetation gaining momentum, future plans are for recreational and educational facilities at the site. A proposal is currently in the process of submission for the development of walking trails, with the aim of furthering the other main outcome of the project: community interest and involvement in helping restore our environment. [Shag Shoal 2001]

It has not been brought to life and shared. It is there in the report to read if you like, but it has not been accepted as part of the organisation's effort. The imprimatur of the community is missing. The Guild touch is absent. PG revealed in the phone conversation his poor impression of TJ's presentation skills. He judged TJ's attitude to be that he had produced the annual report and was trying to derive the spoken presentation from it, rather than preparing for his live audience more carefully. PG revealed that he had returned the compliment by not translating the material further for the newsletter audience, but letting the crime play through to reveal the original guilt and lack of effort. This sort of harsh dealing was not PG's normal style. We return to the occasions on which he carefully and with hours of his own unacknowledged time, recast the complete Review so as to make the speaker look good. The best examples are Strategic Indicators and GIS. Considering this breakdown in expected text manipulation, it is at the level of genre that processing has been neglected. Going from report to talk to Review requires some reconciliation and changes. PG has permitted the free import across genre boundaries, with no formal acknowledgement of changed status. It all looks awkward and dishevelled, the social purpose muddied and unsure, semaphoring to the audience that they need to do a bit more work in order to comprehend it. This is a form of subversion, alerting the audience to the worrying inconsistencies which they will see if they pursue meaning.

16.3.7 Narrator/audience equivocality

The next breakdown is at the level of narrative relation with the audience. The usual involvement of the audience and the narrator-persona is absent in the *Shag Shoal* text, except for some wry and carefully handled polyphony. First there is the 'some would argue' functional phrase, which is often used by journalists to indicate their own effort to insert what they might judge as the community's opinion.

Because the landscape is so artificial and degraded in this sense, T... can see why some would argue that true ecological restoration is not viable. [Shag Shoal 2001]

PG's cunning use of this has the effect of providing The Guild audience with a negative view. T's insertion of the argument turns to damn him from his own lips. However, in attempting to judge PG's text in Hawesian terms, the position is

complicated. The handling of the issue does indicate PG's attention to what Hawes [1999: 277] is describing as 'the conditions of possibility for the generic transition from the dialectic to the dialogic ways of talking and listening, thinking and feeling'. In the articulation of the two separate positions, of judging the landscape as irreparably damaged, versus the claims of reclamation, there is a trace of what Hawes is outlining in

conversational utterances that make distinctions, mark differences and then affirm those differences are utterances informed by and grounded in the genealogical spirit of active affirmation rather than reactive negation [Hawes 199: 277]

Not so in the following:

He described his objectives as belonging to two main areas – functional and ecological. In the functional area he included beautifying the roadsides and building-surrounds through garden-style landscaping; and – uttered with some humour attached – the seemingly impossible objective of minimising the visual impact of the emission stacks on the skyline [Shag Shoal 2001]

The 'some humour attached' originally stood like that, without the 'uttered', indicating an ironical perception on the part of the detached narrator, and isolating the speaker from his audience in a quite aggressive narratorial gesture.

and – with some humour attached – the seemingly impossible objective of minimising the visual impact [*Shag Shoal* 2001 draft version]

PG felt on reflection that this aggression and negativity was unworthy of him and he added the 'uttered' so as to link the speaker with his audience again, thus conforming to Hawes's dialogic requirement [199: 277] to 'mark differences and then affirm those differences' which Hawes claims guards against the dangers of dialectic, seen as

predicated on an affirmative will to falsehood, a creative will, a will to power rather than a will to truth which ultimately is a will to be right and in the process to make others wrong, a will to control and to dominate [Hawes 199: 277]

16.3.8 Breakdown in polyphony

Shag shoal marks a distinct divergence from the polyphonic clarity of other Reviews, in that the voices are muddied, the 'glorified gardening' charge seeming to damn the speaker, coming from the uncertain voice of the chorus, and not being countered effectively. In Shag shoal PG can be diagnosed as altering the mix of voices, signalling his discomfort with the organisational voices he is reviewing. However the power of the disparate voices is maintained, and hence the validity of the Review.

16.3.9 Information structure: not converting the speaker standpoint – deixis

This Review does not have the familiar PG touch of audience inclusion. TJ is made to stand on his own, with the multinational company construed as the enemy, the invader, a big powerful presence looming over what PG has managed to present as the rather artificial garden, despite TJ's denial:

Of the many decisions made, one was to include suitable *non*-native plants in the project. [*Shag Shoal* 2001]

Those are PG's italics. He was obliged to furnish an apology for this in the following issue, because the speaker had intended the 'non-native' to be interpreted as exogenous native plants, indicating plants that are Australian, but not endogenous to the region. This mistake can be diagnosed at two levels. The first is lexical. The translator did not get the right gloss for the term in the Source language. The second is at the information structure level. The deictic position is wrong. For a natural resources manager, sourcing Australian plant material from as little as five kilometres away can be considered too far away. TJ's standpoint was from the ideal botanical position, unattainable in this case, but a badge of competence and best intentions. Usually PG would have been alert to a contradiction like this, but perhaps the negative frame he had adopted led him to seize on something to criticise.

16.3.10 Irony and subversion with clean hands

Ultimately the judgement is that PG avoids the temptation to give in to dialectic, but that his position was not strong enough for him to take anything other than the standpoint of irony and subtle subversion, which appears in these three challenge texts. Expressed in translation terms, his ploy is to use lexical equivalence, rather than to work for intersemiosis. He goes on strike, refusing to bring his usual expertise in translating from spoken mode to written mode. A contrast of his performance in *Shag Shoal* with that in *Gammon* shows how careful he was in *Gammon* to protect the audience from the mode transfer, judging that certain facets of the live event would not translate to the written page. In *Shag Shoal* he can see what might happen and he lets it happen. But his hands are clean. The audience will work it out for themselves as they unravel the messy relations resulting from the lack of processing.

16.3.11 Other Reviews must process at 2 levels: interaction and detail

The vigour of his negative feelings revealed in *Shag Shoal* [July 2001] makes the usual maintenance of strategic tact all the more remarkable. These unusual examples of negativity contrast firmly with the usual tactful Reviews. This is where the tertiary research question about unconscious processing arises. How is it ever possible for him to process the proceedings without this negativity? What is going on in the rest of the meetings? The suggested answer is that much processing of material detail takes place at a level below that of the processing of social patterns. In that way, PG's faithful representation of the community to itself is enabled, by bypassing the surface inconsistencies, and seeing into the heart of the community, so as to view the sincerely held conservation ethos. Perhaps on *Shag Shoal* night, the pre-dinner drink conversation upset him so much that his usual view of the community was destabilised and the negatives were allowed to sneak through.

17 DISCUSSION OF ANALYSIS

The first chapter of the Analysis [chapter 8] introduced the rhetorical structure of the genre-hybrid Review and previewed text categories of narrative persona, lexis and characterisation. The three sections in this chapter consider a collection of other text features observed in the analysis, for interpretation in terms of the three research questions.

Section 17.1 looks at Face, then at how, in cementing his genre-hybrid, PG valued rhetorical structure over detail. We hear the voices produced in the narrative polyphony and characterisation, presenters' voices, the narrative-personae and the whole troupe of personalities, and notice that the audience is not the same each time either. Sometimes they are distant, sometimes divided. Section 17.2 acknowledges PG's ability to translate at the levels of lexis, grammar, information structure and genre and to find dynamic equivalence. Section 17.3 admires the maintenance of tact all the way through the dangers encountered by opening up the interactions.

17.1 The successful components of the Reviews in technical terms

17.1.1 Balance of positive and negative Face

Face is a prime construct relating to tact, trust, strategic ambiguity, and positive reference frames [section 2.2.3.1]. Affairs in The Guild do not usually get to the stage of providing many examples of Face renegotiation. One exception happened on Gammon night [chapter 12] where a request to look at a slide of monitoring equipment was rejected in favour of enjoying the rest of the slides, which could have been interpreted as a Face Threatening Act, but which had the hierarchical structure to support it in a cocktail of power influences. One important way in which tact is normally maintained is by means of close attention to the technicalities in the formal presentations. This closes off other, more interpretive avenues to discussion.

However, these avenues were unusually opened on the aberrant Gammon night.

Instead of looking for Face Threatening Acts, Face can be more effectively understood in terms of the balance between positive [involvement] and negative [independence] face:

... Involvement and independence are in conflict because emphasising one of them risks a threat to the other...[Scollon and Scollon 2001: 47]

To illustrate the sensitive handling of Face in the Reviews, a set of excerpts from *Fish* and *Shag Shoal* have been organised in terms of Scollon and Scollon's checklist of involvement and independence in Appendix A1.

17.1.2 Genre-hybrid brings ideas into intimacy

17.1.2.1 A rhetorical home for the intimacy

PG is constructing a rhetorical home for the community, somewhere he can bring ideas into intimacy. The very structure of the genre-hybrid is itself a kind of intersemiosis, telling us that the old genre was not doing the new kinds of jobs members want, moving abstract ideas into more familiar space. The structure permits dialogical interaction and thereby confronts the old hegemony.

17.1.2.2 Valuing the structure over the detail

PG manipulates strategies in information structure to effect community goals and policies, to present The Guild community to themselves as they want it to be. PG took care to establish a robust rhetorical structure for his genre-hybrid, which he managed to maintain as constant throughout the period. He based the structure on careful consideration of what he needed to include to match the expectations of The Guild discourse community, plus his strategic decisions about how to accomplish his own communicative goals and how to maintain his communicative ideology. The importance he attaches to his communicative strategies is clear when they come under attack in the Genre Challenge [chapter 13] and in *NEPC* [chapter 15]. He defends the integrity of the genre-hybrid, insists on its active nature and its dynamic potential. He testifies to its real existence as a community resource.

Another testament to the faith PG had in his genre-hybrid is his awareness of the functions of its various sections. He accepted emendations on the opening and closing *NEPC* paragraphs. The initial and final paragraphs are load-bearing parts of the text. On the other hand those structurally important paragraphs are less crucial if there is a solid consistent structure with several key struts on which readers can depend. If the whole fabric is strong, the text can tolerate some pressure on one or both of the key opening and closing paragraphs. The test of this strong structure comes in *Strategic Indicators* [chapter 11] where PG uses games with the established rhetorical structure to gain interest.

The *NEPC* ploy testifies in another sense to PG's technical expertise. He knows that the speaker and the committee members would be attracted to checking the opening and closing, and probably be satisfied at that. In *Tax* [section 16.2] there is evidence that PG acknowledges the importance of the opening and closing in the three distinct sections. In the introduction and conclusion the members are there. But in the body of the Review they are not – they are replaced by 'people' and 'taxpayers'. Then he uses the final paragraph to introduce his new 'uninitiated' narrative persona.

17.1.3 Polyphony, voices and characterisation

In thinking more about the dialogical interaction which confronts the hegemony, the first thing to notice is that the genre-hybrid mixes narrative with scientific summary, permitting narrative polyphony in a variety of forms. The primary aspect of polyphony is the voice of the reviewer himself, and PG explores a bravura range of narrative personae and standpoints. With these he manipulates the audience in a multiplicity of cohorts, exclusions, inclusions, standoffs and intimacies. The presenters and the characters they bring to the text complete the rich cast.

17.1.3.1 Voices

In *Fish* [chapter 11] PG overtly transcribes some questions and answers, giving two sets of voices a format segregation. In *Fascinating* [chapter 14], his Review of SZ's presentation adopts a kind of dialogic suspension because it includes traces of the conflict which had occurred over the draft. The eventual smooth text developed a narrator-persona whose position differs from PG's. The conflicting positions were not resolved, but were in suspension. Two months later, this overt dialogue had

disappeared, and PG had embarked on burying the polyphony deeper into the text, so the conflicting *Wildlands* voice [chapter 16] was corralled into ironical lexis such as 'wildlife assets'.

17.1.3.2 Characters and audience

Characterisation, and peopling the texts with a range of personalities who come in and out of the oeuvre, are two ploys which increase the number of voices. With characterisation the people and even the machines and departments are made three dimensional, given a past and other kinds of depth. PG makes sure the presenters get their own voice with direct use of speaker-generated material, always acknowledged, as with the Archiepelago de Colon in *Galapagos* [chapter 11]. Conversely, he is not afraid to misrepresent the speaker completely if he feels he can make them look better, as in *Exchange* [section 10.2] and *Strategic Indicators* [chapter 11]. This reveals something about his goals in making the speaker look good – it is not for their sakes, but for the sake of the audience and the community. The Guild members see the reflection of themselves which is most positive and likely to promote interactional confidence.

PG can also make the speaker's voice carry negative messages and simultaneously quarantine the audience from them. In Tax, the speaker was the one who led the reader through the Australian Tax Office minutiae, and the set of technical terms such as 'entity taxation' and 'depreciating assets'. The audience were separated from him. Where usually they are 'we' and 'members', in Tax, they are 'people' and 'taxpayers'. In *Wildlands*, he was perhaps writing for two different audiences, one to share an ironic point of view, and one to accept the information at face value.

17.1.3.3 Treasure hunt as non-translation semiosis

The reciprocal of this process is where he refuses to translate, a refusal made manifest at the levels of lexis, grammar, information structure and genre in *Shag Shoal* [chapter 16], where he leaves a tangle of unresolved rhetorical mismatches. These prompt the audience to delve further and make new connections, more interpretation. Such engagement leads them into complexities which they would not otherwise see. This is an extreme example of the audience splitting he tried in

Wildlands, where one cohort can follow the clues in the treasure hunt and the others might be satisfied with the surface information.

So while at one level PG is avoiding intersemiosis and leaving the material to its lexical equivalence, the Target Text ends up as a sort of non-translation [Gentzler 2001: 192], because it is telegraphing that the writer has left undone those things which he ought to have done. The unresolved rhetorical mismatching, or treasure hunt, is non-translation semiosis.

17.1.3.4 Intersemiosis

Mostly, however, this study notes PG's skill in intersemiosis, or translating on the readers' terms. Examples of the intersemiosis include *Gammon*, where PG did not betray the intimacy of the gathering, and its converse, the acknowledgement of quirky sentimentality in *GIS* [chapter 11] translated into the personification of the computers. The subtlety of information structuring in *Exchange* amends the material into what PG judges is a more prototypically Guild ethos.

17.1.4 The professional writer's multilayered proficiency

PG's technical proficiency as a professional writer is multilayered. So far there has been discussion of the genre and discourse level, but there can be acknowledgement of his proficiency at most other levels too. It was noted in preparation to reading the Reviews that PG was a verb virtuoso, and he pulled out a verb raft to float his discomfort on in *Tax*. The hot link URL in *GIS* was at the time unusually adventurous, so PG is an early adopter of technical tricks, but also an old-fashioned format aficionado in *Strategic Indicators*.

An important level is that of style. PG knows that less is more. In *Gammon* and *Galapagos* he was mean with the aesthetic experience. He also showcased the presenter's self-minimisation in both Reviews, reinforcing the cultural quality of modesty, while emphasising the importance of the aesthetic text. 'Style' can be reinterpreted as judgement in discourse variety and information structure, but there is an important issue which is often overlooked in this regard. It is that of talent and inclination. Someone who devotes a lot of attention to the craft of writing for its own sake stands in contrast to a person who spends their time doing something else.

A professional writer is likely to make better writing decisions than someone who chooses to spend most of their effort on another profession. One thing PG has shown is the value the organisation gets when they employ a writer to do a writer's job.

17.2 How technical achievements link to success and organisational outcomes

There are three research questions to address, but it was originally a set of practical questions which prompted the analysis of the Reviews. As the Reviews' technical achievements come to be linked with their success and contribution to organisational outcomes, it is satisfying to be able to go back to the practical questions and see if the answers come out at the same time.

17.2.1 Why the Guild liked PG

No objective information emerges on why The Guild committee preferred PG's work to that of others. One possible group of answers suggest that the Reviews were interesting to read, that their standpoint was not predictable, that the dialogia permitted a more complex picture of the factors and issues than might emerge in a more single dimensional piece. Perhaps members felt that the Review was in that way more representative than the old Summary, that voices had not been quenched, that matters were still open, that something of the struggle was represented.

Putting the question in more formal terms leads to concentration on matching the output with expectations and goals relating to community building. By what means might the technical components have contributed to the Review's successful reception by organisational members? It is perhaps possible to link most of the conjectured answers to the dialogia, which was made possible by the genre-hybrid. Perhaps Guild members felt that the organisation seemed a more socially dynamic place because of the extent of characterisation. Perhaps people found new understanding of issues when they bothered to read the newsletter, when they could count on the same writer each week, the same structure, a regular place for a little joke, a quirky comment.

17.2.2 What organisational needs he was meeting

If one now goes on to ask the formal research question about the contribution, one can use some of the insights from the practical question to find a way into the answer. Asking by what means the Reviews' technical features might have made a contribution to organisational goals immediately provides two answers, one social and one intellectual. The increased pleasure in reading and interacting facilitates the transfer of knowledge. The increased complexity in the Reviews affords more intricate understanding. In terms of organisational learning, the genre-hybrid can be predicted to facilitate the transfer of complex knowledge in terms of the narrative component which provides an analogue for communities of practice with their story telling.

17.2.3 What he was doing right technically

The next stage in seeking the answer to the practical question of what The Guild liked about PG was to think about in what terms text was well-oriented to context. The quest was for strategies that might be succinctly summarised into a single page of guidelines. The completed journey reveals that the successful orientation of text to context consisted in correctly deducing that what was important, with this particular group in that particular stage of the organisation's life, was the interaction of the people rather than the reporting of each specific scientific fact. Relationship building was the focus, not cataloguing, taxonomy or reporting. The components of context were successfully captured in emphasising the dialogical structure of the genre-hybrid, rather than the details of what was included in one paragraph or another of one Review or another. The dialogical patterning is the way in which the organisational patterns are reproduced, the way in which the Weickian equivoque is realised.

17.2.4 How the kind of community affected interaction with the texts

The main organisational goal is separable into various components and leads to appreciation of the contribution in the different facets. The Guild's purpose is to

enable and facilitate communication and interaction between environmental managers from diverse intellectual backgrounds in the pursuit of environmental sustainability [The Guild's website 2002]

The 'enabling and facilitating' goals are realised in the dialogia. The 'diverse intellectual backgrounds' relate to what kind of community The Guild is. Reviewing the different classifications of community in organisations [section 3.5] raises the question of how the kind of community might affect members' interaction with the Reviews.

The contact category was the Community of Otherness and Difference, which takes in the diverse intellectual backgrounds. The Halfspectrum filter maintains the positive tact frame, yet still allows a wide range of attitudes to be included. To show the variation that PG smoothed through, one can collect the *NEPC* 'neppums' incident, *Gammon* and *Galapagos*, *Exchange*, and the 'no-nukes' seminar incident.

The *KIFOW* classification, especially a scientific *KIFOW*, is probably the default interpretation of the members, the way in which they see themselves, and thus an important factor that PG built into the genre-hybrid design with the scientific points summary section. The *KIFOW* ethos was evidenced in the Genre Challenge, *Fascinating* and the South African marine park impromptu party after the *Strategic Indicators* presentation. The importance of this classification comes in seeing how PG was provoked into the fierce defence of his genre-hybrid, evincing his confidence that members' interaction was a more important function than the transmission of scientific data.

Finally the Community of Practice/interpretive classification appears to be enhanced by the Reviews' capacity to facilitate organisational learning in line with accepted organisational practice in collaborative learning and knowledge management. This is evident in the members' discussion of sessions which had been reviewed, but which they had not attended.

17.2.5 Fascinating flaws show OUTER/INTER contrast

What new task does the new hybridised genre perform? Tuler's [2000: 1] description of dialogic communication as a thinking device prompts a view that the success of the genre-hybrid Review centres in how it allows for the emergence of

additional types of meaning-making. His new form is doing a new kind of social and organisational job for The Guild. That task is to facilitate organisational learning, not just of facts, but of cultural paradigms and pragmatics, of strategic integrity, of identity.

The *Fascinating* text development process starts with a role and function misassignment, turns on a muddle between INTERPECPEM and OUTERPECPEM, and escalates into another standoff in the politics of genre. It illustrates three different tasks in unresolved relation: reviewing, facilitating and report writing.

Fascinating is perhaps the best example of the primary way in which the Reviews contributed to the organisation, because it illustrates the difference between INTERPECPEM and OUTERPECPEM. The presenter is dealing in OUTERPECPEM. She is acting in the OUTER area of members' work. PG is working in the INTER area. The flaws relate to what PG's oeuvre was not. He is not teaching the members to write reports. He is doing genuine CofP/interpreting. He is writing The Guild. He is representing them to themselves. When PG adopts the role of interlocutor to the presenter, he is trying to take what he thinks is a prototypical Guild role. The role is perhaps wrong, but it originates in his impression of the members, of the Weickian equivoque. It derives from his participation. He is working from inside the intimacy.

17.2.6 The translator's technical professionalism

It is unusual to think of deep levels of meaning-making in technical terms, but that is what is happening in the manipulation of texts. Texts are the sites of technicalities. A comparison of the tasks of the professional environmental communicator with the profession of translator is pertinent.

The neutral nonpartisan status of the translator is the major commodity traded. The unattainable ideal of impartiality involves the notion of objectivity, the metaphor of the conduit, the false notion that the translator is able to transfer, without loss of meaning or quality, some kind of independent message content and information from one participant to another. While unattainable, this ideal sets the focus to which the translator applies their concentration and technical skill. In one respect the translator is the only person who understands the full complexity of the material

and the process. The professional environmental communicator is in the same position. Keeping the technicalities in line with the impartiality is tricky. As the text is unpacked, the truth appears, and it is hard to package it up and hide it again.

17.2.7 Keeping the voices distinct – ethical standpoints

Translation analogues for professional communication are not new. Hawes takes a line on contention which ends up with Spivak and her links with translation. Hawes starts by observing that power is the affirmation of difference, while control is the negation of difference [1999: 234] and that spaces can open with dialogics

the intellectual and ethical task is to think both dialogically in thirds and dialectically in halves [Spivak 1988 quoted in Hawes 1999: 229]

which emphasises the importance of including the third space, manifested in The Guild as strategic tact, and unconsciously replicated by PG in his Fractals.

The 'ethical' translation task of keeping voices distinct and true is what PG is doing in code-handling – he is keeping each voice distinct, representing truly and in this new third suspended space what the organisation is all about. In *Fascinating* PG keeps each voice distinct, representing truly and in this new space the richness of the organisational context. In *Tax*, PG provides an obvious split in his voices to separate the taxpayers from Guild members.

PG's Fractals have Hawes's 'selective ontology', ie not just one truth, or a controlling truth, but a truth for each role position. This is a good description of the notion of suspension. In work where PG is put under stress in respect of his values, there is likely to be close engagement with aspects of text which he finds disturbing. This is the point to examine his procedure in Hawesian terms and take a list of speakers whose work falls into the stressful category. In the *Tax* talk, PG was confronted with a frank description of tax minimisation practices. In the *Wildlands* talk he faced animal exploitation. In the *Shag Shoal* talk he was offended by the manipulation of public opinion and the undermining of dissent, of using volunteer labour and student effort, and of supporting polluting industries by labelling corporate effort as environmentally sustainable. PG uses a range of writerly techniques to handle these offensive issues.

17.2.8 Dialogic dangers and delicate decisions

The Reviews provided potential for disruption of the positive tact frame and it is a success factor that this danger was averted. In particular, the dialogic nature of his new kind of genre-hybrid, opened up for PG the difficulty that there was more danger of provocation in the dialogic mode than in the monologic mode. The Analysis chapters showed that delicate decisions about single words held great power, and were treated with tender care, as with the 'with some humour attached' in the *Shag Shoal* becoming 'uttered with some humour attached'.

17.3 Cultural contribution

The Review which ends up being published in the Newsletter is acting to create cohesion and community in The Guild members, in the CofP/interpretive. It is not acting to resolve, as it would in the Unity format, but rather to maintain and suspend the diversity of positions in a Suspension dialogic. Meaning is not in the word. It is in the social interaction, in the Weickian equivoque, the decision environment. The writing is a creature of the organisation It is language doing organisational social jobs, a manifestation of organisational Weickian equivoque, a Fractal of the organisation.

The Reviews constituted an act of cultural management. There are five aspects to the cultural contribution. First, the production of the series of Reviews is a cultural act, telegraphing the organisation as modern and in tune with current wisdom about organisational communication. Second, in producing a series of different kinds of communication, the organisation was succeeding just by doing something differently. Variation is not usually counter-productive. In the case of environmental knowledge, the level of satisfaction with outcomes is generally low and most experimentation is welcomed. Management literature routinely utilises the concept that simply making change enhances practice.

Third, the production of the Review collection constituted an ongoing validation of the speakers, of the social occasion itself and, as PG settled into the position of regular reviewer, a validation of PG and thereby of his work. Fourth, insofar as the Reviews conformed to the RO sets [Myers-Scotton 1998] of the organisation, the tact factor permits the seduction of participants who would not attend if the risk of confrontation were too high. The RO sets include more than tact, for example the set of rights and obligations that goes with scientific credibility is considered a central part of the culture and of the integrity of organisational efforts.

Fifth, the result of increased interactivity and increased confidence in the knowledge base is an enhancement of the Weickian decision environment, increased interactivity among members and an enrichment of the intellectual atmosphere stimulated by that fellowship. Management literature recognises that increased activity translates into increased effectiveness.

Finally, if the Reviews are popular and are seen to increase the overall quantity and quality of communication, they indirectly increase opportunities for decisions. Also, in terms of the issue most closely related to the tact imperative, if the Reviews help the construction of the pleasant atmosphere, participants who might otherwise feel patronised or threatened are encouraged to come along and hear the technical briefing updates.

17.4 Summary: a tricky tactful genre-hybrid

At the end of the technical analysis it seems that what PG achieved was a high level of complexity in his Reviews and that he managed to reflect and confirm organisational cultural patterns as well as effecting the integration and further utility of the knowledge he summarised. His genre-hybrid Review opened new doors and ran the risk of being tactless. However, despite his contradictory personal political standpoint, he maintained the strategic tact, perhaps with a certain degree of unconscious processing. He became a storyteller for The Guild, and wove the scientific information into his stories. The intricacy of the task can be appreciated by matching it with translation processes.

18 CONCLUSION

In the course of discussion, the three research questions did not individually seem to yield much insight. Did PG's Reviews make a contribution to The Guild? What was it? How was it done? It was in combination that these questions produced a high degree of complexity. Now a fresh perspective can be applied in deciding what has emerged from these data, these methods and these approaches. The three research questions can be seen to arise from one major question. What does it mean to do a good job in environmental communication? The answer seems to centre on community, or on Weick's [1990] equivoque [section 3.6]. This prompts recapitulation of the research process from the point of view of The Guild as a community, of PG's approach to community, and of the texts in the context of their community.

18.1 Texts in community

The research was instigated to meet the practical need of preparing to brief PG's successor, which created the demand to work in terms of what PG was doing right. This is difficult, because good performance of any kind is often characterised by smooth operation, by making the job look easy, by doing things that seem obvious. The hard invisible work that goes into making the seemingly obvious decisions is by nature not available to scrutiny. It was helpful to be able to work across the range of texts, and to have the opportunity to discuss decisions with PG. The best information, unsurprisingly, came from flaws in the process.

The first step was to acknowledge that it was the organisational community which was judging the writing as good. This led to an interest in what sort of community The Guild might be. The quest for relevant categories turned up the *KIFOW*, the Community of Practice, and the contact community. There was a common element in all of the models considered. This was the emergence of narrative exchange genres which cut across formal reporting structures and which make the knowledge available to a wide range of groups. The knowledge is presented in a practical and applied manner, thus releasing it from the research and theoretical arena into the practice of participants. PG's genre-hybrid Reviews utilised narrative methods and fitted into the category of text genres considered in these sorts of groups.

18.1.1 Community of Practice

Locating the enquiry about environmental managers in management literature offered a pathway to the category of Community of Practice/interpretive [section 3.4.8], which delivered the importance of the Reviews' organisational learning function. This is not to say that the Reviews were teaching documents. It is way of saying that the meaning negotiation and the construction of community were reflected and enhanced in the Review process, that integration of knowledge happens when people negotiate meanings and renegotiate them with fresh material. The use of narrative mirrors what happens among the 'reps' of the original research [Lave and Wenger 1991].

PG's own technical background enabled him to find reward in learning thoroughly about the information itself. The technical nature of the material had an integrity which could not be compromised. He sought accuracy in this regard and took professional technical pride in the job of delivering the technical information, as clearly and completely as he could, to all of the 'diverse intellectual backgrounds'. In fact one respect in which Gammon night [chapter 12] was revealing is that PG admitted to a slight reaction of bemusement about how quickly the champagne and the party intimacy dismantled the technical component. He had been looking forward to coming to grips with updates on the technicalities of measurement, because it was an area in which he had some prior expertise, and was disappointed that members seemed to be unusually diverted from what he considered a fascinating topic.

The professional writing task of reshaping the technical material for the whole set of cadres was an intellectual enrichment exercise for PG as well. As he manipulated the material and made meanings for himself, he engaged in making meanings for the community he was coming to understand more thoroughly every month. He knew better than to patronise members by eliminating professional vocabulary. The job was not to perform information transfer from scientific vocabulary to newsletterese, but to make the material available to the community in terms of their existing patternings, in terms of the emerging patterns, and in terms eventually of the patterns which his Reviews were having a hand in forming. *Strategic Indicators* [section 11.3.1] showed us this with the revision about environmentally responsible

Triple Bottom Line accounting, which assesses social and environmental outcomes alongside the financial. The process was never static or automatic. Despite the template of the rhetorical structure developed in the first Review, the task each time was different, because the community each time was different. He could not have kept up with this dynamism unless he had committed himself to the community and to their changing meaning-making.

This becomes clearer in the contact community configuration.

18.1.2 Contact community

The contact community characterisation for The Guild [section 3.4.6] was an invitation to use theories relating to languages in contact, intercultural discourse, cross-cultural pragmatics, code-switching and translation. It explained the function of the strategic tact structure, in terms of reducing the complexity of the cultural mix. In the light of the contact community one can interpret The Guild's Halfspectrum professionalism criterion as the common cultural core, around which the community can be built. The ecological rationalist standpoint [section 2.2.2] constitutes the core professional ethos. Tact, as a criterion for meaning making, forms the basis for a common vocabulary and common set of pragmatic Rights and Obligations [section 5.3].

The contact characterisation enables one to see the building of the community as a prime goal, and PG's understanding of that as his primary contribution. In this way the material which is exchanged in each meeting, becomes an excuse for meaning-making exercises, rather than a set of facts to be put across. PG saw this. Or rather he felt it. The Guild's cadres and their codes of interaction delivered patterns to him, which he could interpret by 'code-handling'. Then he could rework and reconfigure the patterns into the Fractal artefact of the Review. From the very first *Fish* Review [section 11.2], the cadres were all patterned out, forming a matrix in which meanings could be made. The readers understand the achievement of the fish management plan document more clearly when they see the whole range of managers, business people, public servants and scientists and how they work together, the kinds of jokes they like, their miseries and challenges, their families and their heritage.

18.1.3 KIFOW

The natural home for The Guild is the *KIFOW*, the learned society [section 3.4.5]. Then as one watches the environmental management professionals communicating with each other, one is led to delineate their kind of professional environmental communication as Natrat-talk. This classification rendered irrelevant most of the scientific and advocacy literature on environmental communication. It drove the enquiry to coopt a range of theories in order to find some locators in a task which would otherwise mean starting from scratch to describe the managers' linguistic discourse variety and the rules for interaction. Furthermore, the logistics of the research process meant that the language the managers use was only effectively visible from the Review output angle, from the point where PG had processed it. The interesting opportunities which arose where there had been some flaw in the process became the points of negotiation, where one could see that there were some rules of interaction in operation, that PG was acting to a pattern he judged as right. The fact that there could be flaws at all was an indication that there was risk-taking, and the risks had to be associated with community dynamics. At the most obvious level the risks and flaws confirmed that the study had entered a realm more complex than that of scientific communication.

PG's handling of the monologic scientific register prompted the question of where professional environmental communicators are to be drawn from. A professional environmental manager is bound to the hegemonic science code. The default status of the scientific register means that, for a high proportion of the population, it is the 'correct' register, the only register, certainly the appropriate register for written documents. It is often explained in terms of formality and the need for consistency and precision in written documents. This is the common paradigm with most people in the community of which managers are a part. It takes a language professional of some kind to see through the hegemony and to realise that there is nothing inherently more precise about scientific vocabulary than any other, to question the processes by which the scientific lexis acquires its meanings, to stare down the normativity and make independent judgements about lexical and grammatical choices. It takes a brave and confident writer to put enough faith in their own judgement to risk choices from outside the hegemonic variety, and it takes a skilled writer to make those choices precisely enough to be acceptable to a community with

so much at stake in terms of how they present themselves. This is why it seems that the group to draw professional environmental communicators from is that of language professionals, writing professionals, communication professionals who are accustomed to dealing overtly with the issue of hegemony.

A manager, encouraged to believe that the scientific variety is default when processes are to be enshrined in print, sees proficiency in the scientific register as an indication of proficiency in professional practice. There is a danger of their undervaluing the worth of material produced in any other variety. In such circles the need to employ a communication professional is dismissed as not only unnecessary, but inappropriate, and a slur on the capabilities of the scientists in the group. There is very little sense that the production of text requires a grasp of intricacies which are just as subtle as many of the scientific facts being exchanged. Many managers sincerely believe that if the general population were better informed about science, they would behave in an environmentally responsible way, and information about science, they are not shy to assert, starts with learning some of the complex concepts and the language that goes with them. This is consonant with the Enlightenment project, a mainstay of Western European thought since the eighteenth century. The twenty-first century is finding ways of breaking down the goal and the means in different ways.

18.2 The questions answered – community building

It appears then that community is an important part of what it means to do a good job in this sort of environmental communication. PG did not content himself with his discovery that The Guild was intent on building community. He went further and committed himself to their community. This was particularly evident in *Fascinating* [chapter 14], where his interpretation of The Guild's people and how they should write was in contention with that of the presenter. PG's work emerges from his commitment. One way to characterise that work is as the creation of intimate space for the technical material. The Reviews arise in the private space of The Guild's patternings, which members can recognise as their own. Translation theory of dynamic equivalence [Malmjkaer 1998] shows how [section 5.4.2.].

This community patterning orientation brings cohesion to the three questions about the contribution, its nature and how it was managed, listed here in reverse order.

18.2.1 Tertiary question: how? - intersemiosis

The tertiary research question asked how PG maintained tact in the context of his inconsistent moral position. The answer emerged [section 6.4] in translation theories of intersemiosis. [Gentzler 2001] The notion of 'code-handling' [section 5.1] was proposed to cope with the suggested unconscious nature of the processing which might enable PG to perceive the patterns without consciously interrogating them.

18.2.2 Secondary question: what? – genre hybrid

The answer to the secondary question about what constituted PG's contribution can be packaged into his technical accomplishment of the Review genre-hybrid innovation, which altered the nature of the reviews from summaries to community documents. The genre-hybrid Review created flexibility in terms of narrative polyphony. Dialogic suspension [section 6.4.2.4] complemented translation suspension, a link supported by Spivak [1988] in an argument [section 6.4.3] that dialogic can replace dialectic [Hawes 1999]. This argument reflects the goal that tact in contact can replace contention in environmental management. [Tuler and Webler 1999]

The genre-hybrid Review achieves the feat of maintaining scientific credibility, along with the tact factor, while at the same time provoking an increase in interactivity and integration through the use of narrative polyphony.

18.2.3 Primary question: contribution? – integration

The Reviews in their incarnation as community documents, or Fractals [section 6], constitute the answer to the primary question. In what respect did the Reviews contribute to the organisation? The answer is everything observed about how the texts can be interpreted as active in terms of the community [section 6.3]. The learning in renegotiation, the primacy of the social task, the technical material as the basis for interacting and integrating, all these make up the answer. They are the basis for the argument that PG's Reviews made a contribution to the accomplishment of the organisational goal to further the understanding of

environmental management among managers drawn from diverse intellectual backgrounds. The Review collection, as the site of renegotiation, brings with it the risks. In particular there is a threat to the strategic tact structure.

Any communication is a risk to Face; it is a risk to one's own Face, at the same time it is a risk to the other person's [Scollon and Scollon 2001: 47]

PG increased his own degree of difficulty by dispensing with the ideal of the 'objective' scientific communication model practised by his predecessors in the OHP summaries and technical information transfer. When he invited the community into his Review Fractals and encouraged their renegotiation, stimulated their interaction, he ran the danger that the strategic tact structure would be compromised. This analysis invites a full appreciation of the amount of effort and skill it took for him to maintain the tact, under these new stresses he had created. Given that much of the effort is suggested to have taken place below the level of his consciousness, the feat is even more remarkable.

When the Reviews are considered in terms of the organisational goal to increase knowledge and effectiveness relating to environmental management, the analyst can judge that the Reviews did make a contribution, in turning The Guild into a modern, communicatively sophisticated organisation. Why does that translate into success? The answer is that old ways of communicating can be inefficient and lock up the knowledge in discrete compartments, sterilising it, making it unavailable for practice in environmental management decision-making. By releasing the knowledge, representing it in many different forms, enabling its integration and activating it, the Review writer opens the way and increases the chances for more people to be able to access it.

The Guild tried something different. They delivered knowledge in Gamble and Blackwell's [2001] midwife mode instead of their former banking mode. This signifies that PG's Reviews constituted the act of changing the mode of delivery and thus that they were an act of Knowledge Management [Sveiby 2001], where operatives share knowledge and integrate it. The Review narratives overtly perform some integrative tasks. The corporate knowledge of an organisation, with its focus on professional environmental management, is the integrated set of knowledges

about the ecology and management of local areas and the state's natural environment. PG's Reviews perhaps increased the complexity and integrity of the corporate knowledge.

The act of knowledge integration eventually has the effect of increasing quality of members' performance. The other effect of increasing integration is making the knowledge itself more attractive. Members become more committed to knowledge they feel in more control of and this has a circular effect of increasing familiarity of the knowledge and increasing their eagerness to participate in knowledge acquisition. A corollary to this increased eagerness is a possibility of increased physical attendance, constituting a reinforcement of organisational vitality.

18.3 Directions for further research

There are several sets of possible directions for further research related to the intellectual fields which have come together in the study, environmental management, professional and creative communication, organisational management and linguistics. They are presented in order of academic gravitas.

First the collation of theories could be developed into a consolidated theory framework for future enquiry.

The translation concept of dynamic equivalence explains the transfer of the organisational interrelations into the narrative structures. Further investigation in relation to translation theory might make a theoretical advance.

Further research in INTERPECPEM or Natrat-talk would add variety to studies in specific linguistic discourse varieties. The pragmatics of Natrat-talk have scarcely been touched on, yet hold major interest at this stage of development of pragmatic theory.

The default interpretation of environmental communication, as either scientific communication or advocacy, needs elaboration.

The professional pathways for professional environmental communicators need investigation. Enhancement of such pathways might attract aspirational communication professionals. This is of interest in general organisational

management as well as in professional environmental management, and in professional and creative communication.

18.4 Real outcomes

PG shows us that if we want writing done, the best person to do it is a writer. He delivered the environmental management science and technicalities by telling stories of people doing things. He pictured them getting new ideas about those doings, and he reported what they said about how we could all do them a bit better.

While the formal research objectives were achieved, it was at the expense of the original practical objectives, which failed in two ways. The initial project, to type out an A4 sheet of dot point guidelines to brief the next incumbent, never materialised. The seemingly simple set of research questions turned up such complex answers that they provoked ranks of further questions and theoretical intricacy. The other practical project, to assess the likelihood and date of PG's resignation, failed miserably. As the last couple of Reviews in 2001 came in, it seemed easy to predict that PG would not stay with The Guild much longer. That was a mistake. When 2003 arrived, he was still with them, and there had been no need to brief his replacement anyway. The whole study effort had been put into trying to find out what they liked about him, but perhaps it would have been a good idea to ask what he liked about them.

What the research did successfully deliver was an appreciation that the nature of meaning negotiation in an environmental management organisation needs someone with the moral commitment to devote enough time to do it, and the love of writing to bother to do it well – a decent writer.

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AJBS	African Journal of Biblical Studies	
AJL	Australian Journal of Linguistics	
ARAL	Australian Research in Applied Linguistics	
COCE	Conference On Communication And Environment	
EEA	European Environment Agency	
IEEE	International Environmental Education	
JALN	Journal of Asynchronous Learning Networks	
OD Practitioner Journal of the Organisation Development Network		

OERD The Oxford English Reference Dictionary

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^{* &#}x27;The Guild' website is not listed to preserve its anonymity.

APPENDIX A

Appendix set A contents

	Appendix set A	Link section
1	Face	2.2.3.1
2	Environmental communication sample	3.2
3	Community of Practice	3.4.7
4	Knowledge management	5.6
5	Fractals	6.1.1
6	Defending claims	4

A1 Comparison of Fish and Shag Shoal in terms of Face

Appendix 1 Face is a comparison of Reviews C1 Fish and C10 Shag Shoal in terms of Face.

Contents list of Face positions

Theoretical position

Involvement (Positive Face) Independence (Negative Face)

Observing deferential types (Negative Face)

- Using formal names and titles
- Giving others a wide range of options
- Action with a degree of autonomy
- The right to have an opposing view
- Emphasis on the individuality of participants

Observing deferential types (Positive Face)

- Using first names
- Common points of views and values
- Common in-group membership
- Paying attention to others
- Upholding the commonly constituted view
- Supporting others in views they take
- Taking the point of view of others

Challenging deferential types (Negative Types)

- Challenge to autonomy
- Making assumptions about the interests of others
- Not giving options

Challenging Deferential Types (Positive Face)

- Not paying enough attention to others
- Not showing interest in others' values and concerns
- Not taking the others' point of view
- Sarcasm
- Distancing
- Methods used by the writer to undermine the speaker's paradigm
- Pointing out non-membership or 'outsider' status

Theoretical position from Scollon and Scollon

This is an analysis of 2 Reviews according to points made about face in intercultural communication by Scollon, Ron and Scollon Suzanne, 2001, *Intercultural communication*, Blackwell Publishers, Oxford.

Involvement (positive Face) solidarity politeness

One shows involvement by taking the point of view of other participants, by supporting them in the views they take and by any other means that demonstrate that the speaker wishes to uphold a commonly created view of the world. (Scollon and Scollon 2001: 46-47)

Discourse strategies to manage [positive] Face include:

paying attention to others, showing an interest in their affairs, pointing out common ingroup membership or points of view with them, or using first names. Any indication that the speaker is asserting... (close connection) to the hearer may be considered a strategy of involvement. (Scollon and Scollon 2001: 47)

Independence (negative Face) negative or deference politeness

Emphasises the individuality of the participants... their right not to be completely dominated by a group or social values... free from the impositions of others. Independence shows that the person may act with some degree of autonomy... (respecting)... the rights of others to their own autonomy and freedom of movement or choice. (Scollon and Scollon 2001: 47)

Discourse strategies to manage [negative] Face include:

making minimal assumptions about the needs or interests of others, not putting words into their mouths, giving others the widest range of options, using formal names and titles. The key to independence Face strategies is that they give or grant independence to the hearer. (Scollon and Scollon 2001: 47)

Observing deferential [negative] Face

• Using formal names and titles

Dieter Menahir has played a key role in developing an Environmental Management Plan (EMP), and in working with the fishers of WA's Delta region to encourage a coordinated approach toward managing their environmental resources. (*Fish* 8/6/99)

The fishers of the region are represented by the **Subiaco Fishermen's Association** (SFA); (*Fish* 8/6/99)

This is when the SFA approached the Inland Waters section of **WARDI** (consisting entirely of Dieter and a senior fisheries scientist) (*Fish* 8/6/99)

Marine Stewardship Council (MSC) (Fish 8/6/99)

Peter Garrett (Fish 8/6/99)

International Standards Organisation (ISO 14000) (Fish 8/6/99)

Fishing licences are currently issued to 38 individuals in the region, although each licence represents what is ostensibly a small business, family members typically being involved in such activities as processing, packaging and transport. In fact, many of the operators **are third or fourth (one, fifth) generation fishers of the region**. (*Fish* 8/6/99)

The fishing families are from one ethnic group, but the designation of generations is interpreted as an alternative and preferred descriptive title.

Giving others a wide range of options

He now sees **causes other than commercial fishing** as predominantly responsible for the decline of productivity

(it gives the culprits present a chance to worry about whether they are going to be named and to feel relief when they are not named) (*Fish* 8/6/99)

He conservatively estimates that, with proper water flow management, fish stocks of certain species could be raised by a factor of at least 15 (*Fish* 8/6/99)

The remedy is couched in positive terms, ie not the negative of shutting down the water-flow impacting behaviour of the culprits. Instead an over-arching culprit of an impersonal improper water flow is introduced. And if something is improperly managed, presumably it can be properly managed and at least there will be time to alter practices. This is a warning, but it is presented as a set of management choices.

 the person may act with some degree of autonomy (respecting rights of others to their own autonomy and freedom of movement or choice)

He also admitted to a once-held prejudice toward commercial fishers (Fish 8/6/99)

Guild values do not permit prejudices. They are unprofessional and fishers are a valid group of NRMs.

these reductions were not due to the actions of commercial fishers but to changes in river management. (Fish 8/6/99)

the right not to be completely dominated by the group point of view

Firstly, he is not a fisherman, and claims he would rather spend a day at the dentist than to go recreational fishing. Secondly, being a **vegetarian** he is not a consumer of fish. (*Fish* 8/6/99)

• emphasising the individuality of participants

R J's work history has centred around **his particular interests** in conservation and ecosystem restoration. (*Shag Shoal* July 2001)

R... approached this mainly through his **personal** agenda of encouraging community participation in environmental projects. (*Shag Shoal* July 2001)

As R... displayed images of various plantings and provided a running commentary of botanical names, it became evident that the selection of vegetation and its introduction across the landscape was an aspect of the project **he particularly enjoyed**. (*Shag Shoal* July 2001)

PG uses 'personal' and 'particular' in respect of RJ to mean 'funny kind of', ie 'bad' or 'wrong'.

Observing positive Face

using first names

To put the record straight **Dieter** began by telling us what he isn't. (Fish 8/6/99)

This is when the SFA approached the Inland Waters section of WARDI (consisting entirely of **Dieter** and a senior fisheries scientist) (*Fish* 8/6/99)

pointing out common points of view and values

The fishing practices are low-tech, **most fishermen** operating from small aluminium boats (*Fish* 8/6/99)

The work is tough – not only physically demanding, but also, **for these owner-operators**, a sick-day means no income. (*Fish* 8/6/99)

(NRM resilience and resourcefulness)

A few years back **the feeling in the community was** that their industry was threatened by the increasing awareness of environmental issues. (*Fish* 8/6/99)

This is when the SFA approached the Inland Waters section of WARDI (consisting entirely of Dieter and a senior fisheries scientist) (Fish 8/6/99)

Small groups have similar values.

• pointing out common in-group membership

In fact, many of the operators are **third or fourth (one, fifth) generation fishers** of the region.) (*Fish* 8/6/99)

This is when the SFA approached the Inland Waters section of WARDI (consisting entirely of Dieter and a senior fisheries scientist) (Fish 8/6/99)

WARDI section is a comparable 'family' struggling enterprise; too much work, too few people.

The process began with **a lot of talking**: to the community, to government bodies, to NGOs ... talk, talk, (*Fish* 8/6/99)

The in-group of fishers are doing the talking.

Wild fisheries with a future. Dieter proudly held up his own copy and informed us that **the initial print run of 300 had all found owners**. (Fish 8/6/99)

On this last point Dieter alluded to the only other guiding text previously available to commercial fishers, The Fisheries Act – a notoriously convoluted and, one suspects, largely ignored bureaucratic tome. (*Fish* 8/6/99)

The in-group of professional writers.

they knew they were on to something when politicians showed such interest in the official launch of the plan. He described a situation wherein a surplus of ministers were vying for the opportunity to deliver an address at the opening. (*Fish* 8/6/99)

Outsiders coming in define the community.

paying attention to others

Most importantly, **members of the SFA now see themselves, and are seen by others**, as setting environmental standards and being proactive on a world scale. From a position of representing a threat to the environment, many of the fishers now see themselves as environmentally responsible leaders. (*Fish* 8/6/99)

• writer demonstrates a wish to uphold the commonly constituted view

The fishing practices are **low-tech**, most fishermen operating from small aluminium boats (*Fish* 8/6/99)

The fishers stick together in their insistence on low-tech equipment – the writer chooses this as important.

supporting others in views they take

Most importantly, members of the SFA now see themselves, and are seen by others, as **setting environmental standards and being proactive on a world scale**. From a position of representing a threat to the environment, many of the fishers now see themselves as environmentally responsible leaders. (*Fish* 8/6/99)

taking the point of view of others

One major impact has been the installation of weirs and the increasing demands of agricultural irrigation **throughout the catchment** of the Koori River. (Fish 8/6/99)

The writer chooses to profile the actions of the fishers as supporting and extending the efforts of others in the catchment to improve sustainability.

Challenging deferential [negative] Face

challenge to autonomy

The fishermen generally **did not communicate** about their operations or observations – sometimes tending to outright **secrecy** [*Fish* 8/6/99)

The fishers were ignoring the WARDI before the program began.

making assumptions about the interests of others

to which Dieter explained that the costs were not only his time, but also **theirs** – (Fish 8/6/99)

Looking ahead, he sees an important goal in **educating other fisheries** about the potential benefits of an EMP (*Fish* 8/6/99)

It implies educating other culprits.

wherein the **participants should be flexible** and looking for ways to improve their practices. (*Fish* 8/6/99)

This is what the culprits should be doing.

not giving options

Not giving options happens when firm directions are set, and when the participants' options are reduced.

The SFA's initial response was, OK, go and make us an EMP (Fish 8/6/99)

When their own management plan is introduced it will constitute a control.

To achieve this...but importantly, would not adversely affect present water demands for agriculture. (Fish 8/6/99)

This warns that agricultural water demands need to be managed, even though for the present they will not be affected.

Challenging positive Face

not paying enough attention to others

R... **briefly acknowledged the controversy** surrounding development of the Power Station, including **a degree of public opposition** to the contract going to a transnational company. (*Shag Shoal* July 2001)

not showing interest in others' values and concerns

R... **briefly** acknowledged the controversy surrounding development of the Power Station, including **a degree of** public opposition to the contract going to a transnational company. (*Shag Shoal* July 2001)

· not taking the others' point of view

and that it has 'bent over backwards' to consult with the local community. (Shag Shoal July 2001) Use of inverted commas is sarcastic.

sarcasm

However, he feels that Federal Electricity is a company that has **taken its responsibilities of corporate citizenship seriously** (*Shag Shoal* July 2001)

Many people in the community think the company is a bad corporate citizen.

He noted the company was working under **stringent environmental audits** (*Shag Shoal* July 2001) *Many people in the community think that the environmental audits are very weak.*

distancing

However, **he feels that** Federal Electricity is a company that has taken its responsibilities of corporate citizenship seriously (*Shag Shoal* July 2001)

He noted the company was working under stringent environmental audits (Shag Shoal July 2001)

Because the landscape is so artificial and degraded in this sense, **R... can see why some would argue** that true ecological restoration is not viable. (*Shag Shoal* July 2001)

He described his objectives as belonging to two main areas – functional and ecological. (*Shag Shoal* July 2001)

By getting people outdoors and involved in such tasks as tree-planting, **he feels** public opposition to industrial developments might be tempered by a wider understanding of the realities involved. (*Shag Shoal* July 2001)

In fact, one of the most rewarding aspects of the project was involving groups of students; students, **he suspects,** who have taken more practical and positive perspectives back into the community. (*Shag Shoal* July 2001)

Use of 'suspects' from lexicon of criminality.

As R.. displayed images of various plantings and provided a running commentary of botanical names, **it became evident that** the selection of vegetation and its introduction across the landscape was an aspect of the project he particularly enjoyed.

(Shag Shoal July 2001)

The enjoyment is ridiculed by the distancing.

writer uses methods to undermine the speaker's paradigm

In the functional area he included **beautifying** the roadsides and building-surrounds through gardenstyle landscaping (*Shag Shoal* July 2001)

Lexical choice of 'beautifying' implies artificiality, artifice, superficiality.

And – **uttered with some humour attached** –the seemingly impossible objective of minimising the visual impact of the emission stacks on the skyline. (*Shag Shoal* July 2001) *Non-dialogic* – *if it was funny PG would have processed the joke. PG doesn't think it's funny; the smokestack is in his backyard.*

Another **functional objective was to reduce adverse public sentiment** toward the Company and the Power Station (*Shag Shoal* July 2001)

Language of bureaucracy used to emphasise lack of connection with community.

R... approached this mainly through **his personal agenda** of encouraging community participation in environmental projects. (*Shag Shoal* July 2001)

Participation is presented as a ploy.

• Pointing out non-membership or 'outsider' status

On this last point Dieter alluded to the only other guiding text previously available to commercial fishers, The Fisheries Act - a notoriously convoluted and, one suspects, largely ignored **bureaucratic** tome. (Fish 8/6/99)

A2 Environmental communication sample

Advocacy

For the advocacy group, we can choose an Australian site such as Vox Bandicoot, who call themselves 'environmental designers' and have a range of activist ideas.

[www.voxbandicoot.com.au/accessed 15.9.02]

A mixture of environmental advocacy and technological enthusiasm is not unusual and is sampled in such offerings as the 1996 Internet for Environmental Communication Workshop [www.isep.at/internet_ws/] accessed 15.9.02]

Default science technical

We can choose at random an example of the communication approach which is taken for granted as the default science style. This model is discussed below as the 'transmission' model. One USA site 'Offers an effective program in the natural sciences. Includes classes in biology, environmental communications, and health sciences.'

[http://www.stephens.edu/www/PR/Academic/ AC_NaturalSciences.html accessed 15.9.02]

Communication generalist

For the category of communication generalist, which we might read as communication professionals confronting the task of turning their hand to the environment, we can visit the Center for Environmental Communication Studies at the University of Cincinnati which 'researches communication practices regarding health and environmental matters'.

The mission of the centre is to enhance the understanding and quality of communication processes and practices among citizen, industry, and government participants in environmental and health policy formation and implementation. The centre's research agenda includes the design, analysis, and evaluation of informational and persuasive messages and campaigns produced by and addressed to individuals and institutions which pertain to environmental and human health risk contexts and controversies; the analysis and evaluation of communication processes within environmental and health-related organisations; and the design, facilitation, and evaluation of processes of stakeholder involvement in risk-based decision-making.

[http://reports.eea.eu.int accessed 15.9.02]

Bibliographies, critical and social science

A group of bibliography sites seem promising until examination proves them to be devoted to critical and cultural analysis of how the notion of the environment fits into other human cultural enquiry. Such is the business of the Environmental Communication Network bibliography [http://www.esf.edu/ecn/bibl.htm accessed 15.9.02], which includes a reference to a representative Australian study, that of Jagtenburg and McKie [1992]. This area of scholarship is that represented in the *Australian Journal of Communication* volume 21: 3 [1994] special edition devoted to the environment , which has played an important part in defining what is meant by environmental communication for Australians. This thesis is not in that mould. Another bibliography is found at the Asian Information and Communication Centre [www.ecanet.net/biblio.html accessed 15.9.02], offering articles from journals such as *Asia Media*, which contain articles dealing with environmental sustainability and community management.

We can include in the category of social inquiry such interesting work in information and communication as that being done at Cook College Campus Centre for Environmental Communication [CEC] where a social science perspective is sought for environmental problemsolving. [http://aesop.rutgers.edu/~cec/ accessed 15.9.02] and also the questioning about the nature of environmental communication, education, and interpretation being asked in tertiary institutions such as Ohio State University.

[http://www-afa.adm.ohio-state.edu/u-majors/ ENVCOMM.HTML accessed 15.9.02]

Management

An important new group of corporate communicators are trying to promote the application of sustainability principles in business, with strategies such as Triple Bottom Line reporting. A representative wording might look something like this group's statement. The group

based on the concept of Green Partnership, is promoting more efficient environmental impact reduction by keeping in touch with as many partners as possible. Environmental impact is caused even by the issuance of environmental reports and the preparation and posting of environmental advertisements. The Ricoh Group, therefore, endeavours to disclose information that is useful for our green partners to reduce environmental impact as well as to provide interactive communication. The Group also makes use of opinions from its green partners to improve environmental conservation activities.

[www.ricoh.co.jp/ecology/e-/action/14.html accessed 15.9.02]

Exploitative

At the diametrically opposite extreme are those companies which understand environmental communication in terms of how far they can use environmental consciousness for exploitative purposes. A representative example follows:

This section will provide an introduction to National/Panasonic's environmental communication. Specifically, these advertisements

[www.matsushita.co.jp/environment/en/communication/ accessed 15.9.02]

Close match

A management approach which starts to approximate to the position adopted in this study is a 1998 article on the EEA (European Environment Agency) site which monitors the extent to which reports are accessed and used, and where the eventual goal is a new information model, described as

a process that moves information from passivity to activity, changes its content, and thus requires developing a new and different representation of knowledge [http://reports.eea.eu.int accessed 15.9.02]

A3 Community of Practice

 $Contrasts \ of \ [discourse \ variety] \ speech \ community \ with \ Community \ of \ Practice \ and \ with \ notion \ of \ social \ identity$

Holmes and Meyerhoff [1999] offer a convenient classification of Communities of Practice in contrast to those of the speech community and of social identity. The speech community is akin to what is termed in this study a 'discourse variety' or register.

SPEECH COMMUNITY	SOCIAL IDENTITY	COMMUNITY OF PRACTICE
nothing to say about boundaries	group identity is defined through comparison and competition with outgroups	boundaries are maintained but group not necessarily defined in contrasts with outgroups
acquisition of norms	learning is incidental	social process of learning
shared norms and evaluations of norms are required	shared identifications are required	shared practices are required
non-teleological	non-teleological: any outcomes are incidental	shared social or instrumental goal

Appendix A3 [Holmes and Meyerhoff Table 1 1999: 179]

Holmes J and Meyerhoff M 1999 'The community of practice: Theories and methodologies in language and gender research' *Language In Society* 28: 2 173-182

A4 Knowledge Management

Gamble P R and Blackwell J 2001 *Knowledge management: a state of the art guide* Kogan Page, London

Gamble and Blackwell [2001] claim that the types of knowledge resources developed in an organisation are related to the approach. Guild activities which PG is involved with are underlined.

The knowledge management matrix

Type	Embodied	Represented	Embedded
approach			
sense	observe knowledge surveys workshops/interviews network analysis	gather business intelligence text and data mining intelligent agents	hypothesise market analysis modelling/reasoning tools reverse engineering
organise	contextualise focus groups expertise guides knowledge coordinators	categorise knowledge taxonomies libraries data marts	map job design workflow analysis performance measures
socialise	share mentoring/coaching communities of practice conferencing tools/groupware	disseminate broadcast tools/ internet/intranet/email distance learning application systems	simulate scenario planning after action reviews competency management
internalise	APPLY –	DECIDE	- ACT

Gamble and Blackwell 2001: 137 figure 7.7

A5 Fractals as concrete forms

We see examples of the application of the Fractal notion in physical texts.

Jencks [2001] speaks of patterns in his claim that human society is entering a new paradigm in architecture, based not on plurality but complexity. He sees that these features overlap....

Complexity is a new take on Cultural pluralism [different tastes, different ethnic backgrounds, different economic groups]...What are called the complexity sciences are really the second stage of postmodernism... A group at Santa Fe said these are the sciences of the 21st century and they're different from the sciences of the last 300 years ...they're really about self-organising systems, complicated things,...but quite obvious and simple... this notion of self-organisation. [Jencks 2001]

That is the physical introduction. Masterson takes us towards the abstraction of the idea:

a famous tile that could be defined as self similar rather than self same, so a Penrose tile is envisaged to be a sort of metaphor for a much more complex understanding of the interfaces say between [Charles Jenks would use the word 'cosmogenic forces'] the interface, a more holistic view perhaps between the natural and the scientific. The Penrose tile can repeat itself endlessly in a self similar way rather than self same, but in its actual repetition you get these glitches in the system, so the system has a built in sense of not completeness. [Masterson 2001]

If that extension to the abstract is perhaps confusing as a result of its transcription from the spoken word, a return to the concrete is recommended.

This vegetative explanation has a coincidental and pleasing relevance for the collation of theories to inform environmental communication. However the concrete examples are the clearest.

Gothic architecture was particularly good at that. If you look at Gothic detailing right down to the bottom of a column or the capital of a column it's a small version of the whole building... A good historian can look at a detail of a Gothic building and tell you exactly what the rest of the building was, and infer the whole from the parts. That's a fractal architecture. [Masterson 2001]

A6 Defending claims

The task

Alvesson and Karreman [2000(a): 9] see that the task is to construct illuminating and manageable portions of the realities at hand in fieldwork situations. The present study is not 'constructing' anything, but rather is making use of a small concentration of authentic linguistic behaviour, in conformity with modern linguistic enquiry standards. Instead of taking environmental communication for granted as a field and as a practice, this study takes the opportunity of a situation where all the elements were open for scrutiny with a practical objective, that of producing appropriate texts for the context. So the reality at hand is the task of producing the texts for the one specific organisation (which can be described in detail although not identified) from specific meetings (which were observed although not videoed) with specific speakers (who are not named) with audio and print texts of talks (which are not directly quoted) and with the Review produced from all this which can be quoted along with the discussions which went into its construction. The manageable portion is the limited set of texts, and the focus on one writer, albeit in contrast to other writers whose work was not so readily accepted. The illumination is the quest for the explanation of responses and techniques which make the writer successful.

Such deep grounding will we think enable the researcher to say something about the specific situation under analysis but also about matters stretching beyond that situation [Alvesson and Karreman 2000(a): 9]

The intention is that the explanation developed for this one writer will be generalisable and useful for other writers, with the discussion aimed at the overall agenda of environmental communication claims.

Alvesson and Karreman [2000(a): 9] advise that claims on the level of practice should be supported with observational evidence. The explanation is developed from analysis of a set of final texts, taped live texts, drafts, cotexts and discussion meetings. They are all referred to in the explanation and quoted where possible. The tapes exist, the texts and drafts of texts exist and the notes of meetings exist. There exists an extensive set of cotexts. The total set of texts is not available for casual scrutiny because of confidentiality requirements, but reference is made to them. Versions of the published texts are reproduced in the Appendices.

Alvesson and Karreman [2000(a): 9] advise that claims on the level of meaning should be supported with ethnographic evidence. Now this enters the realm of semantics. Alvesson and Karreman are aware that meaning emerges as a product of context and thus their version of how to access context is through 'ethnography', but in fact that stricture raises in turn the question of what is deemed to constitute 'ethnography'. The quest for determination of meaning in terms of context is seen as integral to linguistic enquiry and a variety of linguistic conceptual tools are routinely employed. It would not seem to be advisable to limit this range by any characterisation as 'ethnographic'. Rather one would want to approach the matter through the established practice in linguistic enquiry, where the range of tools is suitable for various structural levels. A different set of procedures would be adopted to determine meaning at the syntactic level from those used at the pragmatic level. The comparison and interrelation of meanings in a variety of texts, both linguistic texts and non-linguistic texts, is widely acceptable. In this study the interrelation of texts is seen as an important approach to meaning determination and to assessing the factors contributing to the success of a text in context. One standard ethnographic aspect worth noting is the four-way nature of the roles of student and supervisor. In addition to these two roles, the mentor has an important role as a member of the client organisation, and the student has an additional role in his standing as a successful professional writer. Alvesson and Karreman [2000(a): 9] advise that claims on the level of talk should be supported with conversational evidence. As well as the notes of the mentor discussion meetings, the tapes of the live events include ancillary records of conversational interactions between members of the organisation. Notes of conversations also formed part of discussion meetings and emails were exchanged and often copied.

The realities at hand in fieldwork situations

To continue the discussion of constructing 'illuminating and manageable portions of the realities at hand in fieldwork situations', the study focuses on a short series of texts which reflect and further constitute meetings and interactions in the flow of organisational life.

It is appreciated also that 'it is more illuminating to concentrate on a particular situation, a meeting, an eventin the flow of organisational life [Alvesson and Karreman 2000(a): 9], where one of the things to try and do is to scope the facets of the interactions so that the next novice communicator or the next kind of enquiry can go into a similar topic with an elaborated view. Thus one goal is to extrude and elaborate the facets, rather than to say something almost certainly rather thin about all the events spotted during fieldwork.

To say something about matters stretching beyond the specific situation

The specific situation under analysis in this study is the construction of PG's texts. What one will be able to say about the texts at the end of the analysis is that they contribute to the effectiveness of the organisation, the Guild, by means of their genre-hybrid dialogic configuration, and their 'Fractal' quality, derived from sensitivity to the dialogic dynamics of the context.

Alvesson and Karreman [2000(a): 9] also require of good research that it involves working towards interpretations beyond this specific level of the specific situation under analysis. The primary matter stretching beyond the particular situation is to pursue the possibility of explaining the practice in terms such as to advantage another professional writer in approaching the task of successful professional environmental communication.

The method of observing, assessing and theorising

The development of the professional Natrat-talk practice was observed over a period from June 1997 to August 2001. The observation originally occurred as part of honours supervision and included the additional separate mentor process. After the honours degree was granted, the mentoring and observation continued as a research initiative. It was noted early that the assessment of the processes and theorising of the observations held theoretical interest and might perhaps lend itself to the gathering of insights. Therefore permission was sought and granted to make closer analysis of the student's work and to quote from it for the purposes of the study. As it turns out, material from the student period is not quoted or referred to. The only material quoted or referred to is taken from the Reviews themselves, which were documents made available to all the Guild members for their professional use, and from the speakers' public performances.

The participation effort was very intense, with the supervisor-mentor present at sessions used for summaries as well as others, and privy to many of the conversations in a number of configurations. The mentor was alone with the professional writer, face to face, by phone and email in a variety of locations; alongside the professional writer in his interactions with the employing organisation, the live speaker whose work was summarised, as well as members of the audience and members of the executive, guests of the organisation and external professionals; and independently with the above people in the absence of the professional writer.

Live onstream direction played a part, with the supervisor-mentor often encouraging certain consultations at the meeting with other participants. Specific problems were addressed as they occurred and theoretical positioning was sought on each element, with the adopted procedure being reconsidered at each turn of events.

Assessment and understanding of the processes was pursued by means of analysis of text development and redevelopment, assessment of cotexts, discussions, with records kept of discussion and questions generated in turn from the records of those discussions. Tapes and texts were shared in all drafts, with originals retained in the confidential cache. Literature, model and resource searches and reviews continued right through the process. These resource searches did not so much impose a coherence, as provide a tenuous thread of consistency, mainly by routinely providing unusable results, and by showing up gaps and absences.

The development of the theoretical frameworks and positions had a practical focus in the reflective teaching process. The practice of offering advice encouraged a research direction of trying to capture what happened theoretically. What was required was a theoretical framework that would tell people in advance what it would be like to work for this sort of employer, what pitfalls to watch out for, why people behaved in certain ways, what foibles to predict, and what assumptions to act or not act upon. It especially threw up the absence of any simple sources which might take all this together and present it in terms of a 'How to ...' booklet. A rough comparison to locate this aspect of the enquiry might be the efforts of Scollon and Scollon [2001], who admonish that the first rule of interdiscourse is to know as much as possible about the target culture. In this case the motivation came from the unwelcome possibility that PG might suddenly decide not to continue and a replacement might have to be found.

APPENDIX B EXCHANGE REVIEW DRAFTS

Appendix B1 Exchange draft 1

Cleveland: Cultural Exchange by Degree

Review of HP's presentation – 14 March 2000 – PG

'They got really frustrated with me, at first, about my observations about the Canadian academic school system – because I found it to be very piss-poor at first. But ... that's just how it is, it's just a different focus ... Also, I've got quite a few friends that have come over here now, on exchange ... and they're finding it really difficult to adjust to *our* system ...'

Comparisons are often made between America and Australia, and the two countries certainly share a great deal of cultural and geographic similarities. But as illustrated by the words of HP above, even similar cultures present challenges to the travelling student.

Six weeks after her return from Oberlin University in Cleveland, SP spoke to Guild members about her experiences there as an exchange student where she studied from September to December 1999, as part of a student exchange program, completing her three-year Bachelor of Environmental Management degree at Deakin University.

Why exchange

9 years old world travel with family for five months, the lone back packers pilgrimage after high school, soul searching finding oneself, before beginning her degree at Deakin.

Exchange travel arrangements incurred as HECS debt, got some Youth Allowance Four months in residence at Oberlin.

30 days on a world tour with her brother before Oberlin. Amazing! She wants job that involves travel.

Ottawa is the capital of Ohio, but Cleveland is the biggest city in America. 3.1 million people. One and a half from Niagara Falls

Uni built in the northern suburb of Oberlin, and H... noted the disturbingly frequent television reports of armed robberies involving people being shot in the near vicinity. This was possibly a reflection of the high unemployment in the area, which it was hoped the university would relieve to some extent.

Huge 60,000 (only 10,000 external) students, about as old as Deakin University but around 3 times the size, 20 minutes walk from one side of campus to the other

Village, bank, cu, fruit store, book store, photo shop, po, pharmacy, medical centre, computer store, card shop, jeans shop, beauty centre, hairdresser, music, optical store, dry cleaners, two travel centres, health food, own phone company, printers, jewellers, video-hire dispensing machine, pool, gymnasium, football field, (Sports Department at Oberlin contributes to financing the University). Indoor track and field. Five ice-rinks. Power plant, restaurants, five libraries, cinema.

Dirty city, typically blanketed by brown haze consisting mainly car fumes.

Underground network of tunnels means you can get all over the campus without surfacing into often subzero temperatures.

Didn't get off campus much. No reason to leave. Six pubs and a nightclub on campus. Hour to get to 'downtown' Cleveland via subway and bus. 2nd floor of 13 floor residence building. Late winter, NYE 1 degree almost unheard of.

'The Environmental Studies Department, as some of you might imagine, is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time. [There was] a very good feeling within the Department. Unlike Deakin my experience at Deakin, there was a real bonding with the Canadians'.

The ESD only began with a graduate program about 5 years ago, so the first students are only just emerging. Unlike Deakin, the Oberlin degree includes the fourth year of Honours. Cleveland multicultural.

H... doesn't like lecture style. Not prominent at Oberlin. 3 hours typically of open discussion.

Witnessing first-hand a consequence of the Cola Wars phenomenon, H... was appalled to find Oberlin University had been 'bought out' by Pepsi (whereas the University of Cleveland had been 'bought out' by Coca Cola). All the beverages available at Oberlin campus, including the soft drinks, the coffee, the milk and the fruit drinks, were supplied by Pepsi or its subsidiaries. She saw this as an alarming indication of what could happen in Australia if we are not vigilant. The issue of conditional corporate sponsorship of education facilities is a hot one, particularly when the companies involved make their profits on what are generally termed 'junk foods' targeted at the younger generation, and Australian educational institutions have not been immune such moves.

Concerned about the ubiquitous use of Styrofoam containers throughout the university, she often took her personal cup, plate and cutlery to retail eateries, sometimes drawing unsympathetic responses from those dishing out. And although there was a 'good recycling set-up' at Oberlin, H... was again disappointed by the lack of compliance by students, most opting for the convenience of all-purpose waste bins. She instigated campaigns on these issues, writing articles in the newsletter and the local newspaper, sending emails to administrative staff, and holding protests in front of the administrative building, all in a bid to highlight the University's contribution to Ohio's serious waste disposal problems. She handed these campaigns over to other students when she left.

'They're called professors rather than lecturers over there' (?)

Environmental Education

For teachers who need to do things with kids.

First class they were asked to introduce themselves by naming a plant, an animal, and a word, that together described their personality.

Dancing around the pond.

Doing crafts. 10% for carving a back scratcher.

Mark for telling a story.

No mark for attendance and attendance was poor.

Lots of outside work, which she enjoyed.

One class the teacher brought along a guitar and we sang songs. I found it hard to adjust to the lack of hard study, and at times found it lacking any familiar structure. I tried very hard to make it work for me, and after a couple of months it eventually did. While H... came away with a realisation of how estranged we are from the environment, and what she called 'the village atmosphere', she suspects that many missed the point and were simply confused by the lack of academic structure.

Environmental Attitudes and Communication

The Professor and Teaching Assistant were both from a Visual Arts background and were both completing their PhDs, neither having any specific training in recognised Environmental subjects. Correspondingly, students were confronted with a literary genre with which they were unfamiliar, and with the course structure based around 'constructions of gender in consumer culture', H... found the subject to have little relevance.

Energy and the Environment

Headed by someone with a background in nuclear physics, this subject gave good coverage of nuclear energy issues. It was also in this subject that H... learnt about the Cleveland Renewable Energy Cooperative (CREC), about which she has written in a previous GUILD newsletter. Instigated by a student from Oberlin University, CREC is about to erect wind turbines on Lake Erie, and members who buy into the Cooperative will receive credit on their power bills.

Environment and Development

No structure. The lecturer was geared towards graduate students and had little interest in our class. Cut his lectures short if he felt like it. Spoke about his experiences in South America.

Environmental Economics

Lots of discussion about NAFTA (the North American Free Trade Agreement)
The water coming from the sewage treatment plant and into Lake Erie is cleaner than the water taken out of the Lake for residential use. Became aware of the gigantic infrastructure and energy costs of sewage treatment.

One essay the whole time at Oberlin.

Assessment on attendance (10%), presentation, participation, 'didn't find the work particularly academic', 'knuckling down on particular issues' vs 'wishy-washy reflection' 'what did you think of this' 'reflect on your experience of reading the article' 'how does it relate to you in the real world'. I found it a little bit easy at times, and I guess that's why I got involved in everything else. . . . I didn't do a lot of study while I was there, and I got three Distinctions and a Credit.

Ohio has become the toxic waste dump for North America and there are serious issues concerning the nuclear power industry with Government moving to sell the nuclear power stations to private enterprise as Government funds are not available for the decommissioning that is imminent.

Compare Oz and Canadian system

It just depends on what you're going for; the difference is, the jobs over there are focused toward [their system]; it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception.

Appendix B2 Exchange draft 2

Cleveland: Cultural Exchange by Degree

Review of HP's presentation - 14 March 2000 - PG

'They got really frustrated with me, at first, about my observations [of] the Canadian academic school system – because I thought it was pretty piss-poor at first. But that's just how it is, it's just a different focus ... I've got quite a few friends that have come over here now, on exchange ... and they're finding it really difficult to adjust to our system ...'

The statements above reveal how visiting an unfamiliar culture or subcultures can give us cause for reflection. Six weeks after her return from Cleveland, HP spoke to Guild members about her experiences there, as an exchange student at Oberlin University. H... spent four months at Oberlin, completing the final stage of her Bachelor of Environmental Management with Deakin University.

'Why exchange?', H... asked herself and her Guild audience. She answered the question through reference to some past experiences. At the age of nine, she travelled the world with her family for five months; then later, between finishing high school and starting university, she took off on her own worldly travels as a backpacker. And on her way to Cleveland last year, she enjoyed a hectic 30-days of globe-trotting with her brother before settling down to her overseas study. To sum it up, she confessed to a love of travel, and she certainly hopes it will be part of her work in the future.

Situated on the south-west shore of Lake Erie, in the Province of Ohio, Cleveland has a population of 3.1 million and is America's largest city. From September to December last year, H... lived inresidence at Oberlin University in Cleveland's northern suburbs. She had heard that among the intentions of building the university were hopes of alleviating the area's high level of unemployment; albeit, she commented on the disturbingly frequent television reports of nearby shootings, typically in the context of some petty crime. But as she pointed out, there was little reason to venture from the University campus, which exhibited aspects of a self-contained village. She rarely found cause to make the one-hour journey by subway and bus to Cleveland's 'downtown' heart.

Like most visitors to America (and Canada) H... was impressed by the sheer scale of human enterprises there. Oberlin University caters to around 60,000 students (only about 10,000 externally) and covers an area around three times that of Deakin University. It took 20 minutes to walk from one side of campus to the other, and although this could be done totally underground through a network of access tunnels – thus avoiding the often sub-zero temperatures – H... generally did her walking

on the surface. She did this despite the haze of pollution produced chiefly by an obsessive carculture, and despite on one occasion having her nose-hairs freeze!

H...'s list of facilities available at Oberlin reads more like a large town than a village: besides a bank, a credit union and a post office, there are five libraries, a book store, a computer shop, a print shop and a photo shop; a medical centre, an optician and a pharmacy; a hairdresser, a beauty centre, a jewellers and a dry cleaners; a card shop, jeans shop, music shop and a health food store; five restaurants, two travel centres, a cinema, and an auto-dispensing video-hire facility. The University also has six pubs and a nightclub, its own power plant, and its own telephone company.

On weekends, H... worked at the University's football field setting up for grid-iron matches; during the games she acted as a runner. After listing further sports facilities – an indoor track and field venue, a gymnasium, a pool and five ice-rinks – she noted how the Sports Department is so integral to Oberlin's academic culture that it contributes to the University's funding.

H...'s studies at Oberlin were within the Environmental Studies Department (ESD). About five years old, the ESD has only recently begun turning out graduates, and H...'s impression of the Department's status among the established Academe is that it is not highly valued. She slipped momentarily back into the present of the past: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time.' After hearing some anecdotes from her educational experiences, it became apparent why such perceptions might abound.

Witnessing first-hand a consequence of the Cola War, H... was shocked to find Oberlin University had been 'bought out' by Pepsi (whereas the University of Cleveland had been 'bought out' by Coca-Cola). All the beverages available on Oberlin's campus, including the soft drinks, the coffee, the milk and the fruit drinks, were supplied by Pepsi or its subsidiaries. She saw this as an alarming indication of what could happen in Australia if we are not vigilant. The issue of conditional corporate sponsorship of education facilities is a hot one, particularly when the companies involved make their profits from what are generally termed 'junk foods' targeted at the younger generation; Australian educational institutions have by no means been immune to such moves.

Concerned about the ubiquitous use of Styrofoam containers throughout the university, she often took her personal cup, plate and cutlery to retail eateries, sometimes drawing unsympathetic responses from those dishing out. And although there was a 'good recycling set-up' at Oberlin, H... was again disappointed by the lack of compliance by students, most opting for the convenience of all-purpose waste bins. She instigated campaigns on these waste issues, writing articles in the University newsletter and the local newspaper, sending emails to administrative staff, and even holding protests on campus in a bid to highlight the University's responsibility toward Ohio's serious landfill problems.

'They're called professors rather than lecturers over there' (?)

Environmental Education

For teachers who need to do things with kids.

First class they were asked to introduce themselves by naming a plant, an animal, and a word, that together described their personality.

Dancing around the pond.

Doing crafts. 10% for carving a back scratcher.

Mark for telling a story.

No mark for attendance and attendance was poor.

Lots of outside work, which she enjoyed.

One class the teacher brought along a guitar and we sang songs. I found it hard to adjust to the lack of hard study, and at times found it lacking any familiar structure. I tried very hard to make it work for me, and after a couple of months it eventually did. While H... came away with a realisation of how estranged we are from the environment, and what she called 'the village atmosphere', she suspects that many missed the point and were simply confused by the lack of academic structure.

Environmental Attitudes and Communication

The Professor and Teaching Assistant were both from a Visual Arts background and were both completing their PhDs, neither having any specific training in recognised Environmental subjects. Correspondingly, students were confronted with a literary genre with which they were unfamiliar, and with the course structure based around 'constructions of gender in consumer culture', H... found the subject to have little relevance.

Energy and the Environment

Headed by someone with a background in nuclear physics, this subject gave good coverage of nuclear energy issues. It was also in this subject that H... learnt about the Cleveland Renewable Energy Cooperative (CREC), about which she has written in a previous GUILD newsletter. Instigated by a student from Oberlin University, CREC is about to erect wind turbines on Lake Erie, and members who buy into the Cooperative will receive credit on their power bills.

Environment and Development

No structure. The lecturer was geared towards graduate students and had little interest in our class. Cut his lectures short if he felt like it. Spoke about his experiences in South America.

Environmental Economics

Lots of discussion about NAFTA (the North American Free Trade Agreement)
The water coming from the sewage treatment plant and into Lake Erie is cleaner than the water taken out of the Lake for residential use. Became aware of the gigantic infrastructure and energy costs of sewage treatment.

One essay the whole time at Oberlin.

Assessment on attendance (10%), presentation, participation, 'didn't find the work particularly academic', 'knuckling down on particular issues' vs 'wishy-washy reflection' 'what did you think of this' 'reflect on your experience of reading the article' 'how does it relate to you in the real world'. I found it a little bit easy at times, and I guess that's why I got involved in everything else. . . . I didn't do a lot of study while I was there, and I got three Distinctions and a Credit.

Ohio has become the toxic waste dump for North America and there are serious issues concerning the nuclear power industry with Government moving to sell the nuclear power stations to private enterprise as Government funds are not available for the decommissioning that is imminent.

Compare Oz and Canadian system

It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system]; it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception.

It is hard to pinpoint the nature of the divide (or several divides) that H... drew attention to throughout her presentation, but the one that stood out for me was the major differences in what people perceive as 'the environment'. What is it that we study and work around under this enigmatic label? Surely it is everything that we live in, not just a collection of resources. Surely it must include all of the social aspects of humanity — the politics, the economics, the cultural attitudes — that affect the way we behave and interact with each other as well as the non-human elements.

Appendix B3 Exchange draft 3

Degree of Challenge in Cleveland Exchange

Review of HP's presentation - 14 March 2000 - PG

Six weeks after her return to Australia, HP spoke to GUILD members about her experiences as an exchange student at Oberlin University in Cleveland, where she spent four months completing the final stage of her Bachelor of Environmental Management with Deakin University.

'Why exchange?', was the opening question H... asked rhetorically of both herself and her audience. She answered by referring to some contributing factors in her life-experience. At the age of nine, H... had the chance to travel the world for five months with her family; later, between finishing high school and starting university, she took off on her own worldly adventures as a lone backpacker. And last year she fitted in a hectic 30-days of globe-trotting with her brother before eventually arriving in Cleveland and settling down to her study. To sum it up, H... confesses to a love of travel, and she certainly hopes it will be part of her work in the future.

Cleveland sits on the south-west shore of Lake Erie, in the American province of Ohio. It is Ohio's largest city, with a population of 3.1 million. Oberlin University is situated on the city's northern perimeter, and this is where H... spent most of her four months in-residence on the campus. She heard that among the intentions of building the University were hopes of alleviating the area's high level of unemployment; albeit, she commented on the disturbingly frequent television reports of nearby shootings, typically in the context of some petty robbery. But as H... pointed out, there was little reason to venture from the University campus, such were its aspects of a self-containment. She rarely found reason – nor, doubtless, the time – to make the one-hour journey by subway and bus to Cleveland's 'downtown' heart and harbour.

Like many visitors to North America H... was taken aback by the sheer scale of human enterprises there. Oberlin University caters to around 60,000 students (about 10,000 externally) and covers an area around three times that of Deakin. It takes about 20 minutes to walk from one side of the Oberlin campus to the other, and although this can be done totally underground through a network of access tunnels – thus avoiding the often sub-zero temperatures – H... generally did her walking on the surface. She preferred this open-air option, despite the visible brown haze produced by an entrenched car-culture, and despite on one occasion having her nose-hairs freeze!

H...'s list of the amenities available at Oberlin reads more like a large town than a village: besides a bank, a credit union and a post office, there were five libraries, a book store, a computer shop, a print shop, a photo shop, a medical centre, an optician, a pharmacy, a hairdresser, a beauty centre, a jewellers, a dry cleaners, a card shop, a jeans shop, a music shop, a health food store, five restaurants, two travel centres, a cinema, and an auto-dispensing video-hire facility. The University also has six pubs and a nightclub, its own power plant, and its own telephone company.

On weekends, H... worked at the University's football field setting up for grid-iron matches; and during the games she acted as a runner. After listing further sports facilities – an indoor track and field venue, a gymnasium, a pool and five ice-rinks – she noted that the prominence of the Sports Department's also extended to making a net contribution to the University's funding.

H...'s studies, however, were within the relatively new Environmental Studies Department (ESD), which at five years old has only recently produced its first graduates. Her full time load consisted of five subjects: Environmental Education, Environmental Attitudes and Communication, Energy and the Environment, Environment and Development, and Environmental Economics. The educational methodology, however, was not what H... was used to. At Deakin she had experienced what she referred to as 'the British system', with a greater emphasis on lectures, scientific content, and 'knuckling down on particular issues'. By contrast, she found much of her work at Oberlin to be 'wishy-washy' and lacking in disciplined structure. Her assessment was based more on participation and reflective writings.

Reflecting a global movement in the humanities, for teaching to be much more interactive, H... observed that her three-hour subject slots were typically taken up with open discussions rather than

lectures. Referring to her Environmental Education subject, she recounted how students were asked to introduce themselves in the first lesson by naming a plant, an animal and a word, with which they felt some affinity. The subject was designed for teachers of young children, and H... related with some amusement her experiences of dancing around a pond, telling a story to her class, and, as part of the focus on crafts, carving a back scratcher that translated to 10% of her subject assessment.

There was no mark for attendance in this subject, and correspondingly the attendance was poor, but H... confessed to enjoying the predominance of outdoor activities. At one class the teacher brought along a guitar and the session was spent singing songs. H... explained that she tried very hard to make this subject work for her, and with perseverance found unexpected insights. While she came away with the realisation of how estranged we are from the natural environment, and what she called the 'village atmosphere', she suspects that many students missed the point and were simply confused by the lack of academic structure.

In Environmental Attitudes and Communication, H... discovered that her 'Professor' (the title given to 'lecturers') and her Teaching Assistant (provided for classes of over thirty students) were both studying PhDs in Visual Arts, neither having credentials in commonly recognised environmental subjects. Correspondingly, students were confronted with a literary genre with which they were unfamiliar, and with the course structure based around 'constructions of gender in consumer culture', H... found the subject to have little relevance. She did, however, thoroughly enjoy one of her group projects, wherein she and some other girls dressed themselves out of character (and rather provocatively) to see what public reactions they experienced.

Energy and the Environment

Headed by someone with a background in nuclear physics, this subject gave good coverage of nuclear energy issues. It was also in this subject that H... learnt about the Cleveland Renewable Energy Cooperative (CREC), of which she has written in the GUILD newsletter. Instigated by a student from Oberlin University, CREC is working to erect wind turbines on Lake Erie, and members who buy into the Cooperative will receive credit on their power bills.

On another waste issue, H... commented that Ohio has become the toxic waste dump for North America. She became aware, too, of debate concerning the nuclear power industry, with Government – lacking funds for the impending decommissioning of many nuclear power plants – moving to sell the plants to private enterprise.

Environmental Economics

Lots of discussion about NAFTA (the North American Free Trade Agreement)

A very positive aspect of H...'s visit was the numerous excursions she participated in; for instance, on visiting a sewage treatment plant, she became aware of the enormous infrastructure and energy costs involved in this particular waste management industry.

'I found it a little bit easy at times, and I guess that's why I got involved in everything else'

Witnessing first-hand a consequence of the Cola War, H... was shocked to find Oberlin University had been 'bought out' by Pepsi (whereas the University of Cleveland had been 'bought out' by Coke). The issue of conditional corporate sponsorship of educational institutions is a prominent one globally, particularly when the companies involved make their profits from what are generally termed 'junk foods' targeted at the younger generation. H... discovered that the supply of beverages throughout the entire Oberlin complex – mostly soft drinks but including coffee, milk and fruit drinks – was commercially monopolised by Pepsi and its subsidiaries. She saw this as an alarming indication of what might happen in Australia if we are not vigilant.

Her attention was also drawn to the ubiquitous use of Styrofoam containers throughout the university, and she often made her point by bringing non-disposable cup and plate to retail eateries, sometimes drawing unsympathetic responses from those dishing out. And although there was a 'good recycling set-up' at Oberlin, H... noted the lack of compliance by students, the majority of discarded materials ending up in all-purpose rubbish bins. Instigating campaigns on these waste issues, she wrote articles in the University newsletter and the local newspaper, sent various emails to

administrative staff, and even held a protest on campus in a bid to highlight the University's responsibility toward Ohio's serious landfill problems.

When asked her opinion on a comparison between the Australian and Canadian approach to environmental issues, H... observed: 'It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system] – it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception.'

It is hard to pinpoint the nature of the divide (or several divides) that H... drew attention to throughout her presentation, but the one that stood out for me was the major differences in what people perceive as 'the environment'. What is it that we study and work around under this enigmatic label? Surely it is everything that we live in, not just a collection of data and resources. Surely it must include the social aspects of humanity – the politics, the economics, the cultural attitudes – that affect the way we behave and interact with each other as well as the non-human elements of our surroundings. Science itself, it might be argued, is a social construct, as are the abstract issues of democracy, free enterprise, and business.

Appendix B4 Exchange draft 4

Degree of Cultural Exchange in Cleveland

A review of the presentation by HP - 14 March 2000 - PG

Six weeks after her return to Australia, HP spoke to Guild members about her experiences at Oberlin University in Cleveland. As an exchange student, she spent four months at Oberlin completing the final stage of her Bachelor of Environmental Management with Deakin University.

'Why exchange?', was the rhetorical question posed by H... in her opening address. She answered by referring to a theme of past experiences. At the age of nine, she enjoyed five months of world travel with her family; later, between finishing high school and starting university, she took off on her own worldly adventures as a lone backpacker; and last year, she fitted in a hectic 30-days of globetrotting with her brother before eventually arriving in Cleveland, and settling down to her study. To sum it up, H... confessed to a love of travel, and she certainly hopes it will be part of her work in the future.

Cleveland sits on the north-west shore of Lake Erie, in the American state of Ohio. Cleveland, with a population of 3.1 million, is the country's largest city. Oberlin University is situated on the city's northern perimeter, and this is where H... lived in-residence at the Oberlin campus through the Northern fall and into winter. She heard that among the intentions of building the University were hopes of alleviating the area's high level of unemployment; albeit, she commented on the disturbingly frequent television reports of nearby shootings, typically in the context of a robbery. But as H... pointed out, there was little reason to venture from the University, such were its aspects of a self-containment. She rarely found reason – nor, doubtless, the time – to make the one-hour journey by subway and bus to Cleveland's downtown heart and harbour.

Like many visitors to North America, H... was taken aback by the sheer scale of human enterprises there. Oberlin University caters to around 60,000 students (about 10,000 externally) and covers an area around three times that of Deakin. It takes about 20 minutes to walk from one side of the Oberlin campus to the other, and although this could be done totally underground through a network of access tunnels – thus avoiding the often sub-zero temperatures – H... generally did her walking on the surface. She preferred this open-air option, despite the visible brown haze produced by an entrenched car-culture, and despite, on one occasion, having her nose-hairs freeze!

The list of amenities available within the Oberlin campus reads more like a large town than a village: besides a bank, a credit union and a post office, there were five libraries, a book store, a computer shop, a print shop, a photo shop, a medical centre, an optician, a pharmacy, a hairdresser, a beauty centre, a jewellers, a dry cleaners, a card shop, a jeans shop, a music shop, a health food store, five restaurants, two travel centres, a cinema, and an auto-dispensing video-hire facility; the University also has six pubs, a nightclub, and its own power plant and telephone company.

On weekends H... worked at the University's football field, setting up the venue for the game of gridiron; during the matches she acted as a runner. After listing other sports facilities – an indoor track and field venue, a gymnasium, a pool, and five ice-rinks – she noted that the importance of the large Sports Department even extended to making a net contribution to the University's funding.

H...'s course, however, was within the Environmental Studies Department (ESD). Established for around five years, the ESD had only recently produced its first graduates. Claiming a strong feeling of bonding and support within the Department, H... gained the impression that its status among the established Academe was generally poor: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time.'

Her full time load consisted of five subjects: Environmental Education, Environmental Attitudes and Communication, Energy and the Environment, Environment and Development, and Environmental Economics. The educational methodology, however, was not what H... was used to. At Deakin she had experienced what she referred to as 'more of the British system', with a greater emphasis on lectures, scientific content, and 'knuckling down on particular issues'. By contrast, she found much of her work at Oberlin to be 'wishy-washy' – lacking in disciplined structure. Her assessment was based more on participation and reflective writings, and she characterised with her comment that she 'didn't find the work particularly academic'.

H...'s comments perhaps reflect a general shift in the social sciences for contemporary teaching to be much more interactive. She recounted that her subject attendance of three hours per week typically involved informal and open discussion. There was presumably some relief in this, for H... claimed a dislike for the lecture mode. And while she showed us numerous examples of her written assignments, she remarked on how she was required to write only one 'essay' during her stay.

Referring to her Environmental Education subject, H... recounted how students at the first lesson were asked to introduce themselves by naming a plant, an animal, and a word, with which they felt some affinity. She reminded us that the subject was designed for those needing ways to engage young children, and she related with some amusement her experiences of dancing around a pond, telling stories to the class, and, as part of a focus on crafts, her carving of a back scratcher that translated into 10% of her subject assessment. On one occasion the teacher brought along a guitar, and a session of communal singing ensued. H... explained how she tried very hard to make this subject work for her, and came away with an appreciation of how estranged we are from the natural environment, and also from elements of what she called the 'village atmosphere'. She suspects, however, that many students were put off by the lack of academic structure, and simply missed the point. With no mark for attendance, student turnouts were generally low.

In Environmental Attitudes and Communication, H... discovered that her Professor (closer to what we term 'lecturers' here) and her Teaching Assistant (provided for class sizes over thirty) were both studying PhDs in Visual Arts, neither having credentials in commonly recognised environmental subjects. Correspondingly, students were confronted with a literary genre with which they were unfamiliar, and with the subject based around 'constructions of gender in consumer culture', H... found the subject to have little relevance. She did, however, thoroughly enjoy a particular group project (her group receiving top marks!), wherein she and some other girls dressed themselves out of character (and rather provocatively) to observe the public responses to their unconventional appearance.

Taught by someone with a background in nuclear physics, Energy and the Environment was a subject in which H... was on more familiar academic ground. It was here she learned of the Cleveland Renewable Energy Cooperative (CREC), of which she has written in the GUILD newsletter. Initiated by a student from Oberlin University, CREC is in the process of establishing wind turbines on Lake Erie. H... was also drawn into debate concerning the nuclear power industry, and commented on a Government – lacking the funds for impending decommissioning of many nuclear power plants – that is moving to sell the plants to private enterprise. She also remarked that Ohio, through its commercial arrangements, has become the toxic waste dump for North America.

And learning more on regional issues, H... encountered a great deal of discourse in Environmental Economics concerning the North American Free Trade Agreement (NAFTA) set up in 1992 between

Canada, the US and Mexico. Such encounters were a very positive part of the cultural exchange, as were the several excursions H... participated in; for instance, on visiting a sewage treatment plant she became aware of the enormous infrastructure and energy costs involved in this industry.

Despite enjoying certain aspects of the more relaxed approach to learning, H... was sometimes frustrated by the lack of challenge: 'I found it a little bit easy at times,' she confessed almost guiltily, 'and I guess that's why I got involved in everything else'. 'Everything else' included her observation of the ubiquitous use of Styrofoam containers throughout the university. She often made her point by bringing a non-disposable cup and plate to retail eateries, sometimes drawing unsympathetic responses from those dishing out. And although there was a 'good recycling set-up' at Oberlin, H... noted the lack of compliance by students, the majority of discarded materials ending up in all-purpose rubbish bins. Instigating campaigns on these waste issues, she wrote articles in the University newsletter and the local newspaper, sent various emails to administrative staff, and even held a protest on campus in a bid to highlight the University's responsibility toward Ohio's serious landfill problems.

Something else that gained her attention was the idea that Oberlin University had been 'bought out' by Pepsi (whereas the University of Cleveland had been 'bought out' by Coke). The issue of conditional corporate sponsorship of educational institutions is a prominent one globally, particularly when the companies involved make their profits from what are generally termed 'junk foods' targeted at the younger generation. Witnessing first hand a consequence of the Cola War, H... discovered that the supply of beverages throughout the entire Oberlin complex – mostly soft drinks but including coffee, milk and fruit drinks – was commercially monopolised by Pepsi and its subsidiaries. She saw this as an alarming indication of what might happen in Australia if we are not vigilant.

When asked her opinion on a comparison between the Australian and Canadian approach to environmental issues, H... observed: 'It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system] – it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception.' And in that comment, I think she identified a divide that is still in dire need of bridging; that is, the academic divide between the physical and social sciences. It seems important that one group doesn't see the other as narrowly focussed and impersonal, while the other sees an undisciplined community of radicals. In terms of creating a sustainable environment, we must remember that the technologies we use, and our consumption and management of resources, are integral with our politics, our economics, our pedagogics – in short, our social attitudes. Science exists within this environment. These are abstract terms and difficult to pin down, but they are also the driving force behind programs of educational exchange. Enormous amounts of information can now be transferred across the world by simply pushing some buttons, but to more fully appreciate a different culture, there is no better way than to immerse oneself in it.

Appendix B5 Exchange draft 5

Degree of Cultural Exchange in Cleveland

A review of the presentation by HP - 14 March 2000 - PG

Six weeks after her return to Australia, HP spoke to Guild members about her experiences at Oberlin University in Cleveland. As an exchange student there, she spent four months completing the final stage of her Bachelor of Environmental Management with Deakin University.

'Why exchange?', was the rhetorical question posed by H... in her opening address. She answered by referring to a theme of past experiences. At the age of nine, she enjoyed five months of world travel with her family; later, between finishing high school and starting university, she took off on her own worldly adventures as a lone backpacker; and last year she fitted in a hectic 30-days of globe-trotting with her brother before eventually arriving in Cleveland and settling down to her study. To sum it up, H... confesses to a love of travel, and she certainly hopes it will be part of her work in the future.

Cleveland sits on the north-west shore of Lake Erie, in Ohio. Cleveland, with a population of 3.1 million, is the country's largest city. Oberlin University is situated on the city's northern perimeter, and this is where H... lived in-residence at the Oberlin campus through the Northern fall and into

winter. She heard that among the intentions of building the University were hopes of alleviating the area's high level of unemployment; albeit, she commented on the disturbingly frequent television reports of nearby shootings, typically in the context of a robbery. But as H... pointed out, there was little reason to venture from the University, such were its aspects of a self-containment. She rarely found reason – nor, doubtless, the time – to make the one-hour journey by subway and bus to Cleveland's downtown heart and harbour.

Like many visitors to North America, H... was taken aback by the sheer scale of human enterprises there. Oberlin University caters to around 60,000 students (about 10,000 externally) and covers an area around three times that of Deakin. It takes about 20 minutes to walk from one side of the Oberlin campus to the other, and although this could be done totally underground through a network of access tunnels – thus avoiding the often sub-zero temperatures – H... generally did her walking on the surface. She preferred this open-air option, despite the visible brown haze produced by an entrenched car-culture, and despite, on one occasion, having her nose-hairs freeze!

The list of amenities available within the Oberlin campus reads more like a large town than a village: besides a bank, a credit union and a post office, there were five libraries, a book store, a computer shop, a print shop, a photo shop, a medical centre, an optician, a pharmacy, a hairdresser, a beauty centre, a jewellers, a dry cleaners, a card shop, a jeans shop, a music shop, a health food store, five restaurants, two travel centres, a cinema, and an auto-dispensing video-hire facility; the University also has six pubs, a nightclub, and its own power plant and telephone company.

On weekends H... worked at the University's football field, setting up the venue for the game of gridiron; during the matches she acted as a runner. After listing other sports facilities – an indoor track and field venue, a gymnasium, a pool, and five ice-rinks – she noted that the importance of the large Sports Department even extended to making a net contribution to the University's funding.

H...'s course, however, was within the Environmental Studies Department (ESD). Established for around five years, the ESD had only recently produced its first graduates. Claiming a strong feeling of bonding and support within the Department, H... gained the impression that its status among the established Academe was generally poor: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time.'

Her full time load consisted of five subjects: Environmental Education, Environmental Attitudes and Communication, Energy and the Environment, Environment and Development, and Environmental Economics. The educational methodology, however, was not what H... was used to. At Deakin she had experienced what she referred to as 'more of the British system', with a greater emphasis on lectures, scientific content, and 'knuckling down on particular issues'. By contrast, she found much of her work at Oberlin to be 'wishy-washy' – lacking in disciplined structure. Her assessment was based more on participation and reflective writings, and she characterised with her comment that she 'didn't find the work particularly academic'

H...'s comments perhaps reflect a general shift in the social sciences for contemporary teaching to be much more interactive. She recounted that her subject attendance of three hours per week typically involved informal and open discussion. There was presumably some relief in this, for H... claimed a dislike for the lecture mode. And while she showed us numerous examples of her written assignments, she remarked on how she was required to write only one 'essay' during her stay.

Referring to her Environmental Education subject, H... recounted how students at the first lesson were asked to introduce themselves by naming a plant, an animal, and a word, with which they felt some affinity. She reminded us that the subject was designed for those needing ways to engage young children, and she related with some amusement her experiences of dancing around a pond, telling stories to the class, and, as part of a focus on crafts, her carving of a back scratcher that translated into 10% of her subject assessment. On one occasion the teacher brought along a guitar, and a session of communal singing ensued. H... explained how she tried very hard to make this subject work for her, and came away with an appreciation of how estranged we are from the natural environment, and also from elements of what she called the 'village atmosphere'. She suspects, however, that many students were put off by the lack of academic structure, and simply missed the point. With no mark for attendance, student turnouts were generally low.

In Environmental Attitudes and Communication, H... discovered that her Professor (closer to what we term 'lecturers' here) and her Teaching Assistant (provided for class sizes over thirty) were both studying PhDs in Visual Arts, neither having credentials in commonly recognised environmental subjects. Correspondingly, students were confronted with a literary genre with which they were unfamiliar, and with the subject based around 'constructions of gender in consumer culture', H... found the subject to have little relevance. She did, however, thoroughly enjoy a particular group project (her group receiving top marks!), wherein she and some other girls dressed themselves out of character (and rather provocatively) to observe the public responses to their unconventional appearance.

Taught by someone with a background in nuclear physics, Energy and the Environment was a subject in which H... was on more familiar academic ground. It was here she learned of the Cleveland Renewable Energy Cooperative (CREC), of which she has written in the GUILD newsletter. Initiated by a student from Oberlin University, CREC is in the process of establishing wind turbines on Lake Erie. H... was also drawn into debate concerning the nuclear power industry, and commented on a Government – lacking the funds for impending decommissioning of many nuclear power plants – that is moving to sell the plants to private enterprise. She also remarked that Ohio, through its commercial arrangements, has become the toxic waste dump for North America.

And learning more on regional issues, H... encountered a great deal of discourse in Environmental Economics concerning the North American Free Trade Agreement (NAFTA) set up in 1992 between Canada, the US and Mexico. Such encounters were a very positive part of the cultural exchange, as were the several excursions H... participated in; for instance, on visiting a sewage treatment plant she became aware of the enormous infrastructure and energy costs involved in this industry.

Despite enjoying certain aspects of the more relaxed approach to learning, H... was sometimes frustrated by the lack of challenge: 'I found it a little bit easy at times,' she confessed almost guiltily, 'and I guess that's why I got involved in everything else'. 'Everything else' included her observation of the ubiquitous use of Styrofoam containers throughout the university. She often made her point by bringing a non-disposable cup and plate to retail eateries, sometimes drawing unsympathetic responses from those dishing out. And although there was a 'good recycling set-up' at Oberlin, H... noted the lack of compliance by students, the majority of discarded materials ending up in all-purpose rubbish bins. Instigating campaigns on these waste issues, she wrote articles in the University newsletter and the local newspaper, sent various emails to administrative staff, and even held a protest on campus in a bid to highlight the University's responsibility toward Ohio's serious landfill problems.

Something else that gained her attention was the idea that Oberlin University had been 'bought out' by Pepsi (whereas the University of Cleveland had been 'bought out' by Coke). The issue of conditional corporate sponsorship of educational institutions is a prominent one globally, particularly when the companies involved make their profits from what are generally termed 'junk foods' targeted at the younger generation. Witnessing first hand a consequence of the Cola War, H... discovered that the supply of beverages throughout the entire Oberlin complex – mostly soft drinks but including coffee, milk and fruit drinks – was commercially monopolised by Pepsi and its subsidiaries. She saw this as an alarming indication of what might happen in Australia if we are not vigilant.

When asked her opinion on a comparison between the Australian and Canadian approach to environmental issues, H... observed: 'It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system] - it's a lot of environmental education and awareness ... it's not really scientific ... that was my perception.' And in that comment, I think she identified a divide that is still in dire need of bridging; that is, the academic divide between the physical and social sciences. It seems important that one group doesn't see the other as narrowly focussed and impersonal, while the other sees an undisciplined community of radicals. In terms of creating a sustainable environment, we must remember that the technologies we use, and our consumption and management of resources, are integral with our politics, our economics, our pedagogics – in short, our social attitudes. Science exists within this environment. These are abstract terms and difficult to pin down, but they are also the driving force behind programs of educational exchange. Enormous amounts of information can now be transferred across the world by simply

pushing some buttons, but to more fully appreciate a different culture, there is no better way than to immerse oneself in it.

Appendix B6 Exchange draft 6

A Degree of Cultural Exchange in Cleveland

A summary of the presentation by HP – 14 March 2000

As an exchange student, HP spent the last four months of 1999 at Oberlin University in Cleveland, where she completed the final stage of her Bachelor of Environmental Management with Deakin University. She spoke to Guild members about her various experiences of Canadian culture, and in particular, the people and attitudes she encountered in her environmental studies. In opening her address, H... posed the rhetorical question, 'Why exchange?'; she followed with references to a theme of personal experiences. At the age of nine she travelled for five months with her family on a round-the-world trip; later, between finishing high school and starting university, she took off on her own worldly adventures as a lone backpacker; then last year she fitted in a hectic 30-days of globe-trotting with her brother before eventually arriving in Cleveland and settling down to her studies. To sum it up, H... confesses to a love of travel, and she certainly hopes it will be part of her work in the future.

Cleveland sits on the south-west shore of Lake Erie, and is Ohio's largest city. Oberlin University is situated on the city's northern perimeter and caters to around 60,000 students (about 10,000 externally) and covers an area around three times that of Deakin. The list of businesses and amenities available within the campus reads like those of a large town, and to walk from one side to the other takes about 20 minutes. Although this can be achieved through a network of underground access – thus avoiding the often sub-zero temperatures – H... generally did her walking on the surface. She preferred this option despite the city's reputation for its car-induced smog, and despite, on one occasion, having her nose hairs freeze!

H...'s placement was within the Environmental Studies Department (ESD), her full-time load consisting of five subjects: Environmental Education, Environmental Attitudes and Communication, Energy and the Environment, Environment and Development, and Environmental Economics. The educational methodology, however, was not what H... was used to. She described her educational background at Deakin as more akin to the British system, with a greater emphasis on lectures, scientific content, and 'knuckling down on particular issues'. By contrast, she found much of her work at Oberlin to be 'wishy-washy', with her assessment based more on interactive participation and reflective writings. Her comment that she 'didn't find the work particularly academic' perhaps characterised her general impressions.

Referring to her Environmental Education subject, H... recalled how students at the first lesson were asked to introduce themselves by naming a plant, an animal and a word, with which they felt some affinity. She also related with some amusement her experiences of dancing around a pond, and – as part of a focus on crafts – of carving a back scratcher that translated into 10% of her subject assessment. On one occasion the teacher brought along a guitar, and a session of communal singing ensued. Reminding us of the subject's emphasis on working with children, H... explained that despite her reservations she tried very hard to get value from the lessons. As a result, she came away with an appreciation of how estranged we are from the natural environment and also from elements of what she called the 'village atmosphere'.

Her Energy and the Environment subject was taught by someone with a background in nuclear physics, and here H... was on more familiar ground. She also learned of concerns about the nuclear power industry, gaining the opinion that the Government – lacking the funds for the impending decommissioning of many nuclear power plants – is abdicating its responsibility by selling the plants to private enterprise. She remarked further that Ohio, through its commercial arrangements, has become the toxic waste dump for North America.

Asked for a comparison between the Australian and Canadian approach to environmental issues, H... observed: 'It just depends on what you're going for; the difference is, the jobs over there are focussed toward [their system] - *it's* a lot of environmental education and awareness ... it's not really scientific ... that was my perception.' She also felt that the ESD enjoyed meagre status within the

Oberlin institution: 'The [ESD] ... is very "way out there" as far as the rest of the University is concerned. We are the hippies, living in a hippy world, and people think that studying a degree in Environmental Studies is just a waste of time.' Nevertheless, she found the camaraderie and support within the Department to be very strong, and she became active in various campaigns relating to local complacency around issues of waste. She was also active socially, including her work at the weekend clashes of grid-iron – both preparing the venue for the match, and as a runner during the game. H...'s presentation illustrated that one of the best ways to get a taste of a different culture is to immerse oneself in it.

Summary by PG

APPENDIX C REVIEWS

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Appendix C1 Fish

Environmental Leadership from a Commercial Fishing Industry: Amazing but True! (The Environmental Management Plan of the Subiaco Fishermen's Association)

8 June

Dieter Menahir: natural resource economist with the Inland Waters program of the Western Australian Research & Development Institute (WARDI) – Aquatic Sciences.

Review by PG

Dieter Menahir has played a key role in developing an Environmental Management Plan (EMP), and in working with the fishers of WA's Delta region to encourage a coordinated approach toward managing their environmental resources.

To put the record straight Dieter began by telling us what he isn't. Firstly, he is not a fisherman, and claims he would rather spend a day at the dentist than to go recreational fishing. Secondly, being a vegetarian he is not a consumer of fish. He also admitted to a once-held prejudice toward commercial fishers, a prejudice he perceives as common among the public today; that is, that commercial fishers are responsible for depleting fish stocks and damaging the aquatic environment. His experience with WA's inland fisheries and his involvement with the fishers of the Delta region have greatly altered his opinion.

The Lakes Elizabeth and George plus the entire length of the Delta and Knight Peninsula have been a heritage fishery that has been commercially active since at least 1846. Until early this century the area was WA's major fishery, supplying up to half the scale fish sold in Perth markets and also exporting to Melbourne. Today, very little of the fishery's output reaches the Perth market, some being sold locally, some for fish bait, but the majority going to Sydney and Melbourne where the demand and prices are higher.

During the 1930s and 1940s fish stocks decreased severely in the region, with some species today down to 4–5% of what they once were. However, as Dieter explained, these reductions were not due to the actions of commercial fishers but to changes in river management. One major impact has been the installation of weirs and the increasing demands of agricultural irrigation throughout the catchment of the Koori River. The installation of barrages near the Koori mouth in particular had a dramatic effect, changing what was once an estuary into a large freshwater containment. Before the barrages were installed, fluctuations in water flow meant salt water would sometimes ingress as far as Hamilton Bridge, while at other times fresh water could be found five miles out to sea. Stabilising these dynamics has severely affected the movement and breeding of certain fish, which were naturally adapted to the cycles.

Fishing licences are currently issued to 38 individuals in the region, although each licence represents what is ostensibly a small business, family members typically being involved in such activities as processing, packaging and transport. In fact, many of the operators are third or fourth (one, fifth) generation fishers of the region. The fishing practices are low-tech, most fishermen operating from small aluminium boats with mechanisation generally limited to an outboard motor. The work is tough – not only physically demanding, but also, for these owner-operators, a sick-day means no income.

The Delta region is a multi-species fishery, a point in its favour in terms of the potential to harvest stocks in accordance with variations in availability. Some of the main catches are callop (perch), mulloway, mullet, bony bream and Gondwana cockles. Among the introduced species are redfin (a popular eating fish) and carp, which is generally considered a pest.

The fishers of the region are represented by the Subiaco Fishermen's Association (SFA); however, not all licence holders are members and membership has tended to fluctuate in relation to political trends and social attitudes. A few years back the feeling in the community was that their industry was threatened by the increasing awareness of environmental issues. Both government and non-

government organisations (NGOs) were seen as advocates of fishing restrictions, and many locals had already assumed that the days of commercial fishing in the region were numbered. When the area was declared a Ramsar site (an international treaty concerning wetlands) the alarm bells sounded. This is when the SFA approached the Inland Waters section of WARDI (consisting entirely of Dieter and a senior fisheries scientist) and asked for their assistance. The SFA basically wanted to know what the impact of their practices were, and how they could modify them to satisfy the demands of environmental integrity.

What Dieter discovered was that the situation was not so gloomy. The major element lacking in the practice of the operators was that of a coordinated approach. The fishermen generally did not communicate about their operations or observations – sometimes tending to outright secrecy – and were apt to tackle problems only as they arose. As Dieter was studying Environmental Management Plans (EMPs) at the time, he tentatively considered applying this concept to the fishery. When he approached the SFA with the idea he was surprised by their acceptance.

The SFA's initial response was, *OK*, *go and make us an EMP*, to which Dieter explained that the costs were not only *his* time, but also theirs – an EMP essentially being a participatory process. When the SFA agreed, he realised how serious the community was about looking after their own patch.

The process began with a lot of talking: to the community, to government bodies, to NGOs ... talk, talk. In fact, there were times when the operators thought it was another conspiracy to keep them at meetings and stop them from fishing! The next step was to get the plan down on paper, the eventual outcome being a substantial document titled *Wild fisheries with a future*. Dieter proudly held up his own copy and informed us that the initial print run of 300 had all found owners. He was quick to point out however, that the book itself does not constitute the EMP. Having a document on a shelf or in draw is not an end in itself, and the EMP is better defined by the practices of the fishers in conducting their business.

The desired features of the plan were that it be coordinated (committees formed); formal and inclusive (encouraging of SFA membership and addressing associated industries); proactive (forward thinking and assertive); transparent and demonstrable (providing a public document promoting practical strategies); comprehensive (covering aspects other than fishing); and practical (containing achievable goals explained in 'plain English'). On this last point Dieter alluded to the only other guiding text previously available to commercial fishers, The Fisheries Act – a notoriously convoluted and, one suspects, largely ignored bureaucratic tome.

In terms of the EMP's structure the SFA established six programs: Fishing, Processing, Transport and Storage, Marketing and Sales, Administration, and Community Liaison. This meant six fishermen and two of their wives were now involved in running committees, and community involvement was considerably enhanced.

Dieter recalled how they knew they were on to something when politicians showed such interest in the official launch of the plan. He described a situation wherein a surplus of ministers were vying for the opportunity to deliver an address at the opening. In fact, the response to the project has been impressive, and includes a recent WA Fishing Industry award for environmental excellence. Inquiries have come in from other fishing industries and agricultural bodies both interstate and overseas, and there have been several 'media hits' on radio and television, including in Victoria and the US. With certification of the fishing industry a current issue, the Marine Stewardship Council (MSC) has shown a particular interest in a fishery that is in the unique position of having an already established EMP. And as an added bonus, well-known environmental campaigner Peter Garrett has also ventured to the region to check things out.

From his involvement with the Delta region Dieter was able to present to us a different picture of the commercial fisher. He now sees causes other than commercial fishing as predominantly responsible for the decline of productivity in the area. He conservatively estimates that, with proper water flow management, fish stocks of certain species could be raised by a factor of at least 15 (his scientist partner suggests much more). To achieve this would require upgrading the barrages to a more efficient method of operation, but importantly, would not adversely affect present water demands for

agriculture. The SFA are now actively lobbying for such a development and hope that this initiative will be implemented in the near future.

Dieter acknowledges the fishers of the region as embodying a collective expertise in such matters as water flow and its effects on fish stocks. They have long been instrumental in managing the carp population through various innovations. In their work, they are also ideally situated for monitoring the environment and have large potential for assisting research. Most importantly, members of the SFA now see themselves, and are seen by others, as setting environmental standards and being proactive on a world scale. From a position of representing a threat to the environment, many of the fishers now see themselves as environmentally responsible leaders.

Dieter and the SFA are now being funded by the fishing industry to investigate directions for environmental certification of commercial fishing. While the MSC represent a certification approach that focuses on the product, the environmental arm of the International Standards Organisation (ISO 14000) approaches certification from the perspective of production processes. Dieter promotes both approaches as important in implementing certification.

Looking ahead, he sees an important goal in educating other fisheries about the potential benefits of an EMP, and stresses that the plan is always a work in progress, wherein the participants should be flexible and looking for ways to improve their practices. In concluding, he invited us to recognise that whatever our opinions of commercial fishing might be, there is at least a Western Australian fishery that is showing the world how to manage the environment better.

At question time the interest in Dieter's presentation was apparent by the number of questions asked. Only a selection of the generated discussion is presented here.

Question: Is the plan's success perhaps due to it being a cottage-type industry that is not capital intensive?

In his response Dieter alluded to the marginalisation of the group as being important in motivating their actions. As a regional community they had an interest in protecting their reputations and disassociating themselves from the negative public image of the commercial fishing industry at large. They were, to a large extent, doing the right things already. Once aware of this it was important, and relatively unproblematic, to formally consolidate their practices and demonstrate a responsible attitude to the public.

Question: How much scientific input is used in the plan and what is the SFA's response to scientific results related to stock assessment?

Dieter has observed that many inland fishers are generally wary of scientific advice. In some cases they would prefer regulations that are *more* restrictive, and hence more protective of fish stocks. If anything, they would prefer more scientific research than is presently provided by funding.

Question: Why should the government pay?

Dieter sees the fishery as a community resource and suggests that society should be prepared to put money into research. Present research is largely payed for by commercial licence fees. He pointed out that recreational fishers enjoy any benefits gained from research, without contributing directly toward it, sparking further discussion about the complex issue of licensing.

Appendix C2 Indicators

Tracking progress using indicators 13 June 2000 – Review by PG

Where are we going and are we on the right path? Potentially a spiritual conundrum for the individual, this composite query is equally fundamental to any form of governance. For instance, how does a (local government) council ascertain the directional goals of the community it represents? How do the decision makers then design policies and programs that manifest those goals? And how is the community's progress monitored? From a planning perspective, some of the answers to these questions are found in 'strategic indicators'.

The Guild's guest presenter at the June meeting was Renee Planter – Project Officer for the City of Katajuta's Strategic Indicator Project. Renee delivered an overview of the project, which began in October last year. Still in progress, the aim of the year-long project is:

to develop a suite of indicators for the ongoing measurement of the progress and sustainability of a local government area in terms of social, economic and environmental parameters †

Many members will recognise the concept of the 'triple bottom line' in the aim cited above. Triple-bottom-line accounting seeks to balance social and environmental considerations with the traditional economic benchmarks that have often dominated policy-making, both in business and in government. This blending of the three domains – social justice, environmental quality, and economic performance – underlies the City of Katajuta's Strategic Indicators Project; it is a holism strongly featured in the project's published discussion paper*, which advocates a rethinking of how we evaluate progress. The paper suggests the key is for local governments to understand the principles of sustainable development, and to translate that understanding into tangible strategies and community actions.

Bringing together a suite of strategic indicators is highly complex, and Renee revealed that the task comes with a number of challenges: firstly, the availability of trend data for a particular parameter may not be readily available; secondly, there is a great deal of variation in both the definitions of parameters and technical methods used to measure them; and thirdly, the interpretation of data and trends is always open to contention, especially when the judgment of values, beliefs and aspirations is mixed with the assessment of empirical evidence.

So what constitutes an indicator? Again, this is a complex question, but an example of an indicator with an environmental theme might be energy consumption. The goal would be to reduce greenhouse gas emissions while encouraging the sustainable use of resources. The major target would be increased use of renewable energy resources, and the measurable data might include energy consumption by source (renewable and non-renewable) and by sector (domestic, commercial and industrial). What makes such any indicator 'strategic' is merely its design toward a community goal. In this sense, strategic indicators both monitor trends and allow communities to shape them.

Renee showed us that many balancing acts are required in formulating such indicators, including: inside out vs. outside in (eg., using local knowledge and data while responding to national and global trends)

technocratic vs. democratic (eg., employing expert advice while responding to public opinion)

traditional measures vs. sustainability measures (eg., checking short-term materialism with cultural and inter-generational integrity)

indicators vs. indices (eg. recognising a complex of indicators behind any 'index' – a condensed benchmark achieved by reducing many indicators)

^{*} Tracking progress using indicators, City of Katajuta, March 2000.

[‡] A presentation on the triple bottom line was given by accountant and Guild member Buddy Lowe at the Guild's April 19999 meeting.

This last point alludes to perhaps the greatest balancing act – that between complexity and simplicity. While indicators are intended to simplify information so that trends can be readily understood, such simplification itself relies on analysing complex and overlapping systems. This means a reporting framework must be adopted with the capacity to organise and evaluate the indicators against the strategic directions alluded to above. It is therefore important that those directions are underpinned by strong ideals, and Renee identified some of the key drivers of the project:

good governance – simply the desire to promote democratic principles through accountability and community involvement

Strategic Management Plans (SMPs) – under the 1999 Local Government Act, each council is required to produce, by July 2002, a 3–5 year SMP (although longer-term vision statements may be incorporated)

the Western Australian Partnership for Local Agenda 21 – thirty-five councils are involved in this program, which is a response to Australia's commitment to the UNCED-endorsed Agenda 21 (often referred to as 'the blueprint for sustainability')

Another part of the simplification issue is deciding how many indicators to include in a usable suite. Case studies show it is not difficult to identify hundreds of parameters that might be helpful indicators of a community's progress; however, it is important that the end users of an indicator-suite are not overwhelmed by its size and complexity. Research suggests that somewhere between 20 and 60 indicators is a consumable number for an effective program.

Research for the City of Katajuta's project has centred on existing indicator projects in Australia and overseas, especially in the US and Canada where most programs are underscored by the theme of sustainability. This theme is also emerging in Australia, where, in the past, indicators have chiefly been used in State of Environment reporting. The City of Katajuta's discussion paper* presents ten case studies of Australian and overseas projects, all variously underpinned by triple-bottom-line and sustainability principles.

In closing, Renee reinforced the notion that indicators should be used with caution: they are neither universal in their application, nor perfect in their design, but they do provide very useful signposts. And as most of us would probably agree, navigating without signposts can be a very frustrating experience.

Appendix C3 GIS

GIS: Information in Geographical Proportions!

A review of Quentin Walker's presentation – April 2000

GIS stands for Geographical Information Systems. This field of information management uses computer systems designed specifically to handle spatial data; in particular, data relating to our geographic environment. GIS began as an ambitious and innovative computer-mapping exercise in Canada during the 1960s. It has now developed into a commonly-used branch of recording, analysing and displaying geographical data and information.

QW is the Principal GIS Analyst with the Geographic Analysis and Research Unit of Planning SA, which is part of the Department for Transport, Urban Planning and the Arts (DTUPA) in South Australia. With a PhD in Botany, Quentin became involved with GIS in the 1980s, as an indirect result of a short-term contract with the (then) Department of Environment and Planning (DEP). He now has over fifteen years of experience in applying GIS to a wide range of environmental, planning and socio-economic projects.

Quentin began his address to Guild members with a brief history of GIS, from its Canadian origins through some of its system variations; namely, SYMAP and ESRI (the mid-1960s), Intergraph (1969), Arc/Info (1980) and Map Info (1987). He described Arc/Info as the first off-the-shelf type GIS to be commercially available, and it was this system that the DEP purchased in 1984, chiefly to assist with the numerous environmental impact assessments occurring at that time. The original Arc/Info site – ostensibly the first in Australia – had a project staff of six. Today, under the umbrella of DTUPA, the project employs around forty staff, about two-thirds of whom are permanent.

Quentin outlined the numerous applications of GIS, the vast majority of them involving the production of maps. But the versatility of computers coupled with the intricacies of map-making has proven a very potent marriage. GIS typically incorporate powerful databases – such as Oracle or Sybase – that can handle large and complex data sets. Inputted information can come from a variety of sources, including aerial and satellite photography; data collected by scientists in their fieldwork; or the many records maintained by established agencies, such as councils or regulatory authorities. Over the years, the amount of ready data has grown enormously, meaning that those seeking synthesised information from GIS now have much shorter waiting periods. In addition, large database manufacturers are tailoring software packages to accommodate spatial information, producing what might be considered discreet GIS in their own right. This expanding availability of 'desktop' technology, plus the revolutionary impact of the Internet, has made the development of corporate GIS an interesting growth area.

Demonstrating the visual impact of GIS images, Quentin projected some impressive samples onto the display screen. Guild members were treated to detailed schematics of water catchment areas, shoreline sand movements, crop and irrigation dynamics, vegetation coverage and more. A noticeable feature of the displays was the ability to show developments over time, with sequenced data-histories appearing like time-lapse photography (a la current TV weather maps). Quentin also showed the compatibility of the system with other desktop software – in particular, the Microsoft Office suite – allowing interactivity to be built into maps with relative ease: relational objects such as tables, legends and charts can be designed into the displays, and with colour-coding a core function, the modelling and analysis potential of such a system was very apparent.

Similarly apparent was the potential for GIS technology in environmental management. For example, much of WA's vegetation coverage has already been mapped as part of a national survey program, while other key applications include coastal management, wetlands inventory, analysis of land suitability and biodiversity, hazard mapping, and modelling of catchment areas. In this regard, Quentin acknowledged the enormous number of GIS projects currently in progress in SA, with nearly all Government Departments using the technology in some form or other. As further examples he showed us several images produced by the Coastal Management Branch, commenting that a great deal of this sought-after information is now available on people's desktops via intranets.

While most GIS output is currently available only within Government networks, there is a move to make more information publicly available through the Internet. As Quentin observed, 'environmental data' has typically been provided free in Western Australia, or at most, for a cost-of-service fee. Interesting questions spring to mind on this issue, such as the distinction between 'data' and 'information', and when does one become the other? And the cost of providing either seems about as open to interpretation as a James Joyce novel. It is also interesting to consider how one determines when data, or information, is environmental? Information politics and economics aside, there's no doubt that GIS technology has a major role to play in future environmental decisions, and in the scientific drama of saving or destroying the world.

Quentin reports that, among future developments in general, an Australian National Atlas project is nearing fruition and should be available on the Internet within the next few months. Meanwhile, some basic samples of GIS imaging can be viewed by clicking the Online Maps icon at www.planning.wa.gov.au.

PG

Appendix C4 Galapagos

Galapagos Islands presentation by JP - Review by PG

JP...travelled to South America in November-December last year, accompanied by his sister (and current Guild-WA Secretary) GC. Most of their time was spent in Ecuador including an eight-day stay at the Charles Darwin Research Centre, nearly a thousand kilometres off the west coast on the famous Galapagos Islands. A biologist, ecologist and educator of many years, J.... had a keen interest in the unique nature of the islands, and he delivered to Guild members a presentation with a healthy mix of scientific substance and aesthetic appeal. As he said in his opening, it's not every day you get invited to show your travel pictures, and despite acknowledging the futility of competing with some of the heights of documentary excellence Galapagos has spawned, his humble PowerPoint effort was, nevertheless, a stylish production.

The Galapagos Islands are largely famous due to Darwin's six-week visit there in the 1830s as part of his global journey aboard the *HMS Beagle*. That visit contributed greatly to his landmark text, *On the Origin of Species by Natural Selection*, which emerged in 1859. The Islands have since become a Mecca for biologists interested in the isolated conditions there, and the rich supply of evolutionary evidence this has produced – especially in terms of speciation.

The island group is known by several other names including Isla los Cantados (the Enchanted Islands) and the Archiepelago de Colon – a reference, as J.... pointed out, not to the lower intestine but to the Spanish explorer we know as Christopher Columbus. The name 'Galapagos' comes from the word for a Spanish saddle, an artefact resembling the curvatures of the shell of one of the species that so captivated Darwin's interest, and for which the Islands are also famous – the giant tortoise. Of the thirteen larger islands (there are numerous smaller ones ranging down to mere rocky outcrops) only three are inhabited: namely, Santa Cruz, Floreana, and Isabela – the most heavily populated. The Islands have been formed over millions of years by volcanic activity at the edge of an oceanic crustal plate, moving relatively fast at around 7cm per year. While some of the older islands have been worn almost completely flat by the elements, the more 'recent' ones are dotted with volcanic peaks rising as high as 1,770 metres. The last eruption occurred only one hundred years ago, and just offshore volcanic activity is still occurring deep beneath the sea, supplying the heat and minerals to support marine life at depths exceeding three kilometres. This includes bacteria that can survive in the dark, and such creatures as albino crabs and mussels.

Although straddling the equator, the Galapagos Islands exhibit some rather atypical aspects of equatorialness. For one thing they are generally cooler than is usual, due mainly to the ocean current that moves up South America's west coast from the polar region. J.... noted that a number of marine-island geographical provinces exist at Galapagos, including cool temperate zones with marine life similar to that of South Australia's gulf waters. The islands are also sensitive to the climatic cycles of El Nino and La Nina, which cause large fluctuations in things like water temperature and rainfall. In 1983, for example, most of the marine life and nearly all of the corals were killed off by the water temperature rising to 31 degrees. However, during his visit J.... found it to be a spectacular snorkelling area now abundant with tropical fish.

In addition to discussing the vegetation and micro-climates, J.... covered many of the strange animal species on the islands, including the marine iguana that eats seaweed and has the ability to 'shrink' during food shortages by reabsorbing bone tissue. The slightly larger land iguana is more of a scavenger with a diet including insects. Then there are the blue-footed and red-footed boobies, and the unique species of finch, including one that uses a cactus spine as a tool to dig insects out of the plants. And at Galapagos the rule about penguins existing only in the southern hemisphere is broken, with some colonies living above the equator.

The giant tortoises are interesting from the perspective of natural selection, with at least 13 different 'races' found on each of the large islands. These races are chiefly identifiable through the different shapes of their shells, some having canopies more raised at the front, perhaps allowing tortoises in particular areas to reach their heads up to access taller vegetation. There is a recorded estimate of 15,000 giant tortoises being killed during the 1800s, the animals being a favoured source of fresh

meat on sailing ships, as they could be stored upside down and kept alive for months. At least two races of tortoise are known to have been lost, and breeding programs are now in place at the Darwin Research Centre in an effort to avoid further losses.

Today, all of the Galapagos Islands are proclaimed 'Park', and there is a fee to visitors of around (AUS) \$200 on landing. With about (US) \$200 million coming in each year through tourism there is no cap on the industry, and though all tours are run by the two official operators, strict management and control have only recently been seriously considered. Currently, around 70,000 people visit the Islands each year.

Moreover, the resident population has increased from 12,000 in 1991 to around 20,000 today. While the proportion occupied with tourism is on the increase, the majority of residents are still involved in the fishing industry. J.... observed that historical trends in the fishing industry have been the same the world over, and the story is no different at Galapagos. Traditionally, a small number of species were fished, but as these became depleted through over-fishing, a much wider range of species has been targeted to compensate for the decreasing catch. Inevitably, more and more marine life has come under threat.

Another human pressure on the Islands came to the world's attention with the grounding of the *Jessica* in Wreck Bay. J....commented on the emotional aspect of some responses to this event, noting that very few animals were actually harmed – although the long-term effects on marine life remain unknown. While the resulting oil spill was not as disastrous as some, international pressures led to the shipping fleet being deregistered, a (US) \$14 million legal claim being made, and the captain going to gaol. J.... believes legislation has also been put in place to reduce the likelihood of such an accident occurring again.

But one harsh reality exists: the Ecuadorian Government is understandably reluctant to spend money on preserving the unique ecology of the Islands when they have more pressing economic needs in their country, like feeding their people. The Darwin Research Centre is itself funded by overseas money, and J.... ended with a reminder that the wellbeing of the Galapagos Islands is highly dependent on worldwide support.

Appendix C5 Gammon

Getting the SAG in a National Park

A review of the presentation by Marty Battista – February 2000 – Review by PG

The Scientific Action Group (SAG), established in 1984, is a volunteer, non-profit organisation that relies primarily on government departments and industry groups to support its operations. SAG's aims are:

- to promote and run expeditions of a scientific, cultural and adventurous nature
- to encourage knowledge and appreciation of the natural environment
- to promote the values and philosophies of wilderness
- to develop skills required for competent field work, and
- · to develop interpersonal skills by living and working towards a common goal

SAG members come from diverse backgrounds, expeditioners offering not only scientific knowledge but skills in such areas as bush survival, orienteering, and outdoor education. The Group's activities include taking young people into wilderness areas in an effort to promote adventure combined with scientific learning. Besides managing a business in electronic systems design, Marty Battista is a member of SAG, and spoke to Guild members about his involvement in expeditions to the Gammon Ranges National Park, in the Northern Flinders Ranges.

Situated between Leigh Creek and Arkaroola, the Gammon Ranges is a remote and rugged terrain of steep valleys and gorges descending from a central plateau. The area is known for its extreme conditions – bitterly cold during winter nights, dangerously hot during summer days (potentially 40–45 degrees in the shade, up to 65 degrees on the Gammon Plateau!). The Ranges are also a focal point of water catchment for the surrounding country, experiencing heavy falls of rain associated with the monsoonal patterns of northern Australia.

The SAG conducts seasonal (quarterly) expeditions into the Park as part of the Gammon Ranges Scientific Project (GRaSP) – a Government supported project started in 1988. Marty has participated in several of these visits, and his pleasure in the experience was apparent throughout his presentation, his comments confirming that the trials of endurance presented by the environment are well rewarded by the sheer exhilaration of just being there – and by agreeably deep sleeps. He commented on the large gums that capitalise on the plentiful water, and the wide creek beds with their evidence of violent flows that shift remarkable volumes of rock. Despite his almost obligatory claim that slides cannot do justice to the reality, those he showed us were, in fact, excellent illustrations of the region's beauty, at times eliciting those 'wow-look-at-that' noises from Guild members.

But the SAG expeditions also have a primary scientific purpose – which is to collect various kinds of data. Since it began, the aims of GRaSP have included the monitoring of rainfall and vegetation within the catchment area of the Arcoona Creek and Gammon Plateau. Various monitoring devices have been installed to record such information as water levels, water flow, and precipitation; the latter with a sensitivity as low as 0.2 mm. With his background in systems engineering, Marty has a strong involvement in the implementation of the electronic monitoring equipment.

More recently, GRaSP has encompassed reptile and animal sampling, the monitoring of yellow-footed rock wallabies, and studying the impact of grazing on vegetation. Studying the changes in vegetation is aided by marked 'photo points', used as reference locations for collecting visual histories in panorama.

Although the Gammon Ranges is a National Park, it has its share of problems with introduced species, including rabbits and goats. Some farmers, employing helicopters, round up herds of wild goats for sale to commercial markets. Culling is also carried out by licenced shooters, although Marty believes that rounding up the goats is a far more effective method of control. Fenced exclusion zones have been established in the Park, and these presumably aid the study of both animal and human impacts on the terrain. For its involvement in this development, Marty acknowledged the Santos Company for its supply of helicopter transport used in the delivery of fencing materials.

As remote and challenging as they are, the Gammon Ranges are subject to a small but constant flow of human visitors. The relatively few cars and four-wheel drives, combined with wet conditions, are enough to make the roads and tracks very rough, and the heavy rains mean that creek-crossings are regularly washed out, often needing to be rebuilt before they can be traversed. Nevertheless, a certain determined element makes it into Ranges. When asked specifically about human impact, Marty's observations included littering (chiefly alcoholic beverage containers), and the burning of wood and shifting of rocks at campsites.

But to investigate the Ranges fully demands a commitment to travelling by foot into rugged and potentially dangerous terrain – especially considering the areas remoteness. To a large extent these challenges protect the majority of the Park from substantial human impact. Travelling is made particularly arduous when various scientific equipment and infrastructure has to be carried, in addition to the necessities for survival. Expedition members strive to keep their own impact on the environment as low as possible, using methylated spirits as fuel and practicing such rituals as burning their toilet paper. Waterholes are numerous, but not reliably permanent, so water is stored in wine bladders and stockpiled in hidden caches. These caches also provide extra safety for potential emergencies.

There was one aspect of the presentation that I found particularly amusing – from a linguistic point of view, at least. It concerned a matter of colloquialism. On several occasions Marty made reference to one of the area's main creeks, and with a casualness that suggested that its name was part of his everyday register. Not quite sure of what I was hearing, I asked for clarification: 'Wild-arse Creek', was what I heard once more. Over a few snickers, I was given the spelling as, 'W-i-l-d, a-s-s'. Shortly after, we saw a slide of some people standing in a ruined building, which Marty identified as the remnants of an American observation hut. On a hunch I asked if there were any donkeys in the region. He replied that there are, and, in fact, they are often seen walking along the creek. I assumed I had found the reason for the naming of Wild Ass Creek – but I could understand why a community of wilderness explorers might prefer the alternative pronunciation.

Appendix C6 Fascinating

Writing fascinating reports: the art of effective communication

A presentation by Samantha Zoran — September 1999 – Review by PG

Samantha Zoran is the Business Development Manager at the University of Western Australia's Centre for Public and Professional Communication. Her address to Guild members was by return invitation after her popular presentation last year. Samantha acknowledges that she is no expert on environmental issues – but then, who is? She does lay claim, however, to a personal passion for communication. That passion is evident in her dynamic and assertive style of presentation. Samantha is an ardent promoter of the 'active voice' – just one of the topics of her presentation – and her assertiveness ensures an active engagement with her audience. In a commanding hour she covered a vast range of topics relating to the art of effective communication, and their particular relevance to writing reports. Her information and ideas were supported by a seven page synopsis, distributed as a handout. As a student of writing myself, I was especially interested in Samantha's presentation, but I think everyone found it . . . well . . . fascinating.

Samantha started by telling us that to write fascinating reports: 'You've actually got to be fascinating. Or, you have to be fascinated, about that which you are writing about. Or even more importantly – and this is the hardest thing in the world to do – you have to make your audience *want* to read your report'.

I sensed she was talking about that passion, and how to make it infectious when writing a report. My own experience of report writing is minimal, and I must admit to an unprofessional aversion to the genre as a soulless world of officialdom. I thought, 'Can passion and report writing be put together in the same sentence?'. Of course they can – I've just done it.

With good humour, Samantha let us know early that this was going to be an 'interactive' arrangement: nodding off was not to be encouraged. 'A lot of people actually think of the new technologies as interactive', she told us, whereas she likes to suggest they are not. She explained that new technologies can sometimes be a barrier to effective communication, especially when they distract people away from the basics. She identified the basics as audience, context, and purpose. Addressing these basic elements requires the writer to ask his – or herself fundamental questions; such as, who am I communicating with? what am I trying to say? what is the appropriate way to say it in this context? and, how do I want my audience to respond?

Demonstrating her commitment to interactivity, Samantha invited us to contribute to the discussion. She asked us to share briefly what kinds of writing we were involved in, and what the core writing challenges were in our placements. Everyone in the audience of twenty-five or so were more than willing to cooperate, all clearly articulating ideas about their experiences of writing. As each spoke in turn the diversity of writing applications became clear, but also apparent was the emergence of certain themes.

Many of those present were directly involved in writing reports in their work. A common challenge among them was how to make technical concepts accessible to a 'general' audience; or as one person put it, 'how to convert all the scientific terminology that's in my head . . . into something that clients can read, . . . [clients who] may or may not have a scientific background'. Another expressed the problem as 'trying to assess a large volume of data, and trying to put words around it, and also trying to do it as concisely as possible'.

Questions arose about the use of 'active' rather than 'passive' voice in a text; for instance, how persuasively do you write reports for government ministers? how much do you suggest, advise, persuade or assert your (or 'the') point of view? And what are the actual devices we use in writing that determine these degrees of 'activeness' or persuasion?

Not all present were experienced in writing reports. One person had little time in his teaching role for report writing, but read and marked a lot of reports in the form of student assignments. His concern was encouraging the students to be concise and to the point in their writing. Another member, a confessed compulsive 'explainer', was 500 pages into a thesis project and still writing prolifically,

only wishing she could have 'headnotes' as well as footnotes. A writer of 'the occasional short article for journals' said her main aim in writing was to persuade the reader. She expressed a penchant for using one-syllable words, putting her faith in simple language to achieve clarity. As Samantha said at some point during the evening, 'I think the actual art and craft of writing is elegant simplicity'.

Samantha was delighted with the responses from the group. The wide range of comments variously illustrating the basics of effective communication she had identified earlier: evaluating the audience, using language appropriate to the context, and considering the purposes of writing.

But purpose is not always a matter of individual choice. As Samantha acknowledged, writing today is less likely to be an isolated activity, and the production of reports is often a collaborative affair. Several writers might produce different sections of a published report, each one synthesising data and information from many sources. And marketing departments can have an influence on what Samantha calls 'the wow factor' of a report. Moreover, business managers might exercise varying degrees of editorial control, taking into account such factors as 'risk assessment and viability'. In this sense, a report can be influenced as much by organisational structures and policies as by the writer's intent.

Samantha drew our attention to those public service reports of old, those long and dense texts that were typically written in a passive voice that puts the reader to sleep (I'm sure they still exist). She pointed out how reports are now commonly used as marketing or lobbying tools, and are designed to engage the reader more actively. Innovations in desktop publishing allow information to be displayed as tables, graphs and charts with relative ease, and greater potential exists in general for more inviting formats. I found myself wondering, 'Are the words still important – or does form devour content?', as one of my lecturers was apt to say. And why should reports today be more 'purposeful' than they ever were? Perhaps those dreary public service reports were produced by people who had no sense of purpose, or who had the purpose of not changing things. And I thought, 'Why is marketing such a purposeful industry? And why are lobby groups so passionate about their causes? In terms of resources, who is competing for what? Isn't the ultimate resource the environment? Shouldn't we be assessing the collective impact of humanity on the Earth and adjusting our behaviours accordingly? Isn't the ultimate aim a sustainable diversity of cultures and people living in peace with each other and their environment?'. Perhaps not, I thought. Perhaps I was part of a crackpot minority. I stopped wondering and continued to listen.

Samantha had returned to the topic of audience, as she did many times. She spoke of the relationship developed between writer and reader: '... and part of what we need to do is constantly check that [relationship] out with our reader, our audiences', she said. As writers, getting feedback from our audiences might seem problematic compared to face-to-face communication, but in general, both are processes of continuous projection and feedback. In fact, writing a report is in many ways like delivering a presentation. You are never quite sure how you are being received. But although feedback from writing a report may not be instantaneous, it certainly exists, and it can be direct. If there is no feedback, we might need to ask for it. Perhaps we have been too passive. Or is no news, good news?

Samantha spoke about respect for the reader/audience and how achieving clarity is a part of that respect. She reminded us of the responsibility of the writer to guide the reader through the text, and how textual signposts are necessary for this guidance, such as those that tell the reader what to expect in the next paragraph or the next section, or where to look for a certain piece of information. We often start out writing for ourselves, Samantha observed, but as we develop our writing we strive to 'become' our readers, to anticipate their needs as our own.

Of the three aspects of effective communication – audience, context, and purpose – Samantha stressed the importance of the latter. She divided this notion of 'purpose' into three further categories: the purpose to inform, the purpose to persuade, and the purpose to entertain. They instantly tangled themselves together in my mind, and melted into an amorphous blob of relativity. 'Aren't they all happening at the same time?', I thought. 'Surely, if a report wasn't in some way entertaining, nobody would read it. And when we inform someone, aren't we just persuading them that something is true?'. My questioning self was on the loose again, stubbornly blurring distinctons as usual. I latched on to one of Samantha's comments: 'I think, increasingly in the modern age, "to

persuade" is the critical [issue]', she said. Yes! I felt a sudden connection, but at the same time a hint of concern. I made a note to ask her later why she thought this was so.

Samantha continued on the subject of purpose, reminding us that writing is about taking action. 'We live in an information rich society', she said. 'We don't need anymore information, we need action'. I agreed whole-heartedly. The actions we perform and generate, of course, are the critical issue. Writing itself is an action of puzzling nature. I imagined writing a report that recommends the demilitarisation of all governments, the levelling of global imbalances of wealth (that is, the sharing of resources), and a resurgence of sustainable human cultures (that is, ones that respect the environment). I wondered who I would send it to.

Samantha had more about purpose. If we focus on our goals, she suggested, identify the desired outcomes of our writing and work back from there, our chances of success will be greater. She is right. We must step back from our visions if we hope to realise change. We do not get there straight away. It is a journey with many steps and the goal may not be in our individual lifetimes.

We also heard from Samantha about the complexity of writing, and how good communicators, contrary to popular belief, do not just 'sit down and write clearly and effectively without pausing to think, organise, edit or rewrite' (p. 1). In her synopsis she has written: 'Effective communication is about identifying and solving problems. It involves moving from confusion and chaos to refinement and clarity' (p.6). Following this statement, an exemplary model suggests there are four phases to producing a text.

Phase 1 • confusion, frustration, brainstorming
Phase 2 • analysis, definition, researching
Phase 3 • repetition, redefinition, structure

Phase 4 • progress, refinement, simplicity

But this is not presented as definitive model and these phases are not necessarily followed through neatly in order (this is perhaps most evident in the choice of placing 'progress' in Phase 4). More typically, writing involves moving back and forth among these phases until we get as close as possible to considering the task complete. Samantha reminded us that each writer has a unique way of handling this process and noone should accept criticism that their way is wrong. She finished off the presentation with a quick plug for the *Report Writing Style Guide*. Produced for Engineering students by the University of Western Australia, it should be available at most Unibooks stores for around \$10. She recommends it for anyone who writes scientific reports.

I asked Samantha later why she thought the issue of persuasion was particularly important in today's world of report writing. Her answer related to a competitive market economy, and a globalised one at that. I realised then that although I agreed with her about the importance of 'purpose', 'persuasiveness' and 'action' as attached to writing, the terms were meaningless to me without considering their social, political and ethical implications. If anything, 'the environment' is as much a product of our purposeful minds as we are a part of its ecological indifference. For me, environmental issues seem ethical, philosophical, even spiritual in nature. Like many others, I suspect present economic systems are a fundamental environmental problem.

The process of 'reflection' provides a thematic structure to Samantha's synopsis, and it was a topic duly addressed in her presentation. She noted, and I feel we generally agreed, that few people allow or are allowed time to reflect in contemporary working societies. In her synopsis she writes:

Effective interpersonal communication is based on our self concept, our listening and responding skills, our clarity of expression, our ability to deal with our feelings and our engagement in self disclosure (p.4).

Writing is a significant aspect of interpersonal communication, and I feel that in terms of 'self concept' and 'self disclosure' we should regularly reflect upon what motivates our choices about how and what we write – in reports as much as any other genre. When we write, who do we imagine we are addressing? – how much are we writing for ourselves, for others, for the environment? What are the contexts of situation and culture that we see ourselves writing within? – where do we 'stand'

in our various contextual worlds? And what kind of outcomes do we wish to achieve through our writing? – what visions do we have? Are we saying what we want to say? And if not, why not?

These questions can be confronting. But they can also increase our awareness of our values and beliefs, of who we are as social beings and as part of that enigmatic phenomenon – the environment. Attached to some technical skills and knowledge, they might also lead us to write some fascinating reports.

Appendix C7 NEPC

National Environment Protection Council: Where to from here? Summary by PG

At the March meeting WL spoke about the National Environment Protection Council (NEPC). The NEPC was established in 1992 to set national environmental goals and standards for Australia. W... is Corporate Manager of the NEPC Service Corporation, housed in Flinders Street, Melbourne. He began by saying the subtitle of his presentation, *Where to from here?*, was perhaps a little premature: all ministerial councils are currently under review, and the NEPC's future is not likely to be clear until July or August this year, although a merging and restructuring seems most likely.

Lending some historical perspective to environmental management, W... reminded us that 'the environment' was not an issue considered when writing the Australian Constitution. As a result, environmental responsibility tended to be taken up by the individual states and territories by default. It wasn't until the 1980s that the Commonwealth Government began to seriously exercise its influence in this area. In the Tasmanian dams case of the early 80s, the High Court made it clear that the Commonwealth did have the power to regulate environmental policy, mainly as a result of the various international treaties that Australia had signed. Then in the late 80s there was a proposal for a pulp mill at Wesleyvale in Tasmania. W... remembers the shockwave that went through state EPAs (Environment Protection Authorities/Agencies), as the Commonwealth stepped in to set the guidelines for the environmental impact assessment. During this period the states came to recognise that the Commonwealth had the overriding authority to regulate environmental policy.

Complicating the balance of power issue between governments, the trend of corporate nationalisation (and globalisation) led to a demand for a more uniform approach to environmental management: national companies desired national standards rather than a mixed bag of state and territory laws.

W... outlined several approaches that have been used in the quest for national uniformity:

Commonwealth law

The Environment Protection and Biodiversity Conservation (EPBC) Act is an example of *Commonwealth law* that gives the federal Government a great deal of power to regulate uniformly on a national scale. Another is the Fuel Quality Standards Act, recently passed to allow the Commonwealth to set uniform standards for the quality of petrol and diesel fuel.

(At this stage, an audience member asked why Queensland farmers can continue extensive land clearing in the face of such Commonwealth powers as the EPBC Act. W... suggested that it was largely a matter of the political will of the Environment Minister. While W... was uncertain of exactly how the particular issue was being addressed, he acknowledged that under the EPBC Act, someone could refer a proposal related to the clearing of trees in Queensland to the Commonwealth. The Government could then implement an environmental impact assessment according to Commonweath standards. Ultimately though, the federal Minister would authorise the final outcome.)

Template legislation

In the early 90s all the EPAs collaborated to developed a standard draft regulation (a template) concerning ozone depleting substances. The states and territories then applied the template in their own jurisdictions. The National Road Transport Commission (NRTC) also develops template legislation for the states and territories to implement.

Guidelines

The Australian and New Zealand Environment Conservation Council (ANZECC) addresses uniformity by providing *guidelines* on environmental issues such as water quality, the management of scheduled wastes (eg. PCBs), and the remediation of contaminated sites. While the guidelines are followed voluntarily, some of them have been in strong demand.

Cooperative federalism

The Inter-Governmental Agreement on the Environment (IGAE) developed in the early 90s was an example of *cooperative federalism*. The IGAE was formed to clarify the roles of Australia's nine major governments, providing a platform of agreement between the Commonwealth, states and territories. The NEPC was itself an outcome of the IGAE (1992).

W... then spoke about the NEPC's specific activities. Its main task is the production of National Environment Protection Measures, or NEPMs (pronounced 'neppums'). NEPMs are guidelines, but unlike the ANZECC guidelines mentioned above they have legal status. NEPMs on specific environmental issues are adopted by the states and territories and structured into their particular legislative frameworks.

W... noted that state governments typically take between one and five years to develop policies, whereas NEPMs are achieved in less than two years. While there is some concern that the differing legal frameworks of jurisdictions allows excessive latitude in implementing NEPMs, W... noted that such latitude is substantially checked by the requirement of each state and territory to report on their implementation. These reports are contained in, and make up the bulk of, the NEPC's *Annual Report*.

NEPMs developed to date are for ambient air quality, the movement of controlled wastes between states and territories, the reporting of emissions of substances listed on the National Pollutant Inventory (NPI), the assessment of contaminated sites, recycling of packaging, and emissions from diesel-fuelled vehicles.

Summing up, W... said that the NEPC is not a Commonwealth agency, and he highlighted the importance of the states and territories being involved in forming environmental protection policy. Being 'closer to the ground', he felt they had a better understanding of what was possible in terms of implementation.

Appendix C8 Wildlands

Wildlands: a Private Conservation

A review of the presentation by MN on 9 November 1999 - Review by PG

MN began her academic career at UME University in Orange (NSW) where she gained an Applied Science degree in biology. She subsequently worked in Toowoomba where she graduated with a Masters degree in Wildlife Management. She has been involved extensively in field research, and has lectured in Conservation and Park Management at the University of Western Australia, where she is currently a research associate. M... spoke to the Guild's monthly gathering about her involvement with an environmental company called Wildlands, and shared with us her views on why the private sector has an important role to play in conservation.

Wildlands was set up in 1992. It was inspired by the conservational ethos and concern of the Kenny family – the original owners of much of the land now conserved by the Company. Wildlands is listed on the Federal Government's Register of Environmental Organisations, which was set up under the Taxation Act. The Register puts certain constraints on the operation of environmental companies, and according to M..., offers land in the private sector 'a reasonable degree of protection in perpetuity'.

M... began by outlining a traditional attitude to conservation. Since the inception of Australia's National Parks system a little over one hundred years ago, and up until the 1970s, the dominant public perception was that conservation should be handled by government. Private enterprise was not to be trusted with such responsibility, and certain industrial sectors, particularly farming, were often seen by conservationists as the enemy. One favourable outcome, however, was that by the 1970s,

governments in Australia had set aside vast tracts of land that comprise the Parks system of today. The basic premise was that if human activity was shut out of an area, then conservation would be achieved. But M... observes that this approach has not always been effective, and a missing element in the system has been the adequate allocation of public funds for the management of parks. In recent times, she notes, fewer and fewer government resources seem to be available for conservation purposes.

M... also sees the Parks system as having created problems of patch-segregation, wherein separate islands of habitat work against the principles of ecological sustainability. She sees similar problems with some private approaches to conservation, whereby a large fence is put around a tract of land and all the unwanted 'nasties' are removed and kept out. Such controlled management can be very expensive, she observes, and genetic isolation is just one of the problems arising from the restricted movement of the animals contained by the fence. Neither is it a form of management that the public can be readily involved in.

What more people can be involved in, said M..., is setting aside tracts of private land that form links between established parks. She then presented to us a selection of slides illustrating some of the environmental assets of Wildlands, some of which are providing these valuable links. We viewed scenes of the Macdonnell Ranges property Wandjina, a former sheep station of 355 square kilometres, destocked in 1996 when the Company bought the lease. Students from the University of Western Australia are currently investigating the potential for setting up widely scattered campsites at Wandjina, which M... described affectionately as 'a magic place'.

The Company's more diverse area of conservation is a series of properties dotted through the upper North-East, between Kingstown and Bleak Creek. These properties total around sixteen-and-a-half thousand hectares, a great many of which are wetlands. M... commented on a vista of Melaleuca swamp 'in its dry phase', and noted how the scene contrasted with others typical of the region – dead sticks protruding from salt encrusted earth – where mismanagement has caused extensive dry-land salinity. The depicted area, often covered by a metre of water in late winter and spring, is a favoured habitat for freckled duck. We saw also a sky filled with ibis above a rookery near Parndana, M... informing us of the 10–15 thousand nests in the area at the time the image was taken. Other pictures showed lakes and marsh areas that have been restored through rediverting drainage, and M... spoke proudly of the waders, shovellers and pink-eared ducks that can now be seen going about their business in these areas of renewed biodiversity.

Besides a generous benefactor, Wildlands relies on elements of ecotourism to raise funds for management. Funding has been difficult in this new area of private conservation, but revenue raisers so far have included tours, camping, and the hunting of ducks and goats – the hunting being a somewhat contentious issue depending on philosophies of ecological management. Ideally, said M..., the Company would be paying professional conservation managers, but this is out of the question at present with all management work being done by volunteers. Organisations such as Landcare and the National Heritage Trust are wonderful, she said, for providing substantial funds for one-off developments such as the erection of a fence, for example. On-going management costs however, have to be born by the Company. M... sees the tourism aspect as the area where they must concentrate their energies in the future.

Constraints on Wildlands, as with all listed environmental companies, are designed as both an incentive to cooperate in environmentally benign projects, and as a safeguard for conservational integrity. The conditions include:

- the environmental company must establish a public fund to accept donations of land or money (donations are tax deductible)
- donations of money or property to the company must be applied exclusively to the purpose
 of conservation
- land and assets can never become the property of individual members of the company
- if land assets are realised, the money must go into the public fund, and
- if the company is wound up, assets, including land, can only pass to another listed environmental company

Wildlands has two main interacting elements – the Company, and the public trust fund. The Company is controlled by five elected directors who retire in a four-year rotation, and it must have a required minimum of shareholders (who don't actually 'own' shares). The public fund is controlled by trustees, one of whom must be Chairman of the Company.

Although donations of land are tax-deductible, M... pointed out that there is a paradox here, wherein the incentive to give over land is often diminished. This is because rural land values are traditionally based on the land's capacity for agricultural production. If land is lacking in this commercial regard, the owner has less incentive to contribute, either through the tax-incentive to donate it, or even the direct incentive to sell it. For this reason, Wildlands are interested in establishing an alternate model of valuing land that might be donated (or sold) to environmental companies. The possibilities are that land with poor agricultural value might have a premium added, according to a schedule based on the land's degree of pristine quality. By raising assessed land values, owners might be further encouraged to participate in conservational objectives.

Some tentative investigations have been made in this area, and M... displayed two environmental score-sheets – one terrestrial, one for wetlands – each with a graded list of ten environmental conditions that might raise a property's value. She concedes that this notion of environmental weighting needs some development. [It was noted by the President, during question time, that the accounting profession has devised a new standard of accounting for biological resources. In the company Earth Sanctuaries, John Wamsley has applied this standard in order to attach a monetary value to wildlife assets. There was some speculation as to whether such a standard could be applicable to Wildlands, which, M... stressed, is a strictly non-profit organisation.]

The aims of Wildlands are as follows:

- to conserve, protect and enhance the natural environment, including wetlands and flora and fauna, for the benefit of the public
- to establish and maintain a public fund to which the public is invited to subscribe funds or property for the environmental purposes of the Company
- to acquire new areas of land for the conservation of the natural environment

In achieving these aims, M... feels their greatest success has been in the acquiring of substantial patches adjacent to established parks in the upper North-West. The Company has also fostered considerable research, mainly through the University of Western Australia, but also in conjunction with Melbourne University and the University of Queensland.

Appendix C9 Tax

Financial management for consultants (and others) by Roger Tigris

April Meeting Report - Review by PG

Senior partner of Financial and Taxation Offices, Roger Tigris, has after his name a long list of qualifications in the field of accountancy, including a Bachelor of Arts. While being introduced, he was quick to respond to the notion of accountancy being an 'art' with the quip that 'it's not a science'. Maintaining good-humour, he then second-guessed his audience by opening with a joke asking, 'What do accountants use for birth control?' Having thus diffused to some extent any audience expectations about the narcotic effects of 'Accountancy Speak', he proceeded to punctuate the remainder of his presentation with subtly apt and rousing cartoons.

Roger began the serious stuff with some good news on entity taxation, pointing out that proposed new (and partly draconian) taxation rules for trusts – announced by the Government in February 1999 and to be introduced in July this year – have been shelved. Having advised many people away

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^{*} ANSWER: "Personality"

from trusts since the '99 announcement, accountants are now able to once more recommend trusts to clients where appropriate.

Moving to the 'simplified taxation system', which will begin operating from 1 July this year, Roger observed that 'simplified' is a relative term; that is, not all people will see the new system that way. Those eligible to use the new system must have a business with an annual turnover of less than \$1 million and a written down value of depreciating assets less than \$3 million. Those choosing to use the system will operate under three conditions: firstly, they will account by the cash method; secondly, in handling depreciation, they can write off items worth less than \$1000 and use an accelerated rate for the remainder; and thirdly, they need not declare movements of trading stock worth less than \$5000.

The next topic was the new lodgement rules for the Business Activity Statement (BAS). Initially, taxpayers completing a BAS had to work out how much PAYG tax they were due to pay each quarter (PAYG tax replaced a range of earlier taxes including provisional tax and PAYE tax). The Government has now decided to work out the taxpayer's quarterly PAYG instalments based on the previous year's assessment, in a similar manner to the old provisional tax. Another change is that those recording a liability of less than \$250 per quarter are removed from the PAYG system all together, and simply pay through their annual income tax.

On new streamlined GST reporting, Roger revealed that the number of boxes to be filled on the quarterly GST form will reduce from thirty down to seven, although the same amount of calculating will need to be done as before. One option will be to provide an abbreviated GST report each quarter with a fully detailed account given at the end of the year. This does, however, mean lodging five GST returns instead of four. Since most businesses are already set up for detailed quarterly reports, Roger recommends they continue this way to avoid that fifth return. As with PAYG tax, quarterly GST instalments will be calculated as an average of the previous year's record.

Roger's next topic concerned contractors and personal services income. Since 1 July 2000, new rules apply if 80% or more of a personal services income is derived from one client – although one of three specific provisos might prevent application of these rules. Where applicable, the new rules state that a contractor or service provider can only claim expenses that would have been deductible as an employee. Also, if the person providing the service is operating through a company, trust or partnership, that person will be assessed on the income derived. Turning to tax effective investments, Roger noted that the Tax Office has in recent years made a major attack on schemes that allow investors to reduce their income. Such schemes typically involve projects with a high level of risk, and their providers want tax benefits attached to them in order to encourage investors. At the same time there has been a major push for industries to be accountable for the impact they have on the environment, leading to environmental issues playing an increasingly influential role in the activities of financial institutions. One outcome of this has been the Taxation Office's application of Product Rulings that favour investment opportunities deemed environmentally (and/or socially) responsible.

As an example, Roger showcased a company named Woodco. Woodco offer investments in plantations of eucalypts, olives and, more recently, almonds. The company has enjoyed a phenomenal increase in share prices and excellent returns to investors in its first 10-year harvest period of its Eucalyptus Project. And the company is projecting an average annual pre-tax return of 28% over a 23-year period for its Woodco Olive Project, the largest such project in the Southern Hemisphere. With the company able to lend the investor up to 100% of the initial investment, the tax effectiveness of these projects comes from the Tax Office's Product Ruling, which allows loan costs to be claimed as a deduction.

With regard to his final topic – debt reduction and wealth creation – Roger declared that 'Getting rid of debt that is not deductible is probably the highest aim that any individual should have'. As an example, he detailed how a non-deductible home loan might be gradually replaced by a deductible loan that can be used to drive a long-term investment. The first assumption is that the homebuyer has substantial equity in their house. Money can then be borrowed on this equity and invested in a managed fund. The fund not only earns a higher rate of interest than the burdensome rates of either the home loan or the investment loan, but has benefits in that the interest paid on the investment loan, plus initial losses, are also tax deductible. The intricacies of offsetting financial gains and losses are dynamic and complex, with the central aim to reduce the home loan as quickly as possible. In the

scenario presented, a twenty-year home loan was paid off in ten years, while the investment loans geared to achieve such early payment converted into a \$334,000 asset at the end of twenty-four years. All things being equal, this outcome assumed the same regular financial input as required by the original home loan.

To the uninitiated, such a scenario might seem like financial sleight of hand. It also hints at why accountancy might be considered an art rather than a science. However, for those serious about creating financial wealth, such investment schemes are enticing options. For more detailed information on the investment advice and products presented by Roger Tigris, it would be prudent to contact him professionally through Financial and Taxation Offices P/L

Appendix C10 Shag Shoal

Shag Shoal Power Station Ecological Restoration Project by Trevor Jones

July Meeting Report - Review by PG

TJ's work history has centred around his particular interests in conservation and ecosystem restoration. He is currently working as Ecological Manager for Federal Electricity, managing the ecological restoration project at the Shag Shoal Power Station. The Shag Shoal site occupies 40 Ha on the northern tip of Labelle Peninsula, overlooking Dark Straits at the mouth of Cliveport's Harbour River. T..'s responsibilities, however, are limited to that of the terrestrial environment, excluding the marine environment or matters of the Station's emissions and discharges. Seven Ha of the site are taken up by the industrial infrastructure, while the remaining 33 ha provide a 'buffer zone' – the portion TJ has been working with.

The Station itself is fuelled by gas, a relatively clean fuel, and T.. explained that a highly efficient 'combined cycle' system of generation is used. This entails the heat energy in the waste gases from the two main gas turbines being harnessed to drive a further steam turbine – producing yet more electricity.

T.. briefly acknowledged the controversy surrounding development of the Power Station, including a degree of public opposition to the contract going to a transnational company. However, he feels that Federal Electricity is a company that has taken its responsibilities of corporate citizenship seriously, and that it has 'bent over backwards' to consult with the local community. He noted the company was working under stringent environmental audits, and also acknowledged Federal Electricity's significant financial backing of the ecological restoration project.

The history of the land around Shag Shoal includes its reclamation from an estuarine wetland of dune ridges and tidal creeks, largely as a by-product of the commercial development, six decades ago, of the Harbour River. As a result, T.. found his 'patch' was a formidable potpourri of soil types and soil profiles; that is, a relatively random scattering of material – including sands, clays and shell grits – dredged from the Harbour River channel. Because the landscape is so artificial and degraded in this sense, T.. can see why some would argue that true ecological restoration is not viable. However, he sees his task as helping the land recover as much as possible by establishing a diversity of vegetation, and thus developing habitat.

He described his objectives as belonging to two main areas – functional and ecological. In the functional area he included beautifying the roadsides and building-surrounds through garden-style landscaping; and – uttered with some humour attached – the seemingly impossible objective of minimising the visual impact of the emission stacks on the skyline. Another functional objective was to reduce adverse public sentiment toward the Company and the Power Station, and T.. approached this mainly through his personal agenda of encouraging community participation in environmental projects. By getting people outdoors and involved in such tasks as tree-planting, he feels public opposition to industrial developments might be tempered by a wider understanding of the realities involved. In fact, one of the most rewarding aspects of the project was involving groups of students; students, he suspects, who have taken more practical and positive perspectives back into the community.

The ecological objectives he outlined included the development of landscapes, wetlands, and sustainable ecosystems; developing a database of environmental data; and, once again, encouraging community participation in environmental management.

In his coverage of project planning T.. displayed a long list of issues involved. A detailed assessment of the site included that of soils, hydrology, climate, flora and fauna. Of the many decisions made, one was to include suitable *non*-native plants in the project. And reference sites, such as nearby Terence Island, were important in identifying the remnant native vegetation of the area. As T.. displayed images of various plantings and provided a running commentary of botanical names, it became evident that the selection of vegetation and its introduction across the landscape was an aspect of the project he particularly enjoyed. One significant challenge was the high and saline water table, ranging from approximately 0.7 to 1.8 metres across the site. Another was the need to erect a vermin fence around the area, which has been effective in keeping out the potentially devastating rabbits that are rife on the Peninsula.

Having had his work perceived by some as glorified gardening, or just prettying up the place with plants, T.. was keen to point out that restoration ecology begins with restoring primary habitat — which happens to be vegetation. Without it, not much is likely to survive. To such critics he also explains that his focus is on establishing ecosystems approximating those that existed before settlement; that is, coastal shrub lands and samphire swamps. In doing so he makes it a priority to establish the larger vegetation first, in this case, tall shrubs. This is not only because they take longer to establish, but also because this upper storey is integrally important to the natural process of regeneration; for example, by bringing in birds with the potential to spread native seed.

As part of implementing the project T.. set up a casual work program, targeting people interested in gaining or furthering experience in various types of 'green' employment. Environment students were also able to use their involvement as work experience – T.. reporting that some had gained employment as a result. The main method of revegetation was through tube stock planting, supplemented by transplanting specimens that were at risk from earthmoving activity in the area. Only a small amount of direct seeding was done.

Reviewing the broad outcomes, T.. notes there has already been significant restoration of habitat. From observations of 20 sample sites in August and December last year, the rates of vegetation survival have proved to be very high, especially considering that no artificial watering has been used. Insects and invertebrates are returning to the area, which will inevitably support native bird and other life. The restoration project also complements the larger scheme of the Handel Wetlands. With the revegetation gaining momentum, future plans are for recreational and educational facilities at the site. A proposal is currently in the process of submission for the development of walking trails, with the aim of furthering the other main outcome of the project: community interest and involvement in helping restore our environment.