

Chapter 4 Explaining analyses of Attitude and Graduation

Introduction

In this chapter I explain and justify the coding decisions made in analyses of the data in terms of Attitude and Graduation. The chapter represents a transition from the general description of theory and methodology outlined in chapter 3, and the analyses and interpretation discussed in chapters 5 and 6. The detailed explanations of the key theoretical constructs of Attitude and Graduation that are presented in this chapter, provide the foundation for explorations of evaluative stance in chapters 5 and 6. However, in addition this chapter makes its own contribution to the thesis. This includes an expansion to the theoretical framework of Appraisal (as represented in Martin 1997, 2000), resulting from its interrogation in the context of the discourse of academic argument. Specifically, the chapter contributes to an elaboration and refinement of the semantic categories within the system of Graduation.

While the theoretical constructs of Attitude and Graduation situate the discussion in this chapter primarily in terms of options in the construal of interpersonal meaning, I also discuss briefly the construal of experiential meaning, as it relates to the identification of field. An analysis of field underlies the identification of what is being appraised in the discourse. A further contribution of the thesis lies in an explanation of the discourse as constructive of two fields in a relationship of projection to each other. A final section of the chapter discusses some of the issues encountered in the process of analysis. The contributions of this chapter towards the thesis are identified and explained at relevant points, and summarised in the conclusion to the chapter.

In the first sections of this chapter (4.1, 4.2, 4.3), I explain and justify the modelling of Attitude and Graduation. Choices within these systems are exemplified with instantiations from both the published texts and the student texts. Multiple examples are provided for most coding categories to indicate the variety of grammatical resources that are implicated, but the examples are not intended to exhaust the instantiations in the data for each category. Where relevant I give an indication of the frequency of particular system choices in the data. Coding is justified on theoretically principled grounds. However, at the same time it is acknowledged that coding decisions are also reliant on readings of the context and the co-text in which the instance occurs. While providing a framework for the analysis of the

evaluative stance taken in texts, Appraisal theory acknowledges that in any interpretation of attitudinal meaning in texts, there is always a need to account for reading positions, and the reading position taken up in this analysis of the texts is one of a native English-speaking academic involved in supervision and marking of undergraduate dissertations such as those analysed in this study. As a member of the academic discourse community the analyst is inclined, for example, to read references to the size, depth, breadth, or quantity in research studies as implying some kind of evaluative position with respect to that research activity. The coding conventions used in the analyses include **bold** to indicate explicit Attitude and *italics* to indicate Graduation. Any variations on this or additional coding conventions will be explained at relevant points in the chapter.

4.1 Expressing Attitude explicitly

In exploring the means by which Attitude is expressed in the data, an initial distinction is made between Attitude that is expressed directly or explicitly, and Attitude that is expressed indirectly or implicitly (Martin 1997, 2000, Martin and Rose 2003). Explicit instantiations, referred to as *inscribed* Attitude (Martin 1997), directly encode a positive or negative value, and that value can be graded up or down. Such instantiations are the focus of this first section. In the following extracts the expressions in bold are interpreted as instantiations of inscribed Attitude:

P2

Students learn to become more **autonomous** writers as they are prepared to write without the help of a teacher (Jacobs, 1989). Through collaborative learning, students can gain a **better** understanding of their peers' **difficulties** in writing, and as a result they may gain more **confidence** in themselves (Mittan, 1989). Peer reviews can boost **confidence**, make writing a more **positive** learning activity, and help students develop greater **independence** in writing.

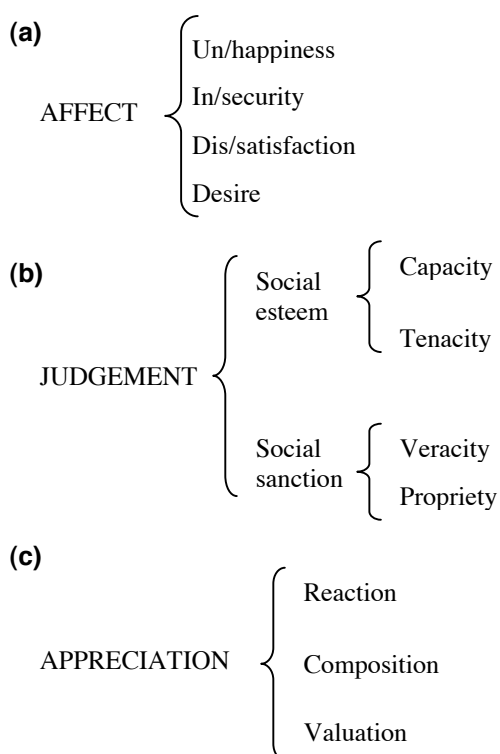
S3:

The society is ever-changing. When someone has left a **familiar** place for a certain years or even just a month and then return, he/she will feel **uncomfortable** because of the **strangeness** of the city. So it is **not surprising** that many Chinese people who went overseas may **suffer** from **stress and disorientation** when they come back to Hong Kong. Even children are usually under **pressure** facing this "**strangeness**". These Chinese returnee children sometimes may have the **unpleasant** experiences in interacting with peers in Hong Kong. Many returnee children cannot be accepted by the peers because of their fluent English. They may also find that they cannot understand each other although they speak in the same language - Cantonese. They find **difficulties** in sharing the values and the subcultures with peers and also they behave in different ways. These returnee children cannot build up a close relationship with peers in Hong Kong and hence they usually feel **isolated** and **depressed**.

4.1.1 Expressing different kinds of Attitude explicitly

Each instance of inscribed Attitude identified in the data is coded for the kind of Attitude expressed, that is, it is coded as either Affect (of feelings or emotions), Judgement (of character and behaviour), or Appreciation (of things). Sub-classifications of kinds of Affect, Judgement, and Appreciation are identified with reference to Martin (2000) and are represented in figure 4.1.(a), (b), and (c).

Fig. 4.1: Sub-categories of Attitude as (a) Affect, (b) Judgement, and (c) Appreciation



As with any system network within SFL, a principle of delicacy applies, so that movement from left to right across the networks represents more general to more specific analysis. Any analysis of data can select an appropriate level of delicacy for coding. As the category of Appreciation reveals itself to be the most significant in this data, I elaborate here only on the sub-categories within that system. The three categories of Appreciation (reaction, composition and valuation) concern the valuing of phenomena. The distinction between each of the sub-categories of Appreciation can be viewed metafunctionally, that is, in terms of ideational, interpersonal, or textual meaning. Thus *reaction* codes responses that are to do with the speaker's interpersonal response (whether it was liked), *composition* is concerned with the textual response (to the overall texture), and *valuation* with the ideational (the content) (Eggins and Slade 1997:128). Further distinctions are made in the network of Appreciation (Martin 1997, 2000), for example,

Appreciation: composition can be differentiated as composition: *balance*, and composition: *complexity*. However, analyses in this study do not apply this level of delicacy. An analysis of kinds of Attitude is exemplified in the extracts below. A positive or negative value is also assigned in each instance.

P2

Students learn to become more **autonomous** [Judgement: Capacity+] writers as they are prepared to write without the help of a teacher (Jacobs, 1989). Through collaborative learning, students can gain a **better** [Appreciation: valuation+] understanding of their peers' **difficulties** [Appreciation: Reaction -] in writing, and as a result they may gain more **confidence** [Affect:Security +] in themselves (Mittan, 1989). Peer reviews can boost **confidence** [Affect:Security +], make writing a more **positive** [Appreciation: valuation+] learning activity, and help students develop greater **independence** [Judgement: Capacity +] in writing.

S3:

The society is ever-changing. When someone has left a **familiar** [Appreciation:Reaction +] place for a certain years or even just a month and then return, he/she will feel **uncomfortable** [Affect:Security -] because of the **strangeness** [Appreciation:Reaction -] of the city. So it is **not surprising** [Affect:Happiness -] that many Chinese people who went overseas may **suffer** [Affect: Happiness -] from **stress and disorientation** [Affect: Security -] when they come back to Hong Kong. Even children are usually under **pressure** [Affect: Security -] facing this "**strangeness**" [Appreciation: Reaction -]. These Chinese returnee children sometimes may have the **unpleasant** [Appreciation: Reaction -] experiences in interacting with peers in Hong Kong. Many returnee children cannot be accepted by the peers because of their fluent English. They may also find that they cannot understand each other although they speak in the same language - Cantonese. They find **difficulties** [Appreciation: Reaction -] in sharing the values and the subcultures with peers and also they behave in different ways. These returnee children cannot build up a close relationship with peers in Hong Kong and hence they usually feel **isolated** [Affect: Security -] and **depressed** [Affect: Happiness -].

4.1.2 Resources in the inscription of Attitude

While the congruent form for the expression of Attitude is adjectival, the few examples above illustrate the need to look beyond such structures in the construal of attitudinal meanings. As a discourse semantic system, Attitude can be expressed through a range of grammatical structures. Such a discourse semantic perspective contrasts with the majority of studies to date on the language of evaluation (related, for example, to hedging, stance, vagueness, etc) in texts, where the orientation tends to be from the lexicogrammar to semantics (see discussion in chapter 2.2.2). In such studies one or more particular grammatical constructions are explored in terms of usage, often within a corpus-based approach involving large numbers of texts, such as Conrad and Biber (2000) on adverbials, or Hunston (1995) on verbs of attribution. Given the discourse-semantic orientation taken in this study, it is important at this point and throughout the chapter to make apparent the

range of ways in which particular interpersonal meanings are construed in the grammar, as well as how various grammatical constructions are interpreted as construing a particular kind of interpersonal meaning.

4.1.2.1 Grammatical resources implicated in the construal of explicit Attitude

I outline and exemplify below a range of grammatical resources identified in the construal of explicit Attitude in both the published texts and the student texts in this study. (P) refers to published texts and (S) to student texts. In these examples, Attitude is expressed as

an attribute in a relational clause,

...What is more direct and **relevant** than...(P2)
 ...interaction is **indispensable** (S3)
 ... some objectives are **useful** (S2),

an epithet in a nominal group,

...performance really only concerned this **narrow** age band (P1)
 ...maturity ...seems to be a **positive** predicator for success (P1)
 ...a **favourable** choice (S2)
 ...an **elaborate** support strategy (S2),

a nominalised quality as head noun in a nominal group,

...The **problem** with ...(P1)
 ...the basic **advantage** ... is that it will (P2)
 ...the issues are clouded by the general **difficulty** of ...measuring (P3)
 ...certain other **refinements** (P1)
 ...the **usefulness** of peer review is well-documented (P2)
 ...interruptions had relational **significance** to the participants themselves (S2)
 ...the **limitations** of this study...are also discussed ...(S4),

a process infused with attitudinal meaning.

An attitudinal meaning can be infused into the process itself. So, for example, Attitude as Affect can be expressed as an affective mental process, as in

...many... **suffer**[:happiness -] from...(S3),

Attitude as Appreciation can be encoded as a material process, as in

... the timing meant that the results were **not distorted** [:composition +] (P1),

and Attitude as Judgement can be realised as a material process, as in

Zimmerman and West **neglect** [:capacity -] to observe...(S2).

The infusion can be unpacked in each case as process and circumstance or attribute, as in

suffer = feel rotten
 distorted = make unbalanced
 neglect = carelessly don't.

The realisation of explicit Attitude as either a quality, an entity or a manner of process, as exemplified above, is taken up again in section 4.2 as a framework for considering the

options for grading meanings, and is drawn upon as a basis for clarifying and extending the system network for Graduation throughout the chapter.

4.2 Grading explicit Attitude

One defining feature in the identification of explicit Attitude is that it encodes a positive or negative value. The other is that the value is gradable (Martin and Rose 2003). In other words explicit Attitude can be graded up or down. The following extract provides multiple examples, indicated in the association of an italicised term with one in bold, or where the two are conflated.

P2

Students learn to become *more* **autonomous** [Judgement: capacity +] writers as they are prepared to write without the help of a teacher (Jacobs, 1989). Through collaborative learning, students can gain a *better* [Appreciation: valuation+] understanding of their peers' **difficulties** [Appreciation: Reaction -] in writing, and as a result they may gain *more* **confidence** [Affect:Security +] in themselves (Mittan, 1989). Peer reviews can *boost* **confidence** [Affect:Security +], make writing a *more* **positive** [Appreciation: valuation+] learning activity, and help students develop *greater* **independence** [Judgement: Capacity +] in writing.

S6

Hong Kong people are always characterized as **competitive** [Judgement: Tenacity +], **hard working** [Judgement: Tenacity +] and **money-oriented** [Judgement: Propriety -],. Most people's *primary* [Appreciation: valuation +] values are money and **success** [Appreciation: valuation +] in career. We expect that there must be small number of people working as volunteers. However, according to a study conducted by the Agency for Volunteer Service in 1993, (AVS, 1993) it was found that 20.7% of the respondents in Hong Kong had volunteer experiences. This reveals that quite a number of people in Hong Kong have been volunteers. Also, in a casual interview with a member of the Agency for Volunteer Service, (AVS) it was found that the interviewee waited for half year to participate in a program. It may be inferred that the management of AVS is *quite* **successful** [Appreciation: valuation +] as the turn over rate is not high.

It can be seen in the examples above that in some instances the Graduation is encoded separately to the attitudinal term (*more confidence, quite successful*) and in some instances it is infused within the attitudinal term (*better, primary*). All instances of Graduation in these examples function to amplify the value, although the amplification is less than high in *quite successful*. An example of the downgrading of Attitude might be an expression such as 'hardly successful'. Corpora studies of polarity (Halliday and James 1993) confirm a likely intuitive appreciation that negative polarity is the marked choice, with discourse in general

being overwhelmingly constructed in the positive¹. It is not surprising to find that positive expressions are therefore dominant. In a related way this is also reflected in the preference for grading up rather than down.

Other than distinguishing between grading up and grading down, the model of Appraisal outlined in Martin and Rose (2003) identifies two senses in which Attitude may be graded. The first is that of *Force*, which has to do with shifting the degree of ‘intensity’ of Attitude, or as Martin (2000:148) refers to it, ‘turning up the volume’. The second is that of *Focus*, which has to do with sharpening or softening the boundaries of a categorical meaning. In sections 4.2.1 to 4.2.4, I apply and extend the system of Graduation, and identify how the semantics of Force and Focus are realised grammatically in the data.

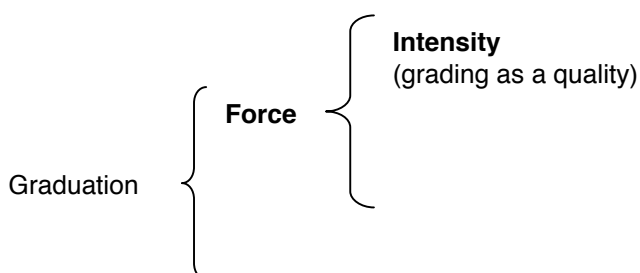
4.2.1 Force: Grading by intensifying

One aspect of what Martin and Rose (2003) refer to as grading the Force of an Attitude is that of *intensity*. In this study I use the term *intensity* to refer to the grading of the Force of an Attitude encoded as a quality, as in the following examples. Attitude realised as qualities is in bold and graded intensity is in italics. Where the grading is encoded within the attitudinal term it is both bold and italicised.

- P1: ...*quite* **successful**
 ...*more* **successful**
 ...the ***best*** attempt
 S2: ...a *more* **convenient** and **economical** way
 ... *relatively* **rare**
 ...***deeper*** ... studies

Figure 4.2 (a) represents this first stage in the building of a system network of choices in terms of grading attitudinal meanings. A comprehensive system of Graduation will be built up throughout the chapter.

Fig. 4.2 (a): System network of choice in grading attitudinal meanings



¹ While negative polarity is the marked choice in language generally, certain lexical terms associate much more strongly with negative rather than positive meanings, as indicated, for example, in corpus studies by Sinclair (1991) and Stubbs (1996). Stubbs points out, for example, the strong negative associations of the word ‘cause’.

The bracketed explanation in '(grading as a quality)' in figure 4.2 (a), suggests the principle underlying the revision and extension of the network of Graduation undertaken in this chapter, namely one which distinguishes between ways of construing Attitude as quality, as entity, or as manner of process. However, before building other options into this network, it is important to consider again the variety of grammatical resources for intensifying quality as a semantic category.

4.2.1.1 Grammatical resources for realising Graduation as intensity

Where Attitude is expressed as a quality it can be graded in intensity by a number of means, exemplified below.

Intensification in an intensifier

Commonly, amplification of a quality is achieved through the addition of a pre-modifying intensifier (e.g. *very*, *quite*, *more*), as in

- ...a *very* **important** stage for knowledge acquisition (S3)
- ...the management of AVS is *quite* **successful**... (S6)
- ...a *more* **positive** experience (P2).

These amplifying resources construe a meaning of graded intensity, and the degree of amplification can be varied such as in the following examples:

- quite* **important**; *very* **important**; *extremely* **important**
- more* **positive**; the *most* **positive**.

The grading does not dichotomise values as positive or negative, but represents them on a cline as relatively high, median, or low in value.

Intensification through infusion in attitudinal attributes

Alternatively, Graduation may be infused in a lexical choice that amplifies a core value. For example in the clauses below, *indispensable* amplifies a core value of *useful*. *Indispensable* can be unpacked as 'useful + extremely'.

- ...some objectives are **useful** (S2)
- ...interaction is *indispensable* (S2).

Similarly, in the following examples *important* can be amplified as *crucial*, or *crucial* can be unpacked as 'important + very'.

- ...(It) was an **important** period for the development of Chinese literatures (S4)
- ...Selling power is the *crucial* ... part of the advertising process (S4).

There are many instances in the data of the grading of importance, with a small set of lexis preferred across the texts. This set is exemplified below:

- ...the **key** difference (S6)
- ...has a **central** role to play (P4)
- ...the **basic** advantage of peer correction (P3)

...the **primary** goal (S4)
 ...the **main** problems (P4).

In the example, '**main** problems', *main* functions to rank *problems* in terms of importance. However, this example proves useful to make the point that the kind of Graduation does not reside in the lexical term itself. 'Main' is used in other instances to encode quantification, implying the largest proportion, as in

...the *main* workforce (S5).

Intensification through infusion in an abstraction

In the example,

...the basic **advantage** (P3),

there is an infused meaning of a graded positive quality which becomes evident in unpacking the abstract noun 'advantage' as 'things that are + *better*'.

Intensification through infusion in a process

In the example,

...students give each other suggestions to **improve** their writing (P2),

the intensified attitudinal meaning is infused in the process, in that *improve* can be unpacked as 'make + *better*'.

In the processes below, Attitude is infused in mental processes of cognition, and the intensification is encoded within the circumstance (underlined),

...**valued** over the literate (S4),

while in the following examples the process encodes the intensification of Attitude (underlined) that is expressed as an attribute or a nominalised attribute,

...can boost **confidence** (P2)

...stimulate their **desires** (S4)

...reinforce...**commitment** and **enjoyment** (S5).

The examples, above, of the amplification of nominalised qualities are all interpreted as *intensification* of an Attitude. However, as will be noted in 4.2.2 (below), where nominalised qualities are amplified, they may alternatively be interpreted as instances of *quantification*, rather than *intensification*. In the coding of Graduation in this study I apply the following principle: when the nominalised quality represents Attitude as Affect (e.g. *confidence*), and this is amplified by pre-modification, either by a pre-modifier (e.g. *greater confidence*), or a process that implies intensification (e.g. *boost*), then the amplification is interpreted as *intensification*. Where nominalised Attitude is encoded as either Appreciation or Judgement (e.g. *greater success*, *boost success*), then the amplification is interpreted as *quantification* (*amount*). This will become clearer in the discussion in 4.2.2 below.

Intensification through repetition

Intensification of a quality can also be realised through repetition functioning to reinforce a particular value. This may involve repetition of the same term (e.g. great, great, great), or the stringing together of inscribed attitudinal resources that share a related value (Martin 2002 b). The former might be expected more frequently in spoken discourse, and no instances are found in these data. The latter kind of repetition is evident in a number of instances in the student texts. These include values encoded as attributes, as in

...written Cantonese is *more colourful, racy and witty* (S4)
 ...This kind of interruption was *rude, intrusive and impolite* (S2),

and nominalised values, as in

...the express (sic) of *solidarity, empathy, interest and concern* (S2).

The evaluative stance being reported is intensified through 'sustaining' (Martin 2002 b: 8) the positive or negative values over multiple instances of attitudinal lexis.

In summary, intensification as the grading of a quality is encoded in multiple ways in the data. By considering these various grammatical realisations from a semantic perspective, we are better able to consider how they commonly function in the rhetorical strategies that writers employ in arguing for their own research.

4.2.2 Force: grading by quantifying

Grading in intensity, as discussed in 4.2.1, is one aspect of what Martin and Rose (2003) refer to as grading the Force in Appraisal. However, there are other means by which attitudinal meaning can be graded as Force. While the adjectival form may be the congruent expression of Attitude in the grammar, as a discourse semantic system, attitudinal meaning may be realised explicitly across a number of grammatical systems. Attitude may be expressed in a nominalised quality for example, as in

...provided opportunities for **fulfilment** [Affect:satisfaction+] (S5)
 ...the **usefulness** [Appreciation:valuation +] ...is well documented (P2)
 ...indications of **failure** [Judgement:capacity -] to learn (P3).

It was noted in 4.2.1.1, above, that when the Attitude that is nominalised is one of Affect, then the amplification is interpreted as retaining a meaning of *intensification*. When attitudinal attributes of Appreciation or Judgement are nominalised, the amplification of the nominalisation is construed through resources of *quantification*. Resources of quantification are drawn upon to add or detract value, as for example in the underlined terms below,

quite successful (S6): some success
more suitable (S2): considerable suitability

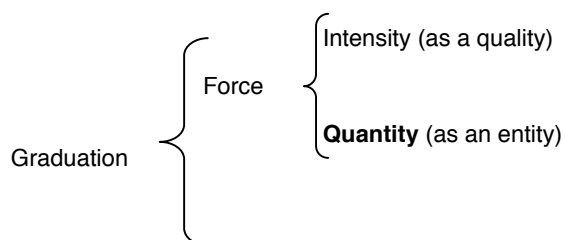
very explicit (P3) : *much explicitness*.

Alternative degrees of value could be achieved through modifying the quantity, for example,

some success; *little success*
considerable suitability; *minimal suitability*
much explicitness; *a lack of explicitness*.

In some instances quantity is encoded as number. In other instances it refers to size, volume or mass. Figure 4.2 (b) represents this expansion of options in the system of Graduation.

Fig. 4.2 (b): System network of choice in grading attitudinal meanings



It is important to note that the network is one of semantic options (not grammatical categories). So while there is a strong association with particular grammatical structures, this is not intrinsic to the semantic option. So *intensity* associates with Attitude represented adjectively in the grammar, but the intensification of an adjectival attribute is not the only means of realisation. Similarly, quantification is associated with Attitude represented as a noun, but other structures can be implicated, as is indicated below.

4.2.2.1 Grammatical resources for realising Graduation as quantity

The range of means by which Graduation as quantity is encoded in the data includes the following.

Quantifying through pre-modification of a nominalised quality

In the following examples, all the attributes are nominalised attributes of Judgement (*competent, care, independence*). Pre-modification therefore construes quantification (rather than intensity). (See discussion in pre-modification of Affect versus Appreciation or Judgement in section 4.2.1.)

...*greater independence* (P2)
 ...*extreme care* (P3)
 ...*greater ...competence* (S3)

Quantifying through an attitudinally infused process

In the following example,

... can be *alleviated* (P3),

the term alleviate itself implies a reduction in a negatively valued phenomenon. It associates for example with reduction of pain, suffering, poverty, etc.

4.2.3 Force: Grading by enhancing

To this point I have considered the notion of Force as grading by *intensification* of Attitude construed as a quality, and grading by *quantification* (as amount) of Attitude construed as an entity. A further dimension of Force in the system of Graduation relates to the grading of a process meaning. Here the semantic option in grading has to do with the manner in which the process is undertaken. One means by which Attitude as manner is graded is through infusion into the lexical verb. Martin (1997, 2000) refers to this infusion as ‘*enrichment*’ (c.f. Eiggins and Slade 1997, Rothery and Stenglin 2000). In fine-tuning the model of Graduation through its application in this study, I include the notion of enrichment, but additionally include instances where an attitudinal meaning is graded through the addition of a circumstance of manner. Stillar (1998) explains that it is circumstances of manner, rather than other circumstantial meanings, that tend to do interpersonal work in that there is no ‘inherent “way”’ in which the process may be conducted, and the ‘speaker’s selection of certain manner adverbs will be a trace of their own positional attitudes and evaluations’ (1998: 36). To avoid using Martin’s term ‘enrichment’, which is intended for the infusion of meaning into the process, I introduce the general category of *enhancement* to include both the infusion of graded Attitude as enrichment as well as enhancement through an attitudinally loaded circumstance of manner. The circumstantial element encodes a meaning of depth or intensity of ‘doing’, ‘feeling’, ‘thinking’ or ‘saying’ (encoding degrees of effort, strength, diligence, and so on). As with other resources of Graduation the values are not categorically positive or negative but represent degrees or clines of value, as in the following examples.

...read **carefully** (P2)
 ...put across ...**clearly** (P2)
 ...(to put it) *more* **simply** (P3)
 ...discuss **in deep** (sic) (S2)
 ...illustrate ...**in detail** (S2)
 ...**precisely** measuring the ...improvement (P3).

The grading of Attitude as enhancement in the examples above is encoded into the circumstantial element. In such examples there can be an additional layer of amplification of the Attitude, as in,

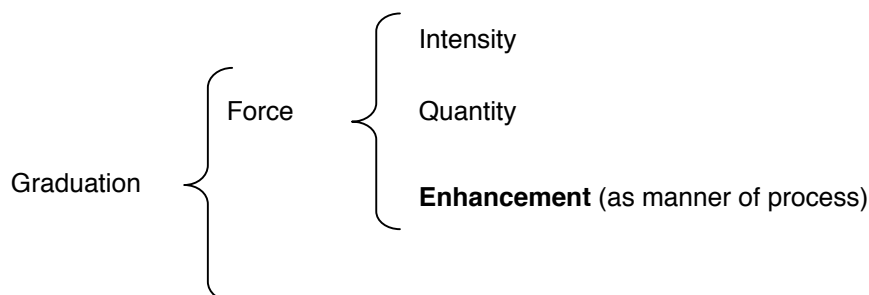
...(to put it) *more* **simply** (P3)
 ...identify *more* **easily** (S4).

The process plus circumstance of manner may also be re-construed as part of a nominal group, as in

...**carefully** controlled compositions (P3).

An extended set of choices in Graduation is presented in figure 4.2(c).

Fig. 4.2 (c): System network of choices in Graduation



The explanations and illustrations to this point articulate the semantic options in grading Attitude as Force. The discussion focuses on clarifying the semantic distinctions between the options of grading as *intensification*, *quantification*, and *enhancement*. Each offers a different kind of amplification, and associates strongly, but not exclusively, with certain grammatical realisations.

4.2.4 Grading as Focus

The second dimension to Graduation in Martin's (1997 and 2000) modelling of Appraisal is that of Focus. Grading Attitude as Focus involves the sharpening or softening of the categorical boundaries of experiential phenomena or non-attitudinal terms. As such it relates primarily to the indirect encoding of Attitude, as will be discussed later in this chapter (in 4.3). While there are no examples of the focusing of an attitudinal entity in the data in this study, this would be exemplified in expressions such as 'true happiness' or 'real stupidity'. Interestingly, when attitudinal phenomena are graded as Focus in this way, their meaning appears to shift away from the interpersonal towards the experiential. In other words, 'happiness' becomes a psychological category, rather than a felt emotion.

4.3 Graduation evoking Attitude: Force

To this point Graduation has been considered in terms of the grading of explicit Attitude, and the process of interrogating the system in this respect has contributed a more clearly delineated set of semantic options, each of which associates predominantly with particular grammatical realisations, as in:

Intensification of Attitude as quality (Attitude as attribute)

Quantification of Attitude as entity (Attitude as nominalised attribute)

Enhancement of Attitude as manner (Attitude as circumstance of manner).

A second phase of the interrogation of the system of Graduation considers the grading of non-attitudinal terms, and explores the means by which this functions to evoke rather than inscribe attitudinal meanings. A consideration of Graduation in this respect opens up an analysis of Attitude in texts to incorporate not just an analysis of inscribed Attitude in the data, but also Attitude that is expressed indirectly or implicitly. It is readily apparent that the encoding of explicit Attitude by no means exhausts the potential of the language to construe values.

There is discussion in recent literature on Appraisal of the ways in which Attitude can be implied, with distinctions being made by some in terms of notions of *provoke*, *invite* and *evoke* (see Martin 1996: 146). I do not engage with this evolving discussion in this study, in that, as yet, there is no consistent position in the theory. I will use the term *evoke* to mean generally to encourage the reader to interpret an attitudinal meaning, even though none is explicitly encoded.

One means for evoking Attitude identified in Martin and Rose (2003) are instances of lexical metaphor. Examples from the data include,

- ...capture readers' attention (S4)
- ...bear fruits in the form of results (S6)
- ...the force driving the development of written Cantonese (S4)
- ...writing as a vehicle for communication (P2).

In the first example, *capture* evokes Appreciation:reaction. The examples of *drive* (meaning 'to push forward strongly'), *bear fruits*, and *vehicle* all evoke Appreciation:valuation.

However, these are some of the very few instances of lexical metaphor in the data in this study. Far more frequent as a resource for evoking Attitude is the grading of non-attitudinal meanings. Graduation in this sense is used extensively in both the published texts and the student texts. As has already been noted in this chapter, resources for grading Attitude are themselves gradable, as in *quite successful* / *very successful* / *extremely successful*. As such, the graduating term (e.g. *quite*, *very*, or *extremely*) retains some evaluative potential even when it does not accompany an inscribed evaluative term.

In the following section I explore the ways in which amplified experiential lexis (that is, lexis that is not intrinsically evaluative) can take on a value through the fact that it is graded. I frame this discussion in terms of the network choices articulated for Graduation to this point in the chapter, namely those of Force (as *intensification* or *quantification* or *enhancement*) and Focus. An exploration of the ways non-attitudinal resources are graded results in an expansion of the system choices in the model in a number of respects.

4.3.1 Intensifying non-attitudinal attributes

The intensification of attitudinal attributes (e.g. *very important*) involves the grading of a positive or negative quality. However, attributes that do not inscribe a positive or negative value may also be amplified, as in

...*more* talkative (S7)
 ...*high* involvement speaking style (S2)

or in nominalised form

...*reinforce*...understanding (P3).

Depending on the context, such amplification may function to encourage, or evoke, an evaluative reading. In some cases this evaluative reading is encouraged by co-articulation with another explicitly encoded term. In the following instances (not from the data) the underlined terms are interpreted as carrying no intrinsic attitudinal meaning.

It was a direct response to the question
 The choices were varied
 It was one-way communication.

However, when the underlined terms are paired with an explicitly attitudinal term (in bold), an evaluative reading is evoked.

It was a direct and **relevant** response to the question
 The choices were varied and **complex**
 It was one-way and **inflexible** communication.

A prosody appears to function retrospectively in these instances back from the explicit second term in the pair. The evocation of Attitude is further strengthened with amplification, as in

...is *more* direct and **relevant** than... (P2)
 ...so varied and **complex**... (P3)
 ...a *very* oneway and **inflexible** form (P3).

While the intensifiers (*so*, *very*, *more*) arguably apply across both terms in the nominal group complex, in each case the inscribed term follows the non-inscribed term. The evaluation moves from evoked to inscribed Attitude in the nominal group. There is a sense of expanding the initial experiential meaning while adding an evaluative meaning. The second term reinforces the first.

An interpretation of these pairings as non-arbitrary is supported if we consider a reversal of order, as in

...so **complex** and varied

...an **inflexible** and oneway form.

The second term in each case now seems somewhat redundant, as it simply reiterates one aspect of the initially encoded experiential meaning (e.g., *varied* is one kind of *complex*) without adding an interpersonal dimension.

In the following example,

...makes the students' task a mechanical one,

mechanical may be read as fundamentally experiential in nature, that is describing experientially some feature of the task. Alternatively, within a particular discourse and from a particular reading position it is likely to be read as value-laden. Such an evaluative reading is, I argue, further encouraged when the term is amplified, as in

...makes the students' task a *very mechanical* one (P3).

In this instance then, *mechanical* is coded as explicit Attitude.

4.3.2 Quantifying non-attitudinal lexis

In 4.2.2 above, examples are given of how nominalised values or values infused in entities can be graded through quantification. It is very apparent in the data in this study that the quantification of non-attitudinal entities can also function evaluatively. In this case the evaluation is implicit rather than explicit. A few of the many instances of this are exemplified below.

4.3.2.1 Grammatical resources for realising quantification

The following are examples of different means by which quantification is encoded. They are categorised in terms of the grammatical realisations.

Quantification through non-specific numeration

Non-specific numeration is used extensively in the data in ways indicated below:

- ...*many* studies (S2)
- ...*few* diachronic studies (S4)
- ...*more* research (P4)
- ...*some minimal amount* of research (P3)
- ...*relatively little* attention (S3)
- ...*several* differences (P1)
- ...*a much larger* sample (P1)
- ...*large numbers* (P1)
- ...*quite a number* of people (S6)
- ...*a small number* of people (S6)
- ...*a relatively small number* of staff (S5)
- ...There are *a lack of**... (S7).

*The term *lack of* may encode a meaning of a small inadequate amount, or none at all.

The evaluative implications of the quantification of non-attitudinal meanings is most apparent where there is some added meaning of relativity, as in the underlined terms in the examples below,

...more research (P4)
 ...a much larger sample (P1)
 ...a relatively small number of staff (S5),

or where the quantification is intensified, as in the underlined in,

...some minimal amount of research (P3)
 ...very few research (S3),

or where the coding of quantity implies a number or proportion relative to a total, as in

...problems to be solved by all learners (P3)
 ...most of these studies were based on... (P1)
 ...entirely in Cantonese (S4)
 ...mainly focus on (S3)
 ...none has as yet (P1),

or where there is an additional coding for (in)sufficiency, as in

...the problem of too little, too late (P4)
 ...not enough empirical evidences (S4).

There are also examples in the data of meanings of sufficiency or insufficiency infused in lexis, as in

...an era of tight public spending (P4)
 ...adequate evidences (sic) will be given (S4).

The colloquial expression *tight* implies quantity as insufficient. The term *adequate* encodes quantity as sufficient.

Quantifying as a specific number

As with the vague expressions of quantity (Channell 1994, Myers 1996) exemplified above, quantification through numerals can also offer a means of implying value through quantity. An evaluative implication in a reference to a specific amount will rely on some additional contextual support. For example, the figure of '240' in the extract below, is within the prosodic domain of the amplified positive Appreciation, '*best*', and can be taken to evoke value of positive Appreciation:composition.

P1

Walker's (1975) study of mature students at Warwick University represents the **best** British attempt to unravel the relationship between age and performance. He took 240 mature undergraduates who were admitted to the university... (P1).

Prosodies of value and how they function are discussed in detail in chapter 5.

Quantifying through multiple references

A further resource for evoking value by implying quantity is through multiple instances presented in a list. For example, a proposition or claim may be attributed to multiple sources that are listed in the text, as in

(Leech 1966; Tannen 1982, 1985; Vestergaard & Schroder 1985) and...
(Tse, D., Belk, R.W., & Zhou, N. 1989; Snow 1993) (S4)

(Mendonça & Johnson, 1994; Mittan, 1989, Mangelsdorf, 1992; Stanley, 1992, Tipper & Malone, 1995) (P2).

A value is implied for the referenced sources, or the 'sayers' (Halliday 1994) through quantification. (See also Lemke 1998 on projective evaluations, and the discussion in chapter 5 on projection and prosodies of value). The examples of listing of sources (phenomena) to express quantity functions in a similar way to the repetitions of inscribed Attitude described above (4.2.1.1 and 4.2.2.1), where interpersonal meaning is amplified through multiple references (Martin 2002b). The attributed sources are 'piled up', giving weight to the proposition or claim they are included to support. Quantification through listing can then be further enhanced with the implication of additional sources beyond those explicitly referenced, as indicated in the underlined expressions in the following examples,

(such as ...Gibbon 1981; Hutchby 1995 1996a 1996b; Hutchby and Wooffitt 1998; Korolija 1998) (S2)

(e.g. Cohen 1987; Robb et al. 1988; Anson 1989; Hyland 1990; Lockhart and Ng, 1993) (P4).

And the implication of *more* may not always enhance a long list, but just one or two references, as in

P and C (1955) for instance... (P1)
Maize in 1952, for example,... (P3)
(such as ...Fishman 1980 1983, Leet-Pellegrin 1980 cited in Fasold 1996: 109-110) (S2)
like Snow (1994) (S4).

Borderline instances of evoking Attitude through quantity occur where there is simply a reference to *a number* or even just a plural form of the noun.

...a number of writers (P4)
...the attention of linguists (S4).

Even such instances can function to evoke Appreciation, albeit weakly and given relevant contextual support.

The multiple examples above point to the fact that quantification is used extensively in the data in the context of attributing a proposition or claim to specific sources. The quantity of sources cited in support of the proposition implies a degree of validity attributed to that proposition. And as the examples above suggest, quantification itself can be encoded with degrees of implicitness along a cline of realisation with explicit encoding at one end. A

proposition can be encoded explicitly, for example, as *valid*. This kind of Appreciation can, alternatively, be encoded implicitly by listing a number of specific sources to which a proposition has been referenced, as in

(Mendonça & Johnson, 1994; Mittan, 1989, Mangelsdorf, 1992; Stanley, 1992, Tipper & Malone, 1995) (P2),

or

(e.g. Cohen 1987; Robb et al. 1988; Anson 1989; Hyland 1990; Lockhart and Ng, 1993) (P4).

A further degree of implicitness is encoded with the use of ‘*e.g.*’ or ‘*such as*’, preceding a single source to which the proposition is attributed, as in

P and C (1955) for instance (P1).

In some instances a reference to quantity is expressed as a simple plural form, as in

...a number of writers (P4).

This can be interpreted as implying Attitude when it is located within the domain of other evaluative choices in a phase of text. What is evident is that the less explicit the encoding of Attitude the more reliant an evaluative reading is on other evaluations in the surrounding discourse.

In addition to the valuing of sources through Graduation, it is interesting to note here Lemke’s (1998) discussion of the values associated with particular sources through an intertextual implication, as might apply, for example, in

...it is through interacting with others that students learn and develop (Vygotsky) (P2).

The notoriety of the source (*Vygotsky*) carries an intertextual value that is then implied for the proposition that is attributed to this source. This issue is discussed further in chapter 5.

Infusing processes as amount

A further resource for quantifying, in addition to numeration or multiple examples, is the infusion of processes with meanings of more as *amount*. Such quantification can then function to evoke a positive Appreciation of the value of the phenomenon being described. Examples include

...broadened the understanding (S2)
...expand understanding (P3).

These processes can be unpacked as ‘become/ing + more’, and such processes may also be re-construed as part of a nominal group, as in

...distinct increase in the number of ...(S4).

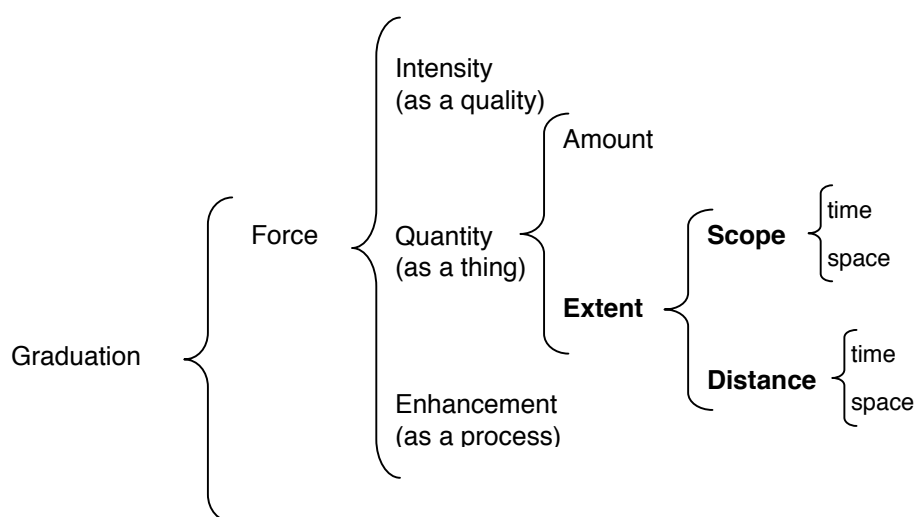
The extensive exploitation of resources for quantifying Attitude in the data reflects, in part, the nominalised nature of academic discourse. In other words, because the discourse

frequently construes processes or attributes as things, there is a preference for grading by force as quantification. The frequency with which entities are graded in the discourse also reflects the extent to which the research process is concerned with entities as research participants. To this point, I have identified multiple means by which *quantification as amount* (including number, volume, mass) is encoded in the data. However, *amount* is just one dimension by which attitudinal meanings are graded as quantity. Other options are discussed below.

4.3.2.2 Quantification as extent in time or space

Perhaps not surprisingly given the nominalised nature of the discourse, the texts also exploit other dimensions of grading as quantity. There are, for example, many instances in the texts of what Martin (1997) refers to as ‘measure’. An interrogation of the notion of ‘measure’ in these data has resulted in a more elaborated system, under a more general semantic category of *extent*. Quantification relates, therefore, to the grading of phenomena as *amount*, and as *extent*. Extent can then be further differentiated as semantic categories of *distance* (relative location) and *scope* (relative spread). Both *scope* and *distance* can then be further differentiated as options in *time* and in *space*. The extended network below (figure 4.2.d) represents a clarification and further differentiation of options from those presented in Martin (2000) or Martin and Rose (2003).

Fig. 4.2 (d): System network of choices in Graduation



Extent as a general semantic category refers to how extensive something is in scope or distance, in time or space. This resource is frequently used in the data to imply a value in terms of relevance and/or generalisability. A research finding, for example, that is claimed to apply across a greater physical and/or temporal distance, implies value relative to one

that is restricted to a specific location in time or space. The implied value may be positive *generalisability* where the scope is amplified, or it may be positive *relevance* where the distance is reduced. The following extracts are indicative of the ways such resources of extent as used to evoke Attitude. Here and elsewhere in the data they are frequently accompanied by resources of quantity as amount. The instances of extent that evoke an attitudinal reading are underlined and italicised. An indication of whether the extent is + or –, and related to time or space is given in brackets.

P4

Research findings on the *limited* [- scope:space] and even negative effects of traditional product-oriented feedback on and correction of students' work by teachers have been reported *for at least 30 years*, [+ scope:time] *from* the work of Stiff (1967), Marzano and Arthur (1977) *to* [+ scope:time] findings reported by Hendrickson (1981), Sommers (1982), Hillocks (1982) and Graham (1983) *in the early 1980s* [+ scope: time]. Further studies carried out *in the late 1980s* [+distance: time] and *more recently* [- distance:time] (e.g. Cohen 1987; Robb et al. 1988; Anson 1989; Hyland 1990; Lockhart and Ng, 1993) all report similar findings. Goodlad and Hirst (1989) found over 1,000 articles on peer tutoring published between 1975 and 1989. The benefits of using peer groups have also *long* [+ scope:time] been recognised, *from the early* [+ scope:time] studies carried out by Piaget (1959), Vygotsky (1962) and Dewey (1966) *to* [+ scope:time] *more recent* [- distance:time] studies, such as those by Johnson et al. (1994), who believe that “peer relationships are the key to reaching students' hearts” (p.21).

(...)

Despite *the long history* [+scope:time] of the benefits of using a process-oriented approach to writing, *in Hong Kong and other parts of Asia* [+ scope:space] such an approach is still being described as “an innovation” (Brock 1994; Pennington and Cheung 1995; Pennington et al. 1996). This perception is confirmed in the Hong Kong Education Department's document, Teaching Writing as Process (1994), in which they state: “Although Process Approaches to writing have been popular *in many countries*, [+ scope:space; + distance:space] it is still relatively unknown *in Hong Kong schools* [- distance:space], particularly at primary level” (p.25).

The density of encodings of graded space and time, in the extract from P4, displays a tendency for the accumulation of meanings of extended scope in relation to the studies that report certain findings. It also displays a complex dynamic, as values are layered upon each other. A negative finding (*limited*) is positively supported by a broad scope of literature, some of which is valued over others (e.g. more recent over more distant in time). A further example of the accumulation of meanings of + scope in space is provided in the extract from P1 below.

P1

Harris (1940) in the United States found evidence to suggest that younger students tended to obtain better degree results. Similar findings have been made *in Britain* by Malleon (1959), Howell (1962), Barnett and Lewis (1963), McCracken (1969) and Kapur (1972), *in Australia* by Flecker (1959) and Sanders (1961), *in Canada* by Fleming (1959), *and in New Zealand* by Small (1966) [+ scope: space].

In this case the accumulation is realised through a listing structure.

4.3.3.3 Extending non-attitudinal meanings as scope

In the following section I exemplify options for grading as extent: scope from the data. Table 4.1 presents *scope* as extended (+) or contracted (-) *space*, and identifies the range of grammatical resources employed. Table 4.2 presents *scope* as extended (+) or contracted (-) *time*.

Table 4.1: Examples of grading as Scope: space

Graduation as Scope, encoded as	Scope as + space	Scope as - space
Epithet/attribute	...the <i>general</i> finding (P1) ...in <i>different</i> ways (S2) ... <i>different</i> kinds of discourse(S2) ... <i>extensive</i> training (P4) ...a <i>pervasive</i> phenomenon (S4)	... <i>oneway</i> ...communication (S1) ...a <i>specific</i> organisational context (S6)
Infusion in process	... <i>extend</i> Walker's work (P1) ... <i>broadens</i> the audience (P2) ...not <i>confined</i> to (S2)	...are <i>limited</i> by (S7)
Thing in nominal group	...(a) <i>variety</i> of texts (S4) ...a brief <i>exposure</i> (P4)	...the <i>limitations</i> of the study (S4)
Circumstance (adverbial)	... <i>mainly</i> manned by (S5) ... <i>widely</i> adopted (P4) ...written <i>entirely</i> in Cantonese (S4)	
Comment adjunct	... <i>generally</i> speaking (S4) ... <i>on the whole</i> (S4)	
Repetition	... <i>in Britain</i> , ... <i>in Australia</i> , ... <i>in Canada</i> , ... <i>in New Zealand</i> (P1)	

Table 4.2: Examples of grading as Scope: time

Graduation as Scope encoded as	Scope as + time	Scope as - time
Epithet/attribute	... a <i>long</i> history (P4) ... <i>well-established</i> groups (S5) ... a <i>lasting</i> impression (S4)	...a <i>much shorter</i> training period (P4) ...a <i>brief</i> exposure (P4)
Infusion in process	...the pattern <i>persists</i> (P2) ... <i>extended</i> to the 1990s (S4)	
Circumstance (adverbial)	... <i>long</i> recognised (P4) <i>Eventually</i> we will lose (S3)	
Circumstance (prepositional phrase)	... <i>for at least 30 years</i> (P4) ... <i>from</i> the work of Stiff (1967)... <i>to</i> ...(Hendrickson 1981) (P4) ... <i>since the 1970s</i> (S2) ... <i>over the past decade</i> (S4) ... <i>extended to the 1990s</i> (S4)	

4.3.3.4 Extending as distance: time and space

The examples of grading as *extent*, identified above in table 4.1, are all of extent as *scope*, indicating spread across time or space. The other dimension to extent is that of *distance* from some reference point. Extent as distance can also refer to time or space. Extended distance in time or space can imply reduced relevance, and references to proximity in time or space can imply greater relevance. There are fewer examples in the data of extent as distance. Expressions of distance in space most often draw on specific location references, implying relative proximity to the location that is the focus of the writer's research interest. The value implied through these specific location references is often supported through the juxtaposition of two or more locations of contrasting distance. The references tend to co-articulate with some other resource to signal contrast, for example resources of counter-expectancy (*while, not just, although, still*), or some other contrasting values (e.g. *mainly* vs *very few*).

Also, while Eaton (1980) cites nine *American* studies which confirm the academic superiority of veterans there is some contradictory *British* evidence (P1)
 ...not just *in Hong Kong*...also *in some western countries* (S4)
 ...studies mainly focus on the readjustment ...to *the United States*. Very few research focus on the readaptation to *Chinese societies* (S3)
 ...although ...have been popular *in many countries*, it is still relatively unknown *in Hong Kong* schools (P4)

Examples of extent as relative distance in time include

...to *more recent* studies (P4)
 ...carried out ...*more recently* (P4)
 ...the *earlier* the better (P4)
 ...development of *newer* media (S4).

Relative value may also be evoked by encoding distance as abstract positioning, as in'

...*ranked third* among all (S5).

The extended system network for Graduation is represented in figure 4.2(d).

4.3.3.5 Summary of Graduation as quantification

The extent of the discussion above on the encoding of Graduation as *quantification*, reflects the frequency with which meanings are quantified in the academic texts in this study (c.f. Paltridge 1997). A strong preference for Graduation as quantification is not surprising, given the nominalised nature of the discourse of academic argument. Few studies, however, point to the interpersonal function of such resources in academic texts (an exception being

Myers, 1996). The ways resources of quantification are strategically employed in the discourse of research paper introductions is the subject of chapters 5 and 6 in this thesis.

4.3.4 Enhancing through infusing processes with circumstantial meaning

To this point I have considered how the option of grading as Force applies to non-attitudinal meanings, and how the intensification of qualities and the quantification of entities can evoke attitudinal meanings. The third dimension of Force to consider in relation to grading non-attitudinal meanings is *enhancement*. In 4.2.3, I discussed enhancement as expressing Attitude as manner. Manner may be encoded as an attitudinally loaded circumstance of manner, such as '*read carefully*'. Here I discuss evoking Attitude where the encoding of manner is not explicitly attitudinal.

In Martin's (1997, 2000) modelling of Appraisal the grading of processes is labelled as 'enrichment', but the construct of enrichment is restricted to the infusion of the lexical verb with intensity in some respect. Rothery and Stenglin (2000) give the example of 'sprinted' as meaning 'ran + quickly'. As articulated in Rothery and Stenglin, enrichment, as infusion, contrasts with explicit amplification, which uses scalable lexical items (e.g. very, lots of). They also consider enrichment to include metaphorical comparison, such as 'ran like a bat out of hell' (Rothery and Stenglin 2000:240). In my modelling of the amplification of processes (as a means for evoking Attitude) I include not only the infusion of a process, as enrichment, but also the grading of a process with a circumstance of manner. I use therefore the general label of *enhancement* in the network, encompassing as it does the meaning of expansion with circumstantial meaning (Halliday 1994).

4.3.4.1 Resources for encoding enhancement

As with other options within the system of Graduation, the semantics can be realised in a range of grammatical constructions.

Enhancement infused in a process

There are a number of instances in the data where the process is infused with a meaning of circumstance of manner, where the manner does not encode an explicit attitudinal meaning, but rather invests the process with a meaning of '+ effort/rigour'. For example, the process of undertaking research is sometimes encoded as '*look at*' or '*find out*'. These are considered to construe neutral, unamplified meanings. Other choices, however, can be unpacked as 'find out/look at + effort/rigour', as in the following examples

investigate (S5)

tested out (P1)
explore (S2)
experimented (P3)
examined (S3).

Enhancement as a circumstance

In some cases the enhancement may be as a circumstance

...working *together as a whole* (S1).

Enhancement through repetition

In this study I also code as enhancement evoking Attitude, instances where the description of a research methodology is elaborated as a number of steps or processes, as in the underlined expressions in the following extracts.

P1

Walker's (1975) study of mature students at Warwick University represents the best British attempt to unravel the relationship between age and performance. He took 240 mature undergraduates who were admitted to the university between 1965 and 1971 and compared their progress with that of all undergraduates. This gave him a reasonably large sample to work with and the timing meant that the results were not distorted by any 'returning servicemen factor'. His methodology showed certain other refinements. First, he excluded overseas students. Such students tend to be older than average and also to fare worse academically (Woodley 1979), thus influencing any age / performance relationship. Secondly, he used two measures of performance; the proportion leaving without obtaining a degree and the degree results of those taking final examinations. Finally he weighted the degree class obtained according to its rarity value in each faculty.

P4

The purpose of our study, motivated in part by the calls of Li for more Hong Kong-based research on process writing, and Miller and Ng (1996) for more research on peer assessment, was, therefore, to introduce a group of student teachers to peer feedback and a student-centred process-oriented approach to writing, focusing on the rewriting and revision stages. We could then assess their attitudes, in terms of their views and reactions, after a brief initial exposure, with minimal training, towards this 'innovation', as an indication of how likely or unlikely they are to use such an approach in their own classrooms when they themselves become teachers.

In the first example, above (P1), the text refers to a study other than the writer's, and in the second (P4) to the writer's own study. My argument is that the elaboration of steps in a methodology, functions to imply an enhancement of the methodological process of the research, even though no single process is itself enhanced in terms of manner. There is an indirect implication of a positive attitude towards the study owing to the thoroughness of the approach.

4.3.5 Summary of grading non-attitudinal meanings as Force

An interrogation of the network of Graduation within the system of Appraisal (Martin, 2000, Rothery and Stenglin 2000), in its application to the academic texts in this study, reveals that grading can apply to non-attitudinal meanings construed as attributes, as entities, or as manner of process. When a non-attitudinal meaning construed as an attribute is graded, this represents an *intensification* of an experiential meaning (e.g. *very* oneway), and encourages or evokes an attitudinal reading. When a non-attitudinal meaning construed as an entity or phenomenon is graded, this represents a *quantification* of an experiential meaning. This may be quantification as *amount* (e.g. *many* researchers), or quantification as *extent* (e.g. findings ... reported for *at least 30 years*; *more recent* studies). These instances of grading again function to evoke Attitude. Finally, when a non-attitudinal meaning construed as a process is graded, that meaning represents an *enhancement* of the experiential meaning. An example of the latter is in the implication of manner in sets of verbs that describe research activity as, for example, a process of '*looking at*' versus '*exploring*' or '*examining*'. Once again Attitude is evoked. In particular, the data display a strong preference for exploiting the range of ways in which non-attitudinal entities or phenomena can be graded as quantity (c.f. Paltridge 1997), and this is reflected in the extent of discussion and the number of examples devoted to explaining and exemplifying this aspect of the system. The preferences in the discourse for resources of quantification has also enabled an elaboration of the system in this respect, especially in regard to the option of *extent* as *distance* and *scope in time* and *space*. An additional contribution to the model is the broadening of the notion of grading processes as Force, to a general concept of *enhancement*, that can be realised either as enrichment through infusion, or through the addition of a circumstance of manner. Before discussing the strategic implications of choices within these options, and in grammatical realisations, there is one further dimension to Graduation that needs to be considered in its role in evoking Attitude, that of Focus.

4.4 Graduation evoking Attitude: Focus

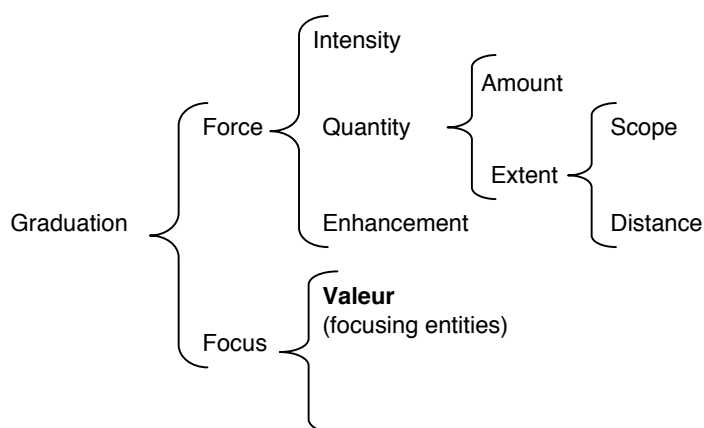
The concept of grading in terms of Focus has to do with strengthening or softening of categorical boundaries around experiential phenomena (Martin and Rose 2003), drawing on Bernstein's (1990, 1996) notion of classification in code theory. A sharp Focus represents a strengthening of the categorical meaning, and a soft Focus represents a weakening. Focus provides a further resource for grading experiential meaning by degree, in other words, a further potential for evoking evaluative meaning. In the examples below, I explore ways in

which experiential categories can be focused and consider the grammatical resources that are implicated.

4.4.1. Focusing the categorical boundaries of things: authenticity

Something can be evaluated in terms of Focus as representing a sharply defined experiential category, or a softened and less distinct one. In figure 4.2.(f), I have labelled this dimension of Focus, as *valeur*, after Martin and Rose (2003), where they refer to Focus as ‘fine-tuning *valeur*’. The concept of Focus to this point, and that captured in the construct of ‘*valeur*’, relates to the categorical bounded-ness of entities. It is this usage that I explore in the first instance.

Fig. 4.2 (e): System network of choices in Graduation



The following extract, P2, illustrates the ways in which resources of Focus can function to evoke Attitude. All instances of Graduation are italicized, and those that represent Focus:*valeur* are italicized and underlined. Inscribed Attitude is in bold.

P2

Such a technique in writing pedagogy is underpinned by writing research theories that advocate writing as a process of drafting and redrafting, as well as writing as process of communicating to a *real* audience.

(...)

Writing becomes *more purposeful* and *meaningful* as it is read by an **authentic** audience (Mittan, 1989). Peer reviews reflect writing as a *truly* communicative process rather than an **artificial, lonely** exercise where students write for a **pseudo**-reader, the teacher, who reads students' essays *predominantly* for assessment purposes rather than for *real* communication.

Peer review is a **useful** technique for encouraging revision in writing. It provides a *true* incentive for students to revise their work.

Each of the four instances of Focus:*valeur* (*real, truly, real, true*) represent a sharpening of a categorical boundary. In each case the focusing of the categorical boundary evokes Appreciation: valuation. This focusing of the meaning may evoke either positive or negative

value, depending on the context and the prosodies of value constructed around the graduation. In this case all four examples evoke positive Appreciation. In this extract (P2 above), the four instances of Focus:valeur co-occur with a number of instances of explicit Appreciation, including *authentic*, *artificial*, and *pseudo*-. These terms, *authentic*, *artificial*, *pseudo*-, are interpreted as explicit Attitude in this text because of the particular field being constructed, that is, one of progressive writing pedagogy. (In a text constructing a different field, the same terms might be used in a technical sense, with no implication of Attitude, for example, if *authentic* were used in the context of a discussion of the origins of an artifact.). This explicit Attitudinal meaning is also reinforced by association with other expressions of explicit Appreciation, in *purposeful* and *meaningful*. The co-articulation of instances of Focus:valeur (e.g. *real*, *true*), alongside those of inscribed Attitude (e.g. *authentic*), construct an argument in this phase of text around value as authenticity. Phenomena are valued on account of the degree to which they authentically represent a given category. Where this meaning is evoked through grading as Focus, I refer to option in the system network as one of valeur:authenticity. Other instances of a sharpening of Focus as authenticity in the data include

...the *definite* relationship (S2)
 ...written in *pure* Cantonese (S4)

By contrast in the following example the categorical boundary is softened.

...*some kind of* ...discussion (P3)

In '*some kind of*' the writer blurs the boundary of what constitutes *discussion*, evoking an attitudinal stance in terms of Appreciation:valuation. It is important to note, however, that Graduation is meaning by degree rather than a representation of binary values of positive or negative meaning. The softening of Focus of *discussion* implies a modification of a positive Attitude.

4.4.2 Focusing categorical boundaries: specificity

So far in an interrogation of Focus, valeur is interpreted in terms of *authenticity*, as in the example 'a *real* audience'. However, an analysis of implicit Attitude in this study suggests another dimension to Focus as valeur where the categorical boundary of an experiential phenomenon is focused not in terms of degree of 'real-ness', but rather in terms of degree of *specificity*. In the examples below, categories that represent objects of study are focused as more specific, in

...estimates of *precisely* what the ...strategies ...are (P3)
 ...*especially* children (S3)
 ...*particularly* at primary level (P4)
 ...*in the narrow sense* (S4)

...deciding *just* what those ...ought to be (P3)

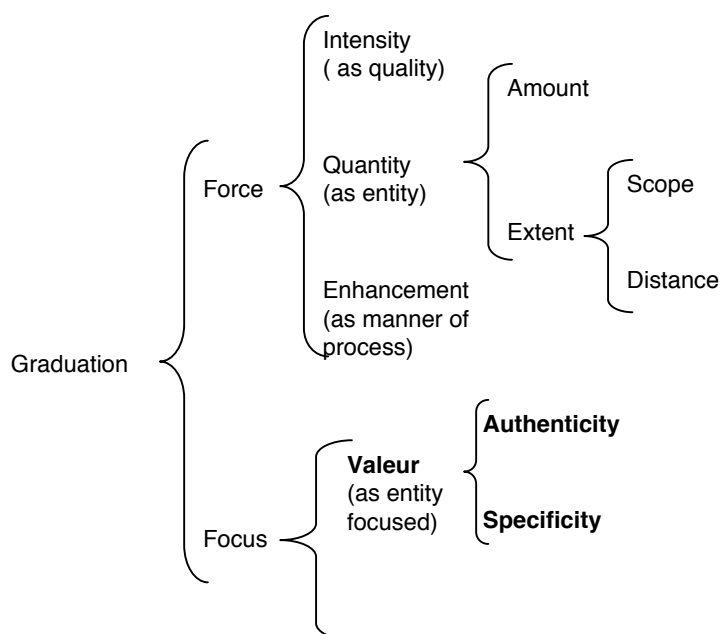
and as less specific, in

...the *general* thrust of the conclusion (P3)

...they can *generally* be called problem-solvers (S7)

Both *authenticity* and *specificity* constitute options for focusing the categorical boundaries of phenomena. The network to this point is presented in figure 4.2.(g).

Fig. 4.2 (f): System network of choices in Graduation



In the context of academic research writing, reference to a narrowing of the focus of some phenomena may function to construe a positive value of relevance or a negative one of limitation. Similarly a broadening of the focus may construe a positive value of broad applicability or a negative one of lack of definition. Once again the co-text and the coarticulation with other resources of Appraisal are crucial in determining the interpretation of value. Tokens of attitudinal meaning realised through the grading of experiential entities will pick up the values construed in their prosodic domain (discussed in detail in chapter 5). As always in coding for Attitude, the meaning does not reside in the lexis alone. In the following two examples the term *narrow* functions to inscribe negative Appreciation in the first example, and to evoke Appreciation through Focus: specificity in the second.

...the relationship...really only concerned this **narrow** age-band (P1)

In the *narrow* sense, written Cantonese is a written form of the Cantonese lexical (sic) (S4)

There are also a number of instances where the term 'focus' itself is used, as in

...mainly focus on (S3)

...(not) mainly focus on (S4).

The use of ‘*focus*’ in these instances is not considered to represent Graduation, for reasons that are discussed later in this chapter (see 4.5.4). However, the expression ‘*mainly*’ does represent Graduation: focus of the meaning of ‘*focus*’.

4.4.3 Focusing the categorical boundaries of processes: fulfilment

While the concept of grading as Focus has, to this point, been limited to the grading of entities, it is apparent in the texts in this study, that the concept of Focus can also be applied to processes, in the sense that a process as a category of experiential meaning can be more or less bounded in terms of completion or *fulfilment*. When processes are focused in this way, as fully or partially realised, apparent, or complete, they can also function to evoke Attitude (c.f. Lemke 1998 on evaluating propositions). There are a number of means by which the focusing of processes as fulfilment can be realised. One sense in which a process can be graded as focus is in terms of realisation, that is, the extent to which the process represents realis or irrealis. One example of such grading is in the difference implicit in the projecting processes ‘to *suggest*’ and ‘to *show*’. The grammar implicated here is that of phase in the verbal group (see Halliday 1994, and Matthiessen 1995 on the grammar of phase:reality). Another sense of focusing the boundaries of a process is in terms of conation, or completion. Instances include, for example, expressions of a process as *attempts to*, *seems to*, *manages to*. In this case the degree of fulfilment is encoded through conation in the verbal group (see Halliday 1994 and Matthiessen 1995 on conation). It has been noted that in English the assumption is that the process is complete, and if not this needs to be marked in some respect. This contrasts with Chinese, for example, where the assumption is that the process is underway, and if the meaning is otherwise then phase functions to signal completion (McDonald 1994, Halliday and Matthiessen 1999: 299). These and other means by which the degree of fulfilment of a process is encoded are exemplified below.

4.4.3.1 Grammatical resources for realising Focus: fulfilment

Instances from the data are grouped in terms of how they are realised grammatically.

Infusion in material processes

- ...the following findings *achieved* statistical significance (P1)
- ...*meet* the needs of (S5)
- ... problems to be *solved* (P3)
- ...to *fulfil* ..my interests (S4)
- ...in order to *fill the gap* in previous studies (S4).
- ...can be *accomplished* in many ways (S7)
- ...*fail to complete* (P1).

Nominalisations of infused processes

- ...in the form of results and *achievements* (S6)

...generally called as “problem-solvers”(S7)
 ...failure to learn (P1).

Conation in the verbal group

...attempts to compare (P3)
 ...trying to innovate (P4)
 ...Goldberg ...tried to distinguished (sic) (S2).

Nominalised conation

...attempt to unravel (P1)
 ...no attempt to change the topic (S2).

Phase: reality of the process

...Talbot suggested that... (S2)
 ...there is ...evidence to point to (P2)
 ...L1 (1992) claims ... (P4)
 ...seems to be a positive predictor (P1)
 ...three studies which indicate that peer response is ... (P4)
 ...Satman (1980)... shows that ... (P4).

Nominalisations of phase: reality

...the apparently simple question (P1).

Circumstantially

...alleviated somewhat (P3)
 ...increased bit by bit (S4)
 ...the issues are clouded to some extent (P3).

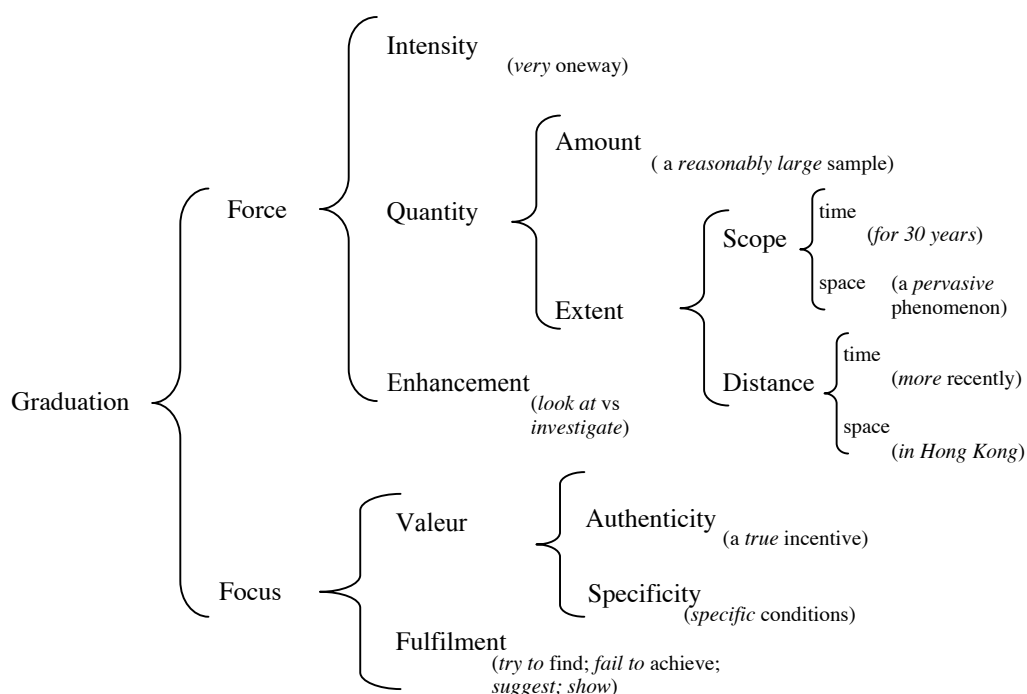
In this final group, the circumstances are read as implying a position on a cline of completion of a process, and are included as fulfilment on this basis.

The explication of this dimension of Focus as fulfilment represents an important extension of the network of Graduation. It allows for inclusion into the model of Graduation, processes of projection, such as *suggest*, *show*, or *indicate*, that are identified in much of the literature on hedging in academic discourse (e.g. Thompson and Ye 1991, Hyland 1998, 1999) and is understood as a very significant resource in the encoding of stance. To date, these processes have mainly been interpreted in terms of infused modality, encoding, for example, epistemic stance towards the truth-value of a projected proposition. By interpreting them from the point of view of Graduation, they can also be seen to imply an attitudinal meaning, as Appreciation: value. Their inclusion into the theoretical modelling of Attitude enables the role of projecting processes and of conation in the construal of evaluative stance to be more systematically considered in relation to other evaluative resources in the discourse.

4.4.4 Summary of Graduation

The system network of Graduation, as it is developed in this chapter, represents a broader and more coherent framework for identifying and categorising both explicit and implicit Attitude in the data than has been available to this point. The completed network of Graduation is presented in figure 4.2 (g) with examples of realisations.

Fig. 4.2 (g): System network of choices in Graduation



This network of Graduation is systematically applied in chapters 5 and 6 in addressing the specific research questions that frame this study, and a set of full text analyses of Graduation is included in Appendix 1a and 1b. However, before proceeding to that discussion, I need to address another fundamental aspect of expressing Attitude, and that is the question of what is appraised. As I indicated in the introduction to this chapter, an analysis of what is appraised in this study implicates the identification of the fields being construed in the discourse. This issue is the focus of the following section.

4.5 Identifying what is being appraised: Analysis of field

Analyses of Attitude explained so far include the identification of both inscribed and evoked Attitude, the kind of Attitude that is being encoded (that is Affect, Appreciation or Judgement), and whether that Attitude represents a positive or negative value. Where

Attitude is encoded indirectly through grading experiential meanings, the kind of Graduation is identified. The remaining step in an analysis of Attitude is the identification of what is being appraised. In sample analyses of Appraisal published to date (for example, Martin 1997, Eiggins and Slade 1997, Rothery and Stenglin 2000), that which is being appraised is identified at a micro level as a specific entity or phenomenon. Such an analysis of the appraised would result in descriptions such as the following, where what is being appraised is indicated in square brackets.

...peer review is a **useful** technique [the pedagogic technique] (P2)
 ...students fare **better** [the performance of students] (P1)
 ...only concerned this **narrow** age band [the age band of subjects] (P1)
 The methodology showed certain other **refinements** [steps in the research methodology] (P1).

In this study, however, the appraised is considered at a more macro level as a field of discourse (c.f. Thetala 1997, and Hunston 2000).

4.5.1 Field orientation

There are two distinct although interacting fields that characterise the discourse of all of the texts in this study. The first field is the set of activities that are the focus of the writer's study. This is referred to as the domain and is coded FD. The domains vary in content from one text to another. The domains in this data set include, for example, the performance of students in different age groups at university; the experiences of returnee children to Hong Kong; shifts in the use of written Cantonese in Hong Kong; and the effectiveness of peer review as a pedagogic technique. The field as domain is realised through relevant choices of participants, processes and circumstances. Thetala (1997) refers to this field as 'topic'. However, the description of this field as *domain* rather than topic is preferred as a range of more specific topics may be integrated into an introductory discussion. The second field that is being constructed in all of the texts is that of research itself as a set of activities. This is coded as FR. The construction of this field (FR) is intrinsic to the task of introducing and positioning the writer's own research, and so is evident to some extent in all the texts in this study. The field of research includes activities related to identifying research issues, processes of inquiry, interpreting findings and outcomes and reporting and disseminating findings and claims.

Lexis associated with the process of arriving at research outcomes, such as '*produced*', '*found*', '*discovered*', '*identified*', '*achieved*', as well as generalised participants such as '*findings*', '*results*', '*evidence*', '*answer*', are identified as constructing the field as *research* (FR). Lexis associated with processes and participants observed through research are identified as constructing the *domain* (FD). So in P1, for example, the FD would include

lexis such as ‘*students*’, ‘*performance*’, ‘*better*’, ‘*worse*’. There are points of intersection between the two fields where some coding ambiguities arise. This is the case, for example, where abstractions encode the interpretation of research findings in lexis such as, ‘*conclusions*’, ‘*relationship*’, ‘*significance*’, ‘*effects*’, ‘*similarities*’. In one sense these are observations of phenomena in the domain, but they also represent aspects of the research process. A decision on coding as constructing one or other field is determined by the dominant field identified in the co-text. So, for example, in the extract below, the underlined is taken to be constructing primarily the field of research (FR).

Of the many who have looked at the relationship between age and performance at universities, none has as yet produced a definite answer to the question ... (P1),

whereas, in the following example, the underlined projected clause is identified as constitutive of the domain (FD).

...the results have indicated that the relationship between age and performance is not a linear one (P1).

4.5.2 The relationship of projection between the fields

An analysis of the texts in terms of field is characterised by a shifting back and forth from one field (FR) to the other (FD). This interaction of fields may be more or less dynamic across phases of text, as is illustrated in the following extracts:

P1:

FR: Harris (1940) in the United States found evidence to suggest

FD: that younger students tended to obtain better degree results.

FR: Similar findings have been made in Britain by Malleson (1959), Howell (1962), Barnett and Lewis (1963), McCracken (1969) and Kapur (1972), in Australia by Flecker (1959) and Sanders (1961), in Canada by Fleming (1959), and in New Zealand by Small (1966). However, most of these studies were based on samples of students who were generally aged between seventeen and twenty-one and the correlation techniques employed meant that the relationship between age and performance really only concerned this narrow age band. As such, the results probably suggest

FD: that bright children admitted early to higher education fare better than those whose entry is delayed while they gain the necessary qualifications.

FR: This view is supported by Harris (1940) who discovered

FD: that the relationship between age and performance disappeared

FR: when he controlled for intelligence. Other studies have shown

FD: that those who gain the necessary qualifications and then delay entry for a year or two are more successful than those who enter directly from school

FR: (Thomas, Beeby and Oram 1939; Derbyshire Education Committee 1966).

The relationship between the two fields is one of projection in both a grammatical sense (Halliday 1994) and in a metaphorical one (Christie 1991a, 1991b, 1997). Grammatically, Halliday explains the relationship of projection as

The logico-semantic relationship whereby a clause comes to function not as a direct representation of (non-linguistic) experience but as a representation of a (linguistic) representation. (1994:250)

He explains further,

While the projecting clause represents an ordinary phenomenon of experience, the projected clause (...) represents a second-order phenomenon, something that is itself a representation. (...) a “metaphenomenon”. (1994: 252)

At a grammatical level, analyses of the data reveal that clauses constructive of FD are connected in a relationship of projection to those constructive of FR through a range of congruent and non-congruent realisations, where ‘sayers’ or ‘sensors’ project ‘locutions’ or ‘ideas’ (Halliday 1994).

4.5.2.1 Grammatical resources employed in realising projection

Grammatical resources used in the projection from the field of research activity (FR) to the field of the research domain (FD) are exemplified below. The relationship of projection is indicated through indentation, where the projected is indicated as indented against the projecting. Resources for projection include:

Verbal or mental processes where the projecting source is named and the projected clause is in a hypotactic relationship, as in:

FR: Sander (1963) has indicated
 FD: that the maturity associated with increasing age and experience seems to be a positive predicator...(P1)

or

FR: I believe
 FR: that the general thrust of the researchers’ conclusions is towards this sort of approach (P3)

Verbal processes where the projecting source is named and the projected clause is in a paratactic relationship, as in:

FR: they state
 FD: “Although Process Approaches to writing have been popular in many countries, it is ...” (P4)

Verbal processes where the projection is an embedded clause functioning as verbiage, as in:

FD: What is more direct than a peer saying,
 FD: “This is not clear to me,” (P2)

Implied projecting verbal process, as indicated in the underlined and bracketed insertion in:

FR: A study by Maize in 1952, for example, attempts (for native speakers) to compare the effect of outside correction by the teacher with that of in class correction by both peers and teachers. (He found)

FD: (that) Students undergoing the latter procedure did improve to a significantly greater extent than those in the control group. (P3)

Implied processes of projection through reference to sources, (sometimes functioning retrospectively) as in:

FD: In this sense, all aspects of social actions and interaction can also be examined by looking at the organizations of the conversations.

FR: (Heritage, 1989) (S2)

Circumstances of angle as in:

FR: According to Scollon R. & Scollon S. W. (1995),

FD: acts are the units at the lowest rank of discourse and can be accomplished in many different ways. (S7)

Passive constructions where the projecting source is specified, as in:

FD: The benefits of using peer groups

FR: have also long been recognised, from the early studies carried out by Piaget (1959) ... (P4)

Passive constructions where the projecting source is not specified, as in:

FR: As a more convenient and economic way to study, mass media

FR: is considered

FR: to be a favourable choice. (S2)

A relationship of instantiation between a nominalised verbal process (question) and an interrogative clause, as in:

FR: none has as yet produced a definite answer to the apparently simple question

FD: 'Do mature students do better or worse than younger students?' (P1)

There are also other instances where verbal and mental processes have been nominalised as semiotic nouns, naming speech acts and thought processes. These nominalizations do not project between clauses, but imply a connection to propositions stated elsewhere in the text, as in

FR: Similar findings have been made in Britain by Malleson (1959)' (P1)

FR: This view is supported by... (P1)

FR: Based on this idea, ...(S2).

It is noted that where there are two fields being construed in related clauses, the metaphorical projection is from the field of research to the field of the domain. However the projection may be coded retrospectively in the grammar, with the projected field preceding the projecting field. In the examples above the indenting rather than the sequencing indicates what is projecting and what is projected.

One further means of projecting other voices into a text is the use of quotation marks as or scare quotes (Martin and Rose 2003), as in

- ...A process approach to writing (...) is also 'nothing new' (P4)
- ...is still being described as an "innovation" (P4)
- ...they can generally be called "problem solvers" because they ...(S7)
- ...no unique definition of "power" in the literatures (S2).

In these examples the information in quotation marks is presented as an intertextual reference, attributable to unspecified sources. There is an acknowledgement that the information is sourced elsewhere, though sourced to a body of cultural knowledge rather than a specific 'sayer'. The implication is 'what (some) people call/refer to as ...'. The source of the projection in this sense is to both the writer and another source, although the other source is unspecified and unspecifiable.

In some instances there are layers of projection where one source projects a proposition that constitutes another source projecting a proposition. In the examples below from P4, the indentations represent the layers of projection, so that the least indented represents the first level of projection:

- FR: Furthermore, Winter (1996) reports...
- FR: ...that "Cohen and her colleagues found...
- FD: ...that tutor and tutee learning outcomes were unaffected by (among other things) the presence or absence of training for tutors" (P4)

- FR: Several reasons
- FR: have been put forward
- FR: to explain
- FD: why process writing is still considered
- FD: an innovation in Hong Kong (P4)

4.5.2.2 Metaphorical projection of one field by another

If we consider the texts from the level of discourse, the grammatical realisations exemplified above can be reconstrued metaphorically as field projecting field (rather than sayer projecting locution, or sayer projecting idea). The notion of the metaphorical projection of one field by another draws on Christie's analysis of curriculum genres (1991a, 1991b, 1997, 2002), which in turn draws on Bernstein's (1986, 1990) work on pedagogic discourse.

Christie (1997) discusses the relationship between what she refers to as the regulative and the instructional registers of the classroom as one of projection with the following justification:

- (...) the relationship of the two is so intimate, it is argued that the regulative register 'projects' the instructional register, where the term is used metaphorically from the functional grammar, following Halliday's advice (1979, 1981, 1982) about the value of thinking grammatically about a text, modelling its organization on that of the clause. Where a relationship of projection applies, a secondary clause is said to be projected through the primary one (Halliday 1994:219), so that something either said or thought hitherto is in this sense 'reinstated'. The metaphor of projection is a useful one to

employ for the relationship of the two registers (...). It accords with Bernstein's general view about the manner in which a pedagogic discourse takes a discourse from sites elsewhere, and reinstates or even 'relocates' it for the purposes of the pedagogic activity (Bernstein 1990: 183-5) (Christie 1997: 136-7).

Christie draws on Bernstein's (1986) notions of *instructional* and *regulative* discourses, and the idea that discourses from other contexts are 'appropriated and relocated in the educational discourse' (Christie 1991a: 239). Christie's 'first-order', or 'pedagogical' register, relates to Bernstein's 'regulatory discourse', and her 'second-order' or 'content' register relates to *instructional* discourse. In Christie's study of the pedagogic discourse of primary school 'morning news',

the first-order register (...) has the function of operationalising and monitoring the teaching-learning activity (...) while the second order or "content register" realises the activity and/or information that is to be dealt with by the children' (1991a: 239)

The notion of relocating, or recontextualising, or re-presenting one field of human experience into another is highly applicable to the discourse in this study. The field of research (FR) projects a representation of experience from another 'world' (FD) as 'metaphenomenon' (Halliday 1994; 252). The field of research (FR) relocates the field of domain (FD) as intimately related although retaining separate field status. The phenomena of the domain (FD) are brought into being and construed in certain ways by the processes of enquiry (mental) and processes of reporting (verbal) that construe the field of research (FR). As with Christie's analysis of the curriculum genre, the construction of the register of academic research reporting requires the analyst to 'track[] the operation of two registers' (Christie 1991a: 237) or two fields. This analysis of the two fields in each text becomes the basis for analysing the distribution of Attitude, in turn enabling the identification of patterns in the orientation of Attitude to field across the texts.

4.5.3 Inscribed Attitude in relation to field

Once the two fields of the domain, and of research have been differentiated (see appendices 1.a and 1.b, instances of explicit and evoked Attitude can be identified as relating to the construal of one or other field. The analysis of explicit Attitude according to field is exemplified in table 4.3 for one of the published texts. (See appendices 2.a and 2.b for analyses of all texts).

Table 4.3: Analysis of inscribed Attitude according to field for P1

Field as research activity (FR)	Field as domain (FD) (student performance at university)
<ul style="list-style-type: none"> • a definite answer • the apparently simple question • The problem with these...studies • methodology showed certain other refinements • really only concerned this narrow age band • results were not distorted by any ...factor • The problem with these two studies is... • the best British attempt • to unravel 	<ul style="list-style-type: none"> • students do better • or worse • students ... obtain better ... results. • children ... fare better ... • those ... are more successful • those ... do better than ... • the ... superiority of veterans • students fare better • or worse than ... • maturity ... seems to be a positive predictor • of success • students do better in ... • and worse in ... • students ... fare worse • students obtained better degrees • students obtained better degrees • students ... obtained better degrees • results ... were better than...

4.5.4 Attitudinal lexis and field lexis

There is one further field-related issue that impacts on analyses of Attitude, and that is the issue of differentiating at the borders of the interpersonal and experiential meanings. This issue arises in relation to a number of terms that appear to be institutionalised Attitude, institutionalised to the extent that they are considered no longer to be primarily construing Attitude, but rather as primarily construing field.

Such terms may, however, seem to carry a residual connotation of either positive or negative value, especially if the term is coloured by prosodic association with instances of explicit attitudinal encodings. In the following example the explicitly evaluative '*refinements*' sets up a strongly positive prosody that is picked up in certain lexis construing processes of enquiry of the field (*excluded*, *measures*, and *weighted*) that then become tokens of positive Attitude, evoking a reading of Appreciation:composition.

P1

His methodology showed certain other **refinements**. First, he excluded overseas students. Such students tend to be older than average and also to fare worse academically (Woodley 1979), thus influencing any age / performance relationship. Secondly, he used two measures of performance; the proportion leaving without obtaining a degree and the degree results of those taking final examinations. Finally he weighted the degree class obtained according to its rarity value in each faculty.

While *excluded*, *measures* and *weighted* can all be seen as experiential, constructing the field of research, in this prosodic environment they evoke positive attitudinal meanings of

careful manipulation or *refinement*. The examples above depend for their interpersonal interpretation on prosodies of value established in the co-text.

In other examples experiential meanings are pushed in the direction of Attitude through co-textual resources of contrast. The contrast constructs the two experiential meanings as being of different values. In the following examples the contrastive resources are boxed, and the contrastively positioned experiential meanings are underlined. The implication is that one of the underlined experiential terms is read as countering the other, evoking a meaning of +/- Appreciation:valuation.

P4

Although Process Approaches to writing have been popular in many countries, it is still relatively unknown in Hong Kong schools, particularly at primary level

It was suggested that qualitative rather than quantitative method was *more suitable* to identify interruptions (S2)

The teacher...reads students' essays *predominantly* for assessment purposes rather than for real communication

A second coding issue relates to lexis which functions primarily to construe a particular field, and yet may be read as carrying some trace of interpersonal meaning. Here again the issue relates to the interface of the interpersonal and the experiential. Examples of sets of lexis in this category include lexis related to research activity as:

- having underlying or **foundational** influences:
 - these literatures formed the foundations of deeper and further studies (S2)
 - using the previous studies as foundations (S2)
 - the inherent theories of interaction (S2)
 - underpinned by theories (P2)
 - as foundations (S2)
 - as a framework to look into (S3),
- being **targeted** or **focused**:
 - it is decided ... to focus on (P4)
 - The purpose of our study ...focusing on (P4)
 - In this study...will be the main focuses (S3)
 - will concentrate on (S2)
 - I will only focus on...' (S4),
- having **structure** and **systematicity**:
 - in an casual interview with ...it was found (S6)
 - through numerous semi-formal observation (S7),
- providing **evidence**:
 - The following findings achieved statistical significance (P1)
 - other differences...did not achieve statistical significance (P1)

adequate ...evidences (S4),

- **relating** phenomena:

- several related observations (P3)
- see additional related bibliography (P3)
- all report similar findings (P4)
- some other related concepts (S2)
- they are more related to (S4)
- the first three principles have a close relationship with (S4).

These terms are not considered in this study to be tokens of evaluative meaning, but rather to represent technicalised evaluation. As processes and participants they are being construed categorically, and tend not to be amplified. If such terms are construed as qualities they are construed as classifiers rather than epithets, as in '*empirical* research'. They are therefore considered part of the construction of the field, rather than primarily construing Attitude in relation to that field. That is not to say that such terms do not carry a residual positive value, but the implication is a kind of default positive, in that evaluation is the business of research. Research is supposed to be *underpinned*, to *focus*, to provide *evidence*, to *relate* phenomena. If it does it is doing what research is supposed to do.

Depending on their prosodic environment, the terms in this category may, however, function as tokens of Attitude, or be given an evaluative implication through grading or counter expectancy, as in

- ...(not) mainly focus on (S4)
- ...I will only focus on... (S4).

It is also possible for the one term to be used in a particular instance to construe an experiential meaning, and in another to foreground evaluation. Consider, for example

- The following findings achieved statistical significance (P1)
- ...interruptions had relational significance to the participants themselves (S2).

In the S2 example, 'significance' is used non-technically and is synonymous with *importance*. It is therefore considered to be functioning a primarily evaluative in this context. In the P1 example, however, the term is being used in a technical sense to describe a technical aspect of the data. It co-occurs with the classifier '*statistical*' signalling the technical interpretation that should be given to the term. While there is an evaluative implication that can be drawn from the description of the findings as significant (implying quantity), this is secondary to the ideational meaning foregrounded in this case.

4.6 Summarising issues in coding Attitude and Graduation

While the analyses in this study are undertaken on a theoretically principled basis, a degree of subjectivity is none the less intrinsic to a study of attitudinal meaning. Different readers may read the texts from different subject positions (Kress 1985, Martin 1995). For example, I have coded the term *traditional* in P2 as negative Attitude in a context in which the writer takes a strongly positive stance towards a progressive pedagogy.

In the **traditional** classroom, writing is often done in isolation - the students write on their own, hand in the product to the teacher, get written feedback from him or her, and finally put aside the writing. (P2)

However, another reader may challenge this reading and consider the term *traditional* to carry a positive connotation (see Martin and Rose 2003 on potential reading positions). While acknowledging the role of alternative reading positions, it is none the less argued that a given text naturalises a particular reading position (Macken-Horarik 2003) through the coarticulation of various resources. The reader who chooses to interpret *traditional* as positive Attitude in this context is reading against the grain of the naturalised reading encouraged in the text.

In the following instance, however, the use of the same term, *traditionally*, is not supported by other positive (or negative) references in the co-text.

Traditionally interruptions are considered as an indicator of power... (S2).

Because of this lack of additional clues to an attitudinal interpretation it is not coded as attitudinal in this data.

The coding of inscribed Attitude is generally less problematic than the coding of instances of evoked Attitude. The main issue that arises in relation to the former is differentiating the boundary of the interpersonal and the ideational where interpersonal meanings have become technicalised and have shifted into the ideational discourse of the field. In the field of research, for example, the concept of *evaluation* is intrinsic to the field. It is not surprising therefore that evaluative meanings should become technicalised in a discussion of research outcomes.

The modelling of Graduation provides a theoretical framework of attitudinal potential. The extent to which an instance of graded ideational meaning is seen to take up that attitudinal potential, and warrants an interpretation as evoking Attitude, depends on the context in which it occurs. The context can be considered from both an experiential and an interpersonal perspective. From an experiential perspective, the context refers to the field that is being constructed in that phase of discourse. In the data in this study there are two

fields being constructed in each text; the field of activity that constitutes the domain in which the research is undertaken (FD), and the field of research itself as an activity (FR). The two fields can be seen to intersect at points in the texts where the domain is specifically constructed as a research topic. For example, a discussion of the '*growth of written Cantonese*' is in some phases of text, construed as constructing FD, that is, as describing a phenomenon in the community, as in for example:

the change in the political status of Hong Kong in 1997 discourages the growth of written Cantonese in Hong Kong (S2)

In this phase of text, the term '*growth*' is interpreted as evoking an attitudinal meaning of appreciation:valuation through quantification. At other times the domain of 'real world' activity is reconstrued as a research topic, as in,

Since linguists like Snow only studies the growth of Cantonese literatures (S2)

This phase of discourse is seen as constructing FR. Grammatically, '*growth*' in the second example, is a participant in a clause that constructs a field of research in terms of both the process (*studies*) and the other participant (*linguists like Snow*). In this phase of text, the term '*growth*' is abstracted from its reference to something becoming bigger, and is interpreted non-attitudinally as an issue or question. Field therefore becomes one aspect of context that is considered in deciding on the attitudinal coding of lexical choices.

The second consideration is the interpersonal context in which a particular construction occurs. In discussing the experiential context, I consider the particular segment of text, clause by clause, as either constructing FD or FR. Experiential meaning is associated with a particulate structuring of discourse, allowing for the clear articulation of boundaries from one field to another. Interpersonal meaning, on the other hand, is associated with prosodic patterning of meanings where meanings spread across phases of text, potentially beyond clause boundaries (Halliday 1985, 1994, Martin 1992). Prosodies of interpersonal meanings 'colour' phases of discourse with an interpersonal implication, exploiting resources such as Graduation in the process. Attitudinal prosodies are established with the encoding of inscribed Attitude at various points in the text. These prosodies of value then proceed to colour a phase of text either prospectively or retrospectively. The intensity and extent of spread of the prosody will be determined in part by the intensity (amplification) of the inscribed term(s) as well as by the frequency of terms in the prosodic domain that carry some interpersonal potential. Terms that carry this interpersonal potential, such as graduated experiential meanings, that fall within the prosodic domain of an inscribed attitudinal terms are likely to be coded as evoking Attitude. The following phase of text provides an example:

P1

Walker's (1975) study of mature students at Warwick University represents the **best** British *attempt* to **unravel** the relationship between age and performance. He took

240 mature undergraduates who were admitted to the university between 1965 and 1971 and compared their progress with that of all undergraduates. This gave him a reasonably large sample to work with and the timing meant that the results were **not distorted** by any 'returning servicemen factor'. His methodology showed certain other refinements. First, he excluded overseas students.

Having taken into account the location of constructions within a particular field and attitudinal prosody, there is also a need to consider degrees of implicitness encoded within resources of Graduation in deciding if they should be coded instances of evoked Attitude. The more implicit the coding of, for example, quantity, the more support needed from co-articulating expressions of Attitude in the co-text.

There are also a number of instances where a rule of thumb is applied to codings. I claim, for example, that an attitudinal meaning of Appreciation is evoked in descriptions of the process of research inquiry as *examine*, *investigate*, or *analyse*, but that this is not so for descriptions of the process as *look into* or *look at*. I claim that *examine*, for example, infuses meanings of *look at* and *in depth*. The set of lexis that is used to refer to the process of research inquiry is therefore seen as establishing a cline of meaning as Force:enhancement. The terms that do not enhance a core process meaning are not. So, for example, in describing a research objective as

...to look into the relationship between x and y,

the writer is not seen as taking up an opportunity to evoke a positive evaluation of her own research inquiry, but is interpreted as doing so where she describes the objective as

...to explore the relationship between x and y.

4.7 Conclusion

To this point I have explored the application of Appraisal theory in relation to the systems of Attitude and Graduation. The process is a bi-directional one. Readings of evaluative meanings from the texts are theorised in terms of the model, and theoretical options for expressing Attitude and for grading meanings are interrogated in relation to the data. The process has resulted in a detailed elaboration of the kinds of resources that have been deployed in this discourse in the expression of explicit Attitude and in realising Attitude indirectly. It has also resulted in an extension of the model in a number of respects. First, the system of Graduation as Force has been expanded. Force as quantification has been elaborated to include quantification as *amount* and as *extent*, where *extent* has been further differentiated as options of *scope* and *distance*, in both *space* and *time*. In addition the category of enrichment of a process has been expanded to include infusion of manner

into a process as well amplification through a circumstance of manner. The expanded category is referred to as *enhancement*.

A second contribution is in the options for grading as Focus. The notion of focusing categorical boundaries has to this point in the development of the theory concerned the boundaries of things as *valeur*, as in 'a *real* audience' or 'a *true* incentive'. The analysis of Appraisal in this study suggests a differentiation to the notion of grading categorical boundaries of things to include two kinds of focusing: focusing as degree of *authenticity*, and focusing as degree of *specificity*. The specificity of boundaries is exemplified in, for example, '*especially children*', or '*particularly at primary level*'.

A more significant contribution in relation to Focus has been to extend the notion of focusing categorical boundaries to the focusing of processes. The notion of grading the boundaries of a process relates to degrees of *fulfilment*, realised, for example, through conation in the verbal group (as in '*attempt to change*' or '*trying to innovate*') or through phase:reality (as in '*suggested that*' or '*shows that*' or '*seems*'). The theory of Appraisal has provided a framework for considering the kinds of values that are encoded in the texts, the means for encoding these values, and for considering what is being evaluated (in this study identified as field). As such the chapter establishes the theoretical foundation for the explorations of evaluative stance in chapters 5 and 6. In chapters 5, I consider the patterns and distributions, and the meanings construed through resources of Attitude and Graduation and how they function in interaction in texts.