Stance and engagement: a model of interaction in academic discourse

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ABSTRACT A great deal of research has now established that written texts embody interactions between writers and readers. A range of linguistic features have been identified as contributing to the writer's projection of a stance to the material referenced by the text, and, to a lesser extent, the strategies employed to presuppose the active role of an addressee. As yet, however, there is no overall typology of the resources writers employ to express their positions and connect with readers. Based on an analysis of 240 published research articles from eight disciplines and insider informant interviews, I attempt to address this gap and consolidate much of my earlier work to offer a framework for analysing the linguistic resources of inter-subjective positioning. Attending to both stance and engagement, the model provides a comprehensive and integrated way of examining the means by which interaction is achieved in academic argument and how the discoursal preferences of disciplinary communities construct both writers and readers.

KEY WORDS: *academic writing, corpus analysis, disciplinary differences, engagement, evaluation, stance*

Stance and engagement: a model of interaction in academic discourse

Over the past decade or so, academic writing has gradually lost its traditional tag as an objective, faceless and impersonal form of discourse and come to be seen as a persuasive endeavour involving interaction between writers and readers. This view sees academics as not simply producing texts that plausibly represent an external reality, but also as using language to acknowledge, construct and negotiate social relations. Writers seek to offer a credible representation of themselves and their work by claiming solidarity with readers, evaluating their material and acknowledging alternative views, so that controlling the level of personality in a text becomes central to building a convincing argument. Put succinctly, every

successful academic text displays the writer's awareness of both its readers and its consequences.

As this view gains greater currency, more researchers have turned their attention to the concept of evaluation and how it is realized in academic texts. Indeed, much of my own work over the past decade or so has been devoted to this. Consequently, a variety of linguistic resources such as hedges, reporting verbs, *that*-constructions, questions, personal pronouns, and directives have been examined for the role they play in this persuasive endeavour (e.g. Hyland, 2000; Hyland and Tse, forthcoming; Swales, 1990; Thompson, 2001). Despite this plethora of research, however, we do not yet have a model of interpersonal discourse that unites and integrates these features and that emerges from the study of academic writing itself. How *do* academic writers use language to express a stance and relate to their readers? This is the question addressed in this article, that brings together a diverse array of features by drawing on interviews and a corpus of 240 research articles to offer a framework for understanding the linguistic resources of academic interaction. My aim, then, is to consolidate my previous work using this corpus to offer a model of stance and engagement in academic texts.

Interaction and evaluation

Evaluation, as Bondi and Mauranen (2003) have recently observed, 'is an elusive concept'. For while we recognize interaction and evaluation in academic texts, it is not always clear how they are achieved. The ways that writers and speakers express their opinions have long been recognized as an important feature of language, however, and research has attempted to account for these meanings in a number of ways. Hunston and Thompson (2000) use the term 'evaluation' to refer to the writer's judgements, feelings, or viewpoint about something, and others have described these varied linguistic resources as *attitude* (Halliday, 1994), *epistemic modality* (Hyland, 1998), *appraisal* (Martin, 2000; White, 2003), *stance* (Biber and Finegan, 1989; Hyland, 1999), and *metadiscourse* (Crismore, 1989; Hyland and Tse, 2004).

Interest in the interpersonal dimension of writing has, in fact, always been central to both systemic functional and social constructionist frameworks, which share the view that all language use is related to specific social, cultural and institutional contexts. These approaches have sought to elaborate the ways linguistic features create this relationship as writers comment on their propositions and shape their texts to the expectations of their audiences. Perhaps the most systematic approach to these issues to date has been the work on appraisal which offers a typology of evaluative resources available in English (Martin, 2000). For Martin, appraisal largely concerns the speaker's attitudinal positions, distinguishing three sub-categories of affect, judgement, and appreciation, roughly glossed as construing emotion, moral assessments, and aesthetic values respectively, and the ways these are graded for intensity. While this broad

characterization is interesting, however, it is unclear how far these resources are actually employed in particular registers and to what extent they can be seen as comprising core semantic features in given contexts of use.

Because the work on evaluation and stance is relatively new, much of it has tended to concentrate on mass audience texts, such as journalism, politics, and media discourses, which are likely to yield the richest crop of explicitly evaluative examples. Yet these public genres tend to offer writers far more freedom to position themselves interpersonally than academic genres. Because we do not yet have a model of evaluative discourse that emerges from the study of academic writing itself, we cannot say which features are *typical* in scholarly writing, rather than which are *possible*. It seems, for example, that 'attitude' in academic texts more often concerns writers' judgements of epistemic probability and estimations of value, with affective meanings less prominent (Hyland, 1999, 2000). The role of hedging and boosting, for instance, is well documented in academic prose as communicative strategies for conveying reliability and strategically manipulating the strength of commitment to claims to achieve interpersonal goals.

An important consideration here is that evaluation is always carried out in relation to some standard. Personal judgements are only convincing, or even meaningful, when they contribute to and connect with a communal ideology or value system concerning what is taken to be normal, interesting, relevant, novel, useful, good, bad, and so on. Academic writers' use of evaluative resources is influenced by different epistemological assumptions and permissible criteria of justification, and this points to and reinforces specific cultural and institutional contexts. Writers' evaluative choices, in other words, are not made from all the alternatives the language makes available, but from a more restricted sub-set of options which reveal how they understand their communities through the assumptions these encode. Meanings are ultimately produced in the interaction between writers and readers in specific social circumstances, which means that a general categorization of interactional features is unable to show how academic writers, through their disciplinary practices, construct and maintain relationships with their readers and thus with their communities.

To be persuasive, writers need to connect with this value system, making rhetorical choices which evaluate both their propositions, and their audience. In sum, to understand what counts as effective persuasion in academic writing, every instance of evaluation has to be seen as an act socially situated in a disciplinary or institutional context.

Stance and engagement

Interaction in academic writing essentially involves 'positioning', or adopting a point of view in relation to both the issues discussed in the text and to others who hold points of view on those issues. In claiming a right to be heard, and to have their work taken seriously, writers must display a competence as disciplinary

insiders. This competence is, at least in part, achieved through a writer–reader dialogue which situates both their research and themselves, establishing relationships between people, and between people and ideas. Successful academic writing thus depends on the individual writer's projection of a shared professional context. That is, in pursuing their personal and disciplinary goals, writers seek to create a recognizable social world through rhetorical choices which allow them to conduct interpersonal negotiations and balance claims for the significance, originality and plausibility of their work against the convictions and expectations of their readers.

The motivation for these writer–reader interactions lies in the fact that readers can always refute claims and this gives them an active and constitutive role in how writers construct their arguments. Any successfully published research paper anticipates a reader's response and itself responds to a larger discourse already in progress. This locates the writer intertextually within a larger web of opinions (Bakhtin, 1986), and within a community whose members are likely to recognize only certain forms of argument as valid and effective. Results and interpretations need to be presented in ways that readers are likely to find persuasive, and so writers must draw on these to express their positions, represent themselves, and engage their audiences.

Evaluation is therefore critical to academic writing as effective argument represents careful considerations of one's colleagues as writers situate themselves and their work to reflect and shape a valued disciplinary ethos. These interactions are managed by writers in two main ways.

1. *Stance*. They express a textual 'voice' or community recognized personality which, following others, I shall call *stance*. This can be seen as an attitudinal dimension and includes features which refer to the ways writers present themselves and convey their judgements, opinions, and commitments. It is the ways that writers intrude to stamp their personal authority onto their arguments or step back and disguise their involvement.
2. *Engagement*. Writers relate to their readers with respect to the positions advanced in the text, which I call *engagement* (Hyland, 2001). This is an alignment dimension where writers acknowledge and connect to others, recognizing the presence of their readers, pulling them along with their argument, focusing their attention, acknowledging their uncertainties, including them as discourse participants, and guiding them to interpretations.

The key resources by which these interactional macro-functions are realized are summarized in Figure 1 and discussed in more detail below.

Together these resources have a dialogic purpose in that they refer to, anticipate, or otherwise take up the actual or anticipated voices and positions of potential readers (Bakhtin, 1986). Stance and engagement are two sides of the same coin and, because they both contribute to the interpersonal dimension of discourse, there are overlaps between them. Discrete categories inevitably conceal the fact that forms often perform more than one function at once because, in

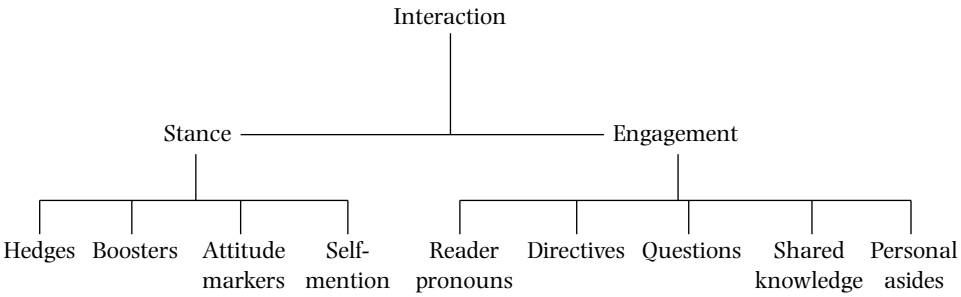

FIGURE 1. *Key resources of academic interaction*

developing their arguments, writers are simultaneously trying to set out a claim, comment on its truth, establish solidarity and represent their credibility. But it is generally possible to identify predominant meanings to compare the rhetorical patterns in different discourse communities.

It should also be borne in mind that evaluation is expressed in a wide range of ways which makes a fine-grained typology problematic. While writers can mark their perspectives explicitly through lexical items (such as *unfortunately, possible, interesting,* etc.), they can also code them less obviously through conjunction, subordination, repetition, contrast, etc. (e.g. Hunston, 1994). Moreover, because the marking of stance and engagement is a highly contextual matter, members can employ evaluations through a shared attitude towards particular methods or theoretical orientations which may be opaque to the analyst. Nor is it always marked by words at all: a writer's decision not to draw an obvious conclusion from an argument, for example, may be read by peers as a significant absence. It may not always be possible therefore to recover the community understandings and references embedded in more implicit realizations.

Distinguishing between these two dimensions is a useful starting point from which to explore how interaction and persuasion are achieved in academic discourse and what these can tell us of the assumptions and practices of different disciplines. This is what I set out to do below. Following a description of the corpus, I sketch out some of the key resources of stance and engagement and discuss what these differences in functionality tell us about the epistemological and social beliefs of disciplinary cultures.

Corpus and methods

My view of stance and engagement is based on a series of studies which draw on both qualitative and quantitative approaches, comprising the analysis of a corpus of published articles and interviews with academics. The text corpus consists of 240 research articles comprising three papers from each of ten leading journals in eight disciplines selected to represent a broad cross-section of

academic practice and facilitate access to informants. The fields were mechanical engineering (ME), electrical engineering (EE), marketing (Mk), philosophy (Phil), sociology (Soc), applied linguistics (AL), physics (Phy) and microbiology (Bio). The value of exploring such a large corpus is that it makes available many instances of the target features in a naturally occurring discourse, replicating the language-using experience of community members.

The texts were converted to an electronic corpus of 1.4 million words and searched for specific features seen as initiating writer–reader interactions using *WordPilot 2000*, a text analysis and concordance programme. A list of 320 potentially productive search items was compiled based on previous research into interactive features (e.g. Biber and Finegan, 1989; Bondi, 1999; Hyland, 1999, 2000), from grammars (Biber et al., 1999; Halliday, 1994), and from the most frequently occurring items in the articles themselves. All cases were examined to ensure they functioned as interactional markers and a sample was double-checked by a colleague working independently.

The interviews were conducted with experienced researcher/writers from the target disciplines using a semi-structured format. These employed open-ended interview prompts which focused on subjects' own and others' writing, but allowed them to raise other relevant issues. Subjects could therefore respond to texts with insider community understandings of rhetorical effectiveness, while also discussing their own discoursal preferences and practices.

Stance and features of writer positioning

Stance concerns *writer-oriented features* of interaction and refers to the ways academics annotate their texts to comment on the possible accuracy or credibility of a claim, the extent they want to commit themselves to it, or the attitude they want to convey to an entity, a proposition, or the reader. I take it to have three main components: *evidentiality, affect* and *presence*. Evidentiality refers to the writer's expressed commitment to the reliability of the propositions he or she presents and their potential impact on the reader; affect involves a broad range of personal and professional attitudes towards what is said, including emotions, perspectives and beliefs; and presence simply concerns the extent to which the writer chooses to project him or herself into the text. It is comprised of four main elements:

1. Hedges.
2. Boosters.
3. Attitude markers.
4. Self-mentions.

Hedges are devices like *possible, might* and *perhaps*, that indicate the writer's decision to withhold complete commitment to a proposition, allowing information to be presented as an opinion rather than accredited fact. Because all statements are evaluated and interpreted through a prism of disciplinary

assumptions, writers must calculate what weight to give to an assertion, attesting to the degree of precision or reliability that they want it to carry and perhaps claiming protection in the event of its eventual overthrow (Hyland, 1998). Hedges, therefore, imply that a statement is based on plausible reasoning rather than certain knowledge, indicating the degree of confidence it is prudent to attribute to it (Example 1):

> (1) Our results suggest that rapid freeze and thaw rates during artificial experiments in the laboratory may cause artifactual formation of embolism. Such experiments may not quantitatively represent the amount of embolism that is formed during winter freezing in nature. In the chaparral at least, low temperature episodes usually result in gradual freeze-thaw events.
>
> (Bio)

Equally importantly, hedges also allow writers to open a discursive space where readers can dispute their interpretations. Claim-making is risky because it can contradict existing literature or challenge the research of one's readers, which means that arguments must accommodate readers' expectations that they will be allowed to participate in a dialogue and that their own views will be acknowledged in the discourse. By marking statements as provisional, hedges seek to involve readers as participants in their ratification, conveying deference, modesty, or respect for colleagues views (Hyland, 1998). Two of my informants noted this:

> Of course, I make decisions about the findings I have, but it is more convincing to tie them closely to the results.
>
> (Phy interview)

> You have to relate what you say to your colleagues and we don't encourage people to go out and nail their colours to the mast as maybe they don't get it published.
>
> (Bio interview)

Boosters, on the other hand, are words like *clearly, obviously* and *demonstrate*, which allow writers to express their certainty in what they say and to mark involvement with the topic and solidarity with their audience. They function to stress shared information, group membership, and engagement with readers (Hyland, 1999). Like hedges, they often occur in clusters, underlining the writer's conviction in his or her argument (Example 2):

> (2) This brings us into conflict with Currie's account, for static images surely cannot trigger our capacity to recognize movement. If that were so, we would see the image as itself moving. With a few interesting exceptions we obviously do not see a static image as moving. Suppose, then, that we say that static images only depict instants. This too creates problems, for it suggests that we have a recognitional capacity for instants, and this seems highly dubious.
>
> (Phil)

Boosters can therefore help writers to present their work with assurance while effecting interpersonal solidarity, setting the caution and self-effacement suggested by hedges against assertion and involvement.

Both boosters and hedges represent a writer's response to the potential viewpoints of readers and an acknowledgement of disciplinary norms of appropriate argument. They balance objective information, subjective evaluation and interpersonal negotiation, and this can be a powerful factor in gaining acceptance for claims. Both strategies emphasize that statements not only communicate ideas, but also the writer's attitude to them and to readers. Writers must weigh up the commitment they want to invest in their arguments based on its epistemic status and the effect this commitment might have on readers' responses. These comments from my interview data suggest the importance of getting this balance right:

> I'm very much aware that I'm building a façade of authority when I write, I really like to get behind my work and get it out there. Strong. Committed. That's the voice I'm trying to promote, even when I'm uncertain I want to be behind what I say.
>
> (Soc interview)

> You have to be seen to believe what you say. That they are *your* arguments. It's what gives you credibility. It's the whole point.
>
> (Phil interview)

> I like tough minded verbs like 'think'. It's important to show where you stand. The people who are best known have staked out the extreme positions. The people who sit in the middle and use words like 'suggest', no one knows their work.
>
> (Soc interview)

Attitude markers indicate the writer's affective, rather than epistemic, attitude to propositions, conveying surprise, agreement, importance, frustration, and so on, rather than commitment. While attitude is expressed throughout a text by the use of subordination, comparatives, progressive particles, punctuation, text location, and so on, it is most explicitly signalled by attitude verbs (e.g. *agree, prefer*), sentence adverbs (*unfortunately, hopefully*), and adjectives (*appropriate, logical, remarkable*). By signalling an assumption of shared attitudes, values and reactions to material, writers both express a position and pull readers into a conspiracy of agreement so that it can often be difficult to dispute these judgements (Example 3):

> (3) these learner variables should prove to be promising areas for further research.
>
> (Bio)

> .... two quantities are rather important and, for this reason, the way they were measured is re-explained here.
>
> (ME)

> The first clue of this emerged when we noticed a quite extraordinary result.
>
> (Phil)

> Student A2 presented another fascinating case study in that he had serious difficulties expressing himself in written English.
>
> (AL)

Self-mention refers to the use of first person pronouns and possessive adjectives to present propositional, affective and interpersonal information (Hyland, 2001). Presenting a discoursal self is central to the writing process (Ivanic, 1998), and writers cannot avoid projecting an impression of themselves and how they stand in relation to their arguments, their discipline, and their readers. The presence or absence of explicit author reference is generally a conscious choice by writers to adopt a particular stance and disciplinary-situated authorial identity. In the sciences it is common for writers to downplay their personal role to highlight the phenomena under study, the replicability of research activities, and the generality of the findings, subordinating their own voice to that of unmediated nature. Such a strategy subtly conveys an empiricist ideology that suggests research outcomes would be the same irrespective of the individual conducting it. One of my respondents expressed this view clearly:

> I feel a paper is stronger if we are allowed to see what was done without 'we did this' and 'we think that'. Of course we know there are researchers there, making interpretations and so on, but this is just assumed. It's part of the background. I'm looking for something interesting in the study and it shouldn't really matter who did what in any case.
>
> (Bio interview)

In the humanities and social sciences, in contrast, the use of the first person is closely related to the desire to both strongly identify oneself with a particular argument and to gain credit for an individual perspective. Personal reference is a clear indication of the perspective from which a statement should be interpreted, enabling writers to emphasize their own contribution to the field and to seek agreement for it (Example 4):

> (4) I argue that their treatment is superficial because, despite appearances, it relies solely on a sociological, as opposed to an ethical, orientation to develop a response.
>
> (Soc)

> I bring to bear on the problem my own experience. This experience contains ideas derived from reading I have done which might be relevant to my puzzlement as well as my personal contacts with teaching contexts.
>
> (AL)

In these more discursive domains, then, self-mention clearly demarcates the writer's role in the research:

> Using 'I' emphasizes what you have done. What is yours in any piece of research. I notice it in papers and use it a lot myself.
>
> (Soc interview)

> The personal pronoun 'I' is very important in philosophy. It not only tells people that it is your own unique point of view, but that you believe what you are saying. It shows your colleagues where you stand in relation to the issues and in relation to where they stand on them. It marks out the differences.
>
> (Phil interview)

Engagement and features of reader positioning

In comparison with stance, the ways writers bring readers into the discourse to anticipate their possible objections and engage them in appropriate ways have been relatively neglected in the literature. Based on their previous experiences with texts, writers make predictions about how readers are likely to react to their arguments. They know what they are likely to find persuasive, where they will need help in interpreting the argument, what objections they are likely to raise, and so on. This process of audience evaluation therefore assists writers in constructing an effective line of reasoning and, like stance options, also points to the ways language is related to specific cultural and institutional contexts (Hyland, 2001). There are two main purposes to writers' uses of engagement strategies:

1. Acknowledgement of the need to adequately meet readers' expectations of inclusion and disciplinary solidarity. Here we find readers addressed as participants in an argument with reader pronouns and interjections.
2. To rhetorically position the audience. Here the writer pulls readers into the discourse at critical points, predicting possible objections and guiding them to particular interpretations with questions, directives and references to shared knowledge.

Again, these two functions are not always clearly distinguishable, as writers invariably use language to solicit reader collusion on more than one front simultaneously. They do, however, help us to see some of the ways writers project readers into texts and how this is done in different disciplines. There are five main elements to engagement:

1. Reader pronouns.
2. Personal asides.
3. Appeals to shared knowledge.
4. Directives.
5. Questions.

Reader pronouns are perhaps the most explicit way that readers are brought into a discourse. *You* and *your* are actually the clearest way a writer can acknowledge the reader's presence, but these forms are rare outside of philosophy, probably because they imply a lack of involvement between participants. Instead, there is enormous emphasis on binding writer and reader together through inclusive *we*, which is the most frequent engagement device in academic writing. It sends a clear signal of membership by textually constructing both the writer and the reader as participants with similar understanding and goals. This was recognized by my informants:

> Part of what you are doing in writing a paper is getting your readers onside, not just getting down a list of facts, but showing that you have similar interests and concerns. That you are looking at issues in much the same way they would, not spelling

> everything out, but following the same procedures and asking the questions they might have.
>
> (Bio interview)

> I often use 'we' to include readers. I suppose it brings out something of the collective endeavour, what we all know and want to accomplish. I've never thought of it as a strategy, but I suppose I am trying to lead readers along with me.
>
> (ME interview)

In addition to claiming solidarity, these devices also set up a dialogue by weaving the potential point of view of readers into the discourse, thereby anticipating their objections, voicing their concerns, and expressing their views. Thus, *we* helps guide readers through an argument and towards a preferred interpretation, often shading into explicit positioning of the reader (Example 5):

> (5) Now that we have a plausible theory of depiction, we should be able to answer the question of what static images depict. But this turns out to be not at all a straightforward matter. We seem, in fact, to be faced with a dilemma. Suppose we say that static images can depict movement. This brings us into conflict with Currie's account,.....
>
> (Phil)

> Although we lack knowledge about a definitive biological function for the transcripts from the 93D locus, their sequences provide us with an ideal system to identify a specific transcriptionally active site in embryonic nuclei.
>
> (Bio)

Personal asides allow writers to address readers directly by briefly interrupting the argument to offer a comment on what has been said. While asides express something of the writer's personality and willingness to explicitly intervene to offer a view, they can also be seen as a key reader-oriented strategy. By turning to the reader in mid-flow, the writer acknowledges and responds to an active audience, often to initiate a brief dialogue that is largely interpersonal. As we can see, such comments often add more to the writer–reader relationship than to the propositional development of the discourse (Example 6):

> (6) And – as I believe many TESOL professionals will readily acknowledge – critical thinking has now begun to make its mark, particularly in the area of L2 composition.
>
> (AL)

> He above all provoked the mistrust of academics, both because of his trenchant opinions (often, it is true, insufficiently thought out) and his political opinions.
>
> (Soc)

> What sort of rigidity a designator is endowed with seems to be determined by convention (this, by the way, is exactly the target of Wittgensteinian critiques of Kripke's essentialism).
>
> (Phil)

This kind of engagement builds a relationship between participants which is not dependent on an assessment of what needs to be made explicit to elaborate a position or ease processing constraints. It is an intervention simply to connect: to

show that both writer and readers are engaged in the same game and are in a position to draw on shared understandings. While all writing needs to solicit reader collusion, this kind of engagement is far more common in the soft fields. Because they deal with greater contextual vagaries, less predictable variables, and more diverse research outcomes, readers must be drawn in and be involved as participants in a dialogue to a greater extent than in the sciences.

Appeals to shared knowledge seek to position readers within apparently naturalized boundaries of disciplinary understandings. The notion of 'sharedness' is often invoked by writers to smuggle contested ideas into their argument, but here I am simply referring to the presence of explicit markers where readers are asked to recognize something as familiar or accepted. Obviously readers can only be brought to agree with the writer by building on some kind of implicit contract concerning what can be accepted, but often these constructions of solidarity involve explicit calls asking readers to identify with particular views. In doing so, writers are actually constructing readers by presupposing that they hold such beliefs, assigning to them a role in creating the argument, acknowledging their contribution while moving the focus of the discourse away from the writer to shape the role of the reader (Example 7):

> (7) Of course, we know that the indigenous communities of today have been reorganized by the catholic church in colonial times and after,.....
>
> (Soc)

> This tendency obviously reflects the preponderance of brand-image advertising in fashion merchandising.
>
> (Mk)

> Chesterton was of course wrong to suppose that Islam denied 'even souls to women'.
>
> (Phil)

> This measurement is distinctly different from the more familiar NMR pulsed field gradient measurement of solvent self-diffusion.
>
> (Phy)

Over three-quarters of such explicit appeals to collective understandings in the corpus were in the soft papers. Writers of scientific papers expect their readers to have considerable domain knowledge and to be able to decode references to specialized methods, instruments, materials, and models, but these understandings are signalled less explicitly.

Directives instruct the reader to perform an action or to see things in a way determined by the writer. They are signalled mainly by the presence of an imperative (like *consider, note,* and *imagine*); by a modal of obligation addressed to the reader (such as *must, should,* and *ought*); and by a predicative adjective expressing the writer's judgement of necessity/importance (*It is important to understand ...*). Directives can be seen as directing readers to engage in three main kinds of activity (Hyland, 2002a):

1. Textual acts.

2. Physical acts.
3. Cognitive acts.

First, *textual acts* are used to metadiscoursally guide readers through the discussion, steering them to another part of the text or to another text (Example 8):

(8) See Lambert and Jones (1997) for a full discussion of this point. (Soc)

Look at Table 2 again for examples of behavioristic variables. (Mk)

Consult Cormier and Gunn 1992 for a recent survey (EE)

Second, *physical acts* instruct readers how to carry out research processes or to perform some action in the real world (Example 9):

(9) Before attempting to measure the density of the interface states, one should freeze the motion of charges in the insulator. (EE)

Mount the specimen on the lower grip of the machine first, ... (Bio)

Set the sliding amplitude at 30mm traveling distance. (ME)

Finally, *cognitive acts* guide readers through a line of reasoning, or get them to understand a point in a certain way and are therefore potentially the most threatening type of directives. They accounted for almost half of all directives in the corpus, explicitly positioning readers by leading them through an argument to the writer's claims (Example 10) or emphasizing what they should attend to in the argument (Example 11):

(10) Consider a sequence of batches in an optimal schedule. (EE)

Think about it. What if we eventually learn how to communicate with aliens. (Soc)

(11) It is important to note that these results do indeed warrant the view that.. (AL)

What has to be recognised is that these issues..... (ME)

Questions are the strategy of dialogic involvement *par excellence*, inviting engagement and bringing the interlocutor into an arena where they can be led to the writer's viewpoint (Hyland, 2002b). They arouse interest and encourage the reader to explore an unresolved issue with the writer as an equal, a conversational partner, sharing his or her curiosity and following where the argument leads. Over 80 percent of questions in the corpus, however, were rhetorical, presenting an opinion as an interrogative so the reader appears to be the judge,

but actually expecting no response. This kind of rhetorical positioning of readers is perhaps most obvious when the writer poses a question only to reply immediately, simultaneously initiating and closing the dialogue (Example 12):

> (12) Is it, in fact, necessary to choose between nurture and nature? My contention is that it is not.
>
> (Soc)

> What do these two have in common, one might ask? The answer is that they share the same politics.
>
> (AL)

> Why does the capacitance behave this way? To understand we first notice that at large B there are regular and nearly equal-spaced peaks in both C3,(B) and C31(- B).
>
> (Phy)

Stance and engagement practices: corpus findings

Analysis of the research article corpus shows that the expression of stance and engagement is an important feature of academic writing, with 200 occurrences in each paper, about one every 28 words. Table 1 shows that stance markers were about five times more common than engagement features and that hedges were by far the most frequent feature of writer perspective in the corpus, reflecting the critical importance of distinguishing fact from opinion and the need for writers to present their claims with appropriate caution and regard to colleagues' views.

The significance of these frequencies can be more clearly understood in comparison to other common features of published academic writing. Biber et al. (1999), for instance, give figures of 18.5 cases per 1000 words for passive voice constructions and 20 per 1000 words for past tense verbs. These overt interaction markers can therefore be seen as an important element of academic prose. Perhaps more interesting, however, are the disciplinary distributions. Table 2 shows the density of features in each discipline normalized to a text length of 1000 words. As can be seen, the more discursive 'soft' fields of philosophy, marketing, sociology and applied linguistics, contained the highest proportion of

TABLE 1. *Stance and engagement features in the research articles*

Stance	*Items per 1000 words*	*% of total*	*Engagement*	*Items per 1000 words*	*% of total*
Hedges	14.5	46.6	Reader pronouns	2.9	49.1
Attitude markers	6.4	20.5	Directives	1.9	32.3
Boosters	5.8	19.2	Questions	0.5	8.5
Self-mention	4.2	13.7	Knowledge ref	0.5	8.2
			Asides	0.1	1.9
Totals	30.9	100		5.9	100

TABLE 2. *Stance and engagement features by discipline (per 1000 words)*

Feature	*Phil*	*Soc*	*AL*	*Mk*	*Phy*	*Bio*	*ME*	*EE*	*Total*
Stance	**42.8**	**31.1**	**37.2**	**39.5**	**25.0**	**23.8**	**19.8**	**21.6**	**30.9**
Hedges	18.5	14.7	18.0	20.0	9.6	13.6	8.2	9.6	14.5
Attitude mkrs	8.9	7.0	8.6	6.9	3.9	2.9	5.6	5.5	6.4
Boosters	9.7	5.1	6.2	7.1	6.0	3.9	5.0	3.2	5.8
Self-mention	5.7	4.3	4.4	5.5	5.5	3.4	1.0	3.3	4.2
Engagement	**16.3**	**5.1**	**5.0**	**3.2**	**4.9**	**1.6**	**2.8**	**4.3**	**5.9**
Reader ref	11.0	2.3	1.9	1.1	2.1	0.1	0.5	1.0	2.9
Directives	2.6	1.6	2.0	1.3	2.1	1.3	2.0	2.9	1.9
Questions	1.4	0.7	0.5	0.3	0.1	0.1	0.1	0.0	0.5
Shared knowledge	1.0	0.4	0.6	0.4	0.5	0.1	0.3	0.4	0.5
Asides	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Total	**59.1**	**36.2**	**42.2**	**42.7**	**29.9**	**25.4**	**22.6**	**25.9**	**36.8**

interactional markers with some 75 percent more items than the engineering and science papers.

Stance, engagement and disciplinarity

It is clear that writers in different disciplines represent themselves, their work and their readers in different ways, with those in the humanities and social sciences taking far more explicitly involved and personal positions than those in the science and engineering fields. As I noted at the beginning of this article, the reason for this is that the resources of language mediate their contexts, working to construe the characteristic structures of knowledge domains and argument forms of the disciplines that create them.

In broad terms, rhetorical practices are inextricably related to the purposes of the disciplines. Natural scientists tend to see their goal as producing public knowledge able to withstand the rigours of falsifiability and developed through relatively steady cumulative growth (Becher, 1989). The fact that this research often occupies considerable investments in money, training, equipment, and expertise means it is frequently concentrated at a few sites and commits scientists to involvement in specific research areas for many years. Problems therefore emerge in an established context so that readers are often familiar with prior texts and research, and that the novelty and significance of contributions can easily be recognized. The soft knowledge domains, in contrast, are more interpretative and less abstract, producing discourses which often recast knowledge as sympathetic understanding, promoting tolerance in readers through an ethical rather than cognitive progression (Dillon, 1991; Hyland, 2000). There is, moreover, less control of variables and greater possibilities for diverse outcomes, so

writers must spell out their evaluations and work harder to establish an understanding with readers.

While there are clear dangers in reifying the ideologies of practitioners, these broad ontological representations have real rhetorical effects. They allow, for instance, the sciences to emphasize demonstrable generalizations rather than interpreting individuals, so greater burden is placed on research practices and the methods, procedures and equipment used. New knowledge is accepted on the basis of empirical demonstration, and science writing reinforces this by highlighting a gap in knowledge, presenting a hypothesis related to this gap, and then conducting experiments and presenting findings to support the hypothesis. In soft areas, however, the context often has to be elaborated anew, its more diverse components reconstructed for a less cohesive readership. Writers are far less able to rely on general understandings and on the acceptance of proven quantitative methods to establish their claims and this increases the need for more explicit evaluation and engagement. Personal credibility, and explicitly getting behind arguments, play a far greater part in creating a convincing discourse for these writers.

The suggestion that 'hard' knowledge is cumulative and tightly structured not only allows for succinct communication, but also contributes to the apparently 'strong' claims of the sciences. The degree to which the background to a problem and the appropriate methods for its investigation can be taken for granted means there are relatively clear criteria for establishing or refuting claims and this is reflected in writers' deployment of evidential markers. While writers in all disciplines used hedges in the evaluation of their statements, they were considerably more frequent in the soft disciplines, perhaps indicating less assurance about what colleagues could be safely assumed to accept. The use of a highly formalized reporting system also allows writers in the hard disciplines to minimize their presence in their texts. In the soft disciplines where what counts as adequate explanation is less assured, interpretative variation increases and writers must rely to a greater extent on a personal projection into the text, through self-mention and attitude markers to invoke an intelligent reader and a credible, collegial writer.

In addition to creating an impression of authority, integrity and credibility through choices from the stance options, writers are able to either highlight or downplay the presence of their readers in the text. As we have seen, the most frequent engagement devices in the corpus were reader pronouns and over 80 percent of these occurred in the soft discipline papers where they functioned to appeal to scholarly solidarity, presupposing a set of mutual, discipline-identifying understandings linking writer and reader. They also claim authority as well as communality, however, addressing the reader from a position of confidence as several of my informants noted:

> I suppose we help to finesse a positive response – we are all in this together kind of thing. I use it to signal that I am on the same wavelength, drawing on the same assumptions and asking the same questions.
>
> (Mk interview)

> It helps to locate you in a network. It shows that you are just doing and thinking what they might do and think. Or what you would like them to, anyway.
>
> (Soc interview)

Similarly, questions were largely confined to the soft fields. The fact they reach out to readers was seen as a distraction by my science informants:

> Questions are quite rare in my field I think. You might find them in textbooks I suppose, but generally we don't use them. They seem rather intrusive, don't they? Too personal. We generally prefer not to be too intrusive.
>
> (ME interview)

> I am looking for the results in a paper, and to see if the method was sound. I am looking for relevance and that kind of dressing is irrelevant. People don't ask questions as it would be seen as irrelevant. And condescending probably.
>
> (EE interview)

In contrast, the soft knowledge writers saw them as an important way of relating to readers:

> In my field that's all there are, questions. Putting the main issues in the form of questions is a way of presenting my argument clearly and showing them I am on the same wavelength as them.
>
> (Phil interview)

> Often I structure the argument by putting the problems that they might ask.
>
> (Mk interview)

Finally, directives were the only interactive feature which occurred more frequently in the science and engineering papers. Generally, explicit engagement is a feature of the soft disciplines, where writers are less able to rely on the explanatory value of accepted procedures, but directives are a potentially risky tactic and, as a result, most directives in the soft fields were textual, directing readers to a reference rather than informing them how they should interpret an argument. Two of my respondents noted this in their interviews:

> I am very conscious of using words like 'must' and 'consider' and so on and use them for a purpose. I want to say 'Right, stop here. This is important and I want you to take notice of it'. So I suppose I am trying to take control of the reader and getting them to see things my way.
>
> (Soc interview)

> I am aware of the effect that an imperative can have so I tend to use the more gentle ones. I don't want to bang them over the head with an argument I want them to reflect on what I'm saying. I use 'consider' and 'let's look at this' rather than something stronger.
>
> (AL interview)

The more linear and problem-oriented approach to knowledge construction in the hard knowledge fields, on the other hand, allows arguments to be formulated in a highly standardized code. Articles in the sciences also tend to be much shorter, probably due to editorial efforts to accommodate the rapid growth of knowledge and high submission rates in many sciences. These factors place a

premium on succinctness, and directives provide an economy of expression highly valued by space-conscious editors and information-saturated scientists, as several informants noted:

> I rarely give a lot of attention to the dressing, I look for the meat – the findings – and if the argument is sound. If someone wants to save me time in getting there then that is fine. No, I'm not worried about imperatives leading me through it.
>
> (EE interview)

> I'm very conscious of how I write and I am happy to use an imperative if it puts my idea over clearly. Often we are trying to work to word limits anyway, squeezing fairly complex arguments into a tight space.
>
> (ME interview)

In sum, these different features, taken together, are important ways of situating academic arguments in the interactions of members of disciplinary communities. They represent relatively conventional ways of making meaning and so elucidate a context for interpretation, showing how writers and readers make connections, through texts, to their disciplinary cultures.

Conclusion

My claim has been that effective academic writing depends on rhetorical decisions about interpersonal intrusion and I have suggested a model which attempts to show how writers select and deploy community-sensitive linguistic resources to represent themselves, their positions and their readers. The account I have provided, however, is necessarily a partial one, representing only the broadest categories of rhetorical function. There are certainly more fine-grained distinctions to be made among these resources which are likely to offer further insights into the rhetorical options available to writers and the patterns of effective persuasion employed by different communities.

There are also obvious limitations with the kind of corpus approach I have adopted. Unlike the detailed studies of part genres, such as Swales' (1990) work on introductions, Brenton's (1996) study of conference abstracts, or Brett's (1994) analysis of results sections, for example, a corpus study is unable to provide information about where these features are likely to cluster. Several studies suggest that greater writer intrusion is a characteristic of Introduction and Discussion sections, where argument is emphasized and decisions, claims and justifications are usually found (e.g. Gosden, 1993; Hanania and Akhtar, 1985). While it seems to be an intuitively reasonable assumption that stance and engagement work is most likely to be done here, the division of research papers into rhetorically simple and detached Methods and Results, and complex, subjective and author-centred Introductions and Discussions might be unwise. Even the most rhetorically innocent sections reveal writers' efforts to persuade their audience of their claims, so that stance and engagement are likely to figure, in different ways, across the research paper. Indeed, as Knorr-Cetina (1981) pointed out many years ago, the IMRD structure is itself a rhetorical artefact.

It should also be noted that this creation of an authorial persona is an act of personal choice, and the influence of individual personality, confidence, experience, and ideological preference are clearly important. We are not the instruments of our disciplines and variables such as individuality and ideolecticity are important limitations on the kind of analysis presented here. It may even be the case, as John Swales (pers. comm.) has observed, that a few famous writers (perhaps Heidegger, Wittgenstein, Sartre, and Halliday) do not play this interactive game with their audiences. However, writers do not act in a social vacuum, and knowledge is not constructed outside particular communities of practice. Such communities exist in virtue of a shared set of assumptions and routines about how to collectively deal with and represent their experiences. The ways language is used on particular occasions are not wholly determined by these assumptions, but a disciplinary voice can only be achieved through a process of participating in such communities and connecting with these socially determined and approved beliefs and value positions. In this way, independent creativity is shaped by accountability to shared practices.

I hope to have shown, then, that stance and engagement are important elements both of a writer's argument and of a disciplinary context as they seek to bring writer and readers into a text as participants in an unfolding dialogue. The model presented here offers a plausible description of academic interaction and suggests how writers anticipate and understand their readers' background knowledge, interests, and interpersonal expectations to control how they respond to a text and to manage the impression they gain of the writer.

REFERENCES

Bakhtin, M. (1986) *The Dialogic Imagination: Four Essays* (ed. M. Holquist, trans. C. Emerson and M. Holquist). Austin: University of Texas Press.

Becher, T. (1989) *Academic Tribes and Territories: Intellectual Inquiry and the Cultures of Disciplines*. Milton Keynes: SRHE/OUP.

Biber, D. and Finegan, E. (1989) 'Styles of Stance in English: Lexical and Grammatical Marking of Evidentiality and Affect', *Text* 9(1): 93–124.

Biber, D., Johansson, S., Leech, G., Conrad, S. and Finegan, E. (1999) *Longman Grammar of Spoken and Written English*. Harlow: Longman.

Bondi, M. (1999) *English across Genres: Language Variation in the Discourse of Economics.* Modena: Edizioni Il Fiorino.

Bondi, M. and Mauranen, A. (2003) 'Editorial: Evaluative Language Use in Academic Discourse', *Journal of English for Academic Purposes* 2(4): 269–71.

Brenton, F. (1996) 'Rhetoric in Competition: The Formation of Organizational Discourse in Conference on College Composition and Communication Abstracts', *Written Communication* 13(3): 355–84.

Brett, P. (1994) 'A Genre Analysis of the Results Section of Sociology Articles', *English for Specific Purposes* 13(1): 47–59.

Crismore, A. (1989) *Talking with Readers: Metadiscourse as Rhetorical Act.* New York: Peter Lang.

Dillon, G. (1991) *Contending Rhetorics: Writing in Academic Disciplines*. Bloomington: Indiana University Press.

Gosden, H. (1993) 'Discourse Functions of Subject in Scientific Research Articles', *Applied Linguistics* 14(1): 56–75.
Halliday, M.A.K. (1994) *An Introduction to Functional Grammar* (2nd edn). London: Edward Arnold.
Hanania, E.A S. and Akhtar, K. (1985) 'Verb Form and Rhetorical Function in Science Writing: A Study of MS Theses in Biology, Chemistry, and Physics', *English for Specific Purpose* 4, 49–58.
Hunston, S. (1994) 'Evaluation and Organisation in a Sample of Written Academic Discourse', in M. Coulthard (ed.) *Advances in Written Text Analysis*, pp. 191–218. London: Routledge.
Hunston, S. and Thompson, G. (eds) (2000) *Evaluation in Text*. Oxford: Oxford University Press.
Hyland, K. (1998) *Hedging in Scientific Research Articles*. Amsterdam: John Benjamins.
Hyland, K. (1999) 'Disciplinary Discourses: Writer Stance in Research Articles', in C. Candlin and K. Hyland (eds) *Writing: Texts: Processes and Practices*, pp. 99–121. London: Longman.
Hyland, K. (2000) *Disciplinary Discourses: Social Interactions in Academic Writing*. London: Longman.
Hyland, K. (2001) 'Bringing in the Reader: Addressee Features in Academic Writing', *Written Communication* 18(4): 549–74.
Hyland, K. (2002a) 'Directives: Power and Engagement in Academic Writing', *Applied Linguistics* 23(2): 215–39.
Hyland, K. (2002b) 'What Do They Mean? Questions in Academic Writing', *Text* 22(4): 529–57.
Hyland, K. and Tse, P. (2004) 'Metadiscourse in Academic Writing: A Reappraisal', *Applied Linguistics* 25(2): 156–77.
Hyland, K. and Tse, P. (forthcoming) 'Hooking the Reader: A Corpus Study of *Evaluative That* in Abstracts', *English for Specific Purposes*.
Ivanic, R. (1998) *Writing and Identity: The Discoursal Construction of Identity in Academic Writing.* Amsterdam: John Benjamins.
Knorr-Cetina, K. (1981) *The Manufacture of Knowledge*. Oxford: Pergamon Press.
Martin, J. (2000) 'Beyond Exchange: APPRAISAL Systems in English', in S. Hunston and G. Thompson (eds) *Evaluation in Text*. Oxford: Oxford University Press.
Swales, J. (1990) *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press.
Thompson, G. (2001) 'Interaction in Academic Writing: Learning to Argue with the Reader', *Applied Linguistics* 22(1): 58–78.
White, P. (2003) 'Beyond Modality and Hedging: A Dialogic View of the Language of Intersubjective Stance', *Text* 23(2): 2594–8.

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