Academic Discourse

English in a Global Context

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2 Approaches

Having constructed a broad view of the topic, I now want to begin to fill in some of the details by looking a little more closely at how analysts go about researching and understanding academic discourse. By *approach*, then, I mean the adoption of one or more ways of conducting analyses supported by an integrative theory or conception. First, however, I have to come clean and admit that in aiming for seamless coherence, my first chapter papered over a variety of different conceptions of discourse and approaches to its study. This chapter goes some way to making more explicit what some of these are. Following an overview of some key issues in the ways social researchers understand discourse analysis, I go on to look at the main approaches to the study of academic discourse, dividing broadly into three groups:

- **Textual:** approaches which focus on language choices, meanings and patterns in texts including those based on genre, corpora and multimodal analyses.
- **Contextual:** these begin with wider situational aspects, such as the sociology of science, ethnography and sociohistorical perspectives.
- **Critical:** a category which brings an attitude of criticality, such as Critical Discourse Analysis and Academic Literacies, while drawing on blends of other methods.

2.1 Some issues in discourse analysis

Discourse analysis is a way of studying language in action, looking at texts in relation to the social contexts in which they are used. Because language is an irreducible part of social life, and connected to almost everything that goes on in the world, social research of any kind always needs to take account of it, and for that reason the term discourse analysis is something of a catch all, covering a range of meanings. Across the social sciences *discourse* is, in fact, becoming a heavily overloaded term with several distinct uses in play. To oversimplify, these spread along a cline between (i) those which focus on the analysis of speech

and writing to bring out the dynamics and conventions which pattern particular social situations and (ii) those which have a more social theoretical orientation and consider the institutionalized ways of thinking which define our social boundaries. Discourse, in other words, spreads between two poles giving more-or-less emphasis to concrete texts and institutional social practices.

i. Texts and life-worlds

There is a long tradition of treating discourse in linguistic terms, informed by both pragmatics and a maturing, activity-centred linguistic perspective on language. This take on discourse recognizes 'language-in-use' as a legitimate object of analysis and sets out to discover grammatical and structural features of language operating at levels higher than the sentence (Blommeart, 2005). Many different frameworks have been developed for this purpose, crossing a number of disciplines and drawing on a broad variety of assumptions and analytical methods. They all, however, regard linguistic signalling and organization patterns as potential resources for interpreting text meanings and as contributing to our understanding of how texts are produced and used.

Many social scientists, on the other hand, particularly those influenced by Foucault (1972), pay very little attention to textual features. Instead they focus on the 'socially constructive effects' of discourse, or on the ways it functions to create social, cultural and institutional developments and to influence how we understand the world. This is what we might describe as discourse as form-of-life: the stuff of our everyday world of activities and institutions which is created by our routine uses of language, together with other aspects of social practices. It is through discourses, for example, that we build meanings for things in the world such as lectures, presentations, meetings and research; it is the ways that we construct identities for ourselves and relationships with others; it is how we distribute prestige and value to ideas and behaviours; and it is the ways we make connections to the past and to the future.

This difference is neatly encapsulated in Gee's (1999) distinction between 'big D' and 'little d' discourse. Gee defines discourse (with a little 'd') as 'language-in-use', that is, language as we use it to enact our identities as teachers, discourse analysts, taxi drivers or particle physicists and how we get things done in the world. Discourse (with a big 'D'), on the other hand, is a wider concept involving both language and other elements. It highlights the fact that our displays of who we are

and what we are doing when we act as members of particular groups, always involves more than just language. As Gee observes:

> It involves acting-interacting-thinking-valuing-talking in the 'appropriate way' with the 'appropriate' props at the 'appropriate' times in the 'appropriate' places. Such socially accepted associations among ways of using language, of thinking, valuing, acting, and interacting in the 'right' places and at the 'right' times with the 'right' objects (associations that can be used to identify oneself as a member of a socially meaningful group or 'social network'), I will refer to as 'Discourses' with a capital 'D'.
>
> (1999: 17)

Discourse, then, is a way of being. It is the institutions, activities and values which we constantly recreate through discourse as members of social groups.

ii. Agency and social structure

Fairclough, like Gee, is just one among many analysts who see no opposition between these two views of discourse and its analysis. He observes that:

> Text analysis is an essential part of discourse analysis, but discourse analysis is not merely the linguistic analysis of texts. I see discourses analysis as 'oscillating' between a focus on specific texts and a focus on what I shall call the 'orders of discourse', the relatively durable social structuring of language which is itself one element of the relatively durable structuring and networking of social practices.
>
> (2003: 3)

For Fairclough, then, this 'oscillation' between texts and the structures which support them is needed to understand how language is used to conduct interactions and how it is embedded in social and cultural practices.

What Fairclough calls 'orders of discourse' are the relatively stabilized configurations of discourse practices and conventions found in particular social domains or institutions. These are Gee's 'Big D' discourses; the genres and styles used for creating meanings in particular areas. In Higher Education, the research, pedagogic and assessment genres of the university and the formal expectations which surround them offer frames for interaction among participants. But they also carry symbolic value because they are linked to, and by repetition reinforce, the values and beliefs of dominant groups. Academic orders of discourse, then, are ideologically shaped by those who exercise authority,

the powerbrokers and gatekeepers of the field. The analysis of academic discourses needs to take both these dimensions of discourse into account.

The point here is that we don't only use discourse to express our attitudes, ideas and understandings, but that these are themselves shaped by discourse. Authorized and valued ways of using language make certain possibilities available to us and exclude others, thereby constraining what can be said and how it can be said. The topics we discuss, how we approach them and the ways we see the world are all influenced by the language we have available to us. Since the late 1970s, work by Kress and Hodge (1979), Fairclough (1989), Van Dijk (1997) and others has pointed to the need to consider these broader social, political and ideological forces that influence many professional and public texts.

This research, however, suggests that the connection between our social arrangements and our discourses is not a deterministic, one way process. We are not simply moulded by the texts we produce and encounter, but also act on these over time so that there is a balancing of human agency and social structure. Put another way, social practices both shape discourses and are themselves shaped by discourses. Giddens (1984) refers to this as the *duality of structure*: social structures (or 'orders of discourse') make social action possible and at the same time social action creates those structures. It is the repetition of the routine acts of individual agents in day-to-day life, including the routine uses of discourses, which reproduces the structure. This, in turn, also creates the possibilities for change. The traditions, institutions, moral codes and established practices which constitute social structures can be transformed when people reproduce them differently by combining different genres or developing them in new ways (Faiclough, 1989).

iii. Writing and speech

In addition to distinctions of text and context and of agency and structure, the term discourse analysis has also been used to refer to different kinds of analyses in two separate contexts: multiple-source, dialogic spoken environments and single-source, monologic written contexts. There are clearly differences between these modes and we often recognize speech to be more highly contextualized, far more dependent on a shared situation, more reliant on immediate feedback and involving more real-time monitoring and less planning. Such differences are generally attributed to the distinct functions that speech and writing have evolved to perform (e.g. Halliday, 1989), or to the degree of detachment and reflection that each permits (e.g. Tanen, 1982).

These different conceptions of speech and writing have, moreover, led to the emergence of different analytic techniques. Studies of spoken discourse have tended to focus far more on the local management of participation such as turn-taking, politeness, utterance sequencing and the sensitivity of interaction to situational and cultural differences. Written discourse analysis, in contrast, has looked more closely at discoursal patterning and contextual factors operating outside the moment of production. We find conversation analysts, speech act philosophers and ethnographers of communication exerting a greater influence on analyses of spoken discourse, and the tools of Systemic Functional Linguistics, text linguistics and Critical Discourse Analysis brought to bear on written texts.

Attempts to identify clear-cut dichotomies between the features of speech and writing, however, have to be treated with caution. It is all too easy to attribute differences to the channel used, rather than to conventions which are specific to particular genres and contexts. This broad distinction thus oversimplifies a more muddied reality. It is often the case that formal written discourse tends to be more lexically dense (with a higher ratio of content words to grammatical words), to have greater nominalization (where events are presented as nouns rather than verbs) and to be more explicit (with clear signalling of semantic relations), but these depend on the purpose of the text and are not absolutes. Such differences are often overstated as a result of focusing on extreme cases such as face-to-face conversation and expository prose, for example, and neglect the considerable diversity of spoken and written genres. In fact, no single dimension of comparison can separate speech and writing and differences should be seen on a continuum rather than as polar opposites of mode.

Comparisons will necessarily reflect differences in the register, purpose and formality of the particular genres studied. Some genres of academic speech, such as supervisory meetings, poster discussions and seminars for example, are closer to casual conversation in their relative informality and spontaneity, blending interactivity with transactional purposes (Biber, 2006). Other genres like prepared lectures and conference presentations, on the other hand, are usually scripted to be delivered orally and are consequently more tightly organized and patterned, while still carrying something of the provisionality and time-constraints of speech (Swales, 2004). We might also note here the complicating role of multimodal semiotics in spoken presentations of various kinds, further undermining a direct spoken–written split in communicative features. The non-verbal dimension of academic speech (and writing) in both structuring talk and conveying information of various kinds is substantial, Kress *et al.* (2001), in fact, argue that meaning

is not created by linguistic means alone but by both linguistic and visual modes acting jointly.

Technological and social changes further blur folk divisions of speech and writing, with new discourse forms increasingly important in the continuous evolution of research and instructional contexts. Much has been written about the potentially dramatic impact of electronic research communications such as e-journals, for example, although we still await their full flowering into new layered, multimodal and hyperlinked documents. More immediate are the changes that electronic media have brought to instructional genres, particularly for online feedback on students' written work, peer conferencing and computer-mediated distance pedagogies. Not only are such genres reshaping teaching, but the absence of physical co-presence seems to be changing our conceptions of what counts as appropriate communication forms by grafting a simulated conversational style onto a written mode.

Having raised a number of issues in how discourse and its analysis are understood, I now turn to describe some of the principal investigative tools employed, grouping them in terms of three main orientations: Textual, contextual and critical.

2.2 Textual approaches

At the beginning of this chapter I suggested that approaches to discourse analysis spread between two poles of a cline, either tending to an emphasis on language or context. The goal of describing and explaining academic discourse means that analyses must ultimately incorporate both dimensions to show how we actively create a world of activities, identities, relationships and institutions through discourse. The notion of *text*, in other words, should be seen as a spoken or written instance of *system*, or the general communicative resources which are available to a particular community. Here, I begin with textual approaches and the ways individuals employ language to structure and express their ideas, identities and communities, focusing on genre, corpora and multimodality.

i. Genre analysis

Like *discourse* itself, *genre analysis* is a broad term embracing a range of tools and attitudes to texts, from detailed qualitative analyses of a single text to more quantitative counts of language features. We can, in other words, examine the actions of individuals as they create particular texts, or we can examine the distribution of different genre features

to see how they cluster in complementary distributions across a range of texts. The first emphasizes the decisions of particular writers while the second steps back to reveal collections of rhetorical choices rather than specific encounters. Different types of genre analysis also draw on different understandings of language and its relationship to social contexts. It is possible, therefore, to identify perspectives influenced by Systemic Functional Linguistics, English for Specific Purposes and New Rhetoric (Hyon, 1996; Hyland, 2004c) with the first two of these taking a more explicitly linguistic approach, largely to inform teaching practice.

Nor is there agreement on the concept of genre itself. It is, for example, seen as *typified rhetorical action* by Miller (1984), as *regularities of staged, goal oriented social processes* by Martin (1993), and as *shared sets of communicative purposes* by Swales (1990). In the most general terms we can follow Bhatia (2002: 22) in saying that 'genre analysis is the study of situated linguistic behaviour in institutionalized academic or professional settings'. But Swales (2004: 61) despairs of pinning down genres more clearly as definitions generally fail to hold true in all cases and often prevent the recognition of new genres. Instead, he suggests that we regard genres metaphorically, and perhaps the most productive metaphor might be to see them as frames for social action which offer users guiding principles for achieving particular recognized purposes by means of language. In other words, genres are schema. From all the possible ways of using language we make a relatively narrow selection and employ this selection repeatedly and routinely to both understand and demonstrate competence in a particular community.

Genres thus provide an orientation to action for both producers and receivers, suggesting ways to do things using language which are recognizable to those we interact with. This ability to see texts as similar or different, and to produce or respond to them appropriately, is possible because communication is a practice based on expectations: our chances of interpreting the writer's (or speaker's) purpose are increased if the writer takes the trouble to anticipate what the we might be expecting based on our previous experiences with texts. Hoey (2001) likens readers and writers to dancers following each other's steps, each assembling sense from a text by anticipating what the other is likely to do by making connections to prior texts. We know immediately, for example, whether a text is an essay, a joke or a lecture and can respond to it and perhaps even construct one of our own, given sufficient practice.

Genres are often associated with recurring rhetorical contexts as we draw on familiar resources to address routine communication needs,

but they also permit expert users a certain leeway and opportunities for innovation. In other words, like dancing, established patterns can form the basis of variations and creativity. This kind of variation is important in creating new forms and genres can be 'sites of contention between stability and change' (Berkenkotter and Huckin, 1995: 6). But genres are not completely open and fluid and such variations are typically circumscribed with limited effects. Expectations for particular conventions of layout and language imply some constraint on choice and so tend towards conformity among genre users which leads to some temporary genre stability. Choice, in fact, is actually defined by constraint and there can be no meaning without it. Devitt (1997) refers to these constraints as a language standard of what is socially and rhetorically appropriate, and while these change over time, there are rewards for playing the game and, as students tend to discover, often consequences for violation.

The genres of the academy represent an enormous assortment which Swales (2004) refers to as a 'constellation' of academic discourse, some of which are shown in Figure 2.1.

Many of these genres interact with, draw on and respond to others in webs of *intertextuality* (Bakhtin, 1986), Useful here is Fairclough's distinction between *manifest intertextuality*, where quotes, paraphrase, citation, and so on signal traces of earlier texts, and *constitutive intertextuality* (or '*interdiscursivity*') where a texts is shaped by borrowing generic or rhetorical conventions from other genres, as in the use of biography in some qualitative research articles, thus merging what may be originally distinct orders of discourse to create new discourses. Genres are also related to each other in clusters of dependence which help construct a particular context. The idea of 'genre set' that Devitt (1991), for example, refers to is the full array of texts a particular group is likely to deal with, so that textbooks, lab reports and lectures may form a set for many science students while 'genre chains' refer to how spoken and written texts can cluster together in a given social context.

Written genres		**Spoken genres**	
Research articles	Book reviews	Lectures	Student presentations
Conference abstracts	PhD dissertations	Seminars	Office hour meetings
Grant proposals	Textbooks	Tutorials	Conference presentations
Undergraduate essays	Reprint requests	Peer study groups	PhD defences
Submission letters	Editor response letters	Colloquia	Admission interviews

Figure 2.1 *Some academic genres*

In sum, despite some terminological and conceptual uncertainties, genre analysis is the major instrument in the text analyst's toolbox.

ii. Corpus analysis

Corpus analysis is 'the study of language based on real life language use' (McEnery and Wilson, 1996: 1), but unlike more qualitative variants of genre analysis it draws on evidence from large databases of electronically encoded texts. A *corpus* is simply a collection of naturally occurring language samples (often consisting of millions of words) which represent a speaker's experience of language in some restricted domain, thereby providing a more solid basis for genre descriptions. While it does not contain any new theories about language, a corpus provides an alternative to intuition by offering both a resource against which intuitions can be tested and 'a motor which can help generate them' (Partington, 1998: 1). In other words, intuition and data work together to offer fresh insights on familiar, but perhaps unnoticed, features of language use. This assists to reduce any bias introduced by looking at just one text, enables analysts to depict what is usual, rather than what is simply grammatically possible, and helps to suggest explanations for why language is used as it is in academic domains and genres.

Corpus studies are therefore based on both qualitative and quantitative methods, using evidence of *frequency* and *association* as starting points for interpretation.

Frequency is a key idea in corpus studies. If a word, string or grammatical pattern occurs regularly in a particular genre or sub-set of language, then it can be taken to be significant in how that genre is routinely constructed by users. Thus Coxhead (2000), for example, shows that a list of 570 word families covers some 8–10 per cent of running words of academic texts while being relatively uncommon in other kinds of texts. Items such as *analyse, process, function* and *significant* are likely to be encountered by most academic readers. We need to be cautious, however, as such 'semi-technical' words are not evenly distributed across the academic register. Analyses of both writing (Hyland and Tse, 2007) and lectures (Thompson, 2006) reveal considerable disciplinary specificity in such frequencies, indicating clear preferences for lexical choices. Analyses also offer insights into the frequencies of other text features as electronic corpora are often annotated, or 'tagged' with additional information such as part of speech codes or sociocultural characteristics of speakers. Biber (1988), for instance, shows how written academic prose is characterized by bundles of grammatical features

such as frequent nouns, long words, attributive adjectives and prepositional phrases which function to present densely packed information.

Frequency information is often supplemented by qualitative analyses of the ways features associate with each other in collocational patterns. Using concordance data, researchers are able to uncover patterns in the surrounding co-text which can suggest clues to the use of target words. Thus analyses can elucidate 'semantic preferences' (Stubbs, 2001) for certain patterns so that, for example, we find the adjective *massive* used in science writing to convey mass, modifying words like *star, planet* and *black hole*, while being used in journalism in the sense of size and collocating with *gamble, profits* and *blow* (Lee in Hunston, 2002: 162).

In addition we find that some words take on particular meanings as a result of their tendency to repeatedly occur in certain semantic environments, sometimes leading to evaluative connotations in a process referred to as 'semantic prosody'. In general use, for instance, the item *cause* normally implies something negative, as in these examples from the BNC newspaper corpus:

1. And that will cause uproar tonight when the general committee gather to ratify the decision.

   . . . on or before Tuesday, March 2, they conspired at Walford Road and elsewhere to cause an explosion in the UK and with possessing a quantity of Semtex.

   Animal studies have shown dioxins to be carcinogenic and to cause birth defects in rats at very high doses.

The strength of collocation can most easily be seen in the use of different clusters across registers, with extended collocations like *as a result of, it should be noted that* and *as can be seen* helping to identify a text as belonging to an academic register while *with regard to*, *in pursuance of*, and *in accordance with* are likely to mark out a legal text (Hyland, 2008a).

Corpus analyses thus help provide a grounded basis for discourse studies, highlight unseen patterns and restrict the influence of intuition on research. The pervasiveness of collocations, in fact, has led Sinclair (1991) to propose that grammar is actually the output of repeated collocational groupings and Hoey (2005) to suggest that every word is mentally 'primed' for use with other words through our incremental experience of them in frequent associations. Corpus analyses have, however, been criticized for providing only a partial account of language use and for offering a description of text as a product rather than discourse as a

process (e.g. Widdowson, 2000a). The fact that corpus data is typically restricted to language at the expense of both non-verbal meanings and the surrounding circumstances of the creation and use of text tends to mean that we are left with rather abstract and disembodied data. While there is something in this, corpus analysis comprises a range of different techniques and these are increasingly used in tandem with other, more qualitative methods to produce a fuller picture of academic discourse.

iii. Multimodal analysis

For many linguists discourse cannot be restricted to linguistic forms of representation alone but comprises all meaningful semiotic activity (e.g. Blommaert, 2005). There has certainly been a shift in our systems of representation away from the purely verbal to the visual in a whole range of genres in domains from advertisements to journalism in recent years, and this trend has also been apparent in research and education. Visuals are often as important as verbal elements in many academic genres and multimodal analyses attempt to offer an integrated perspective to study these developments. Researchers adopting this view consider the specific ways of configuring the world which different modes offer and draw attention to consequent shifts in authority, in forms of meaning and in forms of human engagement with the social and natural world (Kress, 2003; Kress and Van Leeuwen, 2002). Most dramatically, this requires very different semiotic work from the 'reader' as contemporary electronic texts often offer a range of entry points to the 'page' and different reading paths through it when compared with print texts, while involving the reader more actively in filling the relatively 'empty' words with meaning.

Essentially, multimodal analyses seek to describe the potentials and limitations (or 'affordances') for making meaning which inhere in different modes. Considering writing, for example, Kress (2003: 1) argues that writing and image are governed by different logics: writing by time and image by space. So in writing meaning is attached to 'being first' and 'being last' in a sentence, while in a visual it is position which is important, placing something in the centre, for instance, gives it a different significance from placing at the edge, while placing something above can make it 'superior' to what is below. The expansion of genres using new technologies such as e-journals, PowerPoint and digital portfolios in academic contexts thereby hasten and intensify, through their affordances, different potentials for communication, interaction and representation.

Academic written texts, particularly in the sciences, have always been multimodal, but textbooks and articles are now far more heavily

influenced by graphic design than ever before. Graphics typically do more than merely illustrate or supplement information and frequently carry the informative and persuasive weight of an argument. Figures, tables and photographs can occupy up to a half of a contemporary science research article, for example, while pedagogic texts are increasingly multimodal, with coloured maps, graphical representations and photographs helping to both represent an objective world and introduce disciplinary ways of seeing. We cannot, in other words, understand written academic discourse by looking at the resources of writing alone. Learning to read and create images has become a central aspect of learning scientific discourse.

The discourses of the classroom and lecture hall also draw on a multiplicity of representational modes. Kress *et al.* (2001), for example, show how school science teachers orchestrate a complex assembly of meaning resources in their discourse, including image, gesture, speech, writing, models, spatial and bodily codes. Different modes are foregrounded at different parts of lessons in a 'shifting hierarchy' to produce a coherent discourse. Visual material plays an equally prominent role in conference presentations, with something like a new slide every 50 seconds in many science presentations (Rowley-Jolivet, 1999). Dubois observed as long ago as 1980 that scientists frequently structured their talk around their slides, and this practice seems to have become ever more widespread, although there is considerable disciplinary variation in the use of visuals (Swales, 2004).

Few discourse analysts, however, have addressed the interaction between these modes and descriptive studies of lectures and presentations still massively privilege speech. Discussing PowerPoint technology, however, Myers (2000) notes the tyranny of bulletization and the blurring of written and visual modes. More importantly, he points to the rhetorical impact of this presentation software in reducing the speaker from author to animator so that the text is the star of the performance supported by the speaker. While this may overstate matters slightly, it reminds us of how much there is still to learn about the effects of visual presentations.

2.3 Contextual approaches

To understand how language works in the academy we need to move beyond the page or screen to see discourses as firmly embedded in the cultures in which their users participate. If we understand discourse as language-in-action, then this means looking more closely at the ways semiotic resources connect with everyday social, cultural and historical patterns. A second broad group of approaches therefore begins by

foregrounding contextual elements of discourse. This group is potentially very large, but I have collected a variety of tools under three broad headings, each of which deserves more attention than it can receive in the limited space here. These are analyses informed by the sociology of science, by sociohistorical studies and by ethnography.

i. Sociology of science

Sociologists like to explain the beliefs of human communities by referring to aspects of their social organization, but natural science largely escaped this kind of scrutiny until relatively recently. The alleged objectivity of its methods seemed to give science a unique epistemological status which placed it beyond the bounds of sociological analysis. Quite simply, it was not necessary to examine its methods of persuasion because any claim could be tested empirically. But in the 1960s researchers began to look for more social bases for knowledge, questioning the view that texts are deductive proofs of claims or simply the conduit by which ideas and theories are channelled from one individual mind to another. Medawar (1964 (reprinted in 1990)), for example, argued that the scientific paper was 'fraudulent' as it rhetorically disguises methodological choices and interpretations to misrepresent research as an unproblematic inductive process of discovery. Scientific activity and the everyday processes by which research findings are transformed into scientific knowledge therefore became legitimate areas of inquiry.

Taking a strong social constructionist position (discussed briefly in the last chapter), and adopting techniques such as ethnography, participant observation and conversation analysis, sociologists began to insist on the importance of *context* in the creation of knowledge. At the broadest level of context, sociologists have explored the social structure of science, theoretically constructing how we might understand scientific writing as a social act, embedded in the received knowledge of the academic community. Kuhn (1970), for instance, refers to the practices of normal science, where scientific texts manifest the disciplinary perceptions, styles of speculation and other habits of a settled community paradigm. Similarly Lakatos (1978) proposes that a scientific community shares a research programme comprising methods and rules which define what valid research is.

From these perspectives, a model of science emerges where 'independent creativity is disciplined by accountability to shared experience' (Richards, 1987: 200) as scientific methods and findings are coordinated

and approved through public appraisal and peer review. Writers must consider how their research fits with prior work and contributes to that work. The communication system is therefore the basic structural component of the scientific community, and an understanding of knowledge involves an understanding of how it is employed in the social justification of belief. It is the collective agreement of scientists which establishes that a claim has been adequately tested, and it is the verdict of a specially trained audience which is authorized to establish it as knowledge. Research is therefore less a search for truth than a quest for agreement (e.g. Polanyi, 1964: 13), as claims must be critically reassessed by other scientists before they can be regarded as 'well established'.

Studies have also focused on the more immediate contexts of scientific discourse by exploring the connections between writing and research activities. A key work here is Latour and Woolgar's (1979) ethnographic study which suggests that the modern research lab devotes more energy to producing papers than discoveries, and that scientists' time is largely spent in discussing and preparing articles for publication in competition with other labs. They see the lab as a factory where raw materials and labour are processed to produce the marketable products of publications which will enhance the prestige of the lab and attract more funding to continue the process. Other studies have focused on the processes by which research findings gain the status of accredited knowledge through peer review and the uptake of a disciplinary community (e.g. Myers, 1990). Some claims will be ignored or rejected as invalid while others will be recognized through citation and provide support for additional future claims. With time, the successful claim will no longer be referred to but incorporated into arguments as a taken-for-granted assumption. Readers are therefore only fully persuaded when all sources of support have disappeared.

Studies of academic discourse in the sociology of science therefore reveal the ways academic papers are socially situated in institutional and social contexts. They help illuminate how articles are written to provide an account that reformulates research activity in terms of an appropriate, but often contested, disciplinary ideology. This perspective shows us that the scientific writer's purpose is to create a text where a knowledge claim seem unproblematically related to observed data. In part, this involves concealing contingent factors, downplaying the role of social allegiance, self-interest, power and editorial bias, to depict a disinterested, inductive, democratic and goal-directed activity (e.g. Gilbert and Mulkay, 1984).

ii. Sociohistorical approaches

The constructionist idea that things are only true for a particular group at a particular time has generated research into the historical circumstance in which academic discourses emerge and become relatively stabilized in certain periods. These sociohistorical studies trace the evolution of research writing from the advent of modern empirical science in the seventeenth century and adopt methods which span discourse analysis, history and the sociology of science. These studies demonstrate the importance of situating cultural practices in their wider social contexts and represent a significant contribution to how we understand academic discourse. In particular, they show that the writing conventions familiar to us today are not timeless and self-evident means of establishing knowledge but have been consciously developed over time in response to particular social situations.

It is difficult to imagine science in the early Restoration period in England, with its diverse and competing array of cultural practices aimed at describing and controlling the natural world. While the idea of a 'scientific revolution' is now treated with scepticism, there were, nevertheless, large scale attempts to problematize and change classical and medieval beliefs about nature. This period witnessed considerable innovations in ways of identifying, validating and communicating experience; as scientists sought to reject ideas based on trust and authority to find ways of establishing *knowledge*. The concept of knowledge itself, in contrast to an individual's set of beliefs, implies a public and shared commodity, but in the mid-seventeenth century the linguistic practices for establishing the credibility of individual belief and securing its status as knowledge did not exist. It was Robert Boyle and his colleagues at the Royal Society who eventually created rules of discourse which would generate and confirm facts independently of man-made hypotheses, establish conventions of scholarly interaction and create a 'public' for experimental research (e.g. Shapin and Schaffer, 1989).

Essentially, scientific papers evolved as a way of offering a vivid account of experimental performances to distant readers. Although these readers would never see the event themselves, the writer could use the text to create an audience which Shapin (1994) calls 'virtual witnesses'. The reliability of these written accounts crucially depended on two things: (i) the ability to trust in the honesty and incorruptibility of the gentleman scholar within a culture of honour (Shapin, 1994); and (ii) the development of a rhetoric which gave detailed illustrations of experiments and carefully distinguished 'matters of fact' from speculations. Credible knowledge thus emanated from credible persons, and

Robert Boyle was among the most influential of them in creating a scientific rhetoric. His admonishments to avoid a florid style and display personal modesty continues to characterize scientific discourse to this day, but equally important was a probabilistic stance towards natural causes, thus establishing the basis of the experimental programme. Only facts, as discovered rather than invented, could be spoken of assuredly, while opinions as to the causes behind them were to be hedged with utmost caution. Anything else was dogmatism and merely served to undermine both the empiricist model and good manners.

The development of scientific discourse from the 1660s to the present has been traced by Valle (1997) and Atkinson (1999) in analyses of papers in *The Philosophical Transactions of the Royal Society of London*. These analyses show how linguistic practices, particularly those relating to the presentation of experiments, were gradually refined as audiences became increasingly professional, critical and research-motivated. A network of scientists slowly evolved which required institutionalized standards of public argument, and this moved research writing away from scientific reports characterized by narrative structure, personal involvement and author-centred norms of genteel conduct, towards a reporting format with greater emphasis on methodology and experimental description.

The past century has seen further changes, with the de-emphasizing of methods and the substantial expansion of theoretical discussions (Atkinson, 1999; Bazerman, 1988); changes which have probably come about because of the standardization of experimental procedures and the greater need to contextualize work in discipline-recognized problems. Theory and references have increased, with citations now spread throughout the paper as 'common theory has become an extremely strong force in structuring articles and binding articles to each other' (Bazerman, 1988: 157). Visuals have been given greater prominence and have been increasingly integrated into arguments, multiple authorship has increased massively, syntax has become simpler, and sections have become more clearly marked both typographically and stylistically. Titles, abstracts, sub-heads and graphics have developed to foreground novelty and significance in order to accommodate the scanning reading patterns of information-saturated readers searching rapidly for relevance and novelty (Berkenkotter and Huckin, 1995).

The changes noted in these studies demonstrate that the research article is a dynamic textual product strongly responsive to changing disciplinary norms and practices. The sociohistorical literature reminds us that the means by which arguments are presented, procedures enumerated, literature cited, readers engaged and data discussed can only be seen as persuasive against a broader social canvas. The changing

conditions of research, the development of a scientific community, and the creation of ways of talking about nature and gaining assent for knowledge helped to shape the language of scientific presentation we see today.

iii. Ethnographic approaches

Ethnography is an interpretive and qualitative approach to research based on the study of behaviour in naturally occurring settings. Originating in anthropology and sociology, it sets out to give a participant, or insider, oriented description of individuals' practices by gathering naturally occurring data under normal conditions from numerous sources, typically over a period of time (Ramanathan and Atkinson, 1999). While acknowledging that language is always an important part of such settings, ethnographic studies take a wider view to consider the physical and experiential contexts in which language is used. This perspective therefore gives greater emphasis to what people *do*, locating acts of communication in the behaviour of groups and employing methods which are interpretive, contextualized and respectful of participants' views.

Ethnographic methods are based on 'watching and asking' and so include participant and non-participant observation, in-depth interviews, surveys, focus group discussions, diaries and biographical histories. While something of an uncertain and contested term, ethnographic research generally requires analysts to use a variety of methods and data sources, to engage in research for long periods of time, and to recycle the results through participant verification and 'member checking'. While criticized by researchers from more positivist traditions for a perceived lack of rigour, imprecision and subjectivity, ethnography claims to offer a richer, first-hand interpretation based on interaction with a local context. For analysts of academic discourse it suggests methods for studying texts in ways which are 'situated', offering an alternative perspective to those discussed in the sections above. Ethnographic methods have been widely used in educational research and in the area of discourse studies have largely been used to inform studies of student writing.

One example is Prior's (1998) study of the contexts and processes of graduate student writing at a US university. Drawing on transcripts of seminar discussions, student texts, observations of institutional contexts, tutor feedback and interviews with students and tutors, Prior provides an in-depth account of the ways students in four fields negotiated their writing tasks and so became socialized into their disciplinary communities. The interplay of these different types of data and various

theories of writing allows us to see how the multiple influences of academic practices, peers, mentors and students' own personal experiences and changing goals all contributed to their writing and to the process of becoming academic writers. Writing is therefore seen as mediated by other people and things, by classroom tasks and speech genres, by different discourses and disciplinary practices. But as Prior discovered, this training of graduate students is not the induction of individuals into clearly defined disciplines each with its own neatly configured idea and practices, as is often supposed. Instead it is the complex production of persons whereby 'an ambiguous cast of relative newcomers and relative old-timers (re)produce themselves, their practices and their communities' (Prior, 1998: xii).

While Prior is able to offer a detailed and 'thick' description (Geertz, 1973) of this context to develop an explanatory framework of these students' writing experiences, the generalizability of such accounts is often questioned. Hammersley (2001), however, argues that all generalizations are a matter of degree, especially in social research where there are always a multiplicity of interacting variables, and that 'fuzzy generalizations' can provide valuable descriptions of a situation. Such research can also generate what Glaser and Strauss (1967) call *grounded theory,* where categories generated in the early stages of analysis are developed with multiple methods to provide frameworks which may have explanatory relevance beyond the specific local situation investigated.

In this way, Ivanic's (1998) study of the tensions experienced by mature students in coping with the literacy demands of a UK university helped illuminate Lillis' (2001) qualitative research into the experiences of another group of student writers. Detailed investigation of students' accounts of their literacy histories, discussions about university essay writing, and analyses of their essays informed both studies and helped to show how students' values and beliefs shaped their approaches to writing assignments. Ethnographic studies have also been of a larger scale. The 'Framing student literacy' project, for instance, analysed a sizable corpus of student assignments and tutor feedback together with accounts from interviews and focus group discussions with tutors and students in various disciplines in four Australian universities (Candlin and Plum, 1998). Analyses of these diverse data sources not only revealed disciplinary differences in literacy practices but provided insights into how Higher Education requires competency in an institutional form of literacy which is neither agreed nor shared by all students and staff.

Ethnographic-oriented studies have also explored the literate cultures of academics themselves. Perhaps the best known of these

is Swales' (1998) 'textography' of his building at the University of Michigan. Swales makes greater use of analyses of texts and systems of texts in his approach than many ethnographies, combining discourse analyses with extensive observations and interviews. Together these methods provide a richly detailed picture of the professional lives, commitments and projects of individuals in three diverse academic cultures working in the building: the computer centre, the Herbarium and the university English Language Centre. The study brilliantly captures the different practices, genres and cultures of these disciplines and reveals the intriguing complexity which distinguishes academic activity. Through a variety of qualitative methods we get a sense of the individual voices and the kinds of insights which close observation and detailed analysis can reveal.

2.4 Critical approaches

The final orientation to discourse analysis I want to mention here does not fit neatly onto my text-to-context cline, nor does it necessarily comprise a particular theory or set of methods for analysing data. In fact, it extends the cline and bends it round into a loop, reminding us that the ultimate instance of discourse is not the text but the socially positioned reading it affords: how texts can be read in different ways depending on the subjectivity of readers. Critical approaches are better characterized as an attitude to discourse: a way of approaching and thinking about texts. In this sense, Discourse Analysis is neither a qualitative nor a quantitative research method, but a manner of questioning the basic assumptions of these methods. It shares with other forms of discourse analysis an interest in the ways texts are contextually situated, but it stresses that the most important dimension of social context is the relations of power that exist in it and the ideologies that maintain these relations. There are a number of critical perspectives, but the most relevant to the study of academic discourse are those of Critical Discourse Analysis (CDA) and Academic literacies.

i. Critical discourse analysis

Critical discourse analysis views 'language as a form of social practice' (Fairclough, 1989: 20) and attempts 'to unpack the ideological underpinnings of discourse that have become so naturalized over time that we begin to treat them as common, acceptable and natural features of discourse' (Teo, 2000). CDA therefore links language to the activities which surround it, focusing on how social relations, identity, knowledge and power are constructed through written and spoken texts in

communities, schools and classrooms. Discourse is thus a mediator of social life: simultaneously both constructing social and political reality and conditioned by it.

Because of its diverse theoretical concepts and methods, Blommaert (2005) rightly cautions against identifying CDA too clearly as a uniform 'school', but it does provide a label for those adopting a critical stance in accounts of texts. A central aspect of critical views is that the interests, values and power relations in any institutional and sociohistorical context are found in the typical ways that people use language. As one of its leading figures observes:

> By 'critical' discourse analysis I mean analysis which aims to systematically explore often opaque relationships of causality and determination between (a) discursive practices, events and texts, and (b) wider social and cultural structures, relations and processes; to investigate how such practices, events and texts arise out of and are ideologically shaped by relations of power and struggles over power; and to explore how the opacity of these relationships between discourse and society is itself a factor securing power and hegemony.
>
> (Fairclough, 1992: 135)

This overtly political agenda therefore distinguishes CDA from other kinds of discourse analysis.

In terms of theoretical background, it is possible to trace links from CDA to French post-structuralist theory, which emphasizes the centrality of language and discourse. According to Foucault and Derrida, for example, discourses are not transparent or impartial means for describing or analysing the social and natural worlds but work to construct, regulate and control knowledge, social relations and institutions. Everything that exists is expressed in discourse, including scholarship and knowledge. CDA also draws on Bourdieu's argument that textual practices become 'embodied' forms of 'cultural capital' with different exchange values in particular social fields. Particular literacy practices and discourses possess authority because they represent the currently dominant ideological ways of depicting relationships and realities. Discourses that have symbolic value in an institution are ideologically shaped by its dominant groups and access to these valued discourses, and rights to use them, are unequally distributed. Educational institutions can therefore be seen as sites constructed by and through discourses and expressed in texts such as policy statements, curriculum documents, textbooks, student writings and lectures.

To analyse the 'symbolic power' of such texts CDA emphasizes *intertextuality* (the 'quotation' of one text by another), *interdiscursivity*

(the use of generic conventions, register and style across texts), and *recontextualization* (how elements associated with particular discourses colonize new contexts). While CDA does not subscribe to any single method, Fairclough (1992, 2003) and Wodak (1989) draw on Systemic Functional Linguistics (SFL) (Halliday, 1994) to analyse concrete instances of discourse. In this model, language is seen as systems of linguistic features offering choices to users, but these choices are considerably circumscribed in situations of unequal power. Young and Harrison (2004) claim that SFL and CDA share three main features:

1. A view of language as a social construct, or how society fashions language.
2. A dialectical view in which 'particular discursive events influence the contexts in which they occur and the contexts are, in turn, influenced by these discursive events' (ibid. p. 1).
3. A view which emphasizes cultural and historical aspects of meaning.

SFL thus offers CDA a sophisticated way of analysing the relations between language and social contexts, making it possible to ground concerns of power and ideology in the details of discourse.

To examine actual instances of texts, CDA typically looks at features such as:

- Vocabulary – particularly how metaphor and connotative meanings encode ideologies.
- Transitivity – how participants, processes and circumstances are represented in a clause which can show, for instance, who is presented as having agency and who is acted upon.
- Nominalization and passivization – how processes and actors can be repackaged as nouns or otherwise obscured.
- Mood and modality – which help reveal interpersonal relationships such as discourse roles, attitudes, commitments and obligations.
- Theme – how the first element of a clause can be used to foreground particular aspects of information or presuppose reader/hearer beliefs.
- Text structure – how text episodes are marked or the turn-taking system employed.
- Intertextuality and interdiscursivity – the effects of other texts and styles or registers on texts – leading to *hybridization*, such as where commercial discourses colonize those in other spheres.

These textual devices reveal a considerable ideological richness in both spoken and written texts.

Research has largely addressed mass media and public discourses, dealing with issues such as racism, gender, and class. Studies in schools have pointed to the fact that classroom talk is a primary medium through which teachers and students construct 'readings' of textbooks, creating authoritative interpretations and shaping what will count as knowledge, legitimate social relations and textual practices. CDA has also looked at representation in language through the concept of commodification, or the creeping expansion of marketing discourses into other domains. An example of this is how universities construct themselves discoursally as corporate bodies selling educational products in response to the shift to a market-driven model of Higher Education (Fairclough, 1995). University prospectuses, brochures, handbooks, job advertisements and programme materials all reflect the fact that the abolition of grants and the introduction of fees have created markets where students are clients in a marketplace of competing institutions.

My own university's homepage, for example (Figure 2.2), constructs the institution as an attractive product through a range of positive associations (age, excellence, diversity, etc), a personalized corporate

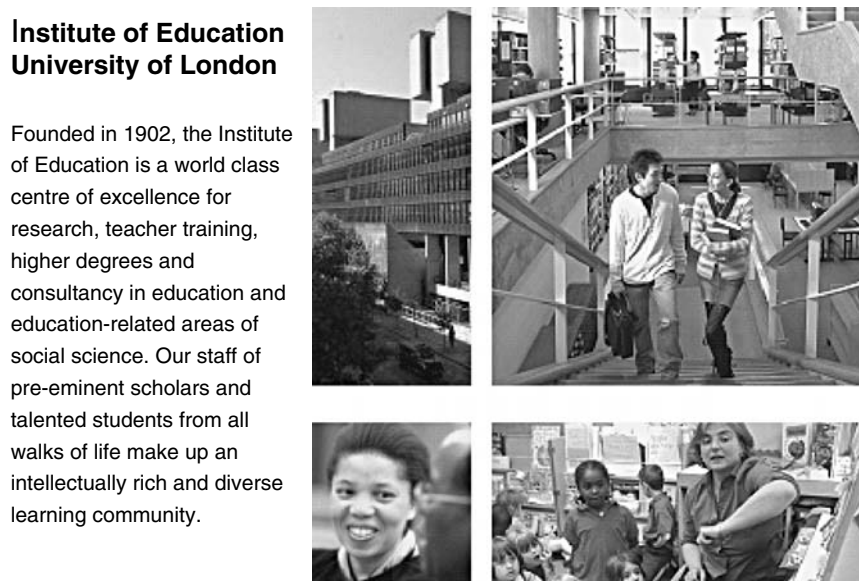

Figure 2.2 *Institute of education homepage*

identity (our staff and students, learning community), and a collage of images which link the professional, academic, social and corporate features of the institution.

On a more critical note, CDA has been criticized for cherry-picking both texts and particular features of texts to confirm the analyst's prejudices while reducing pragmatics to semantics in assuming just one possible reading of the text – that provided by the analyst (Widdowson, 2000b). There is a strong tendency in this work to assume certain patterns of power relations as relevant context without pinpointing their realization in text features, and often there is a failure to go beyond the analyst's interpretations to consult participants' understandings. This privileging of the analyst's viewpoint is, as Blommaert (2005) notes, often further reinforced by appeal to an explanatory level of social theory which lies above any analysis of the text itself. This effectively closes all dialogue with the reader and makes interpretation a black box rather than a product of textual analysis. The plausibility of any interpretation of a text ultimately depends on our willingness to accept it, of course, but this is not greatly enhanced by CDA's consistent failure to establish the intentions and interpretations of participants themselves.

But while CDA has generally remained uncritical of its methods, it has encouraged a broader contextual analysis in discourse analysis and encouraged the search for hidden text motivations. It has also underlined a rethinking of pedagogical practices and outcomes, encouraging teachers to assist students to an awareness of how writing practices are grounded in social structures by exposing the ideological assumptions of the prestige discourses that they seek to acquire. This agenda works to shift curriculum development and instruction away from producing workplace and civic competencies towards critical analyses of text-based cultures and economies.

ii. Academic literacies

An academic literacies perspective implies a different understanding of 'critical' to that advanced by CDA and emerges from very different theoretical premises and practical concerns. It is, in fact, not strictly an approach to *discourse* at all. It is a way of conceptualizing and influencing teaching and learning by radically rethinking *literacy* to take account of the cultural and contextual components of reading and writing. Like CDA, the academic literacies' view frames language as discourse practices, the ways in which language is used in particular contexts, rather than as a set of discrete skills. In so doing it re-establishes the intrinsic relationship between knowledge, writing and identity

(Ivanic 1998, Lillis 2001) and raises issues of relevance and legitimacy in relation to writing practices.

The academic literacies' perspective takes a 'New Literacies' position which rejects

> the ways language is treated as though it were a thing, distanced from both teacher and learner and imposing on them external rules and requirements as though they were but passive recipients.
>
> (Street, 1995: 114)

Instead, literacy is something we *do*. Street characterizes literacy as a verb, an activity 'located in the interactions between people' (Barton and Hamilton, 1998: 3). Because literacy is integral to its contexts, it is easier to recognize the disciplinary heterogeneity which characterizes the modern university. From the student point of view, a dominant feature of academic literacy is the requirement to switch practices between one setting and another, to control a range of genres appropriate to each setting, and to handle the meanings and identities that each evokes. Such experiences underline for students that writing and reading are not homogeneous skills which they can take with them as they move across different courses and assignments.

One problem for participants is that while achievement is assessed by various institutionalized forms of writing, what it means to write in this way is rarely made explicit to students. A failure to recognize that discourse conventions are embedded in the epistemological and social practices of the disciplines means that writing is a black box to students, particularly as lecturers themselves have difficulty in explaining what they mean (Lea and Street, 2000).

The academic literacies approach recognizes that the difficulties students often experience with academic writing are not due to technical aspects of grammar and organization, but the ways that different strands of their learning interact with each other and with their previous experiences. Entering the academy means making a 'cultural shift' in order to take on identities as members of those communities. Gee stresses the importance of this shift:

> [S]omeone cannot engage in a discourse in a less than fluent manner. You are either in it or you're not. Discourses are connected with displays of identity – failing to display an identity fully is tantamount to announcing you do not have that identity – at best you are a pretender or a beginner.
>
> (1996: 155)

Academic success means representing yourself in a way valued by your discipline, adopting the values, beliefs and identities which academic

discourses embody. As a result, students often feel uncomfortable with the 'me' they portray in their academic writing, finding a conflict between the identities required to write successfully and those they bring with them.

A central issue here is that writing tends to be viewed as simply the *medium* through which students present what they have learned without consideration of its deeper cultural and epistemological underpinnings. This separates writing from ways of knowing and the institution's processes and discourses from students' individual histories. Herein lies the critical dimension of this approach:

> The level at which we should be rethinking higher education and its writing practices should not simply be that of skills and effectiveness but rather of epistemology – what counts as knowledge and who has authority over it; of identity – what the relation is between forms of writing and the constitution of self and agency; and of power – how partial and ideological positions and claims are presented as neutral and as given through the writing requirements and processes of feedback and assessment that make up academic activity.
>
> (Jones *et al.*, 1999: xvi)

The academic literacy position therefore encourages us to see that writing must be understood as the crucial process by which students make sense not only of the subject knowledge they encounter through their studies, but also how they can make it mean something for themselves. The varied discourses and expectations of the academy therefore necessitate negotiation between students and teachers rather than accommodation to foreign, and complexly diverse, discourses and literacy conventions.

2.5 Conclusions

This overview of approaches is, I admit, rather brief and inconclusive. Instead of offering a clear way forward to those wishing to adopt a 'best method' for understanding academic discourse, it seems to raise yet more questions. How much context, whether historical, social, discoursal or material, do we need in order to gain insights into academic discourses? Is there a single 'best approach' to the study of all academic discourse? How do various textual discourses interact with each other in real contexts of use? How do we resist dominant ideological positions in understanding academic discourses? What kinds of approaches and descriptions are most helpful for pedagogy?

Perhaps the main conclusion to be drawn from all this is that there are various ways of understanding discourse and different approaches

to its study. I hope it is clear, however, that there is no single, uniquely right way of analysing academic discourse. On one hand, different approaches, concepts and terminologies obviously connect to particular theoretical orientations and research groups. But while these may be championed as defining the work of such groups or expressing their identity, there may be more overlapping, more opportunities for borrowing, and even more prospect of mixing and matching, than we might initially suppose. On the other hand, different approaches address different questions and fit different issues better than others. No single theory or set of research tools is going to offer the best understanding of discourse in all possible situations, so our interests, needs and specific local objectives will influence the ways we approach discourse and the questions we have about it.

We need, in other words, to make choices in analysing discourse and to draw on the most appropriate methods. This does not mean, however, a marketplace of free options. Any method comes with a theory attached to it, however implicit, and will make certain assumptions about what language is and how people use it. No approach to academic discourse can be divorced from our understandings of either the academy or discourse because we select our methods and conceptual tools thorough the filter of what questions we think are important to ask and where we feel we are most likely to find answers. Methods do not, however, exist in some fixed and isolated world, and researchers often adopt them to their own purposes to some extent, taking what they need to fit their goals and understandings. For this reason we should not oppose labels like 'qualitative' and 'quantitative' or 'genre' and 'ethnographic' but must look for ways that offer evidence for a theory of academic discourse which explains how language works in university contexts.