Abstract

This thesis is about discourse, risk, and the management of blame. It examines the case study of 'economy class syndrome', the risk of developing a blood clot after a long-haul flight, and analyses accounts of it from four different interested groups. To do so, the epistemological and methodological principles of discourse analysis have been adopted. These principles are reviewed in depth, and difficulties applying them to research considered and addressed.

Four themes are apparent in discourses about risk; that risks do not 'just happen'; the frequency, seriousness and very existence of a risk is highly contested; risks can be predicted, managed and prevented; and responsibility and blame for them can be attributed. Some conclusions are also drawn about the discursive features that are used to construct these versions of risks. It is suggested that both these themes and features have wider application beyond this case study.

The study of the research topic, the management of the difficulties in applying discourse analytic methods, and the generalisability of the conclusions are all reflexively considered. This research is therefore a substantive contribution to understanding the constructions of risks through discourse; and it is also a contribution to the application of discourse analysis as a theory and method.
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Introduction:

The 'Risk' of Economy Class Syndrome

This research is about risk, discourse, and the management of blame. It considers how risks are constructed through the language that is used to describe them, how successful constructions are maintained, and how responsibility and blame for risks are ascribed.

We are bombarded with information and advice about risks. We are presented with ever more evidence of the dangers of everyday life, advice on how we can and should protect ourselves and who we can blame if a risk does manifest itself and an accident occurs. Media stories are couched in terms of risks increasing in number and magnitude. It is impossible to pick up a paper or turn on the television without being inundated with accounts of hazards, accidents and disasters. But what is interesting about these stories is the way that they are increasingly being constructed not as random incidents that could happen anytime, anywhere, but as predictable, manageable, and therefore ultimately avoidable events.

Recent news coverage highlight this. Different stories report a train crash; floods devastating much of the country; a child kidnapped; all of these, although seemingly very different, appear to be constructed along similar lines. While at first the event or situation may be described in terms of fate, chance or accident, attention soon turns to questioning how and why it happened, what could be done to prevent it happening in the future, and who was to blame.

This phenomenon does not appear to be restricted to news coverage. The idea that risks and accidents are now increasingly perceived to be manageable is evidenced in risk assessments, prescriptions of safety measures and appropriate behaviour – for example, the 'common sense' of accident prevention literature presents responsibility for the avoidance of such risks.

This research aims to address a number of issues about the contemporary constructions of risk. How are risks constructed? How are they presented in such a way as to make them seem manageable? If they are, what effect does this have, both on those who construct the risks, and those whose position in relation to the risk is described? And what are the wider implications of a risk construction that maintains that risks can be prevented and someone held responsible for them? In this thesis I will explore features of the language that is used to construct risks; for how else is it possible to receive information about risks if not from the language through which they are communicated and constructed? I will illustrate this by reference to a specific risk, before highlighting the observations and findings by considering their relevance for other hazards.

While there are innumerable risks that could be considered, I will focus on 'Economy Class Syndrome' (ECS), also known as 'Deep Vein Thrombosis' (DVT), and then consider whether this case study provides an empirical framework to examine other
kinds of risk. ECS is the risk of suffering a blood clot or thrombosis from sitting on
an aeroplane, and attention has been paid to the apparent increased risk of developing
this in the economy class section, rather than business or first class where increased
leg room is available. There are several terms used to describe the issue, and which
one is used, and why, is itself analytically interesting (the issue is also known for
example as 'Traveller’s Thrombosis' and 'inflight DVT'). For the present however, I
will refer to it as ‘ECS’ for simplicity, and return to this issue again.

The term ‘ECS’ was first used in a research report in *The Lancet*, the journal of the
British Medical Association, in August 1988. It was not the first report to raise the
possibility of a link between long haul flights and thrombosis¹, but it was the first to
turn the possible connection into an issue that demanded attention. The report also
explicitly warned of the dangers of the risk to passengers, and by stating that the
airlines did little to inform them added an air of a ‘conspiracy of silence’ to it,
implicitly blaming the airlines for their lack of action in failing to prevent the
condition. Subsequent attention to the issue has presented more information about it.
Remaining seated for long periods may lead to the formation of a clot, usually in the
legs. These are often painless and may go unnoticed. However, they may result in
cramp and swelling, and can be recognised and treated. This treatment can last for
many months, and involve blood thinning drugs such as warfarin and dramatic
changes to lifestyle. In even more serious cases, clots may move to the lungs, causing
a pulmonary embolism. Such cases have often proved fatal. Symptoms may occur
during a flight, immediately afterwards, or some weeks after as a previously painless
clot dislodges itself. A number of risk factors are highlighted as increasing the risk of
a clot occurring, such as the lack of leg movement, but also poor cabin air quality,
previous experience of clots or conditions such as heart disease, pregnancy, taking the
contraceptive pill or smoking. Of course, the importance and relevance of many of
these factors are hotly contested by the different groups who have an interest in the
matter.

Indeed, ECS is a topical and fiercely debated issue. At a time when airline security is
under the microscope, claims are being made about ECS in the national and European
courts that will have significant ramifications for the whole of the industry. News
headlines report on passengers who have collapsed in dramatic circumstances
following a flight, a wide variety of merchandise is marketed as preventing an attack,
and scientific research on the topic receives a high profile. Passenger groups and
media commentators argue that there is a conspiracy over the existence of ECS and
that the lack of information given by the airlines has been responsible for incidents of
inflight thrombosis occurring. In contrast, some representatives from the airline
industry maintain that the responsibility for ECS rests with passengers and their
behaviour during a flight. Research from the medical community has been mixed,
with no agreement reached about the existence or frequency of ECS. The issue is
therefore made more contentious by the lack of any established scientific facts that
can be appealed to. It is clear from the controversy around the issue that ECS is not
something that can be easily explained or that 'just happens'. It is a risk that can be
assessed and accounted for, and for which blame can be apportioned. What is
interesting is that each of the groups who have an interest in the issue do so quite
differently.

¹ An earlier article appeared in *The Lancet* in February 1985 for example.
It is precisely the contested nature of the issue that makes it so interesting and valuable to study; the current debate offers an opportunity to study ‘facts’ in the making. Without any agreement about the issue, it is the claims that groups make that I am studying in this research. Burningham (1998) for example argues that studying the construction of social problems may be the most valid approach to take, given that the existence and character of these problems is often contested. In the absence of established evidence to refer to, each of the protagonist groups make competing claims, hoping these claims will be seen as factual, accurate and compelling. I am studying how they do so, through a focus on the discourse used.

1.1 The Structure of this research

Therefore, in this research I am investigating discursive constructions of ECS, and the claims-making activity undertaken by different groups who have an interest in it. I examine the versions of the issue that are presented by different groups. I highlight how such things as the existence, frequency and responsibility for the risk are constructed and managed, and how the accounts are structured to appear factual, accurate and true. I analyse the information presented by these groups to illustrate this. The chapters that follow will therefore briefly be outlined.

Chapter Two: Discourse Analysis as Theory and Method

This chapter is a description and discussion of discourse analysis (DA), the method used to analyse the different claims made. As will be detailed in this chapter, DA is more than just a method, and represents a different epistemological approach to other methodologies. I describe how this applies to this research.

Chapter Three: Research on Risks, Reality and Rhetoric

In this chapter I discuss previous research on risks, social constructionism, social problems, and studies of discourse, and outline how they have been drawn on in the development of this research.

Chapter Four: Dilemmas and Difficulties in Conducting Discourse Analysis

This chapter continues some of the themes highlighted in Chapter 2, and presents a critical consideration of DA. Previous DA research raises a number of issues about the methodological principles and theoretical foundations of the approach. In this chapter I document these and highlight how they have been resolved or managed for the purposes of this research.

Chapter Five: Potter and Wetherell’s Ten Steps

I explain in this chapter how DA has been used in this research. I highlight the principles of the methodology, as developed by Potter and Wetherell (1987), and how they have been used, adapted or developed.
Chapter Six: The Ethics of Using Discourse Analysis on Interviews and the Internet

I have adopted a particular ethical position in this research, which has had significant implications for the shape of it. In this chapter, I document how DA on interview texts may be deemed unethical, what options this allows, and how I resolved these and other ethical issues to conduct this research.

Chapter Seven: The Actions of the Passengers and the Management of Stake: Airlines' Responsibility for Economy Class Syndrome

What follows are analytical chapters which each focus on a particular group with an interest in the issue of ECS. The first of these is the airline industry. In this chapter I detail the constructions of the issue used and developed by airlines, how they present themselves, and the position of passengers.

Chapter Eight: Easy to Prevent and Needlessly Tragic: Campaign Groups' Construction of Economy Class Syndrome

I highlight some of the observations made in the previous chapter by comparing them to the constructions used and maintained by campaign groups. The human tragedies associated with ECS have generated several organisations campaigning for increased recognition of ECS, its causes and prevention, improved air safety standards, and for airlines to concede their culpability.

Chapter Nine: Subjectivity, Surprise and the Nature of Science: Analysis of Medical Reports in The Lancet

In this chapter I consider the role of science and medicine in the issue of ECS. I focus on The Lancet, the journal of the British Medical Association. All the articles relating to ECS are analysed, and constructions of the issue and consistency and variability in accounts examined. Analysis of these articles is interesting for considering the presentation of the risk, and also the workings of medical research more generally.

Chapter Ten: Facts in the Making: Debates and Discussions in Internet Forums

A final source of information are Internet discussion forums on topics relevant to ECS. These constitute a fascinating insight into the ongoing construction of the issue. The data here are not a final 'polished article', but the controversy in the making, as messages hotly debate and contradict each other on questions of whether the risk of ECS exists, what can or should be done about it, and who is to blame.

Chapter Eleven: Conclusions, Comparisons and Constructing a 'Model of Risk'

This chapter is a reflection on some of the findings of the analysis from these different groups. In it I consider what can be concluded about ECS, and about the constructions of risks. I then assess the potential applicability to another case study and consider more broadly how constructions of risk, blame and responsibility are managed and maintained.
Chapter Twelve: Discussion – Discourse Analysis as a Theory and a Method Revisited

Finally, in this chapter I re-consider some of the issues raised throughout this research, particularly regarding the practicalities of carrying out DA, and how I have addressed them. I discuss how issues highlighted in Chapters four to six were managed, and draw some conclusions about the appropriateness and value of DA research.
Chapter Two: 
Discourse Analysis as Theory and Method

This research is about the construction of risks. This chapter describes discourse analysis (DA), the methodology being used to achieve this. I discuss the principles of DA and the focus on language. I then consider the value of using DA, and how it has been applied in this research.

2.1 Discourse analysis: the turn to the text

This research is about the claims made by different groups about ECS. I am studying their differing constructions of the risk, by considering the language used. Widdicombe and Wooffitt argue that the language of accounts should not be treated as passive, but rather is “a medium through which social acts are accomplished” (1995:2); in this case shaping the risk of ECS. Following Horton-Salway, this means that rather than examining the accuracy of descriptions, they are treated as “discursive accomplishments” (2001b:252); how accounts are made to seem factual and authentic is therefore the object of study, not judging whether they are or not. Factuality and authenticity are treated as the participants’ concern, not the analyst’s. To do so, I am using discourse analysis (DA). DA is an appropriate method because it focuses on language. Indeed, language is the subject of study, and is not merely a way of getting to the data; it is the data. I will now consider what DA is and what using a discourse analytic approach means.

In its broadest sense, DA can be understood as the study of talk and texts (Wetherell et al., 2001:i), and the search for patterns in language use within them (Taylor, 2001 a:10). It is a set of methods and theories for investigating language in use, but more than that, it represents a different epistemological and ontological approach to traditional forms of research. I will consider the features of DA approach that lead to this; in brief these are that language is functional; that language is not neutral; and that language is constructive and oriented to action. These understandings are a move away from a cognitive conception of language as representing an inner reality. They also encompass an understanding of language as contingent and variable. Each of these principles will be considered.

It should also be noted that the term ‘DA’ is used for a number of different approaches; while they all focus on language, they differ significantly (which I will consider at the end of this chapter). It is DA from a social psychological perspective that I am using, and it is to this that the following points refer.

2.1.1 Language as social practice

In DA, discourse is the data. Studying language means considering it as social practice, not a neutral means for the transmission of information. As Te Molder says, it is a strongly but often implicitly held view that language reflects “what is really the
case and what people really think” (1999:246). DA differs from this, and does not presume that discourse represents mere description of an event or interaction. Because discourse is the topic rather than the resource (Gilbert and Mulkay, 1984:13), there is a focus on how events are described and explained, how factual reports are constructed, or how cognitive states are attributed to people (Edwards and Potter, 1992:2). DA considers how ‘objects’ in accounts (be they people, actions, feelings, incidents, and so on) are actively constructed through discourse, even while presented in a way which implies an independent existence from the speaker (McGhee and Miell, 1998:63). In this way, what discourse is doing, and how versions of the world are presented as factual and authentic, are the primary focuses, and not their relationship to reality (Horton-Salway, 2001a; Wiggins and Potter, 2003).

2.1.2 Language as action oriented

Moving away from considering language as a passive means of information transmission leads to a focus on its function and ‘action orientation’ (Heritage, 1984). Each time language is used, it is doing something. This may seem obvious with such things as invitations, accusations, orders, and so on. However, as Edwards and Potter (2001:13-14) emphasize, “actions are pervasively being done even in ostensibly factual, descriptive discourse”. All language is functional, and all words used ‘do’ something; it is not possible to somehow escape from this. Schegloff’s (1972:81) example illustrates this. He points out that there are multiple ways of describing the world; therefore, any word or phrase that is used has been chosen from myriad possibilities. This choice decision reflects the use, effect, and function that a particular piece of language has. As Auburn et al. point out, descriptions are constructed by selecting particular actions or features and presenting them in ways which allow for inferences about those involved to be made (1999:47).

It is furthermore the case that a seemingly neutral, factual description of an event has be to made to seem so; it does not just appear, it could have been described in other ways, and each of these would have had a different effect. Indeed, Potter points to the ‘epistemological orientation’ that language has, the way that a description will build its status as a factual version. In giving an account, for example, participants will attempt to produce descriptions that will be seen as “mere descriptions, reports which tell it how it is” (1997:108, emphasis in the original). What DA studies is how they do this, rather than judging how well their account reflects what it describes. It therefore focuses both on the actions achieved in language use, and the way accounts are put together in particular ways in order to achieve such effects. As Potter (1997:176) argues, "descriptions are not worked up as factual just for the sake of it. Rather, descriptions are built in this way because of their role in activities". This may be to perform rhetorical functions, such as persuading (McGhee and Miell, 1998:69); to manage particular dilemmas (Te Molder, 1999); to create a particular impression of events and ascribe motive, blame, innocence or responsibility (Wowk, 1984:144); or to counter the views of others and engage in self presentation (Billig, 1991:20). For both participants and analysts therefore, the primary issue is the social actions, or interactional work, being done in the discourse (Potter and Edwards, 2003:169).
2.1.3 Language as constructive

Following from this, an approach that considers the action orientation of language encompasses a view of language as ‘constructive’. This may seem somewhat counter-intuitive; how can language ‘construct’ things? As Wetherell (2001b:392) points out, saying that ‘reality is discursively constructed’ does challenge many common-sense assumptions. She argues however that it is important to consider

“the notion that what is most real for humans is created through human actions. Reality is a constructed social product. We actively co-operate to sustain the phenomena of our world such as schools, economies, pastoral landscapes, families, meaningful relationships and so on, and these represent the sedimentation of human activities over time. The processes involved in bringing these phenomena into being are deeply rooted in our societies and cultures. What is most real for us are social phenomena which have involved human construction”.

This construction work takes place through the language that is used to communicate, to participate in, and to describe these practices. Accordingly, Edwards et al. (1995) argue that what may seem independent from discursive construction cannot be separated from the processes that give them their meaning. There are examples of this. Lawes (1999:14) indicates that legal institutions are built up from a variety of practices, including interaction in courtrooms. Rather than thinking about such contexts as external, they can be considered as “something endogenously generated within the talk of the participants and, indeed, as something created in and through that talk”. It is not just social contexts and institutions that may be thought of as constructed through language. Potter discusses the strength of the construction metaphor, and argues that whilst it may seem ridiculous to suggest that the world literally springs into existence as it is talked about or written about, reality enters into human practices

“by the way of the human categorizations and descriptions that are part of those practices. The world is not categorized by God or nature in ways that we all are forced to accept. It is constituted in one way or another as people talk it, write it, and argue it… to judge whether a description was mirroring or constructing reality requires the description to be compared to the reality. Yet reality (or ‘reality’) cannot enter this debate except as another description, which would beg the question of whether this new description is itself descriptive or constructive” (1997:98).

Potter makes it clear that he is not engaging in philosophical discussions about what exists, but instead ‘clearing the way’ for a focus on practical and analytical issues. He argues that it is not possible to gain access to the world except through language; if our access to the world is through constructions in texts and talk, these texts and talk therefore construct our world (Potter et al., 1990:207-8).

Language may be seen as constructive in three ways (Wetherell and Potter, 1988:169). First, it provides the ‘building blocks’, linguistic resources that any piece of discourse is formed from. Second, it encompasses the notion of the inevitable selection that takes place, as only some linguistic resources are chosen at any time. The necessary choices made about language present the world in a particular way, and has implications both for what they describe, and for whoever is doing the describing.
In this way, Moloney and Walker (2002:314) argue that language constructs the nature of objects and events as they are discussed, and Taylor (2001a:6-7) points out that language "is the site where meanings are created and changed". An example of this is Potter and Wetherell's research on New Zealanders' attitudes to Maoris. They state of one of their interviewees that "he is not working with a neutral description of an object and then saying how he feels about it; he is constructing a version of the object. It is in this way that evaluation is displayed. His version of the object carries off his evaluation." (1987:51). And thirdly, stating that language is constructive emphasizes the "potent, consequential dealings with events and people which are experienced only in terms of specific linguistic versions. In a profound sense, accounts ‘construct’ reality” (Potter and Wetherell, 1987:34).

2.1.4 Context and variability in accounts

Language will therefore be selected for the particular effects that it has in a specific piece of interaction1. In this way, language may be seen as ‘indexical’ (Garfinkel, 1967), and contingent on its context. Authors may perceive changes in context and alter their language use - between different accounts they produce, or even in the same one. Considering context is important because, as Wetherell and Potter (1988:169) argue, "the meaning of an utterance is not a straightforward matter of external reference but depends on the local and broader discursive systems in which the utterance is embedded". Therefore, as Taylor (2001a:6-7) argues, to understand what action is being achieved, "it is necessary to consider its situated use, within the process of ongoing interaction”. Edley and Wetherell’s (1999:182) work on identity illustrates this, as “speakers construct different accounts, or versions, of the world (including themselves) as they move across various interactional settings”. Their study regards identity not as something static, but as actively accomplished within particular rhetorical contexts. A focus on the indexicality of language also highlights the different meanings that words can have; these are not ascribed by definition, but vary according to the context and who is using them. For example, Speer and Potter (2000:563) cite calling somebody a ‘poof’ or ‘queen’. They argue that such terms are not inherently negative, but have to be worked up as such. In different contexts, they might have different meanings, in an affectionate conversation between friends, or a heated accusation for example.

Of course, considering variability does not mean a recourse to considering which account or which part of an account is ‘true’ (Edley, 1993), and it is not an attempt to arbitrate between accurate and rhetorically produced accounts. Analysis is focused on how accounts are made to seem accurate, and how they orient to their particular context. For example, a seemingly straightforward account of events at a party may vary if the recipient is an elderly relative, a friend unable to attend, or a police officer. It is not possible for the analyst to decide which one of these versions is more ‘accurate’, even if there is considerable variation between them (and even if the analyst was there). They are being constructed for the particular situation in which they are being given, and Gilbert and Mulkay describe the "contextually appropriate ways" in which language is used (1984:14). The analytic focus of DA is therefore on this indexical nature of language use.

1 Issues about how active this selection will be more fully considered in Chapter Four.
Considering that language is constructive, oriented to action, and used to achieve particular effects in particular contexts, brings a new perspective to considering variability in accounts. In contrast to more traditional approaches, DA does not consider variability to be a 'problem'. Burningham (1995:107) points out that “the extent of variability within accounts clearly poses a problem for conventional forms of analysis which seek to provide a definitive account of action or belief”. DA does not seek to provide such an account, and does not presuppose that it might be possible. Instead of attempting to explain variation away, or to get the 'gist' from a text, the focus is on what a particular piece of language is doing. Variations in accounts may therefore become perfectly sensible if the action of each piece of language use is considered. This leads Gilbert and Mulkay to argue that using DA turns the “intractable methodological liability” of participants’ interpretative variability into a “productive analytical resource” (1984:13). In other words, examining the variability in accounts highlights the constructive nature of language, and the functions that it is being used for (Wetherell and Potter, 1988:171).

This is also a different way to consider consistency in accounts. More traditional research may presuppose that descriptions given by different people of the same event will be the same. If so, this consistency leads to a conclusion that the event happened in the way described. Potter and Wetherell (1987:34) highlight two problems with this. First, a focus in research on finding consistency often leads to variation being ignored, and the consistency being over-emphasized. Second, just because descriptions seem the same does not necessarily indicate descriptive reality: “this consistency may be a product of accounts sharing the same function; that is, two people may put their discourse together in the same way because they are doing the same thing with it”.

2.1.5 Participants' orientations

A focus on language means a focus on participants; analysts do not presume to have an elevated or more valid grasp of the interaction than those taking part in it. For example, Potter and Wetherell (1987:170) state that they are “not interested in the dictionary definitions of words, or abstract notions of meaning, but in distinctions participants actually make in their interactions”. This focus on participants is an imperative in discursive work (Edley, 2001:190), where attention is focused on what is going on for the participants themselves within any given interactional sequence. Wetherell (1998:392) cites Schegloff’s plea for the “foregrounding of participant orientation and the backgrounding of analysts' concerns and categories”, and in doing so Horton-Salway (2001b:247) notes that she examined how “sufferers themselves” made sense of their medical condition. Antaki (1994:4) considers how this might work in practice: “to keep all options open I have used the phrase ‘hearably is’, rather than the balder ‘is’, under the influence of the maxim that it is less profitable for the analyst to track down the (given) meaning of an utterance than it is to watch for how it is responded to by those to whom it is addressed, or more generally, to read its significance from its surrounding context taken at some grain of fineness”. Analysis is only concerned with how participants orient to their context. So for example, a sentence such as ‘I went to a party last night’ could be an answer to an interested query, a way of avoiding an accusation about having been somewhere else, or an explanation for poor health the following day. How the analyst treats this depends on how the participants treat it. So if the following response was ‘you shouldn’t have drunk so much’, it might be possible to conclude that it was being used as an
explanation (for a discussion, see Gill, 1996). DA embodies this approach to understanding accounts and interaction.

### 2.1.6 Methodological relativism

DA focuses on the participants' accounts, but does not judge or rank them as being truthful or accurate; analysts remains agnostic about such matters, maintaining a position of 'methodological relativism'. Accounts are studied without privileging one over another; the analyst has no ability to do so (Wooffitt, 1992:53), and remains "indifferent to the correctness, accuracy or whatever of what people are saying" (Potter and Edwards, 2003:173). A parallel position is adopted in the sociology of knowledge. As Cooper (1999) discusses, this it not a denial that anything is real, but means that, for analytic purposes, beliefs about the truth or falsity of a knowledge claim are sidelined (following Bloor, 1991). Similarly in DA, methodological relativism is not an attempt to "deny the objective reality of phenomena" but to consider the role of those phenomena "in terms of people's glosses, categories, orientations and so on" (Potter and Edwards, 2003:171). In terms of being agnostic, Edley (1993:398) for example states in his study of newspaper coverage that he "will not be playing the role of arbiter, attempting to sort out the truth from the fabrication". The role of the analyst is instead to understand how participants present their accounts of the truth and discredit others as fabrications.

### 2.1.7 Epistemology

DA is different in many ways to more traditional research approaches. As Potter (1996:5) says, DA is not just a method but "a whole perspective on social life and its research". Tuffin and Howard (2001:197) describe the "alternative philosophical underpinnings" that a discursive approach has, and point out that its methods are "inextricably linked to underlying assumptions concerning ontology and epistemology", a point reiterated by Phillips and Hardy (2002:3). DA is not focused on traditional concerns of the way social and intergroup relationships are conducted, but has instead an epistemological concern "with the nature of knowledge, cognition and reality: with how events are described and explained, how factual reports are constructed" (Potter and Edwards, 2003:169). This is expanded upon by Wetherell et al. (2001b:5) who argue that "to enter into the study of discourse is to enter into debates about the foundations on which knowledge is built, subjectivity is constructed and society is managed. These are debates about the nature of meaning... [A]t the heart of discourse studies are some complex but potent discussions on what it means to be human, what counts as 'real' and what the 'social' is".

For example, Taylor (2001a:11) outlines that DA identifies patterns in language - and makes epistemological claims about them. These claims differ from a positivist view of the knowledge gained through research as generalisable; as value free and objective; and providing neutral information about the world in a cumulative manner towards universal truths. Instead, analysts "offer an interpretation which is inevitably partial" and aim "to investigate meaning and significance rather than to predict and control" (2001a:11). Because DA studies people and their perceptions, no one truth is possible: "there are multiple realities and therefore multiple truths" (2001a:12). As Taylor states, this is not just an epistemological position, but an ontological one, about the nature of the world itself. It also applies to the texts that are produced in a
discourse analysis, a point that will be referred to again later. The significance of an approach that does not consider there to be one truth about a situation will now be considered.

2.2. The value of discourse analysis

DA focuses on participants and discursive constructions; this means it is of "enormous value to social scientists whose concerns include the circumstances and experiences of people's everyday lives" (Lawes, 1999:17). The phenomena under study have "genuine consequences for peoples' social lives" (Potter and Wetherell 1987:170) and represent the nature of social practice: "in very basic ways, to 'do' social life is to 'do' discourse" (Wetherell et al., 2001b:3-4). The focus of study are the "procedures through which some part of reality seem stable, neutral, and objectively there" (Potter and Wetherell, 1995:50). DA is often described as 'interesting' and 'exciting' (for example by Gill, 1996:156; Potter, 1997:230) because it "interrogates the nature of social action - the fundamental building block of social life and social science" (Wetherell et al., 2001b:5). What could be more valuable than that?

This is not to ignore the criticisms of DA. Often it is criticised for a preoccupation with language at the expense of matters of 'greater importance'. It is assumed that by doing so, DA denies the reality of the world. The most eloquent portrayal of these arguments is by Edwards et al. (1995), where they describe how 'self evident' realities of the world, such as death and furniture, are used to discredit an approach that seems not to acknowledge their existence. There are several points to be made about this. First, a DA approach is not denying 'reality'. This is not the aim. What it does is highlight how different versions of what this reality is are produced and made to seem accurate. Second, such a division between the 'real' and the 'constructed' or 'discursive' is not a neutral or natural division (Potter and Wetherell, 1987:181). It is a rhetorical device used as part of the formulation of the issue. Potter and Wetherell argue that using it makes the world and things in it seem ready completed, with little alternative but to accept them as they appear. However, DA seeks to explicate the constructive activity involved in the creation of a 'world out there', and does not take any such dichotomy for granted. Rather than become embroiled in philosophical debates about existence and reality, DA asks how speakers or authors that use points such as these authorize their accounts.

Third, in response to the criticism that DA ignores pressing issues such as death and suffering, Potter (1997:230) argues that it is not necessarily impossible for work on fact construction to have a critical potential. It may provide practical help: "an explicit account of some of the procedures involved in building [a description], and the relations between the nature of the description and how it is used, might well assist a critical examination of what is going on in that setting by both participants and analysts". It may also be used in conjunction with theoretical and historical analysis on the demystification of established descriptions of social arrangements (1997:231). This is a point echoed by Morris and Chenail (1995:1), examining how speech is used in therapy and medicine, when they describe a concern to "illuminate, and in some cases, to reform clinical practices". Potter does however warn of too strong an emphasis which can "easily turn into arrogance where researchers assume that they know what is wrong in some domain, and research can become a device for
passing off that assumption as a research finding" (1997:230). Further consideration will be given to the critical potential of DA shortly, in comparison with other ‘discourse analysis’ approaches that take a much more proactive stance on this issue.

2.3. The foundations of DA

In order to understand the DA being described here, I will briefly consider the foundations of the approach. Speech act theory, social constructionism, and ethnomethodology have all been influential in the development of DA. From John Austin’s (1962) *How to Do Things with Words* came the origins of an action orientated approach to language, and was a reaction to the “formal logical systems for representing linguistic statements which could be found to be true or false” (Smith, 2000:43). Tuffin and Howard (2001:199) describe the influence on discursive approaches of a social constructionist ontology, which “argues for examining the ways in which language contributes to our shared understandings of how categories are put together in particular ways, with particular effects. Such categories are not treated as ontological givens, but are regarded as topics for analysis in their own right”. Potter (1997) cites Berger and Luckman’s *The Social Construction of Reality* (1966) as being particularly significant because they emphasised taking a symmetrical position towards knowledge that is treated as true and false. Finally, Garfinkel’s (1967) exposition of ethnomethodology was extremely influential because it aimed to consider the ways that people construct accounts of the world to make them seem reasonable, appropriate and justifiable.

2.4. Same term, different approach: other styles of ‘discourse analysis’

I have mentioned that there are a range of studies called ‘discourse analysis’. I will therefore briefly consider some of these in order to exemplify the approach used here.

Hook (2001:521) describes the “growth industry” around discourse analysis and the proliferation of various models. Any attempt to categorise them will of course be a constructed one\(^2\) and there are overlaps between approaches (Taylor, 2001a). However, it is useful to give an overview, and Wetherell *et al.* (2001a) detail five methods that may be classified under the broad umbrella of discourse analysis: conversation analysis (CA); sociolinguistics; discursive psychology (DP); critical discourse analysis (CDA); and Foucauldian analysis. Each of these has a different definition of discourse, level of engagement with the data, aims, and theories of social action, subjectivity and social relations. Some detail of this will now briefly be given.

In very stark terms, CA developed from ethnomethodology and focuses on naturally occurring spoken interaction as the site where meaning is formed and actions performed, aiming to uncover the organisational principles. Sociolinguistics identifies patterns in language use by considering the vocabulary, linguistic features and technicalities of it, and the structure and functions employed. Discursive psychology (DP) is the basis of the approach that is being used in this research (and I

\(^{2}\) Billig (1999b:576), for example, refers to the different ways in which the approaches and the parallels between them might be characterised when he states that, for his purposes, he “would prefer the distinction between conversation analysis and critical discourse analysis to be drawn differently”. This implies of course that there are different ways in which it might be drawn.
have elsewhere termed it ‘discourse analysis’). It is a move away from social psychology and a transparent, neutral view of language as a means of accessing and understanding underlying cognitive states. Critical discourse analysis and Foucauldian analysis are often conflated, and examine patterns in discourse to understand social relations in society. The focus is on the social situation, and understanding it through discourse.

There are difficulties of course in defining exactly what is meant by these different approaches, and there may be differences within each of these broad categories3. However, there are links between them. Gill describes how all of these perspectives reject a conception of language as merely a means of describing the world, and emphasise “the central importance of discourse in constructing social life” (1996:141). Similarly, Potter (1996:6-7) describes that CA may be relevant to discursive approaches through the understanding of “the delicate way in which actions are embedded in sequences of discourse”. He states that a basic practical understanding of CA is a prerequisite for DA and that it “capture[s] precisely the level of consequential detail that often falls through the cracks” (Potter, 1997:124).

There are links to more critical approaches. Although he was writing about CDA, when Gee (2000:2) describes its focus on the action orientation of language, the construction of institutions through language use in interaction, and that “when we speak or write, we always take a particular perspective on what the ‘world’ is like”, he could have been describing DP. Similarly, Phillips and Hardy (2002:2) argue about CDA that “the things that make up the social world – including our very identities – appear out of discourse... without discourse, there is no social reality, and without understanding discourse, we cannot understand our reality, our experiences, or ourselves”, which has clear parallels to DP.

However, there are differences between all these approaches. Potter (1997:105) for example describes how DP has a broader concern with talk and texts as parts of social practices than the CA concern with talk-in-interaction. Edwards and Potter (1992:2) go on to outline that in contrast to CA, DP has an epistemological foundation, and a concern with the nature of knowledge and reality.

There are a number of key differences between DP and CDA. The first is the focus on participants. Edley and Wetherell (1997:205) describe ‘top down’ approaches such as CDA, where researchers study how people are positioned by and affected

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3 For example, although they might be included in the category of DP, Edley and Wetherell state that the “social world is not constituted in every conversation. We want to acknowledge that some mobilizations of discourse become more stable and pervasive than others, both at an individual and cultural level” (1999:182). This would seem to be a move away from a focus purely on participants’ orientations and considering the site of each interaction as constructive, and this may in part be due to a call by Wetherell in earlier research for greater synthesis between different influences into a “viable approach for discourse analysis for social psychological approaches and topics” (1998:388). There may be further contradictions within approaches. For example, despite outlining that they are in part drawing on Billig’s (1988) ideas about the role of rhetoric in argumentation and citing Potter and Wetherell (1987), Moloney and Walker (2003:306) suggest that “social representations that are expressed within discourse would be directed towards the patterns of thinking underlying the discourse, and not to characteristics of particular individuals producing the discourse”. DP has of course argued against conceptualisations of what might be ‘underlying the discourse’ and such things as mental states that can be referred to through it, instead focusing on the action orientation of language itself.
through discourse. In contrast ‘bottom-up’ approaches such as DP foreground people’s activities, “highlighting the remarkable subtleness and sophistication of ordinary people’s talk and its designed features”. In CDA, dominant structures and power relations can be evidenced in particular discourses that are used to normalise these relations (Hobson, 2002). In contrast, DP focuses on participants’ orientations within a text, and does not attempt to describe a world beyond that.

Second, this prescribes different roles for analysts (Edley and Wetherell, 1997:205). From their privileged position, CDA researchers assume a greater understanding of social situations than ‘ordinary’ people. In contrast, discursive researchers are sometimes almost in ‘awe’ of the sophistication with which people put together their accounts, and view the analyst as “having something to learn from ordinary people’s talk”. Analysis is only possible because of the shared discursive competencies, so the analyst is in no way superior to those whom they research. Third, a crucial difference is that in CDA there is an “impetus to criticise and change social practices” as much as there is to describe and understand them (McHoul and Rapley, 2001:xii). Indeed, Fairclough (1995:1) explicitly states that “this framework is seen as a resource for people who are struggling against domination and oppression in linguistic forms”. DP clearly does not espouse such a view.

A final theme in CDA is the problematising of some, and not all, discourse. In CDA, Fairclough describes how “the power to control discourse is seen as the power to sustain particular discursive practices with particular ideological investments in dominance over other alternative (including oppositional) practices” (1995:2). In DP, no language use is neutral, nor the features used in ideological discourses the domain of certain albeit powerful groups only. In an interesting comparison, Hook (2001) contrasts the approaches of Foucault with Parker (1992), and Potter and Wetherell (1987). He does not however devote much space to explaining what these latter two approaches consist of, and he appears to critique their methods from a Foucauldian point of view, without seeming to appreciate that they are not attempting the same things as Foucault⁴. For example, he states that while “Potter and Wetherell (1987) are rightly explicit about the fact that attaining truth is not the goal of discourse analysis.. it appears that they do not expend enough energy on showing how certain discourses operate as truthful, on demonstrating the bases of power that underpin, motivate and benefit from the truth-claims of the discourse in question” (2001:525). This misses the point that they are not attempting to do this, and indeed, deliberately do not endorse an approach that starts with preconceived ideas or has a political agenda. The emphasis in DP is on the constructive and constructed nature of texts, examining them without a priori ideas about social relations, and orienting to the constructions used by the speakers and writers themselves.

2.5. Discourse Analysis and ECS

How does all of this relate to this research?

Firstly, I am adopting the view that language is not neutral. I do not consider the accounts produced about ECS to be just a factual description of the situation; I argue,

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⁴ It is of course appreciated that such an accusation might be levelled at the review that is being provided here. However, this critique of CDA is being presented in order to highlight what a DA approach does and does not include, rather than solely to criticise CDA perspectives.
and demonstrate in the subsequent chapters, that the language used constructs the issue in a particular way. The existence of the risk, its seriousness, frequency, cause, prevention, and management are all constructed through the language used.

I do not presume in this research that by examining these accounts it is possible to sort out the factual from the inaccurate or constructed ones. I have no privilege or ability to do so. Any information about ECS to assist such a decision would also be constructed and functional and oriented to action; even if it were ostensibly factual data. It may be interesting to draw on an example from Green's (1997) work on the sociology of accidents to illustrate this point. She examined the log books of mountain rescue teams, which documented such details as the number of climbers involved in an incident, how they were dressed, how experienced they were and so on. As Green points out, even the inclusion of such seemingly factual data constructs the responsibility for the need to be rescued in a particular way. Taking note of what climbers were wearing for example implies that this is something that may be relevant in the occurrence of an incident, and implies a possibility that the climbers may be at fault for being improperly dressed for the conditions. Similarly, any account of ECS incidence could be examined for the implicit constructions within it.

Extreme variability in accounts also means that it is not possible to uncover the 'truth' about ECS. Following DA, rather than aiming to get a general understanding of the issue, I am acknowledging and focusing on this variability. Doing so is a way of highlighting constructive work; where two texts or two incidents within the same text appear to be in contradiction, examining the context in which they are situated gives an insight into the function of that language use. Texts produced by different groups may be seen to be different. Equally of course there may be some commonalities. I am examining where, how, and why these occur.

Lastly, it is also important to stress that I am not aiming in this research to resolve or even address philosophical debates, or engage in questions about whether things exist or not. As Potter (1997:6) says, considering the factual construction of accounts does not require an answer to the philosophical question of what factuality is, and as he goes on to say, "need do no more than consider reality construction a feature of descriptive practices; the concern is with interaction, such that philosophical questions of ontology can be left to the appropriate experts" (Potter, 1997:178). This is not to say that this research is 'ignoring' the seriousness of the topic. What I am doing is examining how the seriousness and drama of ECS is built up or undermined. As Antaki (1994:7) argues, "the job of the discourse analyst is to discover, by inspection of the vocabulary and its arrangement, what claims speakers are making about the world, and how they are grounding them", and this is just what I am doing.

In this chapter I have outlined the principles of DA being drawn on; in the next chapter I consider of some of the literatures used in the development of this research; and Chapter Four is an evaluation of some of the principles detailed here.
Chapter Three:
Research on Risk, Reality and Rhetoric

In this review I describe some of the literature relevant to this research. As has been discussed, I am using DA to understand a risk, but place this study much more firmly within the discourse analytic tradition, both methodologically and epistemologically, than within the vast and divergent theorising on risk. I therefore give a brief review of some of this work on risk, and on social problems, highlighting where it was influential in the design of this research. I then outline the previous DA research that I am drawing on, and how some of these concepts are relevant here.

3.1. Risk

There is a huge body of work on risk, both from within and outside sociology. Some of the work was useful in the development of this research, and this will be briefly detailed.

3.1.1 ‘Real’ risk?

There is considerable debate in research on risk over whether such a thing as ‘real’ risk exists. Lupton (1999:1-2) for example notes a common technico-scientific approach in psychology, economics, and medicine, where risks are taken-for-granted objective phenomena. The focus is then on identifying them, and building prescriptive models of avoidance. That ‘risks exist’ is also apparent in some sociology. For example, Furedi (1998:19) states that “those who are at risk face hazards that are independent of them”. Indeed, he notes a divergence between the “public fear and the actual incidence of the danger” (1998:16).

Other work highlights a more subjective character to risks. Dean (1999:131) for example states that “[t]here is no such thing as risk in reality. Risk is a way – or rather a set of different ways – of ordering reality, of rendering it into a calculable form”. Slovic concurs and argues that “risk does not exist ‘out there’, independent of our minds and cultures, waiting to be measured. Human beings have invented the concept ‘risk’ to help them understand and cope with the dangers and uncertainties of life” (1992:119). Similarly, Adam and van Loon (2000:2) point to the essentially “constructed nature” of risks, manufactured through the application of assessment measures. According to Beck, risks cannot be observed as “a thing-out-there”, and exist only in terms of the knowledge about them, open to “social definition and construction” (1992:23).

However, I have no wish to become embroiled in a debate about real and subjective risks; instead, I am seeking to understand how such a distinction may be used in the debate about the particular risk of ECS. The research highlighted here indicates differences in conceptualisations of risk. Whether the risk of ECS is real or not is key for groups to establish; I am examining how they do. Moreover, defining ‘risk’ is
difficult and complicated (Lupton, 1991: 5; Furedi, 1998: 17). I do not wish to do so, but to understand how such terms are used. So for example, when Beck (2000: 4) asks "who is to define the riskiness of a product, a technology, and on what grounds in an age of manufactured uncertainties?", these are exactly the questions that I wish to address.

3.1.2 Risks as cognitive or social?

Just as there are different conceptualisations of risks as objective or subjective, so there is debate over their mental or social basis. For example, Renn (1998: 49) argues that "risks are always mental representations". Others have focused on the social and political factors shaping risk perceptions and responses (for example, Adams, 1995; Thompson et al., 1990; Otway, 1992; Jasanoff, 1999; Horlick-Jones, 1998; Singer and Endreny, 1993; Ruston and Clayton, 2002; Rowe et al., 2000). A major contributor to this field has been Mary Douglas (1985). She argues that cultural assumptions shape notions of risk, which reflect shared norms and expectations rather than individual judgements. In collaboration with Aaron Wildavsky, she makes the point that "public perceptions of risk and its acceptable levels are collective constructs" (Douglas and Wildavsky, 1982: 186), and that the risks chosen for attention are consequential for societal beliefs and processes. Indeed, Franklin points out that "the way that we interpret risk, negotiate risk, and live with the unforeseen consequences of modernity will structure our culture, society, and politics for the coming decades" (1998: 1).

Similarly, however, I do not intend this research to explicitly contribute to this debate. When thinking about the topic of risks, and particularly ECS, notions of the cultural dimensions to risks, their social construction, and their reflection on society were influential. But I am focusing on how this construction takes place, and how groups use ideas about the cognitive or social nature of the risk. A notion as fundamental as ‘does the risk exist?’ is very much up for debate with ECS, and I have aimed to understand how different groups have done so. The discursive approach taken in this research precludes documenting social factors that affect perceptions of the risk; but I have drawn on this research to highlight factors that the groups analysed present as relevant.

3.1.3 Lay and expert knowledges

Another distinction in risk research is between lay and expert knowledges. For example, Kasperson’s (1992) social amplification of risk theory was designed in part to explore the disjunction between technical and social understandings of risk. Further, Slovic’s (1992: 120) results show the varied meanings ‘risk’ has, and he notes the wide range of factors that lay people tend to include in their assessments, a point echoed by numerous studies (see for example, Masterson-Allen and Brown, 1990; Wynne, 1992; 1989; Okrent and Pidgeon, 1998; Shaw, 1999; Franklin, 1998).

Indeed, Plough and Krimsky comment that "it has been difficult to find common ground between the social world of risk perceptions guided by human experience and
the scientists’ rational ideal of decision making based on probabilistic thinking” (1987:4). When Slovic (1992:121) notes that “many conflicts about ‘risk’ may result from experts and lay people having different definitions of the concept”, I have aimed to explore how these different definitions are constructed and used. Lupton (1999:2) describes an increasing focus on “the ways in which different perspectives on risk tend to create conflict between social groups based on differing aesthetic, moral and political assumptions”. I have examined these different perspectives, and the conflict caused by them.

This relates to issues of trust in experts and scientific decision making. As well as differences existing between public and expert understanding of risks, the knowledge that the public receive from experts is increasingly being met with scepticism (Freudenburg, 1992; Franklin, 1998). Indeed, Funtowicz and Ravetz (1998) argue that the high stakes and increasing uncertainties over risks in contemporary society need a new kind of science to provide useful answers. According to James and Thompson (1989:87), individuals faced with a risk consider not only the probability of harm but also the credibility of whoever generates the information. In this research I am exploring how claims to authority are made, and how they are brought into question.

3.1.4 Voluntary or imposed risk

Studies have considered whether risks are imposed or voluntary, and the implications this has. Yearley (2001) highlights research that people differently assess risks they expose themselves to, and those they believe others subject them to. Slovic, drawing on Starr (1969), found that people would accept risks that were a thousand times greater if they were voluntarily assumed, rather than being imposed upon them. Further, hazards rated as voluntary also tended to be rated as controllable (Slovic, 1992:121): if people assume a risk, they feel in control of the consequences of it. Similarly, Benthin et al. (1993) found that when people voluntarily engage in ‘risky behaviour’, they report greater knowledge, less fear and more personal control over the risks. I have drawn on such research to highlight how different groups use these ideas in their presentation of ECS. The categorisation of ECS as voluntary or imposed is a key feature of the construction of the issue, and a focus of analysis.

3.1.5 Blame and control

Whether risks are voluntary or imposed relates to whether they can be controlled and responsibility for avoiding them. Research in this area informed the design of this research, and this is one of the key themes highlighted by analysis.

Risk management has been described as a key characteristic of modern society. Yearley (2001) documents a trend towards taming risk, brought about by confidence in progress and control over nature; an example is advances in medicine which allow control of some diseases. However, he notes that such advances have been consequential, and lead to new and increased hazards as well as greater security. This is of course exemplified by the work of Ulrich Beck.
Beck (1992: 13) describes the risks and consequences of modernisation, epitomised by the concept of ‘the risk society’. At his most succinct, he expresses this as “the stage of modernity in which the hazards produced in the growth of the industrial society become predominant” (1996:28-29). This new form of society is characterised by the minimisation of the consequences of modernity (which Beck terms ‘bads’) assuming central significance over the distribution of societal ‘goods’, and he says that “the gain in power from techno-economic ‘progress’ is being increasingly overshadowed by the production of risks” (1993:12-13). The point, as Beck makes clear, is that these are dangers that “we have created for ourselves” (2000:6).

An emphasis on increased risk as a consequence of (post/late) modern society has been well documented (see for example, Giddens, 1990; Jasanoff, 1999:136; Fox, 1999:13; Okrent and Pidgeon, 1998; Slovic, 1998:73). The point is that risks are perceived as increasingly controllable; while at the same time new ones are emerging (Crouch and Kroll-Smith, 1991; Davidson and Baum, 1991). What has been useful to consider is the notion of controlling risks, and how this incorporates blame and responsibility. As Green (1997:93) says, “[a]ccidents have been transformed from random misfortunes, which can only be understood in aggregate, into preventable misfortunes”. Singer and Endreny (1993:104) build on this to argue that “[i]n a society like ours, the need to fix responsibility, to locate a cause, and preferably an agent, is pervasive” (1993:104). This may be because, as Davidson and Baum (1991), Crouch and Kroll-Smith (1991), and Marris (1996) point out, unpredictable events threaten our sense of control, so assigning responsibility for them becomes a way of coping. If blame can be apportioned, it should be possible to avert similar events in the future. Furthermore, Lupton (1999:4) comments that “[r]isk is primarily understood as a human responsibility, both for its production and management, rather than the outcome of fate or destiny, as was the case in pre-modern times”, and that in late modern society, there has been increasing attention to how blame for risks is ascribed. In the development of this research, I considered how risks are presented as controllable. As Beck (2000:8) says, “risk always involves the question of responsibility”. In this research I consider how this question is addressed, and avoided, by the groups involved with the risk of ECS.

3.1.6 Blame on individuals, organisations or society

Any blame for risks can be levelled at individuals or organisations, and this can have significant implications. For example, van Vuuren (2000:31-32) notes that while previous research focused predominantly on human error as the cause of accidents, work now considers incident causation in its social and organisational context. Indeed, Perrow (1984) says that accidents are an unavoidable consequence of the design of complex technical systems, and Reason (1991) points to the importance of organisational and management factors as causes of incidents. Similarly, Vaughan (1996) suggests that the wider culture of an organisation (with the social forces and contingencies that impinge upon it) is crucial when considering risks and accidents. However, research highlights that it is still very often individuals who are held responsible when an incident occurs. Bennett (2001) describes the ‘need’ to apportion blame after an air crash, and points to the usual focus on pilot error. He argues that this hinders reflection of the underlying causes of a disaster. Blaming an individual avoids having to ask wider questions about the organisation and its structure and management; or make changes to them. This is significant in this
research because of the implications of blame being apportioned at an individual or organisational level. If passengers can be presented as responsible for ECS, then it is up to them to modify their behaviour to avoid the risk. If airlines are presented as responsible, this may have huge legal, financial and organisational ramifications for the industry. It is clearly crucial for groups to establish where blame for ECS should be apportioned, and defend themselves against counter-accusations. In this research, I examine how this is done.

Also relevant here is an interesting literature on illness distribution and health promotion, which has included a focus on whether individuals or wider society are responsible for ill health. The influential Black Report (1980) cited individuals’ behaviour as the main cause of health inequalities between different social classes. Since then sociological work has demonstrated both that this behaviour has to be considered in its social context, and the influence of social factors (see for example Williams and Calnan (1994) on the social factors that GPs could not address when treating chronic heart disease; and Graham (1977) who documents that stress prevented working class women giving up smoking during pregnancy). Research has also noted that individuals do not see behaviour as the main determinant of ill health (Pill and Stott (1982) note that the most frequently cited cause of illness is ‘germs’; these are seen as an external agent for which people cannot be blamed); and that individuals undertake their own assessments of the ‘sort of people’ and the ‘sort of lifestyles’ likely to be at risk of poor health (Davidson et al., 1991). Finally, research in this area has considered illness prevention as a ‘moral enterprise’. Graham (1989) for example notes that health promotion messages reinforce the guilt and confusion women feel; especially because they make parental responsibility equate to sacrifice and culpability for mothers. Indeed, according to Oakley (1989), health promotion messages construct appropriate behaviour. I am seeking to understand how participants orient to these issues. Do groups construct blame for the ill health caused by ECS as an individual’s concern, focusing on their behaviour; or do they present wider influences as being dominant? Is ECS prevention presented with a moral responsibility to care for oneself or for others? I explore these questions in this research.

3.1.7 Language and risk

So far, I have outlined aspects of risk research that highlight key issues in the construction of ECS. In this research, I am examining how the groups studied orient to these issues. My work differs in fundamental ways from much of this previous research. I do not presuppose that risks can be measured; rather, I examine how other people do so. Furthermore, I am not adopting the common view of discourse as neutral. Fischhoff (1998:63) for example uses a referential view of language, and argues that risk communication can be made more or less accurate, and more or less effective. In this research I argue that all language has an effect and a function, that it does not merely reflect what it describes but actively constructs whatever that is.

This point about the referential nature of language also differentiates my research from one other key text that should be acknowledged here. The edited collection by Dorothy Nelkin (1985) does address the issue of language and risk. Nelkin points out that disputes over risk engage and polarise a variety of groups, who approach the issue with their own sets of assumptions, modes of analysis, and ideological
frameworks. These structure their definition of the problem and responses to it (1985:13). Each chapter describes how participants in a risk approach the issue through a ‘frame’ or set of assumptions. These are grounded in cultural, institutional, or situational factors, and are expressed through language (1985:20). Nelkin states it is possible to address the different descriptions and solutions that groups give of risks.

However, the book seems to take a somewhat realist view. Nelkin states that perceptions may differ from the “actual extent of the risk” for example (1985:15). Correspondingly, the view of language presented is not always consistent; some language is seen as important in shaping and presenting ideas, but not all. Also while language is an important factor in the construction of the issue, there are others: a summary of one of the chapters states that it examines “the language, the concepts, and the procedural rules…” (1985:22), as if these latter two categories can somehow be distinguished from the first. In this research I am aiming to understand how such things as ‘frames’ are constructed and invoked in discourse. I am presenting a systematic and detailed approach, absent from Nelkin’s book, to examine the discursive constructions of risk.

3.2. Social construction and social problems

In this chapter I will now briefly consider other useful literatures. I have already documented the contribution of social constructionist perspectives in the development of DA. It is not my intention to begin to summarise the vast amount of work carried out under this banner; for even what the term means is in debate (Burningham and Cooper, 1999:298). Social constructionists differ significantly on the extent to which there is a ‘real’ basis to issues. There is much debate about how tenable such a view is both within social constructionism, and between this view and a more realist perspective (see for example Archer, 1995; Nightingale and Cromby, 1999; Butt, 1999; and Sobal and Brikmont, 1995, for presentations of a ‘realist perspective’, and Herrick and Jamieson, 1993; Grieder and Garkovich, 1994; and Holstein and Miller, 1993, for a deeper social constructionism). I acknowledge however that it is difficult to categorise researchers as either ‘realist’ or ‘constructionist’; there are too many overlaps, different uses of the terms, and to depict a two-sided debate with (all) realists on one side and (all) constructionists on the other would be a necessarily constructed conceptualisation of it (see Chouliaraki, 2002:83; Gergen, 1994, 151; Parker, 1999:2-3).

I do not wish to become embroiled in any debate of this kind. I am adopting a stance of ‘methodological relativism’ towards the existence of ECS. I do not wish to make claims about its existence. I am instead concerned to understand how others do, and how they substantiate their view. This is despite (or because of?) what Collins and Yearley (1992a:308) describe as the “rejection of any kind of foundationalism and its replacement, not by permanent revolution, but by permanent insecurity” that such a stance implies. But as will be considered in more depth in Chapter Four, in this research I am following Woolgar (1992) and do not view such a position as a problem or a failure, but an opportunity.

There is also interesting research on the construction of social problems, which highlights how DA (and therefore this research) can avoid becoming involved in a ‘realism versus social constructionism’ debate. For example, Hoban (1995) describes
the process by which issues may take on characteristics of 'social problems', but
seems to imply that there is a difference between the perceived and actual issue. It is
not clear how this might be assessed, and how he has access to the information about
the 'real' problem. Research in this vein led Woolgar and Pawluch (1985a; 1985b) to
term it 'ontological gerrymandering', whereby some claims are rendered problematic
but the supposed conditions on which they are based are not. However, a DA
approach does not have to become involved in whether real risk exists or not. It
leaves aside such debates, and instead concentrates on how such differences are
drawn upon in language. Indeed, Woolgar and Pawluch (1985a: 224-5) note that a
way to move beyond "the current impasse between proponents of objectivism and of
relativism" is to focus on "close examination of the rhetorical strategies which
constitute social problems explanation... further examination promises to provide
intriguing insights into this fundamental feature of the way we make sense of our
world". Further, other research has explicitly highlighted the value of studying
language. Indeed, Maynard (1988:311) suggests that by doing so it is "possible to
transcend or step outside the terms of the debate between objectivist and
constructionist approaches to social problems". This is emphasised by Marlaire and
Maynard (1993:173) who point out that "delineating the rhetoric of the social
problems language game allows us to move away from single social construction
centred analyses to a more comparative approach by seeking and identifying
commonalities at the level of members' discursive practices". This is exactly what I
have aimed to do.

Having outlined the previous work on risk, social construction and social problems
that has been drawn on in this research, I will now consider the relevant DA literature.

3.3. Discourse analysis: previous research

There seem to be very little (if any) DA research that has specifically addressed risks2.
There are however a number of relevant themes from previous DA work, which I will
briefly discuss.

The first of these is an appreciation of the value of studying purportedly 'factual'
accounts. As Billig (1996:3) says, "so called 'plain' or 'unadorned' styles are
themselves styles, which demand as much authorial skill as more floridly verbose
styles". Such texts are not somehow above discursive practices, and, as has been
indicated in Chapter Two, can be examined in terms of their function and effect. I am
therefore adopting Potter's (1997:108) distinction between the action orientation and
the epistemological orientation of factual accounts. He emphasises that questions can
be asked of texts, such as; how are descriptions produced so that they will be treated
as factual? How are they made to appear solid, neutral, independent of the speaker,
and to be merely mirroring some aspect of the world? And how are these factual
descriptions put together in ways that allow them to perform particular actions? I am
therefore focusing both on how ECS is constructed in texts, and how they are

2 The most relevant study found is that by Horton-Salway (2001a; 2001b) who analysed competing
accounts in the construction of M.E. Her work does not examine constructions of risk, and does not
cover the same themes as this research, but is similar to this in that she considered the different groups
who had an interest in this controversial and contested issue. Horton-Salway's work has therefore been
drawn upon in relevant places throughout this research.
presented as factual, authoritative accounts of it; for as Wooffitt (1992) argues, the factual status of an account is inextricably a product of discursive practices that make it seem so. Using such an approach is particularly relevant for the study of ECS because, as Edwards and Potter (1993:36-37) highlight with reference to Pomerantz (1984), ‘factual’ accounts tend to be produced in situations where accountability is in question, and when they face an implicit or explicit challenge: “where there is an issue, conflict, or dispute” (1993:24). In this research, I am focusing on factual accounts produced by groups involved in a particularly contentious debate.

This leads into the second theme I have drawn on: the rhetorical organisation of accounts (see Speer and Potter, 2000:545; Horton-Salway, 2001b:247; Puchta and Potter, 2002:347; Te Molder, 1999:246; and Simons, 1989:11). Edwards and Potter (1993:24) for instance argue that “accounts are likely to be described in ways that anticipate their possible refutation or undermining as false, partial, or interested and that they are likely to be designed to undermine, in turn, alternative versions”. That is, they can have both a defensive and offensive rhetoric (Potter, 1997). Michael Billig has written extensively on this topic, and argues that because opinions are offered where there are counter-opinions, “the meaning of an ‘opinion’ is dependent on the opinions which it is countering” (1991:17). Similarly, the meanings of statements are derived both from what is being supported and what they are implicitly or explicitly oriented against (1996:2), and in this way “affirmation and negation are intertwined” (1991:143). This is particularly significant for this research, as Billig states that “attitudes are stances on matters of controversy [and] we can expect attitude holders to justify their position and to criticise the counter position” (1991:143). I therefore considered accounts in this light, examining the offensive and defensive rhetoric used. As Billig points out, cases where an attack was implicit, rather than actual, can be highlighted as well, and texts can be seen be employing defensive rhetoric even where there did not seem to be any direct accusation. Indeed, as Potter and Wetherell (1987) argue, accounts are designed to counter real or potential alternatives, a point reiterated by McGhee and Miell (1998). This research therefore followed Potter’s appeal to study both the procedures through which factual versions are built up, and the ones through which they are undermined (1997:107).

A third theme is the management of stake and accountability; examining how texts have been made to seem definitive and incontrovertible (see for example Heritage 1984; Watson and Sharrock, 1991 on the value of this). Potter (1997:111) argues that ‘stake’ is one of the central features of the production of factual accounts. It concerns the interest that authors have in the production of a particular account and attempts to distance themselves from it. Ensuring that accounts are not discounted as a product of an interest amounts to what Potter (1997:110) describes as a ‘dilemma of stake’.

McGhee and Miell (1998:65) argue that “accounts often contain attempts by the writer to show themselves to be separate from the claims they are making and hence disinterested, while the claims made by others are presented as motivated by self interest or other forms of bias.. people are seeking to make their claims appear to be natural and to almost have a life of their own”. Alternatively, authors may build their stake through the presentation of entitlements to have certain knowledge (Potter, 1997:114). As McGhee and Miell point out, “rather than distancing themselves from their analyses (in order to show impartiality), individuals may seek to construct ownership of their relationship analyses (in order for example to show involvement and the authenticity of the analyses)” (1998:65, emphasis in original). Finally, stake

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may be used "as a resource" for those wishing to undermine the facticity of accounts (Potter, 1997:114). Pointing out the stake that an author has in the production of an account is a means of discrediting it.

Considerations of stake are of particular interest in this research. Firstly, as Potter (1997:111) points out, stake is not just attributed to individuals, but also to social groups, nations, and ethnic groups and so on. In this research I am considering how stake is managed both by individual authors, and also on behalf of groups represented. Secondly, two groups have a very clear (and different) stake in the issue (airlines, and passenger groups), and another purports to be neutral (the medical research community). For example, airlines have a commercial interest in playing down the seriousness of ECS but do not want their presentation of it dismissed because of this, and I am examining how they work to counter this. Similarly passenger groups emphasise their involvement in the issues to stress both their proactive role and the seriousness of the issue. Emphasising 'knowledge entitlement' is one way of doing so. Scientists have to be seen to have no stake in the topic for their research to be taken seriously. I consider how they attempt this. All these types of stake have to be differently managed, and I am examining how this is done.

A fourth theme in DA work is on the actions that are accomplished through discourse; of particular interest is how accusations and blame are managed. Edwards and Potter (1992:51) for example argue that "what is ostensibly mere 'description' of actions and events can be constructed to generate specific implications concerning the speaker/actor's involvement with regard to attributional issues of responsibility and blame". I am seeking to understand how this is achieved; as MacMillan and Edwards point out, consideration of how "causality and accountability of actors in events, and of speakers/writers of texts" in factual accounts is a fruitful area of study (1999:153). This may be by examining blaming and exoneration (Horton-Salway, 2001:159); or how "admissions" may be managed (MacMillan and Edwards, 1998:329). I am exploring how risks are presented as avoidable and manageable, and how blame for them can be apportioned, and am drawing on this literature to understand how this is achieved.

Finally, I will be drawing on work that has specifically addressed scientists' discourse. In this research, I am analysing reports in The Lancet, the journal of the British Medical Association. In doing so however, I am not intending this research to be a contribution to the sociology of scientific knowledge (SSK). What I am doing is drawing on issues that SSK has raised, and showing how scientists orient to them in their discourse. Overviews of SSK have been given by Martin and Richards (1995), Ashmore et al. (1995), Potter (1997), and Nelkin (1995), on the different themes and focuses of work. The aspect of SSK that I have drawn on is distinction between the "idealised view of science" and "the conclusion that scientific practice is much more creative and contingent" than this (Woolgar, 1996:15-16); but what I have focused on is how participants orient to these ideas. Indeed, I am using this work to demonstrate how scientists draw on the received view of science to substantiate favourable claims and dismiss unfavourable ones. As Mulkay et al. (1983:198) point out, "scientists... regularly present correct belief, which is almost without exception taken to be identical with their current views, as arising unproblematically from the experimental evidence; whilst incorrect belief is explained by reference to the distorting effect of personal, social, and generally non-scientific factors". I am showing how they do this
in their discourse, and drawing on work that has examined the tools that scientists use to present their accounts, particularly Gilbert and Mulkay (1984), and also Fahrestock (1989), Potter (1983), and Yearley (1981) to do so.

In this chapter I have considered the previous research that is relevant to, and has been drawn on, in this research. The next chapter is a more thorough consideration of the DA methods used to carry it out.
Chapter Four:
Difficulties and Dilemmas in Conducting Discourse Analysis

In this chapter, I consider some apparent difficulties in carrying out DA. I argue that some of the principles of DA either may not be feasible in practice, or that consideration of them presents a challenge to the approach. I describe these difficulties, discuss how I have addressed them, and the effect they have had on this research.

4.1. Potential difficulties and dilemma

The starting point for thinking about some of these issues was a paper by Charles Antaki, Michael Billig, Derek Edwards, and Jonathan Potter (2003), entitled “Discourse Analysis Means Doing Analysis: A Critique of Six Analytic Shortcomings”. In it they describe a number of ways in which research purporting to be DA falls short of the standards required. I will consider in depth some of the points that they raise, and then consider other issues with a DA approach, and how they may be managed in order for (this) research to proceed.

4.1.1 Under-analysis

Antaki et al. state that discourse ‘analysis’ means attention to the details of utterances, showing the effect of the features identified, how they are used, and how they are handled sequentially and rhetorically (2003:16). The first problem they identify is ‘under-analysis through summary’, where the ‘gist’ of data extracts is given by the analyst, but no or little actual analysis is carried out. As Gilbert and Mulkay (1984), Potter and Wetherell (1987), Potter (1988), and Gill (1996) point out, producing a simple summary and ignoring areas of contradiction and vagueness is a principle taught in academic training. Not only is this “precisely the wrong spirit in which to approach analysis” (Gill, 1996: 145), but it is problematic if it does not analyse the features of the text. It also implies there is a reality ‘beyond the text’ that can be described, rather than concentrating on the construction of the text itself. Taylor (2001b:320) notes that material on sensitive topics may be so powerful that a novice researcher is tempted to let it speak for itself: “however, this does not constitute academic analysis... analysis must involve more systematic investigation” Similarly, McGhee and Miell (1998:67) argue that the act of summarising risks losing the “subtle nuances and connotations of specific words used, particular turns of phrase and idiomatic vocabularies”.

I agree that this is indeed a shortcoming when it occurs. However, it may be harder to avoid than perhaps it seems. Indeed, even those who highlight such a shortcoming may be seen to engage in a form of it themselves. For example, in one passage Potter (1997:5) lists examples of where the phrase ‘economical with the truth’ is mentioned

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1 Following Burman’s (2003:1) consideration of Antaki et al.’s paper, similarly I wish to offer these comments “in a general sense of sympathy and agreement with their arguments”.

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in a search of newspaper articles. The examples are not analysed but are taken at face value to make an analytical point about their occurrence and frequency. Furthermore, Potter (1997:174) can also be seen to be summarising and rephrasing what is being said, as this extract from his text, including the data extract, shows:

“A newspaper article about the poet Philip Larkin’s meeting with Prime Minister Margaret Thatcher illustrates a more complex use of the same idea:

He had been introduced to her once before, at a reception in Downing Street in 1980, and liked to tell the story that as she welcomed him she said: ‘Oh Dr Larkin, I am a great admirer of your poems.’ ‘Quote me a line then’. [...] Larkin says that Mrs Thatcher misquoted the line: ‘Her mind was full of knives’.

‘I took that as a great compliment’ [...] ‘I thought if it weren’t spontaneous, she’d have got it right’ (Independent on Sunday, 3rd July 1994 – emphasis added).

Note the way that Larkin is reported to have used Mrs Thatcher’s failure to get the quote precisely right as an indication that she actually knew the poem, but was having to recover it from memory.”

Is it the case that Potter is summarising and not analysing in this sentence? There may well be many instances that Antaki et al. are referring to that are much more problematic than this, and I do not doubt the validity of their claim. But is this sort of sentence as used by Potter needed to move the text along, make it readable and present a flowing argument? This touches on what is a key part of many of the dilemmas considered in this chapter – the constraints of academic writing. A text must be coherent, and that may mean summarising to help the argument along. This is not to say that summary alone is enough; clearly it does not constitute analysis. But it might have a role to play.

To summarise data is to lose the crucial detail in it, and in this research I have made efforts not to do this. It may be useful at times, however, to introduce data with a brief description of it. This has been done as rarely and as conscientiously as possible. It is also noted that a way of ‘getting to grips’ with the data is to read it, get a gist of what it is saying, and then analyse it closely to understand why a particular reading has been gained from it2. I would therefore argue that while brief and careful summary certainly does not constitute analysis, as long as analysis follows, then it may be acceptable. This is what I have done.

4.1.2 Taking sides

A second shortcoming that Antaki et al. identify is “under-analysis through taking sides” (2003:4). Remaining agnostic towards accounts is key in discursive approaches (see for example Wooffitt, 2001:49). In her work on patients with M.E. (myalgic encephalomyelitis), Horton-Salway says that “rather than taking up a position on the debate and offering my own explanations and definitions of M.E., my analysis of the data will focus on how the participants (mostly doctors and sufferers) make sense of its causes and definitions” (2001a:147). Antaki et al. state that

2 Potter (1988:48) for example says that “the analyst constantly has to ask: why am I reading the passage in this way? And what features of the discourse allow me to produce this reading?”
inclusion of a moral, political or personal stance towards the quoted text does not constitute DA (2003:9). Taylor (2001b:320) agrees and argues that DA “should be coherent, depending for its persuasiveness on argument, rather than, say, emotional impact.” Antaki et al. (2003:4) point out that taking sides may sometimes be subtle or implicit, and give examples such as an analyst saying that:

“the speaker ‘realises’ or ‘appreciates’ how relationships need hard work. Or the analyst might add that the respondent ‘takes seriously’ the idea of marital commitment and ‘sees the problems’ of divorce”.

Antaki et al. argue that this indicates that “the analyst is aligning himself or herself with the position taken by the respondent”, and that crucially, this support alone does not constitute analysis of the discourse. They do acknowledge the debate within different forms of DA about this point, and even amongst themselves; those working in CDA might specifically align themselves with a particular text. The point is that alignment on its own does not constitute analysis. I agree; but the likelihood of remaining agnostic needs to be considered. Can an analyst remain calm and distant in receipt of a harrowing account? I have no wish to ‘bang on the furniture’ to stress that some things, such as accounts of violence or abuse are ‘obviously harrowing’; but if a participant presents their account as upsetting or traumatic, then the analyst may be able to understand it in this way. Can they then remain detached from it? I think it is essential to be agnostic, and I have attempted to be impartial to the accounts analysed; indeed, where I felt that agnosticism might not be possible, I abandoned this element of the research (this is fully considered in Chapter Six).

4.1.3 Over-quotation

A third point that Antaki et al. make concerns “under-analysis through over-quotation”, where a large amount of data are presented with little analysis of them. (2003:4). However, there are instances where those who highlight this shortcoming appear to engage in it – MacMillan and Edwards (1999:155-6) for example list eight extracts from newspaper articles in order to make their point, without individual analysis or deconstruction of them. Antaki et al. say that over-quotation is not a substitute for analysis, and I agree that a collection of extracts showing the same feature is not DA. But again, the practical conditions of carrying out DA have to be considered. It is tempting to list instances of a phenomenon to substantiate the claim about its existence and significance. This relates to academic credibility and peer approval. It is also a function of the nature of DA, where generalisations or statistical associations cannot be produced in the same way as other quantitative or qualitative approaches. In this research, I have attempted analysis of all extracts of data rather than merely listing several as examples of a phenomenon; where two are given, a comparison is being made.

There are other points that Antaki et al. make that I agree with and which I have followed in this research. For example, they point to the danger of “circularly identifying mental constructs”, and an interpretation of discourse as the expression of some “underlying realm of thoughts, ideas, attitudes or opinions, where the nature of those underlying thoughts and opinions is given in the talk itself” (2003:13). This is

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3 A reference to the Edwards et al. (1995) paper previously discussed, in which they describe how critics of their approach accuse them of ignoring what is real, and may bang on a table to ‘prove’ that it, and other things, exist.
of course problematic, as it has been convincingly argued that language is not a reflection of an inner cognitive state\(^4\). I have attempted to avoid implying that discourse is representative of a mental realm. Furthermore, Antaki et al. point to the problem of “under-analysis through isolated quotation, where a single quote is selected and allowed to ‘stand for itself’ as if it required no further comment” (2003:11). As they point out, “quotation, like summarising, is not discourse analysis in itself”. Again, I have analysed all data extracts to understand how they make a particular impression, rather than leaving that impression to speak for itself. I have similarly tried to avoid what they describe as “under-analysis through false summary” (2003:15), implying that the data are representative of a (section of) the world at large. Antaki et al. argue that DA means doing analysis; and I have tried to demonstrate this throughout.

I have so far drawn on the critiques of DA research made by Antaki et al.. I will now discuss the other issues that have arisen in the course of this research.

### 4.2 Intention

The first point may be one of clarification. It concerns whether participants deliberately construct their accounts. For example, Potter (1997:174) states of his data that “we can see that it is highly selective and carefully organised”. This certainly implies intention, as does the description of a participant who is stated to “cleverly use this requirement. as a resource” (Speer and Potter, 2000:553). However, this may be more a product of the research style, rather than necessarily meaning to imply that people do intentionally construct their discourse in particular ways\(^5\). Indeed, Potter (1997:46) points out that the form of analysis can imply conscious planning. Instead, it is possible to consider “utterances being fitted to contexts in ways that perform actions without necessarily involving the speaker in thought-out, strategic planning”. He points out that we are “familiar and skilled” at everyday conversation. Even when analysis of such conversations has revealed their complex organisation, he argues that it makes sense to describe this skill and design “without implying planning and strategy” (1997:46). As Wetherell and Potter (1988:171), and Gill (1996:142) point out, people may just be ‘doing what comes naturally’ or saying ‘what seems right’ for the situation, rather than be strategically planning, or self consciously adjusting their discourse.

Potter (1997:64) therefore states that it may be “most analytically fruitful” to remain agnostic about whether speakers intentionally and strategically design their discourse. While it is not inconceivable that they plan the effects of their interaction, he states that it is doubtful that this happens most of the time. The point is that it is not possible for the analyst to distinguish between the two. It seems the aim is to analyse how a particular effect may be achieved, and not to be concerned with whether it was deliberate. This is relevant for this research where it may be presupposed that the groups planned at least some of the texts studied here. Press releases for example are

\(^4\) For example by Potter and Wetherell (1987); Edwards and Potter (1992); Antaki (1994); Wetherell (1998); Moloney and Walker (2002); Seymour-Smith et al (2002); and McGhee and Miell (1998).

\(^5\) Lawes (1999:5) points out the danger that implying a deliberate construction risks implying underlying cognitive processes at work. As she says, this is incompatible with the focus that DA has on language, which does not suppose that certain mental attributes can be measured.
likely to be carefully written. Indeed, the planning of texts can be seen from the changes made to them, and I highlight where these occur and the effects that they have\(^6\). In doing so, it does not matter whether these were intended or not.

### 4.3 Generalisation

A second point of clarification concerns the degree to which DA research can be generalised. There seems to be some disagreement about this. For example, Gill (1996:155) highlights that DA does not aim to uncover “universal processes”, and moreover points out that “discourse analysts are critical of the idea that such generalizations are possible”. She states that discourse is always constructed from particular interpretative resources and always designed for specific interpretative contexts: “In short, all discourse is occasioned; there are no trans-historical, transcultural, universal accounts”. Results from DA and other approaches will therefore differ: analysis identifies “normative patterns” rather than aiming for “statistical generalizations” (Puchta and Potter, 2002:351; Te Molder, 1999:249).

On the other hand, there are instances where it is implied or stated that DA findings can be generalised. Findings may be offered as generalisable from one account to another within a particular group. Wetherell and Potter (1988:173) for example state that they chose a “relatively large sample by DA standards because we were particularly interested in the generality of our conclusions across a wide group”. Taylor (2001a:25) notes that patterns observed in one account may be repeated in further examples, and Potter et al. (1990:213) state that “one of the striking things about studying the talk of fifty or so interviewees on a particular topic is the restricted and indeed stereotypical set of terms and tropes that occur again and again”. Moreover, the possibility of generalisation across different contexts as well as within them is suggested. Potter and Wetherell (1987:161) note that an effect described in one text may have relevance for other diverse areas. Potter seems quite adamant about this, depicting the “generality” of questions concerning the production of factual discourse (1997:2). He describes how he draws on a wide selection of materials because of his “conviction that there are general features of fact construction” (1997:8). Potter identifies a number of themes used in constructing such discourse, and argues that they are “persuasive and recurrent” (1997:205). He even argues that DA is a valuable method of study because, “although the details of what is talked about may be endlessly varied, the sorts of procedures for constructing and managing descriptions may be much more regular, and therefore tractable in analysis” (1997:112). Furthermore, Gilbert and Mulkay (1984:39) suggest that the ability to generalise findings can be tested by collecting further data: “Evidence will be required from many more research papers and from other research areas in order to establish any degrees of generality for our conclusions”.

There seems to be a contradiction between the principle that all interaction is dependent on context, and the assertion that themes and processes can be generalised.

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\(^6\) It could be argued that written accounts are more likely to have been deliberately constructed than spoken ones. Potter’s comments here, as in the majority of DA theory and empirical studies, relate to interaction, and not directly to written texts. While much of the theoretical debate can be related to documents, this seems to be a something of an omission in the literature. So for example, while this point about intention has some validity for written texts, there are clearly vast differences between impromptu conversations and situations where it is possible to extensively plan texts.
across different contexts. Can it be that while discourse is not generalisable and it cannot be claimed that a particular effect is in general use, it is possible to illustrate other occasions where it is? It could be that the different conceptions of the ability to generalise reflect different approaches to DA. Edley and Wetherell (1999:182) imply this when they state that their analysis is “grounded in that strand of discourse theory which pays attention to the more global patterns in collective sense making”. But other discursive researchers also apply the same concepts to different situations, meaning attention is focused on whether certain themes or processes are present in the data. This relates to whether concepts are imposed on the data or generated from what participants say. I will now consider this.

4.4 Participants’ orientations

A key principle in DA is the primary importance of ‘participants’ orientations’. This is an “imperative” in discursive work, where attention is directed at what is going on for the participants themselves, within any given sequence of interaction (Edley, 2001:190). Antaki (1994:4) describes how this might work in practice. Analysts consider how participants use words and meanings because “it is less profitable for the analyst to track down the (given) meaning of an utterance than it is to watch for how it is responded to by those to whom it is addressed, or more generally, to read its significance from its surrounding context taken at some grain of fineness”. It is stressed that analysts should try to understand both the meanings that language has for participants, and the way that they use language. As Psathas states, he “…make[s] every effort to use only those terms which members might or could use” (1990:6).

However, it seems this principle is not always followed. For example, Wetherell and Potter (1988:169) seem to suggest that analysts can discern things about the use of language by participants that they themselves may not be aware of: “discourse.. has wider repercussions of its own which may not have been formulated or even understood by the speaker or writer”. They go on to state that “choice of terminology can have subtle effects which may be overlooked by speakers”, and that “neither users or receivers of this discourse need be intentionally aware of these consequences when formulating their description” (1988:170). Can it be that the ‘analyst knows best’?

These questions may be usefully illustrated by extracts from a debate in the journal Discourse and Society between Michael Billig and Emmanuel Schegloff. It addressed various matters about approaches to language, and some of Billig’s points in particular are relevant here (even though mainly oriented to conversation analysis (CA)). Billig (1999a:543) argues that CA uses a specialist rhetoric which is literally not participants’ own terms. Schegloff et al.’s (1990:31) previous CA work gives an example of this; they describe a concern with “…the phenomena of ‘correction’ (or, as we shall refer to it, ‘repair’).”. As Billig points out, such use of analysts’ classifications contradict the aim in CA of “taking seriously the object of inquiry in its own terms” (Schegloff, 1997:171, emphasis in original), and imposes categories upon peoples’ interaction. As he says:

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7 This of course accounts to a certain extent for the preference for interactional data rather than written texts noted earlier.
"There is no doubt that CA uses a highly technical vocabulary. This creates a paradox. Although participants are ostensibly to be studied 'in their own terms', they are not to be written about in such terms. The speakers, conventionally studied by CA, do not talk of 'adjacency pairs', 'preference structures', 'receipt designs', 'self-repairs', etc. Instead, analysts use their own terms to accomplish this observation of participants' own terms [...] The difference between the analyst's rhetoric and the vernacular of the participants is more than merely a difference in vocabulary. Analysts are attending to matters that the speakers do not." (Billig, (1999a:546):

Billig (1999a:547) considers whether this use of specialist terms is a necessary feature of CA. He cites Sharrock and Anderson, who argue that analysts do not focus on features of talk that 'are readily observable' by speakers, with the result that CA "necessarily disattends to what actors may see as the business of their talk, in favour of the activities which actors engage in solely by virtue of their character as operators of a speech exchange system" (1987: 246).

But is it necessary for analysts to move beyond the data in order to analyse it, and is a focus purely on participants' orientations an impossible ideal? Antaki (1994:161) certainly seems to think so, and argues that "to make claims about the rhetorical effects of what people are up to in their conversations, one needs to make inferences which necessarily take some steps away from the information given."

Although Billig was referring to CA, his points are applicable to DA. It not only uses some CA terms and concepts, but has others of its own, such as 'interpretative repertoire'. It seems doubtful whether any participants would state that they had been using an “interpretative repertoire” in their account. While the meanings that participants use may be addressed, their texts are examined for features that they may not consider to be the most pertinent, and are described in terms that they certainly do not use and that may not be understood by them.

4.5 Imposition or unmotivated looking?

This relates to a further debate about whether analysts engage in ‘unmotivated looking’ at a text or have preconceived ideas about what might be there. If the orientations of participants take precedence in DA, what does this mean for the process of analysis?

Firstly, the stress on this as a principle is clear. Psathas (1990:3) states that “the first stages of such research can be characterised as ‘unmotivated looking’. No particular, pre-selected topics or phenomena are being searched for”. He goes on to state that “we are seeking to discover phenomena, not validate prior conceptualisations and interpretations about phenomena” (1990:7). The data should not be examined for pre-existing ideas, nor categories imposed upon on it. Taylor (2001a:38) reiterates this: “the researcher is looking for patterns in the data but is not entirely sure what these

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8 After all, Potter (1996:6-7) has argued that a basic grasp of CA is necessary to undertake DA.
9 Drawing on definitions from previous research, this may be described as a culturally recognised set of related resources including terms, descriptions, and tropes that are drawn on by speakers to construct versions of a phenomena (see for example Potter, 1996:4; Seymour-Smith et al, 2002:255; Lawes, 1999:6; Wooffitt, 1992:61).
will look like or what their significance will be. She or he must therefore approach
the data with a certain blind faith, with a confidence that there is something there but
with no certainty about what". Indeed, Wiggins and Potter (2003:518) explain that
analysis should "identify and highlight phenomena that have not previously been
subject to empirical study".

But to what extent is this possible? Antaki (1994:138) describes how features of
language use are not simply apparent but require identification by the analyst. In
order to do this and to persuade readers about the effects of genre, positioning and the
effects of conversational sequencing, analysts are obliged to "do homework in
stylistics, pragmatics and conversation analysis". This implies that analysts do not
come to the data with an 'open mind', but with ideas, tools, and techniques not only in
mind, but rehearsed and ready to apply. For example, MacMillan and Edwards
(1999:153) state that they use "technical analytical categories", which are drawn from
CA, rhetoric, linguistics, and other literature on discourse, "in so far as they help to
explicate analytic claims". Indeed, Wetherell (2001b: 395-6) points out that looking
at data without preconceptions is impossible because analysis always takes place from
a position of prior assumptions and theorising. This seems particularly pertinent in
DA, where experience and apprenticeship are an appropriate way to learn (I expand
on this in section 5.1).

The aim of 'unmotivated looking' also has to be balanced against the need for
research to build on existing studies. Potter makes this quite explicit: "my hope is that
these themes will provide an analytic start point and stimulus for researchers to take
the topic of descriptions further" (1997:206). There seems to be a parallel here to the
nature of scientific work (Collins, 1985). Is it the case that while the real credit comes
from discovering something 'new'\(^\text{10}\), the established discoveries still have to be
acknowledged, so their authorship is recognised, there is no danger of reinventing the
discursive wheels\(^\text{11}\), and to prove the analyst's apprenticeship and authority in the
field? When Taylor (2001a:22) outlines that researchers should design studies to
build cumulatively on previous findings, the point seems to be to apply previously
'discovered' phenomena to new data (see also Antaki et al., 2003:16; Wetherell et al.,
2001b:6). But there is still the issue of imposing these previously found categories on
the data. Billig (1999b:574) contends that prior judgements cannot be avoided: "the
analyst, in order to conduct the analysis, must bring presuppositions about the nature
of the interaction".

How does this apply in this research? I have sought a balance between focusing on
what authors are doing in their accounts, and imposing categories of analysis on them.
I have applied concepts from previous research, but made efforts to show how these
are matter for participants, even if they would not use or recognise the terms. While
this may not constitute 'unmotivated looking', I do not think this is possible. I first
read my data without any ideas as to what it might contain; but then it is impossible to
chart where this ends and the recognition of concepts or devices begins. It is also of
note that this is a thesis, has to be firmly situated within previous research, and
demonstrate knowledge and understanding of it.

\(^{10}\) A point eluded to by Potter and Wetherell (1987:171).
\(^{11}\) There is little point and no credit in for example 'discovering' that when items are grouped in threes,
speakers orient to the third part as a sign of completion – this should reference Jefferson (1990:63).
In summary, while there is an emphasis on examining ‘participants’ orientations’ in data without any preconceptions, this may be unrealistic because the previous research will be known about, and referencing it may be required for academic credibility. Is it the case that reflexively acknowledging this is the only way to proceed, rather than striving for an impossible ideal of ‘unmotivated looking’ for participants’ orientations?

4.6 Context

The next issue is the importance of context. A fundamental principle in DA is the contingent, indexical nature of language. Potter (1997:4) says that “the simple point here is that people do not produce descriptions out of the blue; they produce them for what they can do in some stream of activity”, a point echoed by Antaki (1994); Tuffin and Howard (2001:198); Jackson and Cram (2003:16), and McGhee and Miell (1998:66). As Moloney and Walker (2002:317) describe, the variability in talk means context is crucial, and is a way of understanding this. Language use is contingent on the context in which it is produced.

The amount of context necessary to give an account meaning varies according to the approach taken (Wetherell, 2001b:387). Conversation analysts might only include contextual factors to the extent that participants refer to them in their talk. In contrast, critical discourse analysts would argue that understanding an interaction requires knowledge of the social, historical and cultural context; moreover, it is a knowledge of these conditions that determines which interactions will be examined. Wetherell (2001b) argues that these differences reflect different approaches. What she does not go on to say is that there is debate about this within, as well as between approaches.

Considering the amount of context deemed necessary, Wetherell says that context may only be relevant for analysts in terms of what participants are trying to achieve: “identities, narratives, and versions can be understood in terms of the work they do in the immediate interaction and, once again, relevance is an issue for participants rather than analysts” (2001b:388). Is this workable in practice? In contrast, Taylor explicitly argues that the meaning language has derives both from an institutional and interactional context (2001a:7, emphasis added). Billig (1991:18-9) stresses that “the strategic interactions of individuals, who are greeting, blaming, excusing, etc, each other, occur within a wider social patterning. Even the words they use have a history, which is echoed in the present... in addition to the immediate context in which opinions are expressed, there is also a wider context”. It may therefore not only be

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12 It is important to note the two meanings of ‘context’ in which an utterance or sentence is important. The first is an institutional context, such as a classroom, a courtroom, a casual conversation; the second is an interactional context, meaning the series of utterances in which something is said and oriented to; for example Potter (1997:4) describes a phrase being “occasioned by its context”, where it may be a response to one given previously. This is perhaps similar to Schegloff’s (1992) distinction between an external (or distal) context, and a proximate context.

13 See for example Psathas (1990:5) who argues that “we will not undertake to define the phenomena of interaction since, from the epistemological position on which such work is based, no stipulative position would be sensible. Interactional phenomena are discoverable matters”.

14 Indeed, it has been noted that institutional contexts only exist when the participants orient to them; Lawes (1999:17) for example describes how the appearance of something such as a research interview is produced through the interaction of those involved, a point reiterated by Speer (2002:512).
that the wider context is important for participants and for the meaning of language use, but that analysts could not examine the data without an understanding of what this context might be: Gill (1996:147) says that “without an awareness of the social, political and cultural trends and contexts to which our texts refer, we would be unable to carry out any analysis”.

A question then arises: if it is necessary to describe an institutional as well an interactional context, how might this be done? One answer is to give details of a wider context – but this means moving beyond the data. Firstly, this may lead to data and background information becoming confused or intertwined: “it can be argued that including in the data the information that, say, one speaker is female and one is male amounts to a claim that gender is relevant to the interaction, when perhaps it is not” (Taylor, 2001a:25). Secondly, any description given of the context will be a constructed version of it. Any features described will be the analyst’s selection, and of course will not be ‘neutral’\(^{15}\). As Antaki says, details of a context will be “the analyst’s culturally informed reading of it” (1994:130). Thirdly, how can a wider context be presented to readers for validation, if it is based on the analyst’s account and not directly on the data? I will return to this point in the next section.

An alternative answer would therefore be to avoid descriptions of context, and present enough data that it becomes apparent. But how much data is necessary to allow readers to assess both the relevant institutional and interactional context?

One option is to present all the data; this might allow an understanding of the particular institutional context to which the participants are orienting, and the particular interaction that an extract comes from. However, academic constraints, limits on space and reader patience render this problematic (I will expand on this in the next section). Further, it may be difficult to determine just what ‘all the data’ is. Any selection of a topic and the data related to it is the choice of the analyst. These choices are not merely a reflection of what is ‘out there’ or is ‘obviously’ relevant. Others might select the data differently\(^{16}\), and there will always be data excluded in a study. As there are no boundaries around ‘the data’ for a ‘topic’, including ‘all the data’ becomes a problematic notion.

A second option is therefore a necessary selection of the data studied. But this may not be simple. Antaki (1988:12) argues that a “sentence ripped out of a transcript is all but impossible to make sense of, and even a reasonably long extract is thought by some to be unintelligible”. In later work he cites Condor (1990) to argue that to “crop extracts from transcripts may be to alter significantly the meaning they had at the time” (Antaki, 1994:125).\(^{17}\) Potter and Wetherell give a data extract that is 126 lines

\(^{15}\) Potter (1997:133) for example draws attention to the “problem I am having giving a ‘neutral’ description of the ‘thing’ that is subject to competing description”. He also acknowledges that “the search for non-metaphorical language within which to discuss metaphor is futile, or, at very least, it begs the question of what literal uses of language would be” (1997:180). This point is reiterated by Gill (1996:147) who points out that “to say that an awareness of the context of discourse is vital is not to imply that this can be neutrally and unproblematically described”.

\(^{16}\) As Potter and Wetherell (1987:7) note about their selection of data: “[n]aturally we have been guided by our own value judgements as to what is the most productive and interesting. Others will look at the field differently”.

\(^{17}\) This is not of course automatically to assume that participants had a definite meaning, or that it can be known, but that taking extracts out of context and attempting to understand them is problematic.
It is clear that a balance is required between the meaningful presentation of extracts and allowing readers to validate work; and infinite data collection and limits on space and patience. Whatever position is reached will not be ideal. In this research, I have described and referred to a wider context, to make the data meaningful to readers. I do not pretend that this was an objective summary of the situation, the overview of ECS in the Introduction was of course deliberately constructed. Aspects were highlighted that proponents in the debate would question, and it was in no way a neutral account. It was also constructed to be persuasive about the importance of the issue, and therefore the value of studying it. But I consider such an account was necessary so that readers can make sense of the purpose of the research. Perhaps what is important is to acknowledge the contingent, constructed nature of such contextual description, to avoid giving the impression that it is possible to have access to the ‘facts’ of the issue, or that some language is neutral and may be unproblematically used. Furthermore, I would argue (and demonstrate in analysis) that the wider context is oriented to by participants. I have aimed to highlight when and how this occurs in the data. Potter (1988:48) advocates presenting as much data as is “manageable” and ensuring that any selection is as representative as possible of the materials studied. I have followed this to allow validation of this by readers. This leads into a consideration of exactly how that might take place.

4.7 Validation

While validity is an issue in all research (and I will compare DA and other research more fully shortly), in DA there are no facts to which analysis can be compared. As Taylor says, for DA research this may amount to a “crisis”, because the researcher “cannot claim to offer ‘objective’ knowledge of reality” (2001a:12). Seale points out that conceptions of reliability and replicability are rooted in a “realist view of a single external reality knowable through language” (1990:41), and “validity in this tradition refers to nothing less than truth, known through language referring to a stable social reality (1990:34)”. For discourse analysts, different criteria for evaluation are required.

DA therefore has particular methods of validation. Potter (1996:11-12) recognises that even though conventional measures of validity and reliability are not useful here, and that there is less of distinction between them than in conventional research, the concepts are still important. The five methods that Potter (1996) and Potter and Wetherell (1987) describe will be briefly described here.

The first of these is to ensure coherence. Analysis should show how the discourse fits together and how discursive structures produce effects and functions (Potter and Wetherell, 1987:170). Potter (1996:11) argues that each new study provides a check on the adequacy of the previous studies on which it draws; those studies which illuminate aspects of interaction may be built on, while those that do not are likely to become ignored, a point also made in Edwards and Potter (1993:33). This clearly

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18 Or of course that such a thing could be achieved.
19 This confirms again the way in which research is carried out in the light of previous work.
also relates back to the generalisation of DA research; 'valid' studies may be applied to further research.

The second method is to consider deviant cases; indeed, Potter (1996:11) says that cases apparently contradicting a pattern are some of the most useful analytic phenomena. He argues that in DA research "deviant cases are not necessarily disconfirmations of the pattern (although they could be); instead their special features may help confirm the genuineness of the pattern"; the exception proves the rule.

Indeed, Puchta and Potter (2002:349) argue that because analysis is concerned with identifying patterns rather than a general statistical association, analysis of potential deviant cases is particularly important for supporting the adequacy of claims.

The third method of validation is an emphasis on 'participants' orientations': "when looking at variability and consistency, it is not sufficient to say that as analysts we can see that these statements are consistent and these dissonant; the important things is the orientation of participants, what they see as consistent and different." (Potter and Wetherell, 1987:170). I have already noted that DA privileges participants' perspectives over those of the analyst. Potter (1996:11) describes the oft cited critique that there is no assessment of DA interpretations, but states that a close attention to participants' understandings provides one kind of check.

Fourth, Potter and Wetherell describe the criterion of 'fruitfulness'. This is "the scope of an analytic scheme to make sense of new kinds of discourse and to generate novel explanations" (1987:171). This also relates back to the balance between acknowledging existing research, and finding new and interesting concepts.

Finally, Potter (1996:12) states that "perhaps the most important and distinctive feature in the validation of discourse work is the presentation of rich and extended materials in a way that allows readers of discourse studies to evaluate their adequacy". As Potter and Wetherell (1987:172) make clear, a DA report is more than a presentation of the findings, it is part of the process of confirmation and validation; and Potter (1997:105-6) states that "if we have a transcribed record of discourse, rather than a set of formulations in note form, it places the reader of the research in a much stronger position to evaluate the claims and interpretations". This follows Sacks's ideal of work "where the reader has as much information as the author, and can reproduce the analysis" (1992: I, 27)\textsuperscript{20}.

In conclusion, Potter (1996:12) does add the caveat that not every study will combine all these measures; nor do they guarantee the validity of DA research, as there can be no such thing as a guarantee. In relation to this, it is useful to draw out a comparison between DA and other forms of research. Indeed, some of the methods of validation

\begin{footnote}
\textsuperscript{20} Of course, the reader may not want to examine all the data presented; analysis is the job of the analyst. This seems similar to the fascination in natural science with replication, which is a fundamental principle but rarely carried out. Replications of experiments are usually only carried out by students learning how to do them – and if the experiment doesn't work, there is a presumption of student error. But replicability is a standard that is used in science, and this standard is not compromised by questions of whether or not anyone actually does it (Gilbert and Mulkay, 1984). Similarly in DA, there is the ideal, in theory at least, that the analysis can be opened up, the data presented, and the reader invited to consider whether they would come to the same conclusions.
\end{footnote}
are apparently similar. Lofland and Lofland's (1984) comments about deviant cases and coherence in ethnography are remarkably similar to DA. Lieblich et al. (1998) describe how they gave interviewees the analysis of their interviews to check that they had understood them properly. The desirability of generating 'novel explanations', and doing so by presenting a report are common to researchers (Dey, 1993). However, the point is that the enactment of these procedures is based on the proposition that it is possible to get closer to the truth, and that research can be more or less successful in achieving this. While this may be apparent as a principle of quantitative research, where a survey can be made more accurate and free from distortions and bias (de Vaus, 1993), this is also applicable to qualitative methods such as ethnography, unstructured interviews, or documentary analysis. Referring to documents, MacDonald and Tipton (1993:199) say that achieving validity requires a "triangulation of research strategies"; more data can be collected to provide a check on the accuracy of the results. In ethnography, Fielding (1993:167) notes that "objective observation is hopeless to achieve", but lists various procedures to "evaluate the quality of observation in terms of possible error and bias". Remarkably similar concerns are expressed by Strauss and Corbin (1998) about grounded theory. Silverman (1985), Denzin (1988), and May (1997) all highlight that the development of methods in such a search for 'truth' can seem to deny the interpretations and creations of the social world by the people in it; but even an in-depth ethnography assesses whether the account produced is a valid reflection of that particular social setting. In other research, validity is the relationship between the analysis and the topic; in DA, validity is the relationship between the analysis and the data, because that data is the topic.

4.7.1 Considerations about validation

I will now reflect on the measures for validation of DA I have just described. It is interesting to consider is how these seemingly straightforward criteria may be implemented in practice, and what they imply about the very nature of DA work. I will address four aspects of validation in practice.

4.7.2 Validation and volume

First, there are considerations concerning volume of data. If readers are to validate analysis by examining the data and comparing their conclusions, this would mean presenting all the original data: Psathas (1990:15) argues that a report should "include all or as much of the data... as the researcher actually analysed in developing the description and the analysis". As I considered in section 4.6, is this possible in practice?

One problem is the permitted length of journal articles. Reicher (2000:6) says this is particularly pertinent when "dealing with data that is not amenable to summary and to compression". Indeed, he goes onto ask whether journal word limits may actually indirectly discriminate against certain forms of research. To a certain extent, this depends on the data. MacMillan and Edwards (1998) for example append the full text of a newspaper article that they studied to their paper; but as this was just one article, it was possible. It would not be possible to append the transcripts of 50 interviews.
Taylor (2001a:41-2) says this means analysts will usually have to leave out most of their material, especially in larger scale projects.

One solution is to present summaries of the data. Taylor (2001a:42) describes how Brown (1999), in his study of self-help books, presents summaries of the narratives and devices found, illustrated with brief quotations. But while this means analytic claims can be based on large quantities of data, it is difficult to validate them because the data is not presented and participants' orientations can be less easily assessed.

Data presentation and summary was considered in section 4.6; the point is that this has implications for validity as well as for the context and detail of an account.

Another solution is to attempt to compromise over volume. Puchta and Potter (2002:349) do so by presenting one instance of each phenomenon: "this is a compromise between journal space and reader patience on the one hand, and allowing the reader the option to assess our analysis of a range of examples on the other". They then referred readers to their other publications with more details in them.

Yearley (1981:412) resolved this difficulty by acknowledging that his description of his data involved a "clearly a certain amount of 'glossing'", but implies that this is unproblematic because the paper he analysed "can be checked in a number of major libraries and is relatively short". By providing some 'raw data', the discourse analyst is opening their work up for verification. But in DA this is a fundamental principle; is this apparent compromise enough?

4.7.3 Validation and extracts
Second, there are considerations about the presentation of data extracts. In the previous section I addressed the effect of selecting extracts on context and meaning. There are others difficulties that pertain to validation. Taylor (2001a:42) describes the difficulty of finding appropriate examples to illustrate general claims: a feature which appears across a large sample may not be visible in a short extract. She also makes the point, developed by Antaki et al. (2003), that the richness of discourse data means an extract offered as an example of a particular feature may be open to further analysis, distracting from the point it was intended to illustrate. This may mean having to ignore features in a large data extract, or trying to present meaningful occurrences in a shorter one, which leads to drawing on information outside the text to make it meaningful, which is difficult to validate.

Furthermore, the examples that are chosen will have been extracted, cut, and presented by the analyst; they do not exist as ready-made example of a feature. Antaki (1994:126-7) highlights some analysis and data extracts presented by McNaghten (1993). He points out that "what McNaghten does is to pick out those passages in the stream of text and written evidence that hint most strongly at the discourse which informs what participants are saying". There is of course every

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21 This is of course true of almost all methods – it would not be practical to append thousands of completed survey questionnaires to an article. But quantitative survey work has different methods of validation than DA. So while it might be useful to attach a blank questionnaire to assess whether the wording would have generated bias, the answers respondents give will be summarised in the article itself. In DA, this validation comes from examination of this data itself.

22 While it would of course be possible for the reader to access the original texts, for example by borrowing them from a library, it seems unlikely that they would be inclined to make this effort.

23 Taking into account Speer's (2002) point about the difficulty of drawing a distinction between 'naturally occurring' and 'contrived' data.
reason to do this; analysts have little real interest in readers not coming to the same conclusions as them. Does the necessity of only presenting extracts of the data, which the analyst selects and structures, make 'validation through presentation' meaningless?

4.7.4 Validation and wrong turns
Third, there are considerations of how much of the research process can and should be validated. The analyst is supposed to “present the data in full and work through the analysis to show the reader exactly how the data were interpreted and the conclusions were reached” (Taylor, 2001a:41-2). Wetherell and Potter (1988:183) furthermore state that “the overall goal is to openly present the entire reasoning process from data to the conclusions”. However, Tuffin and Howard (2001:200) note that many texts fall short of describing the nature of analysis. When Wetherell et al. state that the chapters in their book are written by analysts who are “going behind the scenes of their published articles to show the reasoning and procedures which led to the finished product” (2001a:ii), this seems to be a rare acknowledgement that research texts are a ‘finished product’, not ignoring what Gill (1996:146) describes as “the hours of frustration and apparent dead ends”. However, it is unsurprising that examples of the processes of reasoning are rare, as there are clear reasons to avoid this. Of course, there may not be the space to expand on the process of analysis. But is there any credibility in describing the wrong turns, mistakes, and wasted time that are inevitably part of analysis?

4.7.5 Validation and realism
There is a fourth consideration about validation. Does maintaining that analysis can be substantiated by presenting features in the data on which it is based amount to a realist claim about the existence of such features?

There are apparent examples of this. Seymour-Smith et al. state of their study that “analysis of the file proceeded through identifying the main repetitive patterns evident in these accounts” (2002:256, emphasis added). Gilbert and Mulkay point to the “direct evidence that the same interpretative pattern is employed in social contexts other than that of the interview” (1984:86). Psathas says that “our claim about what the phenomenon is must be based on the phenomenon itself – what any one of us can discover and ‘see’ if we are also brought to a point where we can ‘see’ the same phenomenon” (1990:8, emphasis added). Indeed, Schegloff states adamantly that:

“For whatever naturally occurring setting in the world turns out to be engaging, observing it carefully, closely, seriously, open-mindedly; observing – over and over again – to find what the natural world may be ‘telling you’ that you did not know before” (1999b:581).

The point seems to be that features in interaction can be seen and discovered, they exist there for the analyst to identify them, and furthermore, through the presentation of data, their presence can be validated by others. This does seem reminiscent of realist critiques of a discursive approach in the paper written by Edwards et al. (1995) in which they describe banging on furniture to prove its existence. Is pointing to data 24 Potter and Wetherell’s (1995) study of how quantification is used as a tool in cancer research campaigns seems to be a unusual example of this, when they describe “telling the story” of their research, and that they could have done so in other ways, referring to a range of other contingent factors that would “make a good narrative.”
and saying ‘there, look, this is the feature, I’ve seen it and you can too’ tantamount to hitting a table?

Billig certainly seems to think so. He discusses this in relation to the imposition of preconceived ideas during analysis, and dismisses the “naive methodology and epistemology” that conversation analysts use to maintain that they do not impose categories on the data. He says that when they claim to be merely labelling what actually exists and can be observed to exist, they “assert that the technical terms describe objective realities in an unproblematic way” (1999a:547). Antaki concurs, and gives a pragmatic view of the process: “it can never be the case that a nugget of talk will appear before the reader and supposedly prompt the analyst to say ‘here: this clearly shows that such-and-such a thing is happening in this explanation’: in discourse analysis the hand of the analyst is already needed” (1994:138). Features may not simply exist in the text, but need to be brought into being by the analyst; and indeed, Wetherell (2001b:396) has argued that “findings is the wrong word. The results are not found, they are narrated into being”.

Two points can be made in response to this; first, the principle of validation through presentation encourages what may seem to be realist declarations about existence. Second, this necessary ‘narration’ is not always acknowledged. Does this mean that validation through presentation should be used as a way of seeking agreement with the claims made, but not as a presumption that what is being highlighted could have been made apparent without intervention or ‘exists’?

In this research I have attempted to avoid implying a realist orientation to the analysis, and presented it as one possible interpretation that may be highlighted by the data – but may not. I have used the other considerations about validation to try and find a balance between presenting enough data to make the analysis meaningful and possible to validate, and overwhelming the reader. I do not wish to pretend that such decisions were easy, obvious, or self evident in the data.

4.8 Reflexivity

There are three reflexive issues relevant to this research. First is the consideration that (this) research is constructed. Second, selecting an issue for study involves ‘ontological gerrymandering’ about its existence, and using language referentially in order to do so. And thirdly, DA deconstructs texts, so the texts that it produces can be deconstructed. Are any of these issues a problem? And if so, what can be done about them? I consider these issues, and how I dealt with them in this research.

Firstly then to consider the nature of research. On one level this is because of the academic constraints fundamental to all research. Research does not take place in a vacuum, but in university departments, or as part of research contracts, bound by

25 Again, while Billig’s comments are directed at CA, they are applicable to DA as well.
26 The parallels with findings from the sociology of scientific knowledge are clear. These have described how scientific inquiry proceeds by stating the objective existence of phenomena, which are then brought into being by the work of the scientist, who can then claim to have ‘discovered’ what exists and provide evidence of this that can be validated by others; see for example, Woolgar (1980).
27 As Cooper points out, reflexivity “resists easy or singular definition” (1997:272). What I wish to do here, rather than attempt definition, it explore those aspects that arose for this research.
funding criteria, journal regulations, the need for peer approval, and so on, a point made by Cooper and Woolgar (1996:148). As Simons (1989) says, researchers inevitably make choices about language, frame issues, design arguments for certain audiences, and do not necessarily fit into the mythical image of good scholarship, consisting of cold hard logic, devoid of rhetoric. But more than this, research can be seen as perhaps implicitly, but also deliberately, constructed.

For example, Taylor (2001a:14) argues that the researcher’s identity is relevant to data collection. Moreover, Edwards and Potter issue a reminder that discourse analysts cannot somehow remove themselves from the research process: “clearly analysis of this kind cannot be adequately performed without the analyst drawing on their native linguistic competence” (2003:178-9). Researchers use their own skills and understandings to analyse those of others. Potter describes how a particular discussion “drew heavily on my own linguistic and cultural intuitions” (1997:214). Indeed, he uses Mulkay’s (1981) warnings to point out that researchers may draw on their everyday knowledge and resources in unexplained ways. For example, data is only data when it is selected by the researcher; this will be guided by their theoretical assumptions both about the topic and discursive work more broadly (Taylor, 2001a:24).

This leads into the second issue to be considered; the way that topics and data are selected, and the implications of doing so. DA research may seek to understand how participants present a particular issue. But does identifying this issue amount to ‘ontological gerrymandering’? Woolgar and Pawluch (1985a; 1985b) developed this term to describe that while the claims made about issues may be problematised, the issues themselves are not. In DA, a research topic is selected. To deny this selection would be to engage in realist argument, similarly used in defence of scientific work, that phenomena present themselves to the researcher. Such a claim cannot be made in DA, which emphasises the constructive power of language, and that the very selection of topics constructs their existence. This is related to another point of tension; that DA research has both a constructive and a referential view of language. This creates a problem for the analyst: Taylor (2001a:2) states that “On one hand, language is assumed to be constitutive. On the other hand, in academia as elsewhere, no one entirely abandons the premise that talk and texts convey information about something else. So language is also assumed to be referential”. As she points out, this is an assumed feature of any academic text, including hers, and of course, this one. Billig (1991) also makes an interesting comment about the nature of academic argument. He cites Habermas’ critique of Foucault and Derrida to point out that to argue something is to get away from treating all arguments equally, because it means arguing counter to something else. As Billig says, “the argumentative act itself constitutes a denial of the sort of strict relativism... it assumes that [some] positions are better, stronger, wiser and more convincing than those of... [an] opponent”. Furthermore, “the expression of the argument assumes its own persuasiveness in practice, and, in this case, the theory of argumentation is an instance of the practice of argument” (1991:25). So, while arguments about ECS are treated symmetrically, the case being argued about them is only one side, even while it attempts to persuade that it is true.

There are other ways in which academic writing is structured. It is of course shaped by its purpose and audience, and so will vary because of this (Taylor, 2001a:40). It
may be subject to conventions (Cooper and Woolgar, 1996), use examples in a
deliberate attempt “to keep things interesting” (Potter, 1997:178), and inevitably fit
the topic to its restrictions (Antaki, 1994:1). When Potter (1997:98) states that he has
“chosen the construction metaphor on pragmatic grounds”, it is apparent that
academic work is not based solely on relaying information but on practical choices.
All this construction, of course, is done to benefit the research and add credibility to
the researcher. Accounts are constructed to convince readers (Potter, 1997:4), and to
foster particular impressions of the author (Smith, 2000). As Billig (1999:545) points
out, any contrasts that are used are not “rhetorically neutral” but are designed to
illustrate the particular strengths and weaknesses, in order to make an argument more
compelling. So when for example Van Dijk (1999:459) states that “.. in my view
regrettably so, both critical discourse analysis and conversation analysis generally
ignore the cognitive basis of discourse and interaction”, the choice of the word
‘ignore’ here is significant as it constructs the cognitive base as something that exists.

This leads into the third reflexive issue. All academic texts can be deconstructed and
subject to DA (Mulkay, 1988: 97; Wooffitt, 1992:55; Woolgar, 1992: 329; Billig,
1996; Woolgar and Ashmore, 1988:1), and this includes DA texts themselves (Potter
and Wetherell, 1987:3; 183). The claims made in DA texts are constructed to achieve
particular effects, and can be deconstructed to understand this. Any DA of a DA text
could then of course be deconstructed as well. As Simons (1989:4) states, “rhetoric
about rhetoric cannot avoid doubling back on itself; cannot avoid its own rhetoricity”. Collins and Yearley (1992a:304) describe this deconstruction of a relativist approach:
“within the first few nanoseconds of the relativist big bang, nearly everyone realised
that the negative levers were equally applicable to the work of sociologists and
historians themselves”. They describe this as the “relativists’ regress”, and state that
“in the end, [it] leads us to have nothing to say” (1992a:302).

Is this a problem? Hook (2001:538-9) is without doubt. He discusses infinite
interpretation from a Foucauldian perspective, and states that because close study of a
text means that it can always have more than one reading, this leads to

“[a] problem of textual relativism, where any reasonably supported textual
interpretation will hold, within relative confines, as well as any other. Hence
the results of our analyses will be of little significance beyond the scope of the
analysed text.. [B]ecause a discourse analysis text cannot be taken to reveal a
“truth’ lying within the text, it must acknowledge its own research findings as
open to other, potentially equally valid findings”.

Nightingale and Cromby (1999:211), Noble (1992:198) and Sarbin and Kitsuse
(1994:10) would agree. Furthermore, issues from a reflexive approach to DA may be
considered ‘problematic’ in other ways. Reflexivity highlights both the constructed
nature of work and its basis in interpretation and conventions, and apparent illogical
inconsistencies about the role of language and the existence of certain things. These
issues may be a ‘problem’ when having work taken seriously in an academic (or
indeed social) environment, and may not persuade about its value and contribution.
As Taylor says, this could lead to “professional difficulties for researchers whose
future employment depends on others’ assessment of the quality of their work”
(2001a:13). Is it possible to address these issues? And is it possible not to descend
into a deconstructive spiral?
4.9.1 The benefits of a reflexive approach

I will consider how these issues might be approached. Of course, to consider ‘problems’ and hope to find ‘solutions’ is to posit the debate within a ‘realist’ framework, ignoring the very nature of reflexive considerations. Taylor states that “these limitations are not simply a consequence of weaknesses in the research process: the issue is not that better research would produce more enduring and reliable findings. Rather, all knowledge is considered to be situated, contingent and partial” (2001b:319). However, in order for research to proceed, some ‘position’ (if not ‘solution’) on these issues has to be reached. Woolgar (1988:12) says of Woolgar and Ashmore (1988) that they “seem to be juggling with several balls at once. They raise questions about ways of exploring reflexivity, their discussion throws up more questions, questions about the questions and so on. The trouble is that, in the end, the balls remain in the air”. The same can probably be said of this research. I am raising questions and issues; but in order for this research to proceed, and to be about ‘something’ rather than an exploration of reflexivity, some decisions may have to be made, answers sought, and balls caught.

The first way to consider reflexivity then is to appreciate the insights it brings. Woolgar and Ashmore (1988:1-2) describe that doing so “brings extra dividends” and that “reflexivists see the study of knowledge as an occasion for exploring new ways of addressing longstanding questions of knowledge and epistemology”. Considering the constructed nature of research certainly highlights such questions. For example, Woolgar (1992:334) argues that “reflexivity asks us to problematise the assumption that the analyst (author, self) stands in a disengaged relationship to the world (subjects, objects, scientists, things). It asks us to explore the consequences of challenging the assumption that the analyst enjoys a privileged position vis-à-vis the subjects and objects that come under the authorial gaze”. Reflexive considerations highlight that researcher is not seen to ‘know better’ than the researched, and does not inhabit a different social world from which they can observe. The researcher and the researched are not only on the same level, but the researcher may even be ‘in awe’ (Potter, 1997) of the sophistication with which the researched construct their accounts and organise their social lives through them.

Woolgar (1992:333) goes on to describe how “reflexivity aims to capitalize upon the strains and tensions associated with all research practice”; this may be by “observ[ing] that research practice tends to abide by a series of representational conventions which delimit the manner and substance of research”. Some of these have already been detailed in this chapter. The point that Woolgar makes is that considering them is not a weakness of research or a problem, but a valuable appreciation. Potter (1988:48) also views such considerations in a positive light, and argues that DA challenges our assumptions and reading practices which are taken for granted. He says that we should “celebrate” that DA does not ignore such issues or “sweep them under the positivist rug”. Furthermore, Potter and Wetherell argue “discourse analysts are simply more honest than other researchers, recognizing their own work is not immune from the social psychological processes being studied” (1987:182, emphasis added). Does celebrating rather than problematising reflexive issues even enhance academic credibility, rather than detracting from it? Clearly, this fundamentally contingent on the academic environment, and it is easy to imagine situations (which have also been
experienced) in which they might not be particularly well received. And of course, I would not be raising these issues if I did not hope they would enhance this research.

4.9.2.1 The benefits of new literary forms

A second approach to reflexivity, beyond merely highlighting and celebrating its insights, is “to construct analyses with a self-referential quality. These studies examine at the same time the topic and their own investigation of that topic” (Potter and Wetherell 1987:183, emphasis in the original). These are ways of presenting text that, while commonplace in social life, may be rare in academic writing. They can be in any style the author wishes, such as a two-sided conversation or a chatty commentary. They offer a means to be “self-exemplifying” about the text (Pinch and Pinch, 1988:178), and are a practical demonstration rather than just a description of some of the issues raised by a reflexive approach (Cooper and Woolgar, 1996; Ashmore et al., 1995). Indeed, Woolgar and Ashmore note that “the explicit presence of more than one voice reminds the reader (and the writer) that interpretation goes on all the time, that the idea of one reading—a singular correspondence between text and meaning—is illusory” (1988:4).

As Collins and Yearley point out, these ‘new literary forms’ are no less ‘constructed’ than conventional form, but are constructed differently, with an acknowledgement of the conventions that both they and academic texts draw on. So for example, “the absence of convergent argument draws attention to the devices that are normally used to make conclusions come about” (1992a:305). Similarly, as Wetherell (2001b:397) points out, developing a dialogue with a reader undermines “any simple assumption that there is only one truth or one way to read the data”, and Collier and Toomey (1997:286) outline how different literary forms can invite the active participation of the reader into the text. Examples of such textual forms highlight their benefits. In her text, Horton-Salway (2001a) uses the ‘voice’ of a student to make interesting points, clarify the argument, and does so in a clear, interesting and compelling way. As she says, “the construction of invented dialogue not only invites the reader into the text, but also displays the dialogism inherent in one’s writing”; and O’Brien-Malone and Antaki (2001) present their chapter as an engaging dialogue between them.

Adopting a different style of writing therefore draws attention to the constructed nature of research. It may also be a way of addressing the issue of referential language. Rather than describing language as constructive and then ignoring the implications of using language referentially to do so, a new literary form can stress the constructive power of all language. Further, the voice of the author can be made apparent. In this way, arguments about the nature of argument (as previously considered by Billig) may also be addressed. Instead of assuming that the research account is somehow above argument, debates can be built into the structure, raise issues that might otherwise be ignored or assumed to be unproblematic. Argument can explicitly as well as implicitly be at the very heart of the text.

However, new literary forms may not always be appropriate. Myers (1992:221) argues that “the fiction of the dialogue does not allow an escape from the realist

28 Being asked to address what the point of DA was to an audience of positivist psychologists was certainly one such instance of this.
29 Cooper (1997:272) gives an overview of these different forms.
assumptions about representation; the dialogue itself suggests an authority lying behind it”. Pinch and Pinch (1988) argue that new literary forms distract readers and are counter-productive – especially if the points made are translated back into a conventional form. Cooper (1997:272) raises the question of whether they are necessary for adequate engagement with reflexivity, and cites Latour’s (1988) argument that they may patronise readers by assuming that they would have been ‘taken in’ by ordinary texts. Obviously I have not adopted a new literary form here. It may not be appropriate within a thesis, because of efforts to create a seemingly factual and authoritative account, and also because of the (perhaps self imposed) ideas about what a thesis should look like, the standards of professionalism it should maintain, and of course the fear of making a mess of trying to do so30. A rejected journal article can be re-written; this is a more daunting task with a thesis. Furthermore, using a innovative style of writing may not address the ontological questions raised in this research. When Potter and Wetherell (1987:183) state that self referential practices “examine at the same time the topic and their own investigation of that topic”, they do not seem to address the implications of just what ‘looking at a topic’ has. Identification of a topic necessarily means making some claims that something exists in order to be able to study it. Further, new literary forms can still be deconstructed in order to assess their discursive practices; just because they may use a more obvious or honest writing style does not make them immune to this. Perhaps they do not represent a way out of continual deconstruction. But does attempting to do so and ‘stopping’ analysis at some point mean engaging in gerrymandering with claims about existence?

4.9.2.2 The way forward?

There seem to be three possible ways to proceed. Firstly, Wetherell (2001b: 393-4) notes the argument that some reality exists and underlies and determines discourse. She cites Bhaskar (1978)’s distinction between constructed objects which are the products of social and historical processes, and those which are not the products of people; ‘intransitive’ objects. However, the idea that discourse only is only partially constructive, and that a reality exists and is open to assessment has been roundly rejected. Edwards et al. (1995) for example argue that even what may seem to be independent of discursive construction cannot be separated from the constructive processes that give them their meaning and their significance for people. The point of study is not to identify what is real but how ideas about the real are used, and how things are made to seem real.

A second way of working is to embrace the perspective of phenomenology and the importance of perception. Butt (1999:134) draws on Merleau-Ponty’s considerations in the *Phenomenology of Perception* (1962), and argues that our perception cannot be doubted; it is not open to dispute. As Butt states “I see a keyboard in front of me, and this is indisputable. Of course, I could be wrong about exactly what I see, and my perception might change. But that I perceive something is self evident, and not evidenced by other data”. He argues that an emphasis on perception places the focus

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30 Heeding the warnings given by Potter (1997:9), who describes why he used a conventional style rather than a new literary form in his book: “more than anything it is the sheer difficulty of achieving one without making the text reader-unfriendly that put me off”. Similarly, Woolgar and Ashmore (1988:5) describe the difficulties of writing in this way, and that it may engender the irritation of readers if it is seen as “[t]oo arch, frivolous, clever, smart-arse, trendy, fancy stuff”.

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between the person and the world rather than within either: “perception, then, is not imposed, either by an external real world or by a construction of it. It is instead a questioning process, an inquiry into a world which exhibits a resistance to our constructions”. Butt states that while Merleau-Ponty insisted that no ‘inner world’ exists, a study of perception can return us to the ‘lived world’ of experience, an alternative construction to objective thought (1999:134). Might taking as a topic what becomes apparent as a ‘result of perception’ be a way to approach these issues?

However, compelling as this might seem, Peters and Rothenbuhler (1989:19) point out that “perception is often a function of the community and commitments of the perceivever. Hence even the most bodily, individualized and personal forms of experience of the world (one’s sense) are socially constructed”. Further, “[e]xperience is not something raw and dumb that gives our words their meaning; rather, our words give meanings to our experiences. experience of the real world is always already symbolic, as is experience of others”. Emphasising the constructive power of language undermines the usefulness of a phenomenological approach. It is not possible to sidestep the debate about existence and find a way out of continual deconstruction by simply referencing what one perceives to be real, as even such perceptions are already shaped and constructed in particular ways. To say that ECS exists and can be used as a topic is not therefore just a matter of saying that I have perceived it as such.

If a realist approach or a new literary form are both rejected, what alternatives are left? A third option is to turn again to Woolgar and Pawluch. They state that “we do not believe that sociology has reached a dead end or that its only recourse lies in turning analytically upon itself. Instead [we suggest] an awareness of the social character of our explanatory practices, as significant an advance as it may be, is only the first step towards understanding how we accomplish these practices” (1985b:162).

I have therefore tried to adopt an awareness of its ‘explanatory practices’. The way forward seems to be to do so and then ‘just get on with it’. Research is constructed in a number of ways. Is it enough then to admit this? And is it enough to acknowledge some of these issues without finding a ‘solution’ for them? Potter for example, having pointed out the constructed nature of his own work, seems to indicate that it is enough to acknowledge this and move on: “So with the emphasis that, of course, this chapter is a story which involves a range of constructive work, simplifications, categorizations, and implicit rhetorical oppositions, let us move on…” (1997:69, emphasis in original). The only way to proceed appears to be to acknowledge the processes of research, the tensions encountered between the principles and practicalities of DA. This includes, paradoxically, where issues of reflexivity have been considered but sometimes ignored. Potter and Wetherell (1987:182) certainly seem to think so, and argue that it is possible to acknowledge that while analysing texts, DA research constructs its own version of the world. They state that “most of the time, therefore, the most practical way of dealing with this issue is simply to get on with it, and not to get paralysed by or caught up in the infinite regress possible”. The point then is to “reflexively acknowledge the theories, values and politics which guide research so these can be taken into account when evaluating the analyst’s claims” (Wetherell, 2001b:396); acknowledge the reflexive nature of research, and

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31 This is not of course to imply that no others exist, or that what is being presented in this chapter is anything other than my interpretation of these ‘options’.

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then carry it out. Such a sentiment seems to be reiterated by Collins and Yearley (1992a:324), who state that “in the relativist’s world you have to decide what you want to do; epistemology does not make the decision for you. But once you have decided what to do, all there is left is to do it”.

So that’s it then.
Yes.
I still can’t help thinking that I’m engaging in ontological gerrymandering, or taking a line similar to Collins and Yearley’s maligned social realism.
*But you don’t want to get into a deconstructive spiral do you?*
No..
*And you do want your research to be about something, don’t you, not just about reflexivity?*
Yes..
*Well then. The best thing to do is to acknowledge the constructions and limitations of the research, and just get on with it.*
It seems so.
*And you can discuss this some more in your discussion chapter anyway.*
Well, in that case – the next chapter outlines just how it *was* done.
Chapter Five:

Potter and Wetherell's Ten Stages

In this chapter I describe the methods used in this research. This study is based on DA as approached by Potter and Wetherell (1987), so I detail the methodology they outline, subsequent developments, and how I used it here. As I highlight, ethical issues became particularly pertinent in this research. These are more fully documented in Chapter Five.

5.1. DA as a 'craft skill'

The first point to make is that DA is criticised for not explicating the actual process of that analysis. Indeed, Tuffin and Howard (2001:200) describe how many texts fall short in explaining "what actually to do with the data at the point of analysis", and Potter and Wetherell declare that "words fail us" when it comes to describing the analytic process in abstract (1987:168). This is not to say that such critiques are not made of other research, both qualitative and quantitative. The focus in most research training is on data collection, rather than analysis. But the very notion of 'reliability' in social science is dependant on the idea of analytic method; that two people using the same procedures will produce the same results. Dey (1993:251) for example describes the means for checking the reliability of qualitative work. Some of these means might be similar to DA – explaining how the results were arrived at and allowing the audience to scrutinize procedures – but their execution is based on the ideal of “improving” reliability. In DA, the researcher presents their interpretation of an account, and acknowledges that others may understand it differently. As Potter (1996:11) says, traditional approaches to reliability are not applicable to DA.

Explicating the analytic process is difficult in DA, and it is frequently described as a ‘craft skill’, (Potter and Wetherell, 1987; 1995; Puchta and Potter, 2002; Potter, 1988; 1996; Ashmore et al., 1995). The best way to learn how to do DA is through practice, despite the lengthy, labour intensive and often abortive efforts that this may involve. Wooffitt (1993) describes analysis as being conducted without hard and fast rules, and of an ‘analytical mentality' acquired through practical experience; similarly, Lawes (1999:5) describes analysing discourse as a process of ‘living with’ one’s data, and Potter maintains that there is no substitute for “learning by doing” with DA (1996:13). Being in this form, DA is “not easy to render or describe in an explicit codified manner” (Potter and Wetherell, 1995:55).

While describing the processes of analysis is difficult, it does not mean that DA is without a method. While, as Gill (1996:143) says, “it is much easier to explicate the central tenets of discourse analysis than it is to explain how actually to go about analysing discourse”, and Antaki et al. (2003:3) describe that it might seem like ‘anything goes’, this is certainly not the case. There are principles that can be followed, and advice on approaching the daunting prospect of a mountain of data.
Although their method has since been developed, the “groundbreaking” principles outlined by Potter and Wetherell (1987) in Discourse and Social Psychology are still universally drawn on by researchers in this field. This is both because Potter and Wetherell explicitly developed this particular approach, and because they do give a number of procedures that may be followed.

In their book, Potter and Wetherell state that “data are everywhere... and the resources needed to start work are minimal” (1987:187), and maintain that “discourse analysis... provides a workable methodology” (1987:32) to be able to do so. They acknowledge there is no “analytic method” as such, but rather, a “broad theoretical framework, which focuses attention on the constructive and functional dimensions of discourse, coupled with the reader’s skill in identifying significant patterns of consistency and variation” (1987:169). This chapter will now detail the approach they describe, and describe how the stages were used, developed (or ignored) in this research.

5.2. Potter and Wetherell’s ten stages

5.2.1 Stage one: Research questions

Stage One in Potter and Wetherell’s framework is about developing research questions (1987:160). As has been discussed, in DA this means approaching texts in their own right, not to discover the meaning ‘behind them’. Potter and Wetherell state that doing so “does not mean that we are indulging in easy escapism, postponing the ‘big’ questions or ruling them out of court”. They go on to point out that “the research questions discourse analysts do focus on are broadly related to construction and function: how is discourse put together, and what is gained by this construction” (1987:160). Clearly, I have adopted this approach. My research questions are not about the risk of ECS, but how groups persuade about its existence, apportion blame, and present themselves, focusing on their accounts to understand how they do so.

In setting research questions, Potter (1996:5) points out that “one of the skills involved in discourse analytic work is in formulating questions that are theoretically coherent and analytically manageable”; indeed, MacMillan and Edwards (1998:325) describe how they selected the data for their study partly “on the basis that they contain an analytically manageable set of reports”. It was tempting to be too ambitious in the design of this research and consider a range of risks, rather than focusing on one. This was partly fuelled by a notion of increasing the usefulness and credibility of the research; producing a ‘model’ of risk construction, rather than detailed analysis of just one. However, the vast amount of data and the time taken to analyse it for one risk, (always pointed out as one of the ‘disadvantages’ of DA), precluded this. I have included some preliminary thoughts on the applicability of this analysis to another risk in Chapter Eleven, of course with the caveats that DA may not produce generalisable results (and further thoughts are also given on this in Chapter

1 Gill (1996: 141)
2 It has to be acknowledged of course that the design of research is likely to be less explicitly linear than listing these stages might imply. For example, what is presented as the research question is determined by the sample that it was possible to obtain, and so forth, and some stages might be excluded altogether.
Twelve). I did eventually acknowledge that to have an ‘analytically manageable’ data set, I would have to limit the amount of extended analysis, but it was a hard decision.

5.2.2 Stage two: Sample selection

Once the topic area and research questions have been formulated, Stage Two is sample selection. I have already discussed in section 4.6 the practical and theoretical impossibility of collecting ‘all the data’, or even knowing what that is. In selecting data, a balance is required between getting “bogged down in too much data”, even in the specific area chosen, and preventing “the linguistic detail emerge from the mountains of text” (Potter and Wetherell, 1987:161); and a desire to collect large amounts because “the commonplace or important patterns are not recognisable in advance and recurrently used systems of terms need to be elucidated” (1987:162). This was certainly initially the case with this research. I selected data without knowing what might be found in them, feeling that a large amount might be necessary to generate patterns and concepts. Having since carried out analysis, I now recognise the naivety of this.

Initial ideas about data did generate a huge amount from various different sources; which, because of the danger of becoming ‘bogged down’, it was not possible to analyse. For example, a House of Commons Select Committee report (2000) on ECS makes riveting reading, but analysis of it could not be included because of limits on space and time. Moreover, I regret that these limits precluded analysis of media sources. However, Potter and Wetherell argue that “the success of the study is _not_ in the least dependant on sample size” (1987:161); the sample is determined by the specific research question. Here, the research question was to consider the varying constructions of ECS; I will detail how I chose the particular sources shortly. Potter and Wetherell (1987:160) also say that selection and collection of data may be governed by what is available. This was a significant consideration with collecting data from airlines. For example, not all airlines give information about risks of a blood clot in flight⁴, and while this was interesting in itself, it impacted on what data could be collected. Potter and Wetherell also point out that “generally, there is no ‘natural’ boundary line to be drawn in these cases, or no point at which sampling can be said to be complete. It is simply a case of giving a clear and detailed description of the nature of the material one is analysing and its origins” (1987:161). I will therefore now describe the data collected.

5.2.2.1 Airlines

I collected the information available on ECS from a number of airlines; this included information on websites, inflight magazines, advice cards given out with tickets, news releases. The collection of these data was governed by availability, and all the data that could be found from airlines were collected and analysed. Some major airlines – for example, United Airlines – did not provide any information on blood clots or related issues during the collection period. British Airways have produced extensive information about the (possible) risk, so analysis focuses on this, and any other data that could be collected was also analysed; this totalled about fifty web pages, two

⁴ The fact that while the term ‘ECS’ was referred to, none of them used it as a description for the issue, is another matter altogether, and fully considered in Chapter Twelve.
inflight magazine articles, two advice cards, and eight press releases. The size of the data set was also increased through the collection of the online data produced over a period of time. Using an internet archive search engine, it was possible to download versions of the web pages every time a change was made to them, therefore allowing an analysis of temporal change.

5.2.2.2 Passenger groups

As I will fully consider shortly, interviews with ECS sufferers to generate data were not carried out in this research, even though a sample of them was being built up through contacts and 'snowballing'. Instead, I collected the published accounts of groups set up to represent and campaign for them. I identified three such groups, and collected the information they produce.

The Aviation Health Institute, or AHI, is a British based group established in 1990. The founder, Farrol Kahn, is a prominent speaker on the medical impacts of flying. Although the group ostensibly has a broad remit and considers a wide variety of issues, recently its focus has been more narrowly on the risks of ECS. A second group, VARDA (Victims of Air Related DVT Association), originally developed as an offshoot of the AHI, but was established in its own right in 2001. Their chair is Ruth Christoffersen, the mother of Emma Christoffersen, a British woman who died of ECS at Heathrow airport in October 2000. Her case received a high profile both in this country and around the world. VARDA sets out its aims as preventing such deaths, and is solely focussed on ECS. A final group, Airhealth, was set up in 2001, and proactively campaigns just on that issue. An American based organisation, it was established by Michael Reynolds after he developed a blood clot following a flight. It aims to raise awareness of the risks of ECS, and to challenge the position of the airlines on the issue.

I selected these groups because they were actively campaigning about ECS. The type of information they produce varies. Airhealth presents the most information and have pages introducing the issue, on advice for passengers, and pilots, on how to avoid ECS, overviews of the medical research, news, wallet cards with tips to print out, details of how to join, and an 'about us' section. The AHI also details news reports and research on ECS, outlines the legal action being taken, useful links, a shop where products to prevent ECS can be bought (such as stockings and exercise aids to use in flight), and details about the organisation. VARDA produces a smaller amount of information. It includes details of the founding of the organisation, their mission, objectives, and progress made. Analysis of these groups was carried out by examining the online information they produce. An internet library tracks and logs any changes that are made to websites. For all three groups, the information from their websites was downloaded after every change. Different versions of the same page were then compared and the changes noted. This revealed in many instances both how groups had developed their construction of the issue, and of themselves. These three groups were the only groups campaigning on ECS identified, so analysis here was of the population rather than a sample of it. All the information collected from all three groups was analysed.

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5 Available at http://www.archive.org
5.2.2.3 Medical research

This is clearly a very broad category. In this research I chose to focus on *The Lancet*, the journal of the British Medical Association, in which the phrase ‘Economy Class Syndrome’ first appeared in August 1988. All articles and references to ECS from this first piece until August 2003 have been collected and analysed (33 in total); see the Appendix for details.

As has been mentioned, I have attempted to balance gathering enough data to generate interesting conclusions, without being overwhelmed by it. I also drew on Taylor’s (2001a:25) argument that documents may be selected, not because of their representativeness, but because they are particularly worthy of analysis. She gives examples of texts associated with powerful or well known people. Therefore, I analysed articles printed in *The Lancet* both because of the prestige of the journal, and because it is the medical research source most often quoted by other groups. To only analyse *The Lancet* was a consciously subjective decision that was taken on the basis of its perceived importance, and not an attempt at representativeness.

Although there is a history in DA of carrying out interviews with scientists (Gilbert and Mulkay, 1984, for example), this was not part of this research. The reasons for this are fully considered in Chapter Six. In the meantime, the point is that this is not felt to disadvantage the research. Potter and Wetherell (1987:64) state that

“it is fairly easy to collect scientists’ discourse without disturbing their social fabric; journals and books are full of publicly available accounts. [...] By collecting material in this way the researcher is able to amass what is basically a slice through the social life of one discrete realm of human activity”.

This is therefore both a justification of the approach used in this research, and an indication of the benefit of it.

5.2.2.4 Online forums

In undertaking this research, an interesting and unexpectedly rich data source was found. I collected data from two online discussion forums, who draw their membership from pilots, medics, and those with an interest in aviation and health issues. A search using the principles outlined by Hewson *et al.* (2003) indicated that these may be the only two groups with an interest in health and aviation. Again, this is therefore a study of the identified population, rather than a sample of it.

Of the two groups analysed, the first is an email based list. It is set up so that once members have registered on the group’s Internet homepage, messages are delivered direct to their email account, and messages can be posted to all members by entering one generic email address. Previous posts may also be accessed from the homepage.

The second group is an Internet forum. Members register and gain access through an Internet server. Once logged in they can post messages, and both members and observers can read previous posts, for which observers do not have to register. Such ‘threads’ or collections of previous posts are displayed sequentially, and a member adds their post as the next contribution to the series. The members of this forum are stated to include doctors, health professionals, pilots, and others interested in aviation.
issues, and the site has over seventy different sub forums. The site has a search facility, and a search was carried out of all of the public forums (some are private and are only accessible through invitation, for example if an employee of a specific airline). The forums were searched on the keywords ‘DVT’, ‘deep vein thrombosis’, and ‘economy class syndrome’, and hits came from a number of different forums.

These sources were interesting because debates about ECS rage on the sites, usually in the form of an initial question or comment which is followed up in a series of messages. The data here are not a final polished article, but an indication of the current state of the controversy. Messages hotly debate and contradict each other on whether ECS exists, what can or should be done about it, and who is to blame. Myers (1985a) notes that the criticisms and responses in the review process of scientific articles highlight details that are “usually compressed and decisions that are usually unnoticed”; so examining these groups accesses the discussion and presentation of opinions that are still being debated, in the way that a press release, magazine story or journal article does not allow. This allows a glimpse ‘behind the scenes’ in the construction of the issue, and an opportunity to see ‘facts in the making’.

To analyse these sources, I anonymised the details and the addresses of both sites, and all individual members. Dates have been given as these may be relevant to the content of the message (dates show that one message follows on from another for example), and I gave initials to each member to distinguish them. I will now briefly document why.

Formats such as online newsgroups and email discussion forums are valuable to study because, as Couper (2000) points out, the Internet is having a profound effect on almost every area of life. Mann and Stewart (2002: 19) state that this has led to the “generation of a mass of new information and even new communities which are of interest and value to the qualitative researcher”. These include “interest groups”, in a variety of formats such as chat rooms and mailing lists, which “draw together geographically dispersed participants who may share interests, experiences, or expertise”. Both Stanton (1998) and Coomber (1997) highlight the potential of researching using email, list servers and news groups. Indeed, the Internet has been described as “ideal” for linguistic observation studies, studying such things as archived posts to newsgroups (Hewson et al., 2003:46).

Not only are discussion groups and mailing lists rich resources for researchers, but DA is particularly appropriate to study them. Bordia argues that computer mediated communication (CMC) offers “an exciting opportunity to researchers interested in studying linguistic and socio-psychological characteristics of verbal interaction in a naturalistic setting” (1999:149). She outlines three advantages to studying CMC: first, it represents a naturalistic setting; second, computer technology facilitates data collection by storing the interaction; and thirdly and most importantly, unobtrusive data collection is possible “in a setting that is ethically defensible”; this final point will be considered more fully in Chapter Six. Mann and Stewart (2002:86) concur with this enthusiasm and argue that “researchers with an interest in ethnomethodological approaches can ‘observe’ the natural conversation of various kinds of newsgroups”. They do also highlight some disadvantages with this. First, “the time taken typing, and the delays between turn taking can shape the mood of the interaction. This information is often lost in analysis” (2002:87). This is an
interesting point, and I included the dates of when messages were posted to give a sense of how they responded to each other, but I acknowledge that some of the detail of the interaction is lost. Second, Mann and Stewart say that logs of messages ignore the context of speech, which as Paccagenella (1997) describes, is the actual experiences of individual participants at their own keyboards in their own rooms around the world; but this seems largely inescapable, and no different from considering any text separated from its author and time of production. Third, Mann and Stewart point out that because CMC is intended for people involved in the interaction, it loses a sense of its meaning when reread afterwards by others. Again, this may be little different from reading any text after it has been produced. Bordia notes a final consideration of studying CMC: "the generalisability of the findings in the CMC domain to other communication contexts, such as face to face interaction" (1999:150). Of course, in DA, the context of an interaction is crucial for understanding it; generalising beyond this is not the immediate objective. I would therefore argue that analysis of online material is both theoretically valuable and methodologically defensible.

5.2.3 Stage three: Data collection

Continuing to address Potter and Wetherell’s stages of research, Stage Three concerns data collection (1987:162). They point out that DA is often carried out on records and documents of interaction, rather than data garnered from the researcher’s own dealings with participants. The material collected for this research was publicly available texts and documentation; no interviews were carried out or data elicited. While in their Stage Four Potter and Wetherell argue that “interviews have the virtue of allowing the researcher room for active intervention” (1987:163), I have concluded that it is ethically unreasonable to carry out interviews and then use DA to examine them; I address this fully in Chapter Six. In the meantime, it is important to note that a focus on documents and texts is not necessarily a disadvantage. Indeed, not having to “constrain the participants’ response options to obtain usable data” (Wetherell and Potter, 1988:183) is a distinct advantage. Collecting documentary materials precludes analysis of ‘interaction’; this is maintained to be a way to understanding ‘participants’ orientations’ (see section 4.4). However, Potter notes collecting a range of sources (including documentary materials) can “facilitate a rhetorical analysis of some domain. In this way it becomes possible to identify the rhetorical targets and oppositions of particular arguments and descriptions” (1996:8). What Potter describes is precisely what I have sought to do in this research.

5.2.4 Stage six: Coding

Stages Four (interviews) and Five (transcription) listed by Potter and Wetherell are not relevant to this research. Stage Six is coding, the preparation for analysis. As Potter and Wetherell state, the goal is not to find results but to “squeeze an unwieldy body of discourse into manageable chunks” (1987:167), which can then be subject to more intensive analysis. They point out that this process may mean moving back and forward between the stages of coding and analysis, and document this in their own study of racism (1987:167).

Moving between coding and analysis was certainly the case with this research. Firstly, I read the texts again and again to become as familiar as possible with them.
Taylor (2001a: 38) writes that there is no other way to proceed with the process, as does Carabine (2001) (interestingly, as she conducted a Foucauldian analysis). During this reading, preliminary coding notes were made, and Wetherell and Potter (1988: 177) advise careful repeated readings in search of patterns: "this is not a matter of following rules and recipes; it often involves following up hunches and the development of tentative interpretative schemes which may need to be abandoned and started all over again". Following Seymour-Smith et al. (2002: 256), thorough reading of the data meant patterns in the codes and common themes starting to emerge. Tuffin and Howard (2001: 202) argue that "once this preliminary coding stage is completed, the next step is to organise the data into discrete coding categories. The importance of these categories cannot be overstated as they form the backbone of the analytic process". After organising these preliminary codes, I carried out more detailed analysis to understand just how a particular theme was developed in a particular extract.

I have already raised the issue of whether coding and analysis are a case of ‘unmotivated looking’ or ‘imposing categories’ (see section 4.5). In carrying out the research, I had little preconceived idea about what the data might hold; hence the perceived need to gather such a large amount of it. I first looked at the data with only a few vague ideas about what might be interesting – who was being blamed for ECS, how the presentation of self was being managed to avoid blame, and so on – but I had little idea quite how these might be constructed. However, to say that this was ‘unmotivated looking’ would be naïve, in light of knowledge about themes and tools of other DA research. For example, seeing the use of words such as ‘totally’, ‘always’ or ‘never’ immediately brought to mind the work of Pomerantz (1986) on ‘extreme case formulations’. Unmotivated looking may therefore be somewhat unrealistic; but not necessarily problematic. Familiarity with previous DA can both highlight conceptual patterns in the new data, and the relevance of the previous work to current research.

5.2.5 Stage seven: Analysis

In relation to analysis, Potter and Wetherell (1987: 168) state that “it is not a case of stating first you do this, then you do that. The skills required are developed as one tries to make sense of transcripts and identify the organizational features of documents”. Having carried out analysis, it is easy to understand their hesitancy on this point. Describing the process of analysis is difficult6, especially because the movement between coding and analysis makes it hard to explicitly state when analysis takes place. Certainly the process of analysis here followed two closely related features identified by Potter and Wetherell; searching for pattern in the data; and a concern with function and consequence which “consists of forming hypotheses about these functions and effects and searching for linguistic evidence” (1987: 168). Potter and Wetherell (1987: 168) say that “the analyst constantly asks: why am I reading this passage in this way? What features produce this reading?”. The data here were interrogated to understand why they had given the impression they had.

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6 Either in a thesis or to classes of students facing the seemingly daunting prospect of a first DA assignment.
In later work (1995:55) Potter and Wetherell expand upon this, and describe four analytical considerations that I drew on here. The first is to examine instances of variation to help identify features of construction. In this research, the data from *The Lancet* included scientific research reports with contradictory findings. Examining how authors treated these divergent results was extremely helpful in unpacking their constructions of the issue; for example, they used critiques of method to dismiss unfavourable results. The second consideration is to attend to the fine details of the discourse. As Potter and Wetherell say, there is no formula for reading for details, and “it is surprisingly difficult to overcome years of academic training in which the goal of reading it to produce some gist or unitary summary” (1995:59). This was tackled by asking how a particular gist had been gained. For example, a comment in one of the online discussion forums seemed to paint the passengers in a highly damning light. This was identified, and then the fine details of the discourse were examined to see just how this impression had been created. It was also helpful to bear in mind Wooffitt’s (1992) point about Sacks’ work, that all the details in a particular stretch of discourse are potentially there for a purpose. At times, the constructive work in a section only became apparent after repeated reading and knowing that there must be some. For example, the opening statements from the Aviation Health Institute seemed rhetorically uninformative, and it was only by continual re-reading that they become (considerably) less so.

A third consideration that Potter and Wetherell (1995:159) mention is looking for “rhetorical organisation”. Considering how versions relate to actual or potential alternatives was extremely helpful. For example, the airline texts seemed to be working to counter other versions of what their responsibility for ECS might be. It was also a significant factor in *The Lancet* articles, where results that contradicted previous work were being presented and justified. Potter and Wetherell (1995:59) argue that “the rhetorical orientation draws our attention away from questions about how a version relates to some putative reality [...] and focuses it on how a version relates to competing alternatives”. The aim was not to discover ‘the truth’ about ECS, but to examine how different groups present their version as that truth.

A final consideration Potter and Wetherell describe is to look for accountability. Here, this related to examining the rhetorical organisation, because it refers to a consideration of how accounts are constructed “in ways which make them hard to rebut or undermine, ways which can make them seem fair or objective” (1995:160). All the texts examined undertook this in various ways, as will be detailed in Chapters Seven to Ten. This may not be surprising, as from an ethnomethodological point of view (see Heritage, 1984, and Watson and Sharrock, 1991) accountability is an essential character of the design of interaction.

5.2.6 Stage eight: Validation

Potter and Wetherell make clear that the absence of an ‘analytical method’ does not mean no checks on what is produced, and outline several stages to validation; “some are an extension of the analysis, others intrinsic to the presentation of findings” (1987:169). The criteria for validation have been considered in section 4.7. In this chapter I will briefly review how I addressed these. How far this has been achieved is of course up to the reader to assess.
The first criterion is coherence (Potter and Wetherell, 1987:170). Following this, I have attempted to give extracts of data to show how discursive structures produce effects and functions. The second criterion is to consider “participants' orientations” (1987:170). Throughout this research, I have emphasised my focus on how participants construct their accounts and orient to issues, not on what I think is important in them. Thirdly, validation may be enhanced by considering “new problems” (1987:171). Deviant cases were particularly interesting in The Lancet, where it seemed that contradictory claims were being made within accounts. Subsequent analysis of these led to a theoretical scheme in which they were included and understood as constructive features. For example, scientific research methods were brought into question. This initially seemed to represent a challenge to all scientific work. Closer examination identified that this was actually a critique of particular methods only – those that had produced unfavourable results. The overall analytic scheme was therefore reinforced. Fourthly, Potter and Wetherell describe the criterion of validity as “fruitfulness” (1987:171). The balance between acknowledging previous research and finding new concepts has already been considered (sections 4.5; 5.2.4). In this research I have tried to strike this balance by applying some of the work of DA to a new topic, ECS; a seemingly under considered area, risk; and using multiple data sources to draw out interesting schemes through their comparison with each other.

5.2.7 Stage nine: The report

When Potter and Wetherell describe two types of validation, some that are an extension of the analysis, others intrinsic to the presentation of findings, the former refers to the previous stage, and the latter to this one. As they make clear, in a DA report “the goal is to present analysis and conclusions in such a way that the reader is able to assess the researcher’s interpretations” (1987:172). Examples from the data should be given along with the analysis, not just to illustrate the claims being made, but so that readers can themselves analyse the data and evaluate the interpretations of it. Issues about the practicalities of doing so were considered in section 4.7.1. The issues raised about context (section 4.6) are also relevant here. In this research I attempted to present data that could be validated and to not include in analysis anything from outside the data extract. In some cases, this meant having to abandon analysis of some data, because it was not amenable to this presentation. For example, I had analysed this extract from the campaign group Airhealth:

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www.airhealth.org/index.html accessed 31/03/01
1 Pilots are at risk, too, and the first sign often is fainting. Dr David McKenas,
2 medical director of American Airlines, says that the most common causes
3 of sudden pilot incapacitation are cardiac arrest, arrhythmia, and fainting.
4 All of which are often caused by a blood clot in the lung.
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There are obviously a number of interesting features in this text. For example, putting the second and third sentences together attributes the third to Dr McKenas, but this may just be an addition by the group. The impression given however is of a causal link between incidences of pilot incapacitation and blood clots. What I had found particularly interesting was that this is the medical director from American Airlines, and the text makes it seem as if he is admitting that these common incapacitations are due to ECS. The Airhealth site implicitly and directly accuses the airlines of being
misleading about ECS, and of denying that it exists at all. American Airlines are associated a number of times with this. To then mention their medical director in this context, implying his agreement with the occurrence of blood clots in pilots, suggests that American Airlines do know about the risks, agree that ECS is a danger, and are therefore deliberately covering this up. Making this comment seem as if it is by Dr McKenas therefore not only helps to establish it as an independent fact and an urgent issue, but constructs the position of the airline he represents in a highly damning light. However, the text on the Airhealth site where American Airlines were mentioned was not readily amenable to being extracted; lots of ‘mentions in passing’ in the midst of swathes of text did not make selecting examples of the presentation by Airhealth that I have just outlined easy. I could have tried to pick out quotes, but this would have risked losing their meaning out of context; I could have included large amounts of data, but there would have been many other features in it and limits on space; I could have drawn on summary, but it is not possible to validate that. Ultimately then, because I could not draw out this comparative point, I felt I had to leave this analysis out. In this research, I have therefore presented extracts of data with the analysis of them, and invite readers to decide whether they come to the same conclusions.

5.2.8 Stage ten: Application

Finally, Potter and Wetherell address the application of research and note that researchers should “pay considerably more attention to the practical use of their work over and above the amassing of research findings and the furtherance of careers” (1987:174). This ties into considerations about the use and value of this type of DA, especially when it does not necessarily have the political agenda of other more critical approaches. Potter and Wetherell do acknowledge this when they highlight the criticism that is often levelled at DA, that it is ‘just looking at words – not real things’ (1987:174). This implies that while a focus on language use and function may be interesting, it will be of no practical use.

There are a number of points to be made about this. Potter and Wetherell argue that it is important to remember that “virtually the entirety of anyone’s understanding of the social world is mediated by discourse… one of the positive fruits of discourse analysis is to promote an informed critical attitude to discourse of this kind; to be more aware of its constructive nature and the close connection between the way textual versions of the world are put together and specific policies and evaluations are pushed” (1987:175). If social life is constructed, managed, and lived through discourse, then what can be more productive than to study that discourse? As Potter and Wetherell say, the phenomena of study for DA have “genuine consequences for peoples’ social lives” (1987:170).

Further, this leads to a related point of what else would be studied, if it were not discourse? Potter and Wetherell (1987), and Edwards et al. (1995) have a rebutted criticisms that they ignore pressing problems by merely focusing on language. But to describe such ‘issues’ is to make judgements about them; any knowledge about them has been mediated through some source, and interpreted in a particular way; and issues are made real and important through discourse. What DA does is examine how this is done, how distinctions between ‘the real’ and ‘the constructed’ are made, and to look at “the procedures through which some part of reality is made to seem stable, neutral, and objectively there” (Potter and Wetherell, 1995:50).
In this research, I am aiming to understand how the groups make their version of ECS seem ‘stable, neutral, and objectively there’. Each group differently constructs the existence and frequency of ECS, it is not possible to compare these to ‘the truth’ about it. The truth about ECS for each of these groups is brought into being through the discourse that they use. Furthermore, as Taylor says, (and reiterating Potter and Wetherell’s point about fruitfulness), “arguments may be presented for the value of an analysis in terms of its usefulness.. analysis may generate new theory and hypotheses.. [and] it may provide original, novel explanations, including explanations relevant to previous analyses..” (2001b:321). The point of this research is also then to apply discourse concepts, and generate new understandings, by relating them to a new field and a new topic area, in the hope of developing such ‘novel explanations’.
In this chapter I outline some ethical considerations of carrying out DA on interviews, and from sources of data from the Internet. These considerations have shaped this research. After evaluating the ethics of analysing interviews, only ‘naturally occurring’ data were collected in this research. However, I consider analysis of Internet sources to be morally justifiable, for reasons that will be detailed.

6.1. Ethical considerations of discourse analysis

In this research I have collected data from a variety of sources. I had initially planned also to carry out interviews, and did conduct one. Very quickly after this however, I concluded that there are ethical and methodological concerns with carrying out DA on interview transcripts, particularly those on sensitive or political topics, although this has not been given much attention in previous DA research. Is it insensitive to analyse only how people say things, ignoring what is being said? Do respondents need to be informed that DA will be carried out on their transcripts, and is it possible to fully inform them? Furthermore, informing respondents risks influencing how they structure their accounts while not doing so may amount to deception. In this chapter I conclude that when respondents are involved, the ‘means’ of achieving an ‘end’ can never be discounted, and that while the ultimate decisions about research design rest with the researcher, these decisions can and should be fully informed by ethical debates and considerations. These issues will now be considered.

6.1.1 Ethics and the nature of DA

A key consideration is whether it is ethically justifiable to conduct an interview, in particular about a sensitive or traumatic experience, and focus only on the rhetorical features of that account. As Widdicombe notes, the attention directed to accounts in DA may mean those who have produced them are ignored: “in an important sense the participants themselves are irrelevant because it is the language they speak that is the site of the investigation” (1993: 109). Of course this is the main tenet of DA; not to examine texts at face value, but to consider their construction. The point I wish to make is not that DA should examine the content of accounts. Doing so would contravene its principles, and is exactly what its proponents have argued against (Antaki et al.; 2003:13, for example). Rather, the point is that when the analysis is being carried out on interview accounts that have been elicited for the research, then it seems unethical to – in the baldest of terms – ignore what people have said, in favour of how they have said it.

1 It should of course be remembered that these arguments I am presenting are in response to the version of DA as developed by Potter and Wetherell and others from a social psychological perspective. Other forms of DA, such as that advocated by Van Dijk (1990), argue that internal cognitive processes do exist and should be taken account of. Such an approach would not sideline the content of participant’s accounts in the same way; but as has been outlined, such a model is not deemed to be as theoretically useful as the social psychological one, and has not been drawn upon to any degree in this research.
This is important because, as Lepper (2000:190) argues, analyses will “surprise and probably disturb” respondents. This is reiterated by Stenner who points out that “like most people I have experienced the irritation, or even horror, of having someone else take control over the ‘meaning’ of my words” (1993:131). One of the particular ethical issues of carrying out DA may be, as Parker and Burman (1993:157) argue, to do with the authority of “the analyst to impose meanings upon another(‘s) text”. Similarly, Wetherell (2001b: 396) points out that “the act of interpreting the words of another can be an appropriation of their voice”. Stenner (1993:131) argues that he is “painfully aware of having power and control over other people’s words”, and that this awareness is heightened by the lack of any (misconceived) reassurance of an objectivist methodology to back me up”. An examination of language may focus on and suggest interpretations that participants would be unlikely to expect or want. It might also ignore other aspects that they could expect to be emphasised. While this may be the case in all DA work, to impose an alternative meaning when the account has been produced for the purposes of that research alone makes these considerations particularly pertinent. Furthermore, Widdicombe and Wooffitt argue that studying instances of language use means analysts “seem to deny the significance of what people may be saying and doing with their talk” (1995:65). Through a focus on the language rather than the content of accounts, DA may not only marginalize speakers, but it may impose a different meaning or interpretation on their talk.

It is important to consider of course the extent to which DA does ignore content. While the emphasis is on examining the constructions used in language and not taking content at face value, as Billig (1999b:574) points out, when “material is collected on the basis of content – such as gathering a corpus of material on wife-beating, rape or child supervision – then... the analyst must bring in presuppositions about the nature of the phenomenon before the analysis is conducted in detail”. He contrasts this with a CA perspective which may examine in great detail only one account. In this research, I have gathered data on the basis of their content; texts have been collected that were ‘about’ ECS. However, I am then deconstructing the content of these texts to understand how they present the views that I identified in them (following Potter and Wetherell, 1987:168). So for example, while Horton-Salway (2001a:147) collected data on M.E., and identified this topic in accounts to be able to do so, her analysis then focuses on “how the participants made sense of its causes and definitions”. The difficulty here may arise over definitions of what ‘content’ is, and how it is used. Antaki (1994:121) describes that for discourse analysts, “content is some more complex constellation of cultural themes (variously called ‘repertoires’, ‘practices’, and even, rather confusingly, ‘discourses’). The point is then that while DA does examine content, it does not take it at face value as an indicator of an underlying attitude or truth, but analyses how a particular truth is presented as such: “the interest in facts... is attributional rather than actual. That is, the topic is what participants count as factual rather than what is actually factual” (Potter, 1997:7).

2 Parker, Burman, (and some of the other sources here) are not advocates of discursive psychology as such, and develop a more critical DA. However, their comments are still relevant, partly because of some of the similarities between approaches noted in the Chapter Two. They are also being drawn upon here because so little has been said about ethics in DP. In later sections of this chapter, I draw upon the literature from social research more generally, and from ethics, again because of the pertinency and applicability of the comments made; and the silence from DP.
In contrast to other qualitative research therefore, DA focuses on the presentation of information rather than what that information is. This is a point made again and again in discursive work. Potter and Wetherell state that “one is interested in language use rather than the people generating the language”...“given the theoretical primacy of the talk itself in the discourse mode of research and the focus on how talk is constructed” (1987:161;164). Psathas (1990:4) states that “the phenomena being studied are not studied in relation to ‘who’ the persons are but rather in terms of the organizational or structural features of the interactional phenomena themselves”. In a rare acknowledgement of the ethical dilemmas that such an approach might raise, Gill (1996:149) argues that the practice of analysing texts “breaks with a more humanist tradition of critical research in which respondents’ talk is treated as ‘authentic’ and is accorded respect”. Can this be considered an ethical approach to ‘respondents’ talk? I would argue not.

6.1.2 Sensitive topics: A moral obligation to help?

I have so far questioned whether it is right to look only at how people construct their talk. This debate may be further complicated by the subject matter of interviews. If they are about delicate or political topics, it may be felt there is a ‘moral imperative to help’, or that it is insensitive to analyse them. Although he was writing about CA, Billig (1999b:574) makes a crucial point, relevant to DA as well. He says that CA is:

“particularly unsuited for a critical analysis of situations such as rape, racial abuse, etc... This form of analysis, again to quote adherents of CA, involves a particular pattern of ‘attending and disattending’, which specifically disattends to content”.

Sensitive topics should not be subject to analysis that ignores their content3. ECS is a sensitive topic, framed as a pressing social problem, and suffering a clot is both life-threatening and life-changing. Of course, I do not wish to slip into realist statements about the ‘obvious and apparent’ sensitive and traumatic character of the issue. In defining what is a sensitive topic, the approach is of course to determine what the participants’ orientations towards it are. If they can be seen to define the topic as sensitive or political, then the analyst would be justified in doing so. As will demonstrated in some depth in the analysis chapters, the participants in this issue do very much present ECS as a sensitive topic, so I feel able to treat it as such as well.

This ethical uneasiness about analysis of sensitive topics could be overcome either by campaigning on behalf of participants, or not carrying out discourse analysis. However, either of these would contradict the principles of this research. To campaign for respondents means acknowledging that the version they present is the ‘correct’ one. This does not fit with a position of methodological relativism (see sections 2.6.1; and 4.8). This is not to say that respondents do not experience severe trauma in the occurrence of a blood clot, or that they are lying about their stories. As Marlaire and Maynard (1993:175) put it, “we are not pointing to the devastating psychological and physical effects of social problems, however real these may be.

3 This point is relevant because studies using DA are carried out on sensitive topics, even if they are not handled perhaps as diplomatically as they could be. MacMillan and Edwards for example describe that “the circumstances surrounding the death of Princess Diana offered a rich opportunity to examine the various ways in which the press handled their own availability as agents in the events they were reporting” (1999:169, emphasis added), which seems at the very least to be a little callously phrased.
Rather, we are interested in the social organisation of sense making and experience as this organisation is manifest in the procedures of real time talk and interaction'. Horton-Salway (2001b: 249) argues that focusing on the discursive accomplishments in an account "does not imply that discursive psychologists are less concerned about suffering that other analysts. It is rather that our theoretical equivalence does not assume an equivalence between people’s accounts and their internal experiences and cognitive processes". Carrying out DA is therefore a way of acknowledging that the "researcher’s constructions are not more privileged with respect to objectivity or truth than those of ordinary members" (Sarbin and Kitsuse, 1994:10).

Another way of overcoming ethical uneasiness might be to have some practical intention for the research. For example, Willig (1999) outlines a number of goals that discourse analysts may have, such as using DA as a social critique of a particular institution or setting, as a guide to reform, or as an empowerment of the respondents involved. However, doing any of these would require adopting an objective view of the situation analysed, and a position more commonly adopted in CDA (see section 2.4). For example, Willig (1999:147) studied the "positionings made available by discursive constructions of sex" and she assesses the implications for sexual practice. She argues that "sex education needs to challenge disempowering positionings in order to facilitate the practice of safer sex" and recommends a number of techniques that participants might use. This seems to be an identification of what is happening in a situation, and steps that can therefore be taken to improve it. In contrast, in this research I am examining the constructions used by different participants in an issue, and not describing that issue and making recommendations about it. A reading of Willig’s work and others from CDA suggests that without an appreciation of the situation, it is not possible to have any further intentions for the research - such as recommendations for improvement or empowerment of respondents. It is not congruent with the aims of this research to describe a situation in such terms. This being so, I would argue that it cannot be right to use DA on interviews with participants.

6.1.3 Trust and expectations in an interview

A further consideration is whether it is right to carry out DA when respondents may be upset, disappointed or harmed by their participation. While most research aims to minimise harm to respondents, the focus on language in DA leads to particular concerns. The respondent may have expectations about what form the interview will take and how the data will be used, and this may be particularly pertinent with a political topic such as ECS. Potter (1997) describes that interviews are subject to respondents’ powerful expectations about social science research. If these expectations are not met, respondents may feel disappointed or deceived. These expectations may be managed by gaining respondents’ informed consent - but I will argue shortly that this is both ethically and practically problematic.

While many respondents may welcome the chance to take part in research and may enjoy being given a chance to ‘tell their story’ (Hunt, 2002; Dowie, forthcoming), this does not mean that all respondents will, and the design of research that examines the constructions rather than the content of accounts, and does not use the data on their behalf, increases the possibility that they will not. The effects of research that may antagonise, upset or disappoint respondents have to be at the very least anticipated.
This point is made by Taylor (2001a:20), who argues that ethical concerns are always relevant (including in DA) because of the “power relations between a researcher and the participants in a project... the researcher has more power than the participant and must be careful not to abuse it”. The analyst must therefore anticipate any negative outcomes or adverse effects on participants and take steps to protect them (Dixon et al., 1987:164). For example, Brannen (1988:552) states that “respondents are likely to find confronting and telling their stories a traumatic experience” and that “the researcher therefore has some responsibility for protecting the respondent”. Furthermore it has been pointed out that taking part in research is inevitably “consciousness raising” for respondents and that if harmful consequences are a possibility, it is better not to undertake the research (Ely at al, 1991:225, emphasis added). As Bulmer (1982:3) argues, “the researcher has always to take into account the effects of his actions upon those subjects and act in such a way as to preserve their rights and integrities as human beings”. Respondents recounting a traumatic experience may clearly find this distressing. Whether an approach which questions the facticity of participants’ accounts and imposes alternative meanings on them can be seen as preserving individuals’ rights is at the very least questionable.

Furthermore, as Becker (1978) points out, it is important to consider the impact of research findings on the researched – they may feel discredited, or find themselves under attack. Schepper-Hughes (2000) has outlined the anger and upset of respondents who felt that she had emphasised the negative aspects of their community, and failed to acknowledge the advantages of their patterns of social organisation. Similarly with DA, respondents may not understand how or why a focus on language has taken precedence over what they see as the content of their account, and may feel it is unfair or unjustified. Horton-Salway (2001b:256) describes how subjects of discursive analysis may be in danger of having their stories treated as disingenuous, and Riessman (1993) had similar concerns that she might be viewed as carrying out a ‘critical analysis’ of her participant’s story. Horton-Salway states that “clearly, none of us would want to treat participants in such a dismissive way”; but it is clear that this is a danger. Furthermore, respondents involved in a political issue may be disappointed if it does not back up their case or further their cause in the campaign. Bower and Gasparis (1978:28-29) argue that this may amount to ‘social injury’ where:

“a subject, who wished to protect and promote the interests of the group to which he belonged, or of some other group, feels that his right to serve his own social goals has been abridged in the research because he lacked sufficient information about the uses that could be made of the information he provided; in effect, he was deprived of his rights because of an inadequacy of informed consent procedures”.

Informed consent is clearly a way of attempting to overcome these problems; the viability of this will now be considered.

4 Regarding ‘imposed meanings’, while the nature of DA is to look at the data with an open mind and to develop concepts from the data, it has been pointed out that analysts impose categories upon the text, and use terms that participants themselves would have been unlikely to (Antaki, 1994:138). A fuller consideration of the imposition of meaning has been given in section 4.5. Furthermore, to consider an account in terms of its rhetorical structure is to give it a different meaning than it would have for participants – for them it may be their story, their thoughts, their beliefs (although of course the only way to try and understand this would be through addressing what seemed to be their ‘orientations’ throughout the account).
6.1.4 The impossibility of informed consent

Informed consent is widely held to be an important principle in research of all kinds (Lidz and Roth, 1983; Bower and Gasparis, 1978). However, there are a number of ethical and practical problems with this in DA research. If respondents are informed that the structure of their talk will be analysed, this may affect what they then say. Respondents might not agree to an interview if they knew that their discursive practices would be examined and their facticity challenged, but is it deceiving respondents if all this is not explained? If there are practical problems with informing respondents, and ethical problems with not informing them, I would argue that DA of interviews cannot and should not be carried out.

In terms of attempts to inform respondents about the study, Schuler (1982:193) argues that revealing too much may undermine the effectiveness of the research, and Homan (1991:74) points out that "the reactivity of information provided for the purpose of consent is a problem". It has been acknowledged that speakers orient towards their environments (Ochberg 1994), and an interview is an example of a social environment. Potter and Mulkay concur with this and suggest that "whether they occur in interviews, in conferences, or in scientific texts, in every case accounts can only be understood in relation to the specific interactional and discursive occasion" (1985:260). They go to great pains to point out that "different repertoires are suitable for different social occasions" and that "accounts of all kinds must be understood as the products of participants' contextualised interpretive practices" (1985: 266). It is clear that knowing the purpose of the interview could affect the account produced and make respondents self conscious in their language use. Potter and Wetherell for example describe how for interviewees in their study of racism "one of the dangers of producing highly negative claims about groups of people such as Islanders is that they can easily be heard as a display of vindictive racism. This may be a particular concern when being interviewed by a social researcher" (1988:67). People may justify what they are saying because they are being interviewed. While this will not make their accounts any less ‘valid’, it may produce different versions than if they were primarily concerned with ‘telling their story’, and as in the example from Potter and Wetherell, respondents may attempt to alter their language use in respect of what they perceive the researcher’s expectations to be. This would not make the account any less interesting, as it could be examined for the processes that were used to make it justifiable. It may be however that consideration of such processes was not the primary intention of the research. Respondents may also attempt to alter their language use because of their own perceptions of what might constitute ‘good’ use of language. Research where respondents have been surprised and alarmed when presented with their transcripts illustrates this. Lieblich (2002) documents

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5 This is not of course to assume that the account would be invalid because it oriented towards the interview context, or that any such ‘bias’ is something that can be removed from the research process. As Speer points out in her interesting commentary, since DA "treats respondents, not as passive containers of knowledge, but as active participants within the research process who construct rather than report on reality, ‘bias’ is regarded as both unavoidable and pervasive... thus attempts to control bias may not only be futile, but may stifle the very features of the interaction that are theoretically interesting" (2002:511-2). What I am attempting to do here however is not to avoid bias, but to consider how respondents’ language use changes in different contexts, and the effect this has. Ten Have states that "[e]xperimenter effects are not ‘bad’ in themselves, but should be taken into account, and used or avoided depending on one’s chosen research strategy" (2002:527), which is what I have therefore attempted to do.
respondents' disquiet with the casual language they used and their desire to modify it afterwards. While respondents may not engage in sustained use of a different linguistic repertoire, or may not do so at all because they are used to constructing a ‘story telling’ narrative (Lieblich *et al*., 1998; Mishler, 1986), it is crucial to be alive to such a possibility. In light of what Fielding (1993:144) describes as the “long tradition of methodological research [which] warns of the many effects the interviewer has on the respondent’s statements”, it is clear that giving the respondent ‘too much’ information will have implications for the interaction that takes place.

Information given to respondents may not only influence what they say, but it may be difficult for them to understand what they are being told, possibly invalidating the procedures of informed consent. The British Sociological Association’s Statement of Ethical Practice (2002:3) states that it should be explained “in terms meaningful to participants, what the research is about, why it is being undertaken, and how it is to be disseminated and used”; but applying this may be problematic. Parsons (1966) describes this difficulty as ‘the competency gap’ where respondents do not have sufficient expertise to comprehend the subtleties of the information being given to them. They are then unable to make an informed choice about participation. Indeed, Lidz and Roth (1983:155) propose that there are “problems of how to ensure adequate explanation of the factors involved in the decision”. Ball (1984) reports that the majority of his participants had little grasp of what sociological research was, and the sort of outcomes it might produce. Respondents may be “naïve” and this “makes it more imperative that we are careful to protect them” (Ely at al, 1991:223). Importantly, Taylor (2001a:20) makes this point in reference to DA and argues that “in practice, making sure that the consent is informed, that is, that participants fully understand the implications of their involvement, can be difficult”. With DA, it may be difficult to explain analytical procedures in meaningful terms - especially when (as Potter and Wetherell (1987) point out6) even analysts have difficulty explicitly defining what these procedures are.

There are other difficulties with regard to ‘consent’. Although in theory participants do not have to consent to an interview or can leave at any time, they are not encouraged to. For example, Homan writes that while researchers are trained to get informed consent:

> “what frequently happens is that researchers occupy the time set aside for informing potential subjects with a highly generalised and anodyne account which is couched in plausible terms and avoids any possibilities that might disincline intended subjects from participating” (1991:75).

Furthermore, he points out that standard practice, counselled by textbooks, is to use the informing of consent as an exercise in persuasion (1991:76). This constitutes a deliberate ‘softening up’ of participants by feeding them a “cover story” of what the research is about (MacNeil, 1985:61). Informed consent tends to be gained on the basis of selective information, and structured so that respondents will say yes. Lidz and Roth (1983:155) argue that overcoming the problems of informed consent would mean “abolishing the researcher’s interest in getting a consent rather than a refusal”. Gaining ‘informed consent’ also transfers responsibility onto the respondent to stop

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6 This refers to their comment about ‘words failing’ them when it comes to describing the process of analysis (1987:168).
the interview, and means that any potential harm from participation in an interview cannot be mitigated by arguing that respondents ‘did not have to take part’.

It is clearly difficult to ensure that respondents are fully informed about a study. The other extreme would be to tell them as little as possible, to elicit data as ‘uncontaminated’ by researcher effect as possible, and ignore any competency gap. However, this contradicts a deontological view of research which values respondents and their feelings. From this view, some actions are wrong in themselves, and not just because they have unwanted or unfortunate consequences (Gensler, 1998). The end never justifies the means. To deliberately deceive or mislead respondents about the intentions of the research violates what Homan (1991:73) calls their “fundamental right to know”. He says that respondents not informed of the nature of an investigation before it is conducted will feel alienated or betrayed when they discover it afterwards.

Similarly, explaining the principles of the research in a way that Homan (1991:76) describes as ‘half hearted’ may be just as unethical. He says that difficulties in the practical application of the principle of informed consent lead some researchers to satisfy themselves with this. As Johnson points out, there is a danger of confusing the theoretical implausibility of gaining totally informed consent with the practical convenience to the researcher of gaining none at all (1997:44). Again, this manipulation of the principle of informed consent contradicts an ethical focus on the ‘means’ rather than ‘ends’. Bower and Gasparis (1978:17) argue that deceiving respondents, such as with a misleading description of the study’s processes, denigrates them. Indeed, Erikson (1967) believes that ‘using masks’ in social research compromises both those who wear them and those for whom they are worn. Moreover, he contends that doing so violates the terms of a contract that the sociologist should be ready to honour in their dealings with others. Clearly any deception of respondents is an abuse of their trust and (in theory at least) willing participation in the research. Keeping respondents uninformed about the research, what DA is, and how their talk will be used and analysed cannot be morally justified.

6.1.5 The way forward

These ethical and methodological considerations have shaped this research. The BSA Statement of Ethical Practice (2002:4-5) states that it is “incumbent on members to be aware of the possible consequences of their work. Wherever possible they should attempt to anticipate and to guard against, consequences for research participants which can be predicted to be harmful”. I designed this research with this in mind. As Pojman (1990:37) asks, “who’s best to judge what’s right and wrong? We are. We do so on the basis of the best reasoning we can bring forth and with sympathy and understanding”. Contentious issues in the social research literature are left in the end to the researcher and their conscience. Lofland and Lofland conclude that “as in all other ethical dimensions of naturalistic research, we believe that the ethically sensitive, thoughtful, and knowledgeable investigator is the best judge” (1984:29), and Crow (2000:79) argues that “ultimately the ethical obligation lies with the researcher”. Benn (2000) outlines Kant’s argument that if we are autonomous and our morality is ‘up to us’, this does not detract from the vigour of our decisions. It means that we can, and should, make decisions that fully consider the ethics involved.
In the light of these considerations, it did not seem ethical to carry out interviews with people who have experienced ECS. Having asked respondents to be interviewed; having entered into the social engagement of an interview, with the obligations that it implies; having built up trust and rapport; and having asked them to tell a personal and traumatic story it seems ethically inappropriate to then take this data away and undertake discourse analysis on it, and not use it for any more proactive purpose.

What were the options then for carrying out this research in an ethical way? One option would have been to carry out DA, but prepare careful informed consent and show participants the analysis afterwards. As has been discussed, however, there are a variety of methodological and ethical problems with attempting to gain informed consent. Furthermore, while Lieblich (2002) advocates allowing respondents to make alterations to their interview transcripts, this is difficult to incorporate into a study focused on language use, where even the smallest change will be significant, if this is not the focus of the study.

The option that I chose was to design research that circumvents the need to obtain informed consent, by using measures that are unobtrusive and that do not include direct and elicited interaction with respondents. This means there is no social contract between the researcher and respondent, and there are no expectations to be managed. The documents I analysed were all in the public domain, such as websites, fact sheets, and new releases. Indeed, a number of DA studies have been carried out on publicly available or ‘naturally occurring’ data, such as Potter and Edwards (1990) on the media; Potter and Wetherell (1995) on television; and Brown (1999) on self-help books. Indeed, Edwards and Potter argue that “DP favours the analysis of records of natural interaction, or textual materials produced as part of life’s activities (newspaper reports, medical records, written testimony etc)” (2001:12, emphasis added).

The use of ‘naturally occurring’ data does not of course mean ethical and methodological considerations are not applicable. However, when a document is placed in the public domain, rather than being deliberately elicited, I would argue that these issues are not so pertinent. A focus on the constructions in a public document does not have the same moral obligations as a deliberately elicited interview. Respondents have sensitivities and expectations that need to be managed that documents and their authors do not. While an author may wish a document to have a certain effect, relinquishing any control over what this might be is a necessary part of making it public. The researcher may still have power over the words of the author, and the author does not know what use their text is being put to, but this is a consequence of submitting it for public consumption. The responsibility rests with authors, rather than the researcher, because of their decision to publish their text. Lepper (2000) is adamant on this point, arguing that “using naturally occurring data means that much data can be sought from the public domain […] published records, public trials and hearings, broadcasts, newspaper texts – all provide a variety of

7 Speer’s (2002:513;516) point about the definition of ‘natural’ and ‘contrived’ data is acknowledged, where she describes that what is ‘natural’ data is not decided on the basis of their type or the role of the researcher, but on what the researcher intends to do with it. Natural data is therefore often preferred because it is thought to be ‘better’ than contrived materials and more amenable to analysis. However, in this research, my concern is not so much with ‘natural’ data which may be somehow free of bias, but with data which have not been elicited for the purposes of research, and in which there is no social contract to be managed between the analyst and the author.
different kinds of data, about the use of which no ethical dilemma should arise". Furthermore, Bechhofer and Paterson (2000) suggest that non-reactive measures may not incur the same issues of researcher effect, citing Billig (1995) to argue that research may be based upon entirely non-reactive measures. Wiggins and Potter (2003:514) concur with this, and state that because "analysis of interview material may reveal more about interview practices than about how evaluations are used as part of daily interaction", discursive work should focus on naturalistic settings.

In terms of the methodological justification of such an approach, it is also a consideration that when data is referred to as ‘naturally occurring’, it is not somehow untouched by the researcher. When Heath and Luff (1993:307) for example describe recordings of human interaction as ‘raw data’ there is an implication that this is data that is uncontaminated, in contrast to field-notes or responses to questionnaires that have been constructed and mediated by the researcher. However they seem to miss the point that such raw data may also have been constructed, either by the presence of the researcher or recording equipment, or the situations or research design developed generate it. Similarly, the ‘naturally occurring’ data examined here has been deliberately selected for this research, and involving decisions about selection. Issues of relevance and practicability have shaped this and all research and its findings. As will be further considered in the Chapter Twelve, the way to proceed is to acknowledge these issues, and be aware of their effect. This is not something that it is somehow possible to get away from.

6.1.6 Summary

In this chapter I have discussed the moral implications of carrying out DA on interviews on sensitive topics. I have argued that ignoring the content of such an account, especially on a delicate or political topic, may be unethical. The results of analysis or use of the data may upset respondents, and attempts to manage their expectations with informed consent have been shown to be unsatisfactory. These moral problems do have to be solved and ignoring the dilemmas in research will not answer them: Denzin (1978:383) argues that “some resolution of the ethical implications of research has to be made”. The conclusion that if research cannot be carried out to the best of the researcher’s (technical and ethical) abilities, it should not be carried out at all, may be somewhat extreme. Homan (1991:4) however defends Baumrind’s ‘high moral ground’ and his insistence that if methodological rigour ever conflicts with the fundamental rights of subjects, methodology must be compromised (1971:887). I believe that occupation of this high ground can be the only way forward. In light of these considerations, data has been collected from a variety of sources, but deliberately excluded from situations where there is a ‘social contract’ between researcher and researched to be managed.

6.2. Ethical considerations of research on Internet sources

Moving onto the second ethical debate, I have already detailed in section 5.2.2 that I am analysing two sources of data from the Internet; a mail-based list, and an online discussion group. To do so, I became a member of the mail-based list and did not inform the members that I was a researcher, while I entered the Internet forum as an observer. Consent was not sought in either case. This may seem to contradict the
earlier importance placed on ethical considerations. However, the same principles used to assess the ethics of conducting interviews were applied here. I concluded that posts on Internet discussion groups and messages to email lists may also be considered to be public, which means that there may be less ethical difficulty with using them, and that such covert analysis does not involve a 'social contract' between the researcher and the researched. I will now consider these issues in more detail.

6.2.1 Privacy and the public domain

Ethical considerations are extremely pertinent in Internet research. The Association of Internet Researchers' (AOIR) Ethical Guidelines for Internet Research state that "rights to privacy, confidentiality, autonomy and informed consent" should be protected at all times (2002:6). I agree. What I wish to argue is that this research has not breached such ethical considerations because of the careful way it was carried out.

The key ethical issues in research on Internet sources are considering individuals' privacy, and deciding what counts as a 'public domain'. Hewson et al. (2003:53) argue that "internet mediated research raises new issues concerning respecting individual's rights for privacy... the crucial question is whether the researcher is ethically justified in using publicly available information as data for a research study". Clearly, respect individuals' privacy is important. However, I think the key words in Hewson et al.'s comment are "publicly available". Paccagenella (1997) argues that posted messages are public acts, deliberately intended for public consumption. When responses are placed in the public domain, the author concedes control over how they are used, and implicitly accepts this by submitting them. Bordia (1999:150) says of interactions that took place in public discussion forums that "the participants were aware that their verbalizations were public domain" and that the researcher was not "snooping on a private conversations, such as email between two people", a point reiterated by Sudweeks and Rafaeli. They draw an interesting distinction between personal and private: "we view public discourse on CMC as just that: public. Such study is akin to the study of tombstone epitaphs, graffiti, or letters to the editor. Personal? – yes. Private? – no" (1995, no page number; cited in Paccagenella 1997).

Indeed, the AOIR (2002) ethical guidelines state that if the research focuses on publicly accessible archives, then there may be less obligation to protect individual privacy. The National Committee for Research Ethics in the Social Sciences and Humanities' (NESH) guidelines (2001) point out that 'public persons' and people in public spheres have a reduced expectation of privacy, such that simple observations of such persons and people is not ethically problematic. The AOIR guidelines specifically state that if subjects may be understood as "authors intending for their work to be public (eg email postings to large listserves and USENET groups; public webpages such as homepages, web logs etc; chat exchanges in publicly accessible chatrooms etc) then fewer obligations to protect autonomy, privacy, confidentiality etc will likely follow" (2002:7).

I am therefore considering Internet chatrooms to be public spaces. But do their members? Again, it is useful to draw on the AOIR guidelines. These list several questions that should be asked when undertaking Internet research. The first concerns the site of interaction or communication, and what ethical expectations are established by the venue. They ask whether there is a posted site policy that establishes specific expectations "eg, a statement notifying users that the site is private" (2002:5). The
guidelines state that “the greater the acknowledged privacy of the venue, the greater obligation there may be to protect individual privacy, confidentiality and the right to informed consent” (2002:5). Eysenbach and Till (2001:1103) give an interesting example of this, and describe the ‘SickKids’ discussion list for children with cancer. The information about the list states that “adults will NOT be permitted to participate on this list as its purpose it to provide kids with their own personal space to share”. In my research, there were notices on both the forum and the mail-based list web page that they are public sites. The Internet forum warns members to be careful about what they say because of this, and the list administrator on the mail-based list cautions members and reminds them not to say anything on the list that they would not say in any other public forum. Indeed, the aim of the list is stated as a resource for those with an interest in the human side of aviation and “not just a private chat group for just a select few practitioners” (Member DW, mail based list, 08/01/03).

I think there is a further element to whether a site can be considered public or private, and that is the ease with which non-members can access and join it. If access requires a registration, does this mean that a group is private? I have decided that if there are no restrictions on registration, this means a group is not private. If anyone can join the site and if membership is simply a matter of going through the procedures of registration requiring minimal details such as a name and email address, then I do not consider this to be a private site. It is certainly not private compared to a site where registration is only possible through invitation or where access is by password. In this research, I registered for the mail-based list but this only required a name and an email address. The Internet forum was open to anyone to observe. Posting a message required a registration, but I had no wish to post messages, on either site. No private forums were entered or used. If forums and lists are considered to be public spaces, then the same arguments apply as with documents outlined previously in section 6.1.5. Once an author submits their text into a public domain, they forsake control over what happens to that text, or how it may be used. On this point, Eysenbach and Till (2001) argue that it is ethical to record activities in a public place without consent, provided that individuals are not identifiable, an issue which will be fully considered in section 6.2.3.

6.2.2 ‘Informed’ consent revisited

In this research, I observed posts without informing members of my presence. I did not ask their consent. However, I have already considered that even when participants do give consent, it may be difficult to judge whether this is fully informed (section 6.1.4). Furthermore it is important to consider ‘researcher effect’, the extent to which knowing that a researcher is present changes what members do and say. As Eysenbach and Till state, “there is a considerable danger that announcing the research may influence future communication patterns or provoke members to opt out (which may damage the community)” (2001:1104). Seeking ‘informed consent’ therefore might not only mean participants attempt to change their language use (which might be considered a ‘problem’) but announcing research might change community patterns and even “damage” the community. This is clearly to be avoided.

To decide how to manage issues of informed consent and researcher effect, it was useful to draw on previous studies of Internet data. Paccagenella (1997:6) for example acknowledges that carrying out observation on the Internet without
informing those being studied “reduces the dangers of distorting data and behaviour by the presence of the researcher”. Denzin (1999:123) has stated in relation to his online research that “I never identified myself to the group, not did I obtain permission to quote from postings”. As Mann and Stewart (2002) point out, there are parallels here with conventional face-to-face research, and cite Garton et al. who ask: “Must researchers identify themselves if they are only participating in the electronic equivalent of hanging out on street corners or doughnut shops where they would never think of wearing large signs identifying themselves as ‘researchers’?” (1999:93). I would argue not. Paccagenella (1997:6) states that it is acceptable not to seek informed consent provided that the ethical issues that arise are given proper consideration. This is precisely what I have sought to do in this research.

Furthermore, studies that have adopted this covert approach and then informed respondents afterwards have not found any difficulties with doing so. For example, Wilkins (1991:58) observed a conference site and then presented her initial analysis back to the previously unsuspecting members of the group. The discussion on the ethics of this that followed on the site concluded that “anything posted to a publicly readable topic becomes public domain, and can be used”. Rafaeli et al. (1994) cite a similar conclusion to their research, where it was decided that it was not necessary to seek permission for the recording and analysis of publicly posted messages. While members may not be expecting researchers to be present or to access their posts, as Ferri (2000) points out, they will not know who is in a public forum, and once submitting a message concede control over who reads it.

6.2.3 Anonymity

Finally, to ensure congruence with Paccagenella’s invective to give proper consideration to ethical issues, I have anonymised the names of the forum and email list, and the names of the individual members whose messages I studied. This is despite there being disagreement in the literature over whether this is necessary. Mann and Stewart for example argue that there is no need to make participants’ names anonymous, as a “more robust approach would simply be to use the name that accompanied the original text on the grounds that, if people were happy for the Internet to see the association between their words and their name, why should they object to it in a book?” (2002:46). They furthermore state that “chat usernames may bear no relationship to the identity of the user and hence may be used in research reports without modification” (2002:58). However, Herring (1996) discusses using pseudonyms for participants unless they have specifically granted permission for their real names to be used, and Paccagenella (1997:7) states that “changing not only real names, but also aliases and pseudonyms (where used) proves the respect of the researchers for the social reality of cyberspace”. He goes on to point out that even though some Internet resources may be publicly available, this does not mean that participants have waived their right to remain anonymous, nor that the identity of an institution and/or list should be exposed, and Kendall (1999) details how she changed both the names of the forum and the pseudonyms adopted by participants in her research. Finally, and importantly, Walthers (1999) points out that research that reveals even the name of a site can have significant consequences, such as extra visitors to that site, or recriminations between the members on it. Following these suggestions, I have anonymised the names and pseudonyms of members, and the names and addresses of the forums they have participated in. While some researchers
would not regard this double layer of anonymity as unnecessary, in order to make this research as ethical as possible, I have decided to adopt this position.

A final point about quoting from messages is made by Bordia (1999:151). She argues that in her study, “confidentiality was maintained by not reproducing large segments of [individuals’] postings.” To an extent, my research is reproducing postings from participants. This is in keeping with the requirements of DA validation. While this would to contradict Bordia’s position, the segments reproduced from these groups are never more than a few lines long, and all other measures have been taken to assure author anonymity and confidentiality. In relation to this, Eysenbach and Till (2001:1105) argue that “by quoting the exact words of a newsgroup participant, the researcher may breach the participant’s confidentiality even if the researcher removes any personal information”, because quotes can be traced through search engines. I therefore carried out extensive searches of the quotes that I was using in search engines, but they did not provide links to the messages or the forums they came from. I therefore believe the confidentiality of members to be maintained.

I have argued here and in the previous chapter that it is both theoretically interesting and ethically justifiable to undertake covert research of Internet discussion forums and mailing lists. Overt research would mean that respondents’ expectations would have to be managed, there is a risk of not obtaining ‘informed’ consent from them, and of not treating their texts in line with their expectations. To undertake covert analysis instead may initially seem rather more unethical, but the key point is that members are leaving messages in public forums. Members are warned that their posts are public, and accessing them is very straightforward. Furthermore, every effort has been made to maintain the confidentiality of the members. I therefore believe that this research does not infringe the rights of members, or risk causing damage to communities, and is thus in line with the ethical guidelines outlined.

6.3. Ethical considerations of research on the BA Intranet

There is one final issue to be addressed. As part of this research I have analysed pages from the British Airways intranet. This is a web based information system for BA employees. I am not a BA employee, and the data was given to me by a contact at BA. The issues that have been considered here are clearly applicable to this data. The pages were not intended for public consumption, and I did not ask permission to use them. However, I think analysis of them is justifiable for a number of reasons. Firstly, there is no social contract to be managed. This was the main problem identified with analysis of interviews; here, the data has not been elicited intentionally for the purposes of research, and there are no expectations to be managed. Secondly, the data was offered to me, I did not ask for it. I did not put someone with access to it in the difficult position of having to obtain it for me. My contact knew I was studying ECS and thought it would be of interest to me. If they foresaw no ethical difficulty in volunteering me the data, then there seems to be less compulsion for me to do so either. Thirdly, there is the issue of public and private domains. The pages were not for public consumption. They were however designed for all BA employees to be able to access. This is a wide audience, not a specific recipient. To have used this data is not the same as eavesdropping on a private conversation, or, following Bordia (1999:150), reading an email between two people; it is more akin to standing outside a conference hall without a ticket (and with a friend inside). My presence does not
harm or affect anyone inside. For these reasons, I have included analysis of the texts in this research.

This chapter has been a consideration of the ethics of this research. I have documented how and why decisions were taken on the data to carry out DA on. The next four chapters present the analysis of data that was carried out.
Chapter Seven:
The Actions of the Passengers and the Management of Stake: Airlines' Responsibility for Economy Class Syndrome

In this chapter I consider how ECS is constructed by a number of airlines. I highlight various techniques used to avoid blame for the issue, downplay its seriousness, and emphasise their own concerned and active role. Moreover, these airlines attempt this whilst defending themselves against actual or potential criticisms of their actions and their interest in the issue. I discuss the mechanisms by which airlines achieve a construction of ECS as a voluntary risk taken by passengers, which they themselves have been active in trying to prevent, but cannot be held responsible for.

7.1. Presentation of self

ECS is an issue with potentially huge ramifications for the airline industry. With high profile media coverage and imminent lawsuits, it is crucial that airlines counter any claims about its seriousness and portray it as a risk assumed by passengers. It is equally important that the industry portrays itself as acting appropriately and responsibly in the controversy, but playing no part in causing or exacerbating the risk.

Therefore, an airline's first objective in a document about ECS may be to present itself in such a way that the constructions it uses will be taken seriously and not dismissed out of hand. Presentation of self is important not just for what it will say about the speaker or author, but for how the rest of the account will be viewed; for example Horton-Salway (2001b), and Wooffitt (1992) discuss the importance of presenting oneself in a particular way to persuade about the account being told. As I noted in section 3.3, previous research has also considered the establishment of authority in accounts and demonstrated that facticity does not simply manifest itself as a reflection of content; rather, that active construction is required to make an account believable (Billig, 1996; Potter, 1997). In this instance, airlines may characterise themselves as presenting a factual and correct account of the situation. This presentation makes the rest of the account seem credible and gives them the authority to make the statements and claims that they do. Airlines may also present themselves by emphasising their responsible and concerned attitude to the issue, and outlining all the actions they are taking to inform passengers about the issue and understand the problem better.

I therefore now consider how airlines self present as being concerned about ECS and active in trying to prevent it, how they manage potential criticisms about their interest in the issue, and outline that they are 'on the same side' as the passengers.

7.1.1 Factual, concerned and active

Airlines wish to establish the facticity of their account. This can be illustrated with the following extract from the Australian airline Qantas. Its website has information on a number of health related issues including mention of deep vein thrombosis, risk
factors, and preventative exercises. The introductory paragraphs are significant to consider, as they outline the airline’s position on health issues generally, and guide the reader on how the rest of the pages should be considered:


1 Your Health Inflight
2 At Qantas we care about your comfort and safety.
3 We have included the following information about your health inflight
4 that we hope you will find helpful and useful.

The text also goes on to state with reference to the air quality and conditions in the cabin that:

5 Although these unique factors do not pose a health or safety threat
6 to most customers, there are guidelines you can follow
7 that will improve your comfort level during and after a flight.

The text starts out with 'we care', thus setting the tone for what will follow. This may be similar to Horton-Salway's notion of 'scene setting'. As she says, the start of a narrative “has profound consequences for the kinds of causal account that speakers go on to give" (2001b:250). The presentation of self is as concerned, responsibly providing information and advice that is factual and proven. The text states that the guidelines given “will” improve comfort, not that they 'may'. It goes on to state that the recommended exercises have been ‘designed’, implying that they have been deliberately and carefully constructed, will work, and are proven and tested. These guidelines can be “followed” by passengers – the airline has devised and made available the appropriate information, passengers need only respond to what has been provided for them. The airline comes across as efficient and responsible, and this gives them the authority to continue.

An airline may also attempt a favourable self presentation by emphasising its active role in the issue of ECS. It is doing all it can to provide information, and to research the problem. This makes the airline seem to be taking the issue seriously and responsibly, and therefore cannot be accused of ignoring it. Adopting a proactive role in finding out more about the issue makes the airline seem as if they have nothing to hide. This press release from British Airways (BA) illustrates this involved and vigorous attitude:

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1 Layout of quotes follow the style set out by, for example, MacMillan and Edwards (1999)
British Airways takes the health and well-being of passengers and staff extremely seriously.

We welcome the House of Lords' investigation into the health effects of travel in commercial aircraft and have co-operated fully by providing evidence on a number of occasions to members of the Science and Technology Committee.

We are already very active in the provision of health information to our passengers, however we are keen to learn more about DVT and we are supporting an independent study looking at all aspects of transportation, including flying.

We also fully support the need to provide accurate health information and advice to passengers. For many years, British Airways has provided expert medical advice to customers and health professionals and will continue to do so.

There is a great deal of emphasis in the text about what BA are doing. This is both in terms of stressing the activities they are involved in, and also through the action-oriented language used: 'we are active', 'we are keen', 'we support'. Often, even while it is being described in these terms, actually not very much is being done; "we fully support the need to provide accurate health information" sounds extremely proactive, but at the same time does not say very much. However, the impression is given of an efficient and responsible organisation, actively involved in an investigation of ECS and in health issues more generally. They are even so knowledgeable about such issues that their experts provide medical advice to health professionals (lines 12-14). The actions of passengers are not mentioned in this text, and the emphasis is all on the pro-active BA.

It is particularly interesting to note how an airline may continue to stress this concerned and responsible attitude in the face of criticism. That the airline does so shows how crucial it is to maintain such a position. Potter (1997:107) describes how factual accounts can be analysed in terms of their offensive and defensive rhetoric, and Billig (1991:143) points out that "every attitude in favour of a position is also implicitly, but more often explicitly, also a stance against the counter position"; see section 3.3. In the following example, there is an explicitly defensive rhetoric being employed. The extract is taken from internal BA communications. While the BA factsheets and website information are for public use and may be designed to allay public fears and to encourage people to fly, the BA intranet is for BA employees only. This is clearly an audience with knowledge of flying and BA practices, many of whom regularly fly as part of their jobs. The extract here gives a newspaper quote about BA, and then BA's response to it.
BA issues a blood clot warning with tickets
British Airways is to issue health warnings with its flight tickets
in a bid to allay passengers' fears over so-called 'economy class syndrome'.
The airline will introduce the measures next month in the form of a leaflet
instructing passengers how to minimise risk during travel.

Wednesday, January 10, 2001 Daily Mail p39

BA Position
From the beginning of next month we will be sending out health information
leaflets with tickets – the aim of which is to provide passengers
with information on well-being and travel.

The leaflet will offer a range of travel health advice – for example,
on immunisations, carrying medication in hand luggage, what to eat and
drink on-board as well as exercises to do on-board.

The leaflet points out that the possibility of circulatory problems,
particularly traveller's thrombosis, can be reduced by limiting the length
of time passengers sit still. It recommends a few simple exercises which
help – standing up, stretching your arms and legs every couple of hours
and trying to take a brief walk around the cabin whenever you can. It refers
passengers to BA's inflight magazine Highlife for further detail, including
exercises passengers can do in their seats.

The introduction of this leaflet is not a reaction to recent media coverage
on DVT nor to speculation about impending legal action. For some years
BA has provided information on well-being in the air through its
in-flight magazine and its 24 hour travel health line for passengers.
The airline also has an inflight exercise video demonstrating exercises
passengers can do on board. This is to be updated in the next few months.

BA was the first, and is still the only British airline, to have a health website
- www.britishairways.com/health

In February BA will also be writing to 14,000 GP's and sending them
leaflets and posters for their surgeries.

The two texts construct differently the issue being discussed. The newspaper says
that the leaflet is a bid by BA to "allay fears" and is about "economy class syndrome". In contrast BA states that they aim to provide passengers with "information", and that the leaflet is about "well-being and travel", offering a range of advice. Their actions are not about responding to "fears" – the emotive tone of the newspaper article is countermanded by an emphasis on travel generally. It is only in the third paragraph of the BA statement that DVT is mentioned, and then the emphasis is on passengers' actions; that they should not sit still, that they should take exercises and move about. It is written in terms of passengers with phrases such as 'whenever you can' (line 14, emphasis added). Outlining these measures has the effect of making the passengers responsible for avoiding the occurrence of DVT.

Whilst BA is outlining that passengers may take these steps, the text is written to emphasise all the actions it is undertaking. BA says that they recommend, they refer, they will be sending out information, and have adopted a very pro-active stance to the issue. The text is very defensive in this respect, and specifically states that the
information being provided is not a reaction, but an ongoing part of their health and well being programme. The fact that they are not merely reacting is mentioned late in the text, after a number of things that they are doing or have already done have been mentioned, thus subtly substantiating these claims.

7.1.2 Management of stake

It is clear from the defensive tone of this last extract that while airlines are trying to appear factual and authoritative, they are also having to contend with what Potter (1997:110) has described as “the dilemma of stake”, where what is being said may be “discounted as a product of stake or interest”. Indeed, MacMillan and Edwards (1999:153) describe how “various kinds of stake, motive or interest are marshalled in ways that undermine factuality. And as Horton-Salway (2001b:155) says, because there is this danger, participants attend to it in their accounts; see section 3.3. While issues of stake are considered as part of the rhetorical strategies of all the groups studied, they are particularly important for the airlines. Airlines clearly have an involvement in ECS, and a commercial interest in playing down its significance whilst outlining their own responsible role in tackling it. Indeed, their role is so clear that as Potter says “issues of stake may be so salient that inoculating against them may be difficult and ignoring them unlikely to be effective” (1997:130). The airlines cannot pretend to be disinterested or uninvolved; yet they want what they say to be believed and taken seriously, and not just dismissed as a product of their stake.

A variety of methods are used to manage stake. The first is to emphasise that the facts of the issue are being presented. The implication is that as facts are value neutral, the airline cannot be biased in their presentation of them, and they are merely outlining what is already known and proven about the issue. Acknowledging that ECS exists by giving the facts about it may be used to disarm potential accusations about airline cover-ups. Furthermore, an airline may attempt to inoculate against stake by presenting itself as being on the same side as passengers, so presenting information about the issue in the interests of themselves as well as passengers. The implication is that the information provided is reliable and accurate because they have a self interest in making it so.

7.1.2.1 Presentation of Facts

An example of management of stake through the presentation of facts is an article in the Olympic Airways in-flight magazine. The introduction to the text is significant:

[4] Motion, Olympic Airways's inflight magazine: Travel Health section p94 [26/06/01]

1. Economy Class Syndrome
2. Everything You Should Know
3. Deep Venous Thrombosis (DVT) is a much debated subject. Education about in-flight DVT is the best preventative measure because knowledge can lead to actions that offset the development of the condition during flight.

The words “much debated” and “education” are important here. They imply that even though there is a controversy, there is one version that is accurate, and facts exist that it is possible to be educated about. The implication is that it is on these pages that this
version will be given. This is emphasised by the way the article is written, with a series of questions and answers. In this instance, the airline is setting out the ‘facts’, rather than just writing an article which might be dismissed as opinion. Indeed, the text is written in an empiricist style. Following Gilbert and Mulkay (1984), this is a way of constructing a text to make it seem distant from the author. In this text, a factual presentation is maintained through descriptions of the education that it is possible to have – this is presented not as information that the airline has had a part in but that exists independently of them and that passengers can use. In this extract, the effect of this empiricist style is emphasised by its combination with an interesting use of pronouns. Herschell (2001) notes how pronouns can be employed to, for example, encourage solidarity, deny responsibility, or identify enemies and supporters. In this example, the pronoun “you” is used for the passengers in the strap-line. This presents the account as directly related to those reading it rather than passengers generally, or the account being about what ‘other people’ should do. The combination of the empiricist style and the personalisation in terms of the passengers constructs the text as providing independent facts about ECS. It detracts from the airline’s stake in producing them, and makes taking account of the advice the responsibility of the passengers. The text acknowledges that inflight DVT exists, and there are ways to prevent it. It does not try and ignore the issue altogether. The text goes on to state that “here are some steps that you can take to avoid the condition”. This is not ‘to help avoid the condition’, or ‘that may prevent’ it; it is presented as a definite fact that the occurrence of a DVT is avoidable, and that this is the way to do so.

One way of dealing with issues of stake is to therefore acknowledge that ECS exists as an issue. To either deny it or to dither would be expected, but to acknowledge it is to disarm such criticism. This may be what Potter (1997:129) describes as “stake confession”. This “shows that the writer is live to its relevance and its not trying to dupe the readership. It may also work as a display of honesty and objectivity: the author is someone who can stand outside his interests and is well aware of their distorting potential. In this sense it is disarming. Also it puts potential objectors in the interactional position of making a point that has already been conceded”. An airline cannot be accused of being involved in a cover up about ECS or trying to hide the facts if they are stating that it exists and providing advice on how to prevent it. Once this has been established however, the focus for the blame for its occurrence can be shifted onto passengers. Stake management in this way can be seen at various points throughout the text. For example:

[5] Motion, Olympic Airways’ inflight magazine: Travel Health section p94 [26/06/01]

1 Q1 Why is DVT also called ‘Economy Class Syndrome’?
2 The first reports on DVT appeared in the 1940’s among Londoners
3 who were forced to sit for many hours in air-raid shelters.
4 The earliest report of a flight related leg vein problem was published in 1954.

The start to this answer acknowledges that the issue of DVT has been known about for some time. This is interesting because airlines have been accused of denying this and covering it up, by passenger groups, articles in medical journals, and the press. This is an example of what Puchta and Potter (2002:347) describe as a simultaneous justification of one position and criticism of the counter position. The airline is presenting an account of the risk, and by saying it exists is making it harder for such a criticism to be levelled against them. Mentioning the known history of DVT as an
issue also detracts from the idea that flying is the cause. The history of the risk is constructed in such a way to detract from airline responsibility for it. What is also interesting is the way that the airline ‘acknowledges’ the existence of a risk, but does so in such a way to diminish any responsibility for it. In the text, lines 2 and 3 are simply irrelevant to the question the author has asked. Instead, they function to emphasise that while DVT may exist, it is not just an air flight problem.

Further statements in the article seem to be an attempt to acknowledge some of the controversy and issues around ECS, in order to disarm potential critics. For example:

[6] Motion, Olympic Airway’s inflight magazine Travel Health section p95 [29/6/01]

1 ‘But if airlines need to be held in any way responsible, I think it is only
2 if they make a habit of keeping the ‘Fasten Seat Belt’ light on for the
3 convenience of the crew rather than for actual passenger safety.
4 I truly believe that only the captain knows when the risk from turbulence
5 outweighs the risk from DVT’ says Dr. I. Dale Carroll, medical director of
6 The Travel Doctor clinic in Michigan.

The use of the quote in the text seems significant, because at first it appears that the airline is claiming responsibility for bringing on a DVT through their actions, such as unnecessarily asking passengers to remain in their seats. However, while appearing to concede this responsibility, the airline actually implies that this is the only way they might be responsible, and it suggests that keeping a light on is not particularly serious. The only reason the airline does this is for ‘convenience’, reasonable in the cramped working environment of a plane, and not for any more sinister reasons. The expertise of the pilot is emphasised, as subtly are the risks of turbulence. Without explicitly stating it, the risks of turbulence are portrayed as being as significant as those from ECS; and ECS has been taken seriously so far in the article. It is implied therefore that it is obvious and understandable that the pilot might want to keep passengers in their seats, clearly for their own safety. Furthermore, the acknowledgement that the airlines and pilots do this pre-empts any accusations about this, and the airline may be orienting themselves against a potentially hostile context (Potter and Wetherell, 1987:33; Wooffitt, 1992:2). That it is an ‘expert’, supposedly free from stake, making these claims only substantiates what is being said, and carries more weight than using an airline industry spokesperson or leaving it as a simple statement in the text. This is similar to Wooffitt’s (1992:158) description of ‘active voicing’. To cite someone else as holding a particular view helps to establish its objectivity and distances it from being the author’s interpretation. Further, MacMillan and Edwards (1998:329) note the importance of the use of titles accorded to people. In this extract, it is a doctor, and the director, of a clinic that specialises in travel health that is being quoted. Not only is this an active voice, but it is a prestigious one. The claim is made to seem authoritative and independent from the airline. A way of managing stake is therefore to disarm potential critics by acknowledging what may appear to be a problem, and then subtly detract from how serious a problem this is.

Another way of inoculating against stake is to acknowledge the facts of a link between the onset of a DVT and travel; but with a careful stress on travel generally rather than flying per se. An interesting illustration of this is from BA, and it is particularly significant to compare the information released by BA over a period of time. Factsheets available on their website have changed in small but significant
ways, and examining where these changes have been made and possible reasons why further highlights a number of interesting features. The following concerns two factsheets that were available and downloaded on the 28/08/01, and the 30/01/02:

<table>
<thead>
<tr>
<th>Figure 7: <a href="http://www.britishairways.com/health">www.britishairways.com/health</a> [accessed 28/08/01]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a  Traveller's Thrombosis</td>
</tr>
<tr>
<td>2a  Deep vein thrombosis and air travel</td>
</tr>
<tr>
<td>3a  Clotting of blood in the lower legs is known as deep vein thrombosis (DVT).</td>
</tr>
<tr>
<td>4a  This has been referred to in the press as 'economy class syndrome' but the term is misleading.</td>
</tr>
<tr>
<td>5a  Individuals seated in cars, trucks, buses, trains and aeroplanes may all be at risk, and cases of DVT occurring in flight have been reported in travellers in premium as well as economy.</td>
</tr>
<tr>
<td>6a  The term 'traveller's thrombosis' is much more accurate.</td>
</tr>
<tr>
<td>7a  Some people are more susceptible than others to DVT.</td>
</tr>
<tr>
<td>8a  Generally, the risk of thrombosis increases over the age of 40 years but there are a number of additional known risk factors including:</td>
</tr>
<tr>
<td>9a  Previous personal or family history of DVT</td>
</tr>
<tr>
<td>10a Abnormalities of blood clotting factors</td>
</tr>
<tr>
<td>11a Certain forms of cardiac disease</td>
</tr>
<tr>
<td>12a Previous history or currently suffering from malignant disease</td>
</tr>
<tr>
<td>13a Hormone treatment, including the oral contraceptive pill and oestrogen containing hormone replacement therapy</td>
</tr>
<tr>
<td>14a Pregnancy</td>
</tr>
<tr>
<td>15a Recent major surgery or injury, particularly affecting the lower limbs or abdomen</td>
</tr>
<tr>
<td>16a Recent immobilisation for a day or more</td>
</tr>
<tr>
<td>17a Some research has also suggested that, in addition, there may be an added risk from</td>
</tr>
<tr>
<td>18a tobacco smoking, obesity and varicose veins.</td>
</tr>
<tr>
<td>19a DVT is most common in the lower limbs and the general symptoms are pain, swelling below the site of the clot, redness and warmth. However, DVT may be present without any associated symptoms.</td>
</tr>
<tr>
<td>20a It begins with the collection of stagnant pooled blood in the deep leg veins, which progresses to blood clotting. As the clot grows, it can shed emboli which are carried through the blood stream to the right side of the heart, from where they may pass into the lungs causing a pulmonary embolus.</td>
</tr>
<tr>
<td>21a Embolisation may occur hours or days after the formation of the clot and this may have serious consequences including chest pain, shortness of breath, and sudden death.</td>
</tr>
<tr>
<td>22a There is limited epidemiological evidence on the incidence of travellers thrombosis.</td>
</tr>
<tr>
<td>23a However, British Airways has supported a study by Dr Patrick Kesteven of Newcastle University in which all cases of DVT occurring in the north east over a 12 month period have been investigated to establish any association with recent travel (air or otherwise). The findings, published in summer 2000, showed that although a history of travel appears to be a risk factor accounting for 26 cases out of a total of 634, only 16 cases reported having flown in the preceding 4 weeks.</td>
</tr>
<tr>
<td>24a It seems, from this and other studies of which we are aware, that there is indeed an association between long journeys and the occurrence of DVT but there is no evidence that flying is a specific risk in itself. There is a consensus view that it is immobility rather than the environment which is a factor. In addition, at least 75% of DVTs in these studies occurred in travellers who already at least one of the risk factors listed above.</td>
</tr>
</tbody>
</table>
Traveller's Thrombosis – the risks and the research

Clotting of blood, usually occurring in the lower legs, is known as deep venous thrombosis (DVT).

This has become known in the press as 'economy class syndrome' but the term is misleading. Individuals seated in cars, buses and trains may all be at risk, and cases of DVT occurring in flight have been reported in travellers in premium cabins as well as economy. The term 'traveller's thrombosis' is much more accurate.

Research

Reduced blood flow may lead to DVT. Although most of the scientific research relates to hospital patients during the period immediately after surgery, it is clear that prolonged immobility can often be a key factor in the development of a blood clot.

Specific studies examining traveller's thrombosis have looked particularly at how many DVT sufferers have travelled in the weeks preceding their diagnosis.

It is clear from the studies of which we are aware, that there is indeed an association between long journeys and the occurrence of a DVT. However, thromboses can occur after car, bus, rail or air travel, and there is no conclusive evidence that flying itself is a specific risk factor. In addition, at least 75% of DVTs in these studies occurred in passengers who already had at least one of the risk factors listed on the next page.

Risk factors

Some people are more susceptible to DVT than others. Generally, the risk of thrombosis increases once you are over 40 years of age, but there are a number of additional risk factors including:

- Previous or family history of DVT
- Abnormality of blood clotting factors
- Certain forms of cardiac disease
- Previous history or currently suffering from malignant disease
- Hormone treatment including the oral contraceptive pill and oestrogen containing hormone replacement therapy
- Pregnancy
- Recent major surgery or injury, particularly affecting the lower limbs or abdomen
- Recent immobilisation for a day or more.

Some research has also suggested that, in addition, there may be an added risk from tobacco smoking, obesity and varicose veins.

Signs and Symptoms of DVT

DVT is most common in the lower limbs and may well occur without any obvious signs or symptoms.

The general symptoms, where they occur, are pain, swelling and discolouration of the affected limb. The leg may also feel warm to touch and there may be congestion of the superficial veins.

The clinical diagnosis of DVT is not easy. It can mimic many other medical conditions and expert investigation is required to confirm the diagnosis.

Pulmonary embolism

In some cases, small pieces of clot may detach and be carried through the blood stream to the heart and onward into the lungs causing a pulmonary embolus. This usually occurs where there is already an extensive clot in the leg and may happen hours or days after the formation of the clot. It may result in serious consequences, including chest pain, shortness of breath, and even sudden death.
Examination of these two texts highlights a number of features of stake management, and how this may be done by emphasising the risk from travel. Both texts outline that there “is indeed an association between long journeys and the occurrence of DVT” (line 41-42a; 14-15b). However, this is not stating a causal link, rather more circumspectly saying that there is a relationship, and again only states that it is only “long journeys” that might be significant here. Again, this seems to be an example of offensive and defensive rhetoric; BA are describing that the risk exists and so defending themselves against criticisms that they are ignoring it; but at the same time offensively orienting to the accusations that it is flying that causes it by stressing the impacts of travel generally. The new pages (30/01/02) emphasise this more categorically, by stating twice that “thromboses can occur after car, bus, rail or air travel” (line 15-16b, as well as 5b). Stating this in the sentence after one that mention “studies” (14b) implies that this is a research finding, and adds greater credibility to it, although it does not actually say so. To actually state the different forms of travel that might bring on a DVT, rather than just saying that sitting still causes it serves to direct attention away from the airline.

The research section in the new document uses the same text as previously to outline that “reduced blood flow may lead to DVT” (line 9b) and states that “prolonged immobility can often be a key factor” (line 12b). It furthermore points out that studies into DVT “looked particularly at how DVT sufferers have travelled in the weeks preceding their diagnosis” (lines 12-13b). Describing this directed focus (“particularly”) on the weeks leading up to a diagnosis emphasises the importance of what passengers do pre-and post flight, and removes attention from the experience of flight and the airline. Again, a presentation of acknowledging the issue of ECS is done in such a way that it takes the emphasis away from the airlines; DVT is caused by reduced blood flow, not specifically through the plane environment, but sitting still, and by what the passengers had been doing in the previous weeks.

Another example of stake management through acknowledgment of the risks is from the United Arab Emirates Airline. Emirates are an interesting case to study, as they provide their passengers with an ‘airogym’, a cushion that passengers place under their feet. Exercising with it is designed to stimulate blood flow. While this might seem like an acknowledgement that ECS exists and is a cause for concern, the information given out by the airline still plays down the risks and emphasises that it is not flying in particular that may cause it:

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2 These are lengthy extracts with myriad interesting features in them. The difficulties of only focusing on some of these have been discussed in Chapter Four. Some of the features will be referred to later in this chapter, but it is acknowledged that there are many aspects of the text that it is not possible to mention here.

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EMIRATES TO GIVE PASSENGERS A LEG EXERCISER

Emirates, the international airline of the UAE, today becomes the first airline in the world to respond to current, world-wide fears about deep vein thrombosis (DVT) by providing every passenger on long-haul flights with an exercise device proven to boost blood circulation in the legs.

Emirates' Head of Medical Services, Dr. Alasdair Beatton, said: “The health and welfare of customers is our top priority. Airogym is a significant product because it is a simple and fun way of exercising whilst sitting. "Airogym will encourage people to exercise on board – something we already urge passengers to do through our video and audio channels during flights and in our inflight magazine.

Although there is much to learn about the causes of DVT, which appears to affect specific groups of people who sit still without exercise for long periods of time – even when sitting at home – Airogym has proven to improve blood flow. That is why Emirates is becoming the first airline to give its support to this product and is taking a lead role by making it available to our customers.”

Amanda Richards, Director of Airogym, said: “The beauty of Airogym is that it’s simple, discreet and allows you to exercise your leg muscles effectively and quietly, in the safety and comfort of your own seat.

“The use of Airogym can prove beneficial to office workers, the elderly, coach, car or train passengers - not just air travellers. In fact it can help any job, hobby or task that requires someone to be seated for long periods of time.”

The airline has to make the risks of a DVT seem serious enough that passengers will choose to fly with them because they provide an airogym, and yet not so serious that they choose not to fly at all. They do this by presenting themselves as over-cautious – although the facts about DVT have not yet been agreed and there is still “much to learn”, they are taking “a lead role” and responsibly taking action. This is why they are providing exercisers for passengers, not because ECS is very serious. However, while stating that their provision is in response to “fears about deep vein thrombosis”, the airline does not present a causal link between flights and blood clots. If clots occur on flights, it is because people are sitting down, not because they are flying. This is emphasised by the vast number of people who may be susceptible to a blood clot – “any job, hobby or task that requires someone to be seated for long periods of time” could apply to most people, especially when it can happen “at home” as well. The quote from the director of airogym authenticates it - this is someone who would know. The emphasis on the range of risky people and locations shifts the focus away from the airline as causing ECS. It is caused by immobility. This does not mean flying is risky, just immobility; and the airline presents themselves as having the answer to this. ECS is a problem, but choosing to fly with Emirates, who can substantiate their claim to care about “the health and well-being of their passengers”, alleviates that risk.

7.1.2.2 On the same side

An airline may try to characterise itself as being ‘on the same side’ as passengers, and so acting in their interests, as this extract from a BA press release shows:
British Airways takes the health and well-being of passengers and staff extremely seriously. This seems like something that might almost not need saying, as it would be unusual to expect anything less. This may be significant in the light of what Wooffitt (1992:52) says about references to actions and elements that are prefaced by formulations of intentions or expectations. He notes that "people do not routinely construct sentences such as 'I tried to arrive on time, and I did', unless they are specifically emphasising the virtue of the effort". Similarly, for BA to mention that they take the well-being of passengers and staff so seriously might almost seem unnecessary, unless it was to emphasise this 'virtue of effort'. Furthermore, this does not construct ECS as something that creeps up on unsuspecting victims and that the airlines are in a conspiracy of silence about, and instead portrays it as something that affects everyone, including the airlines and their staff. The issue then becomes less about 'them and us', the passengers versus the airlines, and more about that fact that 'we are in all this together'. This sentence has the effect of inoculating against criticisms that BA does not care for its passengers, because what may affect them is likely to affect their staff as well.

7.2. Downplaying the seriousness of the issue

While the airlines want to appear to be presenting an accurate and not overtly partial account of the issue, they also have an interest in playing down the seriousness of it—they do not want people to stop flying. This may be subtly done in order to make it more effective; untempered claims that ECS is an insignificant issue barely worthy of attention may be in danger of being dismissed out of hand. In relation to such situations, Potter and Wetherell argue that making a derogatory point less overt may actually make it more successful: "It can be sensible to be inexplicit. For one thing, explicitness risks being less persuasive" (1987:33). Playing down the seriousness of ECS may be desired, but it may be more effective to delicately construct this idea.

7.2.1 One issue among many

One way to play down the seriousness of the risks of ECS is to mention it amongst a number of other travel and health issues. For example, the Qantas website lists the following factors as relevant to health inflight:


Cabin Humidity and Dehydration
Cabin Pressurisation
Eating and Drinking
Jet Lag
Blood Circulation and Muscle Relaxation
Motion Sickness
Inflight Workout

It is in the section on 'Blood Circulation and Muscle Relaxation' that the risk of blood clots is mentioned:

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1 Blood Circulation and Muscle Relaxation

2 When you're sitting upright and inactive for a long period of time, several things can happen:

3 The central blood vessels in your legs can be compressed, making it harder for the blood
to get back to your heart. Muscles can become tense, resulting in backaches and a feeling
of excessive fatigue during, and even after your flight. The normal body mechanism for
returning fluid to the heart, can be inhibited and gravity can cause the fluid to collect in your
feet, resulting in swollen feet after a long flight.

4 Some studies have concluded that prolonged immobility may be a risk factor in the formation
of blood clots in the legs, deep vein thrombosis (DVT). Particular medications and medical
conditions may increase the risk of formation of blood clots if associated with prolonged immobility.

The importance of the issue is played down in a number of ways. It is firstly
interesting that the risk of a blood clot does not have its own category. It is covered
under ‘blood circulation’, and even this is grouped together with muscle relaxation,
thus denying it the importance that having a category on its own would bring. This
section also comes some way after other issues and information. It is not the first one
listed, so does not carry any implications that it may be the most important one for
passengers to know about or consider. There is no mention of ‘ECS’, of the media
attention, public campaign or publicity that the issue is getting. The emphasis is on
the experience of flight on the body more generally than just blood clots – this is only
mentioned only after all the other effects, such as tense muscles and swollen feet,
have been considered. Not only does this de-emphasise the importance of the issue,
but the text is very tentative about the seriousness when the risk is mentioned. It is
only “some” studies that have found that there “may” be a link; and it is only between
“immobility” and blood clots, not flying. This is interesting, because in the previous
paragraph, flight was explicitly mentioned twice as having an effect on the body.
Here, it is just immobility that may be a factor.

7.2.2 Unemotional language

Another way of playing down the seriousness of the issue is to use unemotional
language and instead draw upon factual formal terms that may attempt to take the heat
out of the issue. The following extract is again taken from BA communications, and
outlines their position to newspaper coverage they have received:

[12] British Airways Intranet – What the papers say [24/01/02] [line numbers added]

1 The deadly cost of economy class
2 Deep vein thrombosis is thought to kill 2,000 British aeroplane
3 passengers each year. Now the airlines are facing accusations
4 of negligence for not telling us about the risks.

5 Tuesday, February 20, 2001 Independent page 10

6 BA Position
7 British Airways confirms that it has received one formal legal inquiry
8 regarding DVT in the form of a pre-claim letter. It would be inappropriate
9 to give any further details in light of the pending legal action.
Although the response from BA is short, it is effective. While the newspaper outlines that ECS is "thought to kill 2,000" people, BA takes the steam out of this emotive claim by saying that it has only received "one" letter. Furthermore, the "accusations" in the newspaper have become an "inquiry" in the response. BA does not directly respond to the newspaper claims, thus making them not seem worthy of a response, as well as it being "inappropriate" to do so. The newspaper text is written very emotively, mentioning 'killing' passengers, rather than just passenger 'deaths', or 'the risk of suffering a DVT'. The mention of "aeroplane passengers" and then "the airlines" in the media text does imply responsibility by the airlines. These are not just 'people' or 'sufferers', but "aeroplane passengers" which constructs them as being in the care of the airlines when this took place. Furthermore, that the airlines have not released information about "the risks" constructs these risks as objective, decided facts, making the airlines seem even more reprehensible for not passing on information. That they didn't tell "us" sets up an emotional 'them and us' situation between the airlines and the newspaper on behalf of the passengers, thought to be dying in their thousands due to the attitude and position of the airlines. The BA response totally detracts from all of this, and is unemotionally couched in formal legal language.

A further way that this is done can be seen in the following extracts from BA (see Figures 7 and 8). There is a section in both texts about the 'signs and symptoms of ECS', and the changes between them are interesting. The language used has changed subtly but significantly. The original text states that:


22a DVT is most common in the lower limbs and the general symptoms are pain, swelling below the site
23a of the clot, redness and warmth. However, a DVT may be present without any associated symptoms.
24a It begins with the collection of stagnant pooled blood in the deep leg veins, which progresses
25a to blood clotting. As the clot grows, it can shed emboli which are carried through the blood stream
26a to the right side of the heart, from where they may pass into the lungs causing a pulmonary embolus.
27a Embolisation may occur hours or days after the formation of the clot, and this may have serious
28a consequences including chest pain, shortness of breath and sudden death.

The later text states:

[14] www.britishairways.com/health accessed 30/01/02

35b DVT is most common in the lower limbs and may well occur without any
36b obvious signs or symptoms.
37b The general symptoms, where they occur, are pain, swelling, and discoloration of the affected limb.
38b The leg may also feel warm to touch and there may be congestion of the superficial veins.
39b The clinical diagnosis of ECS is not easy. It can mimic many other medical conditions and
40b expert investigation is required to confirm the diagnosis.
41b Pulmonary embolism
42b In some cases, small pieces of clot may detach and be carried through the blood stream
43b to the heart and onward into the lungs causing a pulmonary embolus. This usually occurs
44b only where there is already an extensive clot in the leg and may happen hours or days after the
45b formation of the clot. It may result in serious consequences including chest pain,
46b shortness of breath and even sudden death.
There are a number of small but significant differences between these texts. The original text makes a whole sentence out of mentioning the potential lack of symptoms with a DVT and prefixes it with “However”, making it more noticeable (line 23a). In the new text such a frightening idea is tucked away in the first sentence and is stated much more calmly. The original text lists the “general symptoms” associated with a DVT, and while the new text mentions these as well, this is only “when they occur”, detracting from their likelihood and seriousness, and making them less frightening. Furthermore, the inclusion of the phrase “congestion of the superficial veins” in the newer extract (line 38b) does not make this sound particularly worrying. ‘Congestion of the veins’ would seem very serious, but adding the word “superficial” has the effect of detracting from this.

The next details given are similar, but there are some differences between texts. The original text uses more technical language; it states that a clot can “shed emboli” (line 25a), while the new version states that “small pieces of clot may detach” (line 42b). This more straightforward language may have the effect of making the condition seem simpler and less frightening. It is certainly portrayed as less serious in the second text which argues that this may happen only “in some cases” while in the original text this is “as the clot grows” (line 25a), an unpleasant, worrying, and sinister thought. Another unpleasant image used in the first text is that of “stagnant pooled blood in the deep veins” (line 24a). This has been replaced altogether in the later text for the simpler, less frightening version, which instead focuses on passengers who already have “an extensive clot in the leg” (line 44b). This implies that this is something that previously existed. The distinction between DVT and pulmonary embolism is made much clearer in the new text. The first text implies that all DVTs lead to a PE, while the second is much more careful about this, and has a separate section about PE, which only happens in “some cases”. In comparison to this, DVT is constructed in the second text as not too serious, and merely involves swelling and warmth. Both texts are careful to state that a PE may happen “hours or days after the formation of a clot”, so may occur after a flight, which again focuses attention away from the airlines themselves.

7.3. ECS, DVT or ‘travellers thrombosis’

One of the crucial factors in constructing ECS is the term that is used for it. Just as Allan et al. (2000) have argued that the change in rhetorical terms for issues can have significant effects on their construction, so the term ‘ECS’ can be seen to be important here. Indeed, Schoenfeld et al. (1979:39) argue that “as the claims-makers communicate to attract early converts to the proposed point of view, they are significantly aided if they can find a distinctive term for their overall concern, if only for the convenience of headline writers”. ECS is a catchy and distinctive term, and this is useful for making a story eye-catching, memorable and interesting (Anderson, 1997). How the term ‘ECS’ is used is significant for constructing wider issues about its existence and risk, which feed into further concerns about the responsibility for it.

This is crucial for determining an airline’s culpability, as the following extracts from two BA factsheets illustrate (see Figures 7 and 8). Both title the text “Traveller’s Thrombosis”, a term that is less emotive than ‘economy class syndrome’ and one which takes the emphasis away from the airlines and onto travellers, not just on aeroplanes, but also on other forms of transport.
The original text states that:


1a Traveller's Thrombosis
2a Deep vein thrombosis and air travel
3a Clotting of blood in the lower legs is known as deep vein thrombosis (DVT).
4a This has been referred to in the press as ‘economy class syndrome’ but the term is misleading.
5a Individuals seated in cars, trucks, buses, trains and aeroplanes may all be at risk, and cases of DVT occurring in flight have been reported in travellers in premium as well as economy.
7a The term ‘traveller’s thrombosis’ is much more accurate.

The newer text states that:

[16] www.britishairways.com/health [accessed 30/1/01]

1b Traveller's Thrombosis – the risks and the research
2b Clotting of blood, usually occurring in the lower legs, is known as deep venous thrombosis (DVT).
3b This has become known in the press as ‘economy class syndrome’ but the term is misleading.
5b Individuals seated in cars, buses and trains may all be at risk, and cases of DVT occurring in flight have been reported in travellers in premium cabins as well as economy.
7b The term ‘traveller’s thrombosis’ is much more accurate.

The later version of the text differs in that instead of DVT having been “referred” to in the press as economy class syndrome, “this has become known in the press”, but this is still “misleading”. This describes the way that the press have adopted the term ECS and indicates that it is now used to encapsulate the condition. However, the text implies that this is just the term that the press use, rather than it having any kind of descriptive accuracy. This is also a significant change from the first text. To ‘refer’ is to take note of something that exists.

Both texts focus on other factors that may lead to a DVT, and so change the focus from flying to other forms of transport. Furthermore, the term ‘ECS’ is outlined in both to be a inaccurate because “cases of a DVT occurring in flight have been reported in travellers in premium cabins as well as economy” (lines 6a and 6b). This is interestingly written to play down the significance and seriousness of ECS, even while it appears to be acknowledging that ECS is a more widespread phenomenon; cases are stated as having been ‘reported’ rather than ‘occurring’, which casts doubt on their existence. For something to have been reported does not state that it actually happened, just that someone is saying it has. Instead of calling the issue ECS, BA favour the term “Traveller’s Thrombosis”. They characterise ECS as an inaccurate term, and then establish the use of the term ‘traveller’s thrombosis’ by using it without referring to the fact that they are. Doing so would highlight that this was their particular construction of the issue only; merely using it without emphasising this make it seem like a factual term that they are simply drawing upon, and makes it seem distant from their production of it. Further references build up its appropriateness. For example, both texts (lines 44-45a; 17-18b) go on to state that:

“in addition, at least 75% of DVTs in these studies occurred in travellers who already had one of the risk factors listed on the previous page"
After giving this statistic, both texts then give a number of passenger characteristics that may make them more susceptible to ECS. This sentence construction makes the text seem factual and authoritative. The phrase “in addition” really piles on the emphasis that there is a great deal of evidence against a DVT-flying link; quoting an actual percentage from this research is impressive, and gives the idea of knowledge about the situation. This is a significantly high percentage too, and of course no mention is made of the 25% who had ‘no risk factors’. Calling these people “travellers” is interesting too, as it reinforces BA’s term for the situation “Traveller’s Thrombosis”, and with the quoting of figures from medical research, we are a long way from the emotive ‘economy class syndrome’ now. It can be seen that the name an issue has is of fundamental importance, and has implications for what exactly that issue is. In this case, ‘ECS’ implies airline responsibility. It is crucial for an airline to discredit this as an accurate description of the issue, and instead encapsulate the term in a way which draws attention away from them.

7.4. Voluntary and imposed risk

Finally, I will consider the issue of whether ECS is a ‘controllable’ risk. The significance of this idea was highlighted in section 3.1.4, and it was an interesting and key aspect of the constructions used. Airlines attempt to make the risk more acceptable by presenting it as part of the passengers (voluntary) choice to fly, while passenger groups present it as an imposed risk. As I will discuss in the next chapter, campaign groups present ECS as being something that happens to passengers; they are passive, and ECS is active. This serves to take the blame away from passengers, and presents it as being something they are helpless against. Airlines however attempt to present ECS as a voluntary risk that passengers subject themselves to through their personal characteristics, their behaviour in-flight, and their choice to fly.

Airlines construct the issue by using offensive and defensive rhetoric. They place the emphasis on passengers; and consequently away from themselves. One way this is done is by outlining the responsible position that the airline has taken, and the information that they have provided; and it is therefore up to the passengers then to use this information. The airline has done all it can by providing it.

This is illustrated in the following extract from Qantas:


1 When you are flying you can be seated and inactive
2 for long periods of time. The environment can be low in humidity
3 and pressurised up to an altitude of 2440 metres above sea level.
4 Unlike other forms of transportation, air travel allows for rapid
5 movement across many time zones, causing disruption to the body’s
6 ‘biological clock’. Although these unique factors do not pose a health
7 or safety threat to most customers, there are guidelines you can
8 follow that will improve your comfort level during and after a flight.
9 We hope the following recommendations will help you
10 have a more pleasant flight today and in the future.

While this is ostensibly a description of the effects of flying, it actually constructs the passengers’ responsibility in the occurrence of ECS. It is written in terms of the passengers; “when you are flying” (line 1, emphasis added). This takes the emphasis
away from the airlines and the consequences of being in a plane. It directly describes what passengers do: "you can be seated and inactive for long periods of time" (lines 1-2), rather than saying that 'movement may be limited'. It is of course completely unexceptional that passengers will be seated, and largely inactive – they are onboard an aircraft for several hours. This seems obvious, but it must have been pointed out for a reason; and it clearly foregrounds the passengers and their actions in the development and prevention of ECS. There is also a responsibility on passengers; the airlines are providing the guidelines, but it is now up to passengers to improve their own health. The phrase 'will help you have..' (lines 9-10) is written with the emphasis on the passengers. It does not say 'will make your journey more pleasant', but is in terms of the things that passengers can do for themselves, and the ways that they can make their flight more pleasant through their own actions. Despite the mention of the conditions of the plane, it is still the passengers who have the ability to care for themselves and the airline is not to blame if they don’t; the attitude is 'we’ve told you, it’s up to you now'.

This shifting of responsibility onto the passengers can also be seen in terms of the following extract from Olympic Airways:

[18] _Motion_, Olympic Airway’s inflight magazine Travel Health section p98 26/6/01

1 Any person who sits for a long time runs the risk of developing
2 small clumps of clotted blood in the lower legs.
3 Fatal clots can also occur in people who sit still for long periods
4 in buses, trains, cars, theatres, or at their desks.

While again taking the focus away from air travel by mentioning these other forms of transport, using the phrase “runs the risk” further couches this in terms of action by individuals, not something that is imposed upon them. “Runs the risk” is a phrase that implies foolhardy and even reckless behaviour, knowingly engaged in. To “sit still” is presented as a choice.

This is reiterated in a further extract from the magazine:

[19] _Motion_, Olympic Airway’s inflight magazine Travel Health section p98 26/6/01

1 Q8 What preventative measures can be taken?
2 The Economy Class Syndrome may be deadly in some cases
3 but it is highly preventable.
4 Here are some steps you can take to avoid the condition

Again, the emphasis in on passenger action: “you can take”. There is also the element of passenger choice here; “can” take, rather than ‘should’ or ‘must’. This choice means that the responsibility for making this decision rests with passengers, and that therefore the onus of blame is shifted onto them. When the answer to this question states that “Here are some steps you can take”, this is interesting because at the beginning of the article it was stated that it was possible to prevent ECS with knowledge and education (see Section 7.1.2.1 in this chapter). Therefore by providing this to the passengers so that they can now take these steps, the airlines are absolving themselves of blame.
7.5. Conclusions

In this chapter, I have outlined how airlines construct the issue of ECS, their position and that of the passengers. In their texts these airlines undertake a particular presentation of themselves, in order to strengthen the claims made in their account, and to invoke a particular response in the reader to what they wish to say. They portray themselves as taking an active role in finding out about ECS and trying to prevent it, not being involved in a sinister cover up about the issue. They also undertake work to manage their stake in the issue, and to prevent what they say being dismissed because of their interest in it. The seriousness of ECS is counteracted, and formal language is used to take the emotional intensity out of the issue. Similarly, the name for the issue is used by airlines as a way of detracting from their responsibility for it.

The airlines are also oriented to defending themselves against potential critics by presenting an acknowledgment that ECS is an important issue and should be dealt with. However, because the actions and characteristics of the passengers are presented as the cause of it, avoiding it becomes their responsibility, rather than the airlines'. If 'you' as a passenger have any of these conditions that are recognisable and medically known, if you take these precautions or actions, it can be prevented. ECS is not constructed as a random accident or as something stealthily creeping up on unsuspecting victims. It is possible to know about it, it is possible to avoid it, but the responsibility for doing so rests with the passengers and their actions.

These features become more apparent through comparison with a very different version of the issue. The next chapter is about passenger groups.
In this chapter I consider the constructions of the risk and responsibility for ECS that are used by campaign groups. The groups examined are the Aviation Health Institute (AHI), VARDA (Victims of Air Related DVT Association), and Airhealth. Full details are given in section 5.2.2.

ECS is presented as essentially very simple by all three groups. The risk is real and serious, but it can be avoided. The necessary information is readily available, but airlines refuse to acknowledge the risk or give this information. They could tell passengers what they need to know; therefore ECS is preventable. This makes the deaths and suffering from it all the more tragic because they are needless, and the airlines directly responsible. In this chapter, I consider the devices used by the campaign groups to present themselves so that this claim seems plausible, how they construct the tragedy and the seriousness of the issue, and the responsibility of the passengers and the airlines in relation to it.

8.1. Presentation of ‘self’

As I discussed in the last chapter, self presentation is crucial for claims to be believable, and this requires work by the author/s of the text (Woolgar, 1980; Potter, 1997). It is important for groups to establish quickly their knowledge and authority on the issue, so that the rest of their account seems plausible, and to encourage support for their cause.

8.1.1 In command of the facts

One way groups do this is by constructing themselves as presenting the facts of the risk of ECS. This may be done by stressing their thorough grasp of the situation, and their independent and unbiased position in relation to these facts. The first page of the AHI website illustrates this:
About the Aviation Health Institute

The world's first independent non-profit making body dealing with the health and well-being of passengers worldwide.

In 1990 Farrol Kahn, realising that there was a need to bring to the attention of the public the health risks associated with flying, founded the Aviation Health Institute. The Institute, based in Oxford, was established in 1996 as a Registered Charity No 1017574. Since then the Institute has been at the forefront of efforts to promote the health of passengers worldwide.

The AHI's objectives are to encourage research, educate the public and the industry and to seeks ways of preventing and reducing the health risks to the flying public.

This presentation of self constructs the knowledge and authority of the Institute in several ways. The scale used to describe the Institute and their work emphasises their importance and credibility. They are the "world's" first such body, they care about passengers "worldwide" (a point which is stressed twice in lines 3 and 9). This is not some small tin-pot organisation. They objectively deal with facts, they are "independent" and "non profit making", as well as being a "registered charity". That their charity number is listed as well, when it is unlikely to be required by anyone reading the first few paragraphs on the site, really emphasises their status. This is an organisation who are pioneering to further the causes outlined. Not only are they the "first" such body, but they are the organisation who are educating others - both "the public" and "the industry". Not only does it seem impressive that they have the knowledge and authority to be able to do this, in particular to educate the industry, but listing these groups further makes the AHI seem separate and independent from them.

The text makes it clear that there is knowledge that does need to be communicated, and this emphasises the importance of the organisation's work. The "need" to raise awareness of issues was "realised", not decided. This was information that existed but was not known about, and it was up to the AHI to do something about that. The risks to passengers exist - they are described as "the health risks" (emphasis added), not 'any health risks' or 'the possibility of risks'. The information given on the site is therefore presented as factual, not as opinion, because it already existed independently of the group; all they have done is present it.

8.1.2 Proven facts

Having access to the facts about ECS is important in terms of a group's self presentation, and also because it can substantiate the claim that (their) information can prevent ECS. It is maintained on a number of occasions by all three groups that ECS can be 'avoided' - if passengers know what to do. This information is available from the group, so they must present themselves as able to give accurate information.

This is quite starkly stated on the Airhealth welcome page:
Travellers could avoid the misdiagnosis that causes further suffering and sometimes death, if only they knew how. On this website you will find the information you need.

This is an emotive part of their introduction. The poignant “if only they knew how” constructs ECS as needless and preventable. The aid this, the effectiveness of the information that the group has is emphasised. It is not just information that passengers ‘may’ require, or that will ‘help’ – but what they “need” to prevent “suffering and death”. The group present the issue as serious, and therefore themselves as knowledgeable, efficient, and important in being able to provide the information to prevent it. As well as using defensive rhetoric, this may also be a use of offensive rhetoric. That the group are presenting the necessary information implies that the airlines are not.

Groups may substantiate their presentation of accurate facts by citing sources of information or quoting from people presented as ‘experts’. The following two extracts are from the same page of the Airhealth site at different times:

Stealth factor: symptoms of pulmonary embolism usually do not appear until a few days or more after the flight.

Dr Stanley Mohler, Director of Aerospace Medicine at Wright State Medical School, calls this a “stealth disease”

Use of the word “stealth” to describe the condition has changed from assertion and opinion to a referenced reality. Quoting from this source has acted as an “externalising device”. Woolgar describes that these allow “a reading that the phenomenon described has an existence by virtue of actions beyond the realm of human agency” (1988:75). Here, it makes this description seem independent from the group. That this source is a doctor, with a prestigious title (MacMillan and Edwards, 1998:329) from what is presented as a prestigious institution, further establishes this as an important and robust fact. The group are still able to use the image they wanted - with the associated implications about the sinister nature of the issue, serious enough to be called a “disease” - but can now make it seem independent from them and an established fact.

The importance to groups of presenting ‘proven’ claims is highlighted at times where they may not be substantiated, but are made to seem as if they are. For example:

Common misconceptions:

I’ll just upgrade and avoid the cramped seats

Altitude affects blood coagulability and the altitude is the same in the front of the plane as the rear. A Japanese study found 70% of victims in coach class, 25% in business class, 5% in first class and one pilot.
This extract is from the opening page of the Airhealth site, which lists "common misconceptions" about ECS, and their construction of the 'reality'. This response from the group does not say anything more about this Japanese "study" and does not even give a reference for it; without this, such a mention might be deemed quite useless in terms of adding to the evidence. But the quoting of figures from a "study" adds credibility, even if no more details are given about it. Also, use of the word "victim" is interesting here. The group do not specify whether the word "victim" was used in the study, or whether this is their interpretation in their summary of it. Either way, the impression is given that this is the term used and found in the study, and this substantiates the use of it on the site. These people are officially victims.

8.1.1.3 Facts under threat

The status of information that groups present may come under threat. This could be because contrasting information on a topic exists, or through more direct challenges to it. Accordingly, two strategies may be used by groups; to acknowledge that differences in information do exist, but that the one accurate version is given here by them; or to attack and denigrate any challenges to their preferred view.

For instance, there is an acknowledgement by Airhealth that the facts about ECS are not yet finalised; however, they present their information as an authoritative account of the current situation. This position is knowledgeably outlined, and very factually and concisely stated. An example of this is given on the 'Advice for Pilots' page, which discusses the recommended frequency for an ankle flexing exercise:


1 How often? Most experts say every two hours. However, it is easier
2 and safer to do it more frequently.

The implication here is that while there is a variation in opinion and "most experts" say one thing, the group are expert enough themselves to give a different recommendation. They externalise this by saying that "it is easier..", not 'we recommend', or attributing this as their own view – but they make it clear that this is the one that should be used.

The Airhealth site is further highly disparaging about a study that does not support the link between air travel and blood clots:


1 Kraaijenhagen is the only one that denies the link between
2 air travel and blood clots. In an October 28 2000 letter to the editor
3 of the Lancet he reported a study of DVT victims using a control group.
4 The control group was so ill-conceived that it led to bizarre conclusions.
5 For example, Kraaijenhagen found that recent injury reduces the risk of DVT.
6 This is like saying that a few drinks will reduce your risk of an auto accident.
7 Six letters from researchers like Ferrari excoriated Kraaijenhagen
8 in the Feb 17 issue. Kraaijenhagen continues to insist that his methods
9 were valid, taking comfort, he said, in the fact that one of his findings
10 was consistent with the findings of other researchers. American Airlines
11 continues to cite Kraaijenhagen as the only valid study.
The research that has been undertaken here is undermined in a number of ways; its (unfavourable) conclusions are therefore made to seem unlikely. That this study is the “only one” (line 1) not to find a link implies that there are many which have. Leaving the sentence as “Kraaijenhagen denies the link” would not have this effect at all. The way that his study “denies” the link is also interesting. This is stronger than “did not find a link” or “no link existed”. A “denial” implies that the link is there but he is just not admitting it. Furthermore, research that is “ill-conceived” and “bizarre” is clearly not in keeping with the expectations of good scientific enquiry. The comparison to the risks of an auto accident (line 6) compounds the ridiculousness of the whole enterprise. The way that Kraaijenhagen is cited also reflects badly on him. He “continues to insist” (line 8, emphasis added) his findings are valid, rather than emphasising the quality of his research, incorporating comments into it or undertaking any further work. This makes him sound belligerent and unwilling to listen to reason. That he “said” (line 9) does not imply any more of an evidential basis to his assertions, only that they are mere opinion. Also, mention of “one of his findings” being consistent begs questions about the rest of them, and implies that even Kraaijenhagen could not find any further corroborating evidence to back them up. Mention of other researchers (line 7) who also disagreed with Kraaijenhagen substantiates the denigration of his work being constructed here, especially when words as strong as “excoriated” are used to describe them. The comment about American Airlines in the last sentence does nothing to add credibility to Kraaijenhagen’s research. Rather, it makes it seem as if the airline deliberately chose this “ill-conceived” study simply because it is the only one that sides with them, and they appear in denial about the facts also. Working to discredit contradictory views can be a way therefore of maintaining the appearance of having the correct and established facts, and giving a reliable and authoritative account.

8.1.2 Taking effective action

While it is important for groups to seem as if they are presenting the facts of the issue, they must also establish themselves as a credible campaign force. To do so, they may emphasise all the action they have undertaken, and how important and effectual it has been. For example, the first page of the AHI website lists the group’s achievements:


1 Since 1996 we have achieved the following:
2 Increased the awareness of air related problems to the medical profession,
3 parliament and the public.
4 Compiled a factual database relating to air related problems.
5 Promoted methods of prevention.
6 Developed a programme for educating the public on preventable airline conditions.
7 Made aviation a high profile public issue demonstrated by the wide coverage in the media.
8 Supported medical research into Deep Vein Thrombosis (DVT).
9 Stimulated the interest of the international community, including
10 the World Health Organisation (WHO).
11 Increased the importance of leg room/seat pitch.
12 Focused the airlines on their responsibility for the health of their passengers.
13 Ran a clean air campaign, in the year 2000, which drew attention to the risk of
14 disease transmission resulting from recirculated air in aircraft cabins.

The list of actions undertaken by the group make them seem very proactive - but do not actually say very much. To have “increased the importance of leg room/seat

100
pitch" is very vague and does not imply anything about what this might have entailed or achieved. The impression given overall however from the numerous action oriented words used ("promoted", "developed", "supported") is that the group has a history of achievement behind them. Fahrestock (1989:36) makes an interesting comment that relates to this. She states that "in the world of ordinary rhetorical arguments, the amount of time and effort that reputable people place in an inquiry is persuasive in and of itself of the value of their results". Persuading about this value seems to be what the group are trying to do here. Giving so much detail about their effort may be designed to give what they say credibility; establish their authority to continue; persuade that they are a worthwhile group to become involved with; and emphasise the importance of the issue with which they have become so involved.

Self-presentation as involved in action is further demonstrated by VARDA:

[27] www.aviation-health.org/varda.html accessed 25/11/02

1 VARDA will lobby all MP's at Westminster in its call for a Public Inquiry
2 and will be asking the public to sign a petition in support of the campaign.
3 John Smith, Austin Mitchell and Dr Ian Gibson are among the first MPs
4 to back the campaign

The text details the influential circles in which the group are moving. It is implied that they are working at the heart of government, and are trying to set up a Public Inquiry, an official and well respected government instrument. That they are going to lobby "all" MPs, a sizeable and difficult task, carries favourable implications about their capabilities and influence. To list the three MPs by name adds credibility, and to say that they are "among the first" implies that this is a currently ongoing process, that these are just the "first" of many others who are on their way. This is in no way implied to be the end result of the campaign and that these were the only three who could be persuaded to join. The group present themselves as dynamic and high achieving, currently in the process of achieving their aims.

8.1.4 Increasing professionalism

A group may assume greater authority if they can adopt a professional approach. If the issues are presented as extremely serious, then a group must seem able to cope with and effectively address them. Increasing professionalisation is illustrated by these changes on the Airhealth website. The extracts are from the "About Us" page, from three different dates, and give details about the group's founder:

[28] www.airhealth.org/about.html accessed 02/02/01

1 My name is Mike Reynolds. I became an ECS victim in Paris in October 2000
2 on the same day Emma Christoffersen died of ECS at Heathrow Airport.
3 I made it to a hospital and survived. Back home I began studying and soon
4 located more than 40 medical journal articles related to ECS. As I read the studies
5 I developed a growing sense of horror at the needless suffering and deaths

[29] www.airhealth.org/about.html accessed 31/03/01

1 The Executive Director is Michael Reynolds, who suffered a PE in Paris
2 in October, 2000. Since then he has been studying medical journals and working towards
3 the goal of ending the needless suffering and deaths of flight-induced DVT and PE.
The second text is written in an empiricist style (Gilbert and Mulkay, 1984). The change from first to third person means that this is no longer a chatty friendly account of how the organisation started, but an official account of a professional and efficient group. The founder is now more formally “Michael” rather than the familiar “Mike”, with an important sounding title of ‘Executive Director’. Less personal details are given about his own experience, and the term “ECS”, over which there is controversy, has been replaced by “PE” [pulmonary embolism] and “DVT”. These are official medical terms and may appear more professional than the debated and media-friendly ECS; but the causal link between flying and blood clots is still made clear – they are “flight induced” DVT. Increasing professionalism is emphasised still further in later versions:

[30] www.airhealth.org/about.html accessed 21/07/01

1 Michael Reynolds, Director, suffered a PE in Paris in October, 2000.
2 Since then he has been working toward ending the needless suffering
3 and deaths of flight-induced DVT and PE.

“Working toward” is an interesting phrase here, as it implies that this is his job, that he is full time on this campaign, and that he is even in some way qualified to do so, beyond his personal interest. This is very different from the original text where he was collecting whatever articles he could find, which made him seem like any other untrained member of the public, with no special skills. Previously details were given of how he was doing this – he was “studying”, “locating articles” and “reading”. This has been replaced by “working towards” and this ‘gloss’ (Potter, 1997: 163) over the unsophisticated details of his efforts gives an increasingly professional aura to his work. He is not an amateur but gives the presentation of doing what those who ‘work towards’ and achieve do. He, and consequently the organisation, now appear to have a far more professional approach, and are more qualified to discuss these issues. The page now includes mention that “we have consulted recognized experts” and of the numerous research papers that have been cited elsewhere. This is now an organisation backed up by fact with an expert and specialised approach, not merely personal interest or resentment.

8.1.5 Management of Stake

The previous chapter considered the pertinence of issues of stake for the airlines. They are also important here. In order for their accounts not to be dismissed and to be seen to be presenting facts, groups need to appear objective and independent from the information they are presenting. The following passage from the AHI illustrates this:

[31] www.aviation-health.org/about_us.html 25/11/02

1 The objectives of the AHI are to investigate the effects of flying on the health
2 of passengers and on the course of common diseases, and to promote awareness
3 and prevention of such conditions, so as to increase the productivity of frequent
4 flyers. The Institute provides an invaluable, independent source of reference,
5 information and comment on aviation health issues. It also encourages airlines #
6 and passengers to take action to address the problems.

From this it can be implied that the Institute has no personal agenda in providing this information, and are purely altruistic. They are only concerned to “promote awareness”. This is presented as a neutral and unobjectionable phrase – how could
anyone not want to be aware of what exists, or what risks there might be? The text does not say that they will be actively campaigning or taking any kind of action other than "promoting awareness" and "encouraging" others. They present themselves as a fact-finding organisation, acting to increase information for the good of all, who can then take action on the basis of the information that the Institute has provided. Attempts are made to maintain this neutral position by stating that the Institute will encourage both airlines and passengers, thereby not aligning themselves on one 'side' of the debate or the other. For the Institute to describe itself as a source of "reference" is also interesting - this is the collection of pure unbiased facts. The way that "comment" is listed separately implies that while this may be opinion, the sources of "reference" and "information" are not.

However, there are other issues of stake to be dealt with, particularly relevant for VARDA and Airhealth. These groups were set up in the aftermath of ECS, and from the very beginning campaigned solely on this issue. Rather than try to deny this and pretend to be objective about the issue, these groups engage in "stake confession" (Potter, 1997: 129). This may be actually a resource for groups, and a way of engaging sympathy and encouraging empathy with their position. They have suffered so much because of ECS that they want to do something about it; and how could they be expected not to? This both makes ECS seem more serious and constructs their position in relation to it as experienced and caring. For example:


1 The aim of VARDA, which is chaired by Ruth Christoffersen,  
2 is to campaign for prevention of DVT amongst air passengers.  
3 Her 28 year old daughter died from the condition minutes after arriving  
4 at Heathrow following a holiday flight on Qantas from Australia.  
5 "We truly believe that Emma and countless others have died needlessly",  
6 she said. "Since Emma's death, five others have died at the Ashford Hospital".

The tragic details here are key; this is a mother talking about her dead daughter, who has died in vain. Her daughter was young, and had been enjoying herself on "holiday". She died suddenly and shockingly, only minutes after landing, implying that there was nothing that could be done to save her. The cause of her death is made clear, she died "following" her flight, and the campaign here is about "air passengers" only. That her mother chairs this group is presented as understandable. After losing her daughter she wishes to prevent others enduring this “needless” suffering. This first hand account stresses that the condition is real and serious and has huge implications for those that are involved. There is no attempt to deny involvement in the issue of ECS here, but to play up their involvement and the associated horror, to gain support for the campaign.

8.2. Emphasising the seriousness of the issue

While the airlines attempted to downplay the seriousness of ECS, campaign groups emphasise it in a number of ways. Similarly they have a self interest in doing so; making the issue seem as serious as possible generates support for them, and justifies their existence. There is also the point that, as Hilgartner and Bosk (1984) highlight, presenting an issue to the 'social problems arena' (which is already overcrowded) means making it interesting, novel and dramatic. Groups may try to do this by emphasising the scale of the risk:
There are thousands of times more thrombosis victims each year than all the turbulence and crash victims in all of aviation history.

The use of 'extreme case formulations' can be seen here. These are evaluative terms taken to extremes, and Pomerantz (1986) describes how they may be used to persuade others of a certain conclusion or legitimise a claim. In this case, repeated use of the word "all", particularly when it is not needed twice for the sentence to make sense, stresses the magnitude of the issue. "All of aviation history" is a powerful image, and use of the contrast is interesting (following Herschel, 2001). Here, contrasting the numbers of victims of ECS with those in all aviation history creates a clear impression of the severity of the risk.

The seriousness of the risk may also be emphasised by the idea that no one is safe. For example, while pilots may be assumed to have the knowledge to be able to save themselves, the risk may seem even more insidious if they are at risk it too.

The text presents the risk in a particular way by drawing on the associations with the position of 'pilot'. Potter and Wetherell, (1987:129) outline that such 'membership categories' are useful because they have particular activities or features associated with them, and they allow inferences to be made. In this case, the category of 'pilot' carries the associations of being knowledgeable, intelligent, and fully versed with all information about flying. Here the risks of ECS are heightened because these associations do not apply. Pilots no longer have their superior status, but are reduced to being "like all other victims". That they too can "struggle" with things that are "strange" and have the fear of not knowing what is happening to them makes the risk seem more worrying and more severe still.

8.2.1 Emotive language

The airlines studied used very unemotional language to present ECS, and drew upon factual, formal terms. In contrast, campaign groups use a variety of terms to stress the drama and tragedy of the issue. This emphasises the seriousness of it and the urgent need to take action. This is done three main ways. Firstly, the fear that lack of knowledge brings is described. For example:

Most victims have no idea what is happening to them. They suffer needlessly. Medical studies focusing only on people stricken at airports have been missing most of the victims. Compounding this is that fact that pulmonary embolism is, more often that not, misdiagnosed as heart attack, chest cold, or other conditions. Many victims die for lack of correct treatment.
they have “no idea” implies an alien occurrence that the victims could not have prepared themselves for in any way. The risk that they suffer is presented as something external to the victims – it ‘happens to them’, it is not something that they have caused or know about. The image is of a sudden onset of an unknown condition and ensuing panic. These people are continually described as “victims”, because of something as simple as a lack of information, emphasising both the tragedy of the situation and the terrifying nature of the condition. Not only are people suffering pain but fear as well.

Secondly, there is emphasis on the waste of life and the senselessness of the suffering, because of the ease of preventing ECS. On the VARDA site it states that:


1 Emma and countless others have died needlessly

This constructs the risk in a particular way. It is presented as simple to take action on. That the suffering could have been so easily avoided emphasises both the tragic nature of the issue, and the urgent need to take action on it. Describing “countless others” emphasises the scale of this tragedy; and this gloss on the numbers is an interesting contrast to the use of the very personal ‘Emma’ to describe this particular victim. This draws on the generation of empathy by making something personal noted in section 8.1.5. The horror and tragedy of this case, with the devastating effects it has had on her family, are multiplied many many times – too many to even mention.

Thirdly, giving poignant personal details about the people involved, and how they suffered, stresses the tragedy of the issue. For example, later versions of the Airhealth home page launch immediately into the traumatic details of an individual’s death:

[37] www.airhealth.org/index.html accessed 16/05/01

1 Vacationing in Belize, Karen Perkins was in her scuba gear preparing for a dive, unaware that during her flight a blood clot had formed in her calf.
2 As she kicked into the water part of the clot passed through her heart to her lung, and she died. Her husband, Bradley Perkins, Vice President and General Counsel for Alliance Semiconductor Corporation, tried to save her from the dive boat but she had died instantly.

This case is presented as utterly tragic. The details used here emphasise this. As Potter (1997:163) points out, detail in an account can help in “producing a version which is ‘real’ and vivid. [It] paints a scene as it might have been observed”. In this account, detail is used to make the couple seem young and dynamic, and they are fully fleshed out. Giving Mr Perkins his name makes him seem more real, rather than just mentioning him as ‘her husband’, and additional details about his job add to this. It is tragic that he watched her die. He tried to save her but was too late. They are both presented as helpless, she had died immediately, had no chance of survival, and had no idea that she was at risk. He was helpless and could only look on as she died. They are presented as a happy couple, enjoying themselves on holiday when this tragedy struck. They had done nothing to deserve this. A clot “had formed”, not “she had caused” – this is something that happened to her, not something she should have prevented. The account details exactly what she was doing when she died; what she was wearing, and her precise actions, which adds poignancy to the account. The
individuals here are presented as suffering tragically. This serves to enhance the severity and injustice of the issue.

8.3. “Economy Class Syndrome”?

The term used to describe ECS is crucial. Risks and responsibility may be constructed through the use of the term ‘economy class syndrome’ itself. Attempts were made by airlines to establish a new term for it, such as ‘traveller’s thrombosis’. The campaign groups much more frequently use ‘ECS’ as the name for the risk. This is sometimes in a statement of fact:

[38] www.airhealth.org/index.html accessed 20/02/01

1 Airhealth is dedicated to reducing the terrible toll of Economy Class Syndrome
2 (ECS), blood clots formed during air travel.

Although ECS is explained (line 2), it is still used as a term for the condition. This risk of blood clots forming during air travel is unequivocally stated to be known by this name; the term ECS is presented as a fact, not a title given to it by the group, but the approved and acknowledged name for the issue – this is what it is called. This means that the associations that the term carries still apply. Even when it is acknowledged that ‘ECS’ might not be the most appropriate description of the risk, this is because it might not encapsulate the full danger, and not because it erroneously constructs responsibility:

[39] www.airhealth.org/index.html accessed 20/02/01

1 ECS is a misnomer because while cramped economy class seating may increase
2 the risk, flight related thrombosis strikes first class passengers and pilots as well.
3 A more appropriate name would be Air Travel Syndrome to include
4 all classes of passengers plus pilots

ECS is stated to be a “misnomer”. In this presentation however, the risk of a DVT is still flight related, not about travel generally as the airlines construct it. Indeed, the correlation between the risk and flight is emphasised because “all” passengers on a plane are at risk; no one can escape, not even pilots. This makes the risk more serious; “cramped seating” is an important factor but even with extra legroom it cannot necessarily be avoided, and it effects even experienced and knowledgeable pilots. The seriousness of the risk is also emphasised by the autonomy it is given; it “strikes”, implying a sudden and shocking occurrence on unsuspecting victims. The direct causality to flight is still emphasised however. “Cramped seating” is a factor, something the airlines are responsible for, and the new name of “Air Travel Syndrome” makes the cause clear. This presents little doubt that the airlines can be held responsible for ECS, both through the experience of flight, and their failure to make passengers aware of the risks.

8.4. Voluntary or imposed risk

Finally, I will consider how ECS is constructed as a voluntary or imposed risk. While the airlines attempted to make the risk more acceptable by presenting it as part of the passengers’ (voluntary) choice to fly, campaign groups construct it as an imposed risk. This has implications as to who is responsible for the risk.
Here, passengers are presented as helpless to prevent ECS, because they have no information about it. It is an involuntary risk that they are unwittingly subjected to when they fly. Airlines are presented as having the information that could lead to its prevention but not giving it to passengers, and therefore deliberately imposing the risk on them. This presentation of the risk may be designed to invoke outrage at the needless suffering of passengers, and condemnation of the position of the airlines.

8.4.1 Imposing the risk

For example, this extract from the AHI constructs the involuntary nature of the risk:

[40] www.aviation-health.org/health_advice.html accessed 29/09/01

1 There is no doubt that flying is by far the safest form of transport.
2 But there will always be a residual risk attached to flying, particularly if you decide
3 to spend your next vacation in Hawaii or visit your business partners in Hong Kong.
4 You will be forced to sit in the same place for hours, practically without moving,
5 and the narrow seats often mean you spend your entire flight with your knees bent –
6 and that’s when the danger of developing a thrombosis arises.

This is not a risk that passengers bring on themselves through their increased propensity to fall ill or their behaviour – it is “forced” upon them. The text presents a list of contributory factors, all of which are caused by flight – and moreover, by the particular conditions of it. Passengers are forced to sit, they cannot move, they have to endure cramped conditions – all of these are the responsibility of the airline. It may be a passenger’s choice to fly – they “decide”, but then are faced with these conditions – these are not presented as being part of that choice. They are imposed upon the passengers, and the casual link with ECS is made clear – it is “when” these conditions have been experienced that a clot develops. The extreme case formulations (Pomerantz, 1986) emphasise the depravity of these conditions – they may last an “entire” flight. Passengers cannot escape them at all. As the type of journeys that have been described are long haul (to Hawaii or Hong Kong) this means many hours at the mercy of a “danger” because of the conditions of that flight.

8.4.2 Conspiracy of silence

The airlines are presented as even more reprehensible because they deliberately keep the information about ECS from passengers. It is not that they knew nothing or could not help, but that they consciously acted to prevent passengers from finding out the truth. The following extract from a VARDA press release illustrates this:

[41] www.aviation-health.org/varda.html accessed 13/01/03

1 Mrs Christoffersen accused the airline industry and the government of being
2 indifferent to the tragic deaths. She cited that fact that neither Lord Macdonald
3 the Transport Minister or Bob Ainsworth the Aviation Minister attended the
4 House of Commons meeting. They, as well as Sir Richard Branson of Virgin,
5 Rod Eddington of BA, and Sally Martin of Qantas were invited. “It was been swept
6 under the carpet by the very people how knew about the risks of air related DVT
7 and are still in a state of denial” she added.

The text makes it clear that the airlines do know about the risks of ECS – they are not undecided or it is not a topic that the information is not available on – they “knew
about the risks". The past tense is interesting here too – the airlines “knew”. This information is not new or currently being debated, they already have all the facts of it. Further, the text presents the idea that the airlines should have been relaying information about the risks – they were the “very people” who knew about them – but that they have not done so. The issue was “swept under the carpet”, a deliberate action to avoid doing anything about it, not a lack of knowledge of it. Further, that they are “in denial” about the risk presents the airlines both as consciously ignoring it, and also gives the risk an existence. It has a reality beyond the airlines if it is something that they can choose to ignore. The airlines have been given the opportunity to address the issue, but they are presented as deliberately choosing not to – the text states that they were “invited” to the meeting at the House of Commons; in such a venue, this was surely an important meeting. No reason is given why they did not attend, and the reader is only left with the impression of their “indifference” and “denial”. Their non attendance is given as an example of their indifference, and it is “cited as a fact” by Mrs Christoffersen. It is not something “that she said” but a reference to external facts to emphasise the way that the airlines are deliberately failing to address the issue and are making every effort to keep it quiet.

This attempt to cover up the facts is stressed again in terms of airlines denying their importance. This extract from Airhealth describes the extremely minimal number of injuries from turbulence recorded:

[42] www.airhealth.org/index.html accessed 01/03/01

1 Serious injuries from turbulence average five per year. But the airlines want you to think that this is the biggest risk. American Airlines inflight magazine says that turbulence is the biggest danger, even though the risk of ECS is at least 8,000 times greater.

The airline is presented as being deliberately misleading about this in an attempt to cover up the truth. Their magazine only “says”; their defence is outlined as merely an opinion that they are trying to present as true. In contrast, “the risk of ECS” (line 3, emphasis added) is presented as a fact. The group describes the airline as “wanting you to think” (line 1, emphasis added) – this implies that are specifically attempting to persuade people about their version – this is not the same as their text being accidentally inaccurate. The use of quantification and a contrast really emphasises this¹. Not only is the risk of ECS greater than that of turbulence injuries but it is “8,000 times” greater. Putting a figure on this implies they it is a measured fact. That the figure is so high, especially compared to “five” turbulence injuries, emphasises the reprehensible position of the airlines in deliberately trying to conceal this.

8.4.3 Responsibility

The presentation given is that while the airlines may deny them, the facts about ECS exist, and the responsibility for avoiding it rests with them. The AHI gives a “10 Point Plan for Passenger Health” of the actions needed by airlines. This is a list of objectives, with further details about each of these. This extract lists the objectives, and then, for number 10, the details of the steps that the airlines should take:

¹ Following Potter and Wetherell (1995), and Herschell (2001).
10 POINT PLAN FOR PASSENGER HEALTH

<table>
<thead>
<tr>
<th>Objective</th>
<th>Detail</th>
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<tbody>
<tr>
<td>1. Airlines are protected by a 1929 law that should be abolished.</td>
<td></td>
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<tr>
<td>2. Appointment of a regulator on passenger health with similar powers as CAA/JAA.</td>
<td></td>
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<tr>
<td>3. Health warning on air tickets</td>
<td></td>
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<tr>
<td>4. Conduct aeromedical research programmes</td>
<td></td>
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<tr>
<td>5. Collection of reliable data on flying and related medical incidents</td>
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</tr>
<tr>
<td>6. Public inquiry into DVT deaths and incidents</td>
<td></td>
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<tr>
<td>7. Education of public and medical professionals on health risks of air travel</td>
<td></td>
</tr>
<tr>
<td>8. Public consultation on all aspects of air travel</td>
<td></td>
</tr>
<tr>
<td>9. Compensation for victims harmed by air travel</td>
<td></td>
</tr>
</tbody>
</table>
| 10. Airlines to take steps to reduce inflight medical incidents | a) Provide advice with tickets on how to reduce health hazards  
b) Provide advice on board on health precautions by video, card, or announcement  
c) Inform the public of high risk passengers  
d) Make medical information form (Medif) available to passengers and doctors. This is a flying clearance form for passengers with conditions.  
e) Aircraft clean air. Monitor air quality regularly.  
f) Introduce best practice on air filters and fresh air ventilation. |

Responsibility for avoiding ECS rests with the airlines, not the passengers. Passengers are not mentioned in these ten points, except in terms of being “educated” (point 7). The actions that are required are all for the airlines to take. Further, it is presented that if the airlines took action to avoid ECS, it could be effective – for example, objective 10 says that the airlines should “take steps to reduce inflight medical incidents”. If they take these steps, incidents will be reduced. This constructs the airlines as having the knowledge, power, and responsibility to do so. The details are all constructed in terms of the actions that airlines can and should take; it is their agency that is emphasised here, not that of the passengers. Indeed, it is the airlines who have the responsibility to “Inform the public of high risk passengers” (point 10c) – it is up to them to provide information about who might be at risk, and
not necessarily the passengers' fault if they are. Airline culpability is further emphasised through the range of actions that they can take – all aspects of flight are mentioned here, from pre-boarding, to advice giving, to assistance for risky passengers, to air quality and ventilation. Listing all these actions makes the airlines seem comprehensibly responsible. It is this combination of air-related factors that leads to “inflight medical incidents”, and the airlines are constructed as responsible for all of them.

8.4.3 Risky passengers and a moral responsibility

Finally, there is an issue, eluded to in this last extract, about the extent to which passengers with ‘risky’ characteristics are to blame if they have a DVT. The airlines tend to make these people seem culpable if they smoke or have a medical condition that makes them increasingly susceptible. However, when campaign groups list the characteristics of passengers that may increase their risk, there is no blame inferred; rather these people should be better looked after by the airlines and it is particularly tragic that they are not. It is therefore implied that there is a moral dimension to the responsibility that airlines have. Groups present them as undermining or ignoring this to protect themselves, and this casts them in a worse light still.

[44] www.airhealth.org/rankings.html accessed 21/0701

1. We trust the airlines. We trust them to do their best to deliver us unharmed to our destinations. Instead, US airlines are doing their best to conceal the biggest danger in air travel. This is especially tragic for the weakest and the most vulnerable travellers, those with heart disease, cancer, diabetes, pregnancy, and other risk factors. They trust the airlines and their trust is sorely abused.

2. All the needless suffering and deaths could be stopped at the cost of less than a cent per passenger for a leaflet telling them what they need to know. Millions are spent to recover and reconstruct crashed airliners. Millions are spent to foil possible terrorist attacks. If the DVT and PE injuries were caused by terrorists putting something in the food, there would be no expense spared to stop them. But when thousands of air travellers all over the world stagger into hospitals with blood clots caused by air travel, it is simply business as usual.

The position of the airlines is constructed through the assumptions of their membership category (see section 8.2). The group presents the category of ‘airline’ as having the activity of ‘unharmed delivery of passengers to destination’ associated with it. Passengers have a right to expect this, and trust that it will be so. This disjuncture with the reality presented here makes the airlines seem calculating, grasping, and merciless. The continued repetition of the word “trust” makes this very clear. The contrast of the weak and vulnerable victims with the massive resources available to these huge companies emphasises this, especially in terms of the pitiful amount that would be needed to save them. While airlines describe people with these characteristics as being more susceptible to ECS, here these people deserve extra care because of their vulnerability, which the airlines deny them. Using the phrase “doing their best” twice (lines 1 and 2) characterises the airlines as perfectly capable of helping these people and keeping their trust, but instead actively choosing not to. The scale of the issue makes this seem worse, as “thousands” of people “all over the world” are suffering in this way, and the airlines could so easily prevent it if they
wanted to. It is clear again that the risk is avoidable. Clots are caused by air travel but they could be prevented by a leaflet (line 8). The airlines have a moral duty to their passengers that would be so easy for them to uphold, but they are doing everything that they can not to.

In summary, I have shown here that the groups construct the airlines as being responsible for ECS. That the airlines deliberately impose the risk on passengers is presented as dangerous, disgraceful, and morally wrong. It is not the case that the airlines are joining together with the passengers to fight the risk, but by denying its existence and severity, they are forcing passengers to endure the risk and its consequences.

8.5 Conclusions

In this chapter I have outlined the way that campaign groups construct the issue of ECS, their position and that of the airlines. It is vital for groups to be seen as knowledgeable and presenting proven facts. This is particularly because of the contested nature of the issue. There is no Government policy yet, victims and relatives lost a British court case in October 2001 to prove airline responsibility for the risk, and the medical and scientific communities have not yet agreed on the existence or the magnitude of the risk. To some extent then, groups are having to fight against prevailing scepticism and lack of established knowledge on the issue by arguing that this 'new risk' exists. Similarly, groups also have to present themselves as effective campaigners on the issue and a 'force to be reckoned with' to encourage support for them and their claims.

Groups construct the issue by emphasising its seriousness and tragic nature. Further, to argue that something could be so easily done to prevent it adds a very interesting angle to the risk. It is not an intractable problem, but one for which blame can so easily be apportioned. The airlines are presented as responsible for ECS because it is caused by flying, and because they refuse to give any information on its prevention. This sets up a classic dualism, of the poor vulnerable unsuspecting passenger, a victim upon whom the pernicious ECS stealthily creeps, against the might of the resource laden airlines. In the midst of this, the groups are the passengers' champion, providing information, advice and facts, and attempting to bring those responsible to justice.
Chapter Nine:

Consensus, Surprise, and the Nature of Science: Analysis of Medical Reports in *The Lancet*

This chapter is an analysis of all the articles printed in *The Lancet* about ECS between February 1985 and August 2003. A summary of these is given in the Appendix. The earlier articles consist mainly of assertions about an increased risk of blood clots with flight, backed up a few highly detailed specific cases. Later articles reported on research designed to explore this, and these generated a number of responses. Analysis of all of the articles highlights not only the constructions of risk in the context of the ongoing debate, but gives some clues about the workings of science more generally.

What I explore here is the difference between what are presented as the ideals and the realities of scientific practice. While science is presented as evidence based, revealing the truth and building on consensus, authors may argue that this is not always the case. Where facts and findings are being debated, it is these principles that may be called upon to substantiate or dismiss a claim.

9.1 Presentation of self

Firstly to consider how authors undertake self presentation. Gilbert and Mulkay (1984:89) state that “scientific speakers seem to be peculiarly able to construct accounts in which they appear to have privileged access to the realities of the natural world”, and Barnes (1984:22) notes that “for the most part, scientific knowledge is initially accepted on authority”. How do scientists present themselves to make it seem as if they have this ‘privileged access’ to give them this authority?

One way is to present the knowledge and experience they have that allows them to speak on a topic. For example:

[45] Hart et al., 9/2/85 No 8424 p353

1 Sir - Working in a hospital on the perimeter of London Airport (Heathrow) we see
2 a steady stream of illnesses which have developed in-flight.

This is the start to a letter in the journal. Self presentation is one of the first matters to be attended to, as it encourages the reader to assess the rest of the text in a particular light. The authors immediately emphasise the direct knowledge they have of the situation they are describing; it is what they deal with on a day to day basis. Indeed, such occurrences are not so rare that it might be difficult for them to generalise or draw any conclusions, but there is a “steady stream” of them. The authors describe themselves as being right at the centre of what is going on, working near Heathrow, and make a causal link between illness and flying clear. Because of their knowledge and experience, the presentation of this is as an indisputable fact. The presentation of self is thus significant not just for what it says about the authors but in making their claims seem more likely to be true.
Authors may also adopt an empiricist style of writing (Gilbert and Mulkay, 1984), giving presentation of their article as factual, and thus commanding authority on the basis of this:

[46] Paganin et al., 27/4/96 Vol 347 No 9009 p1195

1 Sir - We report several patients with severe pulmonary embolism that developed
2 on long non-stop flights

3 Passengers without any history or risk factors for thromboembolism should be advised
4 to stretch up frequently and consume oral fluids during the flight. Passengers with
5 a positive history or risk factors for thromboembolism should seek medical advice
6 before travelling.

This is an extract from a letter to the Editor; lines 1-2 are the beginning, and lines 3-6 are the conclusion. In line 1, “report” is an interesting word to use, for it implies a direct link between what happened and the authors’ coverage of it; they are merely and only presenting the facts, and these are very clearly stated. As will be more fully considered shortly, the idea that scientific work discovers facts about the world is one of its fundamental principles. As Woolgar (1996:18) describes, a central assumption to the idea of discovery “is that the discovered object is antecedent and that it enjoyed an existence before any discovers happened to come across it”. This may be drawn upon or presented as unrealistic depending on the claim being made. Here, it is used to back up the authors’ assertion that the risk exists and is serious. Cases have occurred, the natural world has yielded these data, and through their work, the authors have recognised it.

Authors may also present themselves as knowledgeable and authoritative on a topic by the recommendations that they make; after all, if an author were at all doubtful about the claims they were making, they would not be expected to make pronouncements on the basis of them. In lines 3-5 above, the authors list the factors that are relevant (passenger characteristics, behaviour inflight), and confidently state twice that passengers “should” take the actions they describe. This reasserts the importance and validity of the ‘facts’ that they have “reported” in the letter, if they are prepared to make recommendations following from them, and the reader is therefore encouraged to also be persuaded by them.

9.2. Presentation of the issue

I will now briefly consider how the risk of inflight DVT is constructed, and the position of others presented. No one version of the risk is presented here, and a great deal of variation exists between articles. Some dismiss the risk out of hand or play it down, while others state both that it exists, and is serious enough to require urgent attention. What it is therefore interesting to consider is how these differing constructions are achieved.

9.2.1 Presenting the risk and the position of the airlines

The first study to use the term ‘economy class syndrome’ was Cruickshank et al. (27/8/88). While a possible link between flying and thrombosis had been suggested in an earlier article by Hart et al., (09/02/85), Cruickshank et al.’s was the first to
systematically describe and present evidence for it. It is therefore interesting to examine how they attempt to establish the risk as valid and serious. They state that:

[47] Cruickshank et al., 28/8/88 No 8609 p497

1 People on long air flights are at risk from deep vein thrombosis (DVT) and pulmonary emboli, even if relatively young and without a past history of cardiovascular disease. We describe six cases to emphasise the hazards of long distance air travel.

This is a very definite construction of the problem, assertively and confidently stated: people “are” at risk. This description of the risk, with explicit causal links to explain it, presents both the issue and their position on it – they are in no doubt in presenting these facts. The authors state that they have cases to describe, thus providing evidence to back up these assertions. It is clear that the blame for what happens does not rest with the passengers. They are described as being “at risk”; the risk is presented as something that are subjected to, that happens to them, not that they bring on. The “hazards” are presented as being caused by long distance air travel, not the behaviour of the characteristics of the people who take it. This is emphasised by pointing out that younger people without a history of health problems are also susceptible. Using the word “even” orients to the idea that it might be something about people that increases their risk, but dismisses this. This also serves to emphasise the severity of the risk, if ‘even’ young and healthy people are at risk. The following quote stresses this further:

[48] Cruickshank et al. 28/8/88 No 8609 p497

1 However, the hazards of such long trips, often under cramped conditions, are not appreciated by most travellers, and the airline companies make no effort to enlighten them.

This constructs the risk in a particular way. That the risk is again described as a “hazard” and as something not realised by the passengers gives it an objective status beyond their interpretation or perception, as does ascribing a cause (the “cramped conditions”). The authors assert that the airlines know about this; this further presents the risk as real, if it is something that they as well as the authors can know about. While passengers do not appreciate this situation, the airlines not only bring about this condition, but deliberately keep quiet about it. This point is reiterated by Hart et al.:

[49] Hart et al., 9/2/85 No 8424 p354

1 We understand that air passengers, even those on very long flights, are given no specific advice to prevent venous thrombosis. While it would be impractical to turn all such flights into mobile physiotherapy departments, we would suggest that cases such as we describe might be avoided if passengers were at least advised to walk up and down the aisle a little more frequently than required for calls of nature.

This is quite damning, to say that cases could have been “avoided” by something so simple, and so within an airline’s power to give. It constructs the risk as something that exists, but that can be prevented; all that is required is “specific advice” on what to do. This also constructs this advice as existing too; it is not the case that the risk exists but there is uncertainty about cause and prevention. The idea of the knowledge existing is emphasised by the fact that the authors outline some it themselves – to
walk up and down the aisle for example. That the advice exists and is not available to passengers constructs blame on the airlines for not making them aware of it. And it is presented as the responsibility of the airlines to do this – passengers should be “given” information, and should be “advised”. It is not constructed as being up to them to seek out this advice or to make themselves aware of the risks. It is something that the airlines should be providing for them; it is because they do not that these cases have occurred.

However, other articles present the risk differently:

[50] Kraaijenhagen et al., 28/10/00 Vol 356 p1492

1 In 1998 the term economy class syndrome was coined to describe the association between travel and thrombosis. A fair risk estimate, however, has not been done.
2 We report the results of a prospective study, in which we kept the effect of bias to a minimum. We compared travel history in 788 patients with venous thrombosis with that of controls with similar symptoms but in whom the disease had been excluded.
3 For air travel alone, the odds ratio was 1.0 (95% CI 0.3-3.0); also, no association was recorded for other methods of transportation. We have shown that there is no increased risk of deep vein thrombosis among travellers.

I will shortly consider some aspects of this quote in more depth; what I want to draw attention to here is how the authors present their claim that the risk does not exist. Firstly, they say that ECS was “coined to describe” the association. This detracts from this being an accurate term – it was just what the issue was called. To ‘coin’ a phrase is to give it a name for convenience, and the authors imply that this is what has happened here, not that any of the associations of the term were necessarily accurate. Indeed, they immediately imply that they are not by saying that a “fair risk estimate” has not been done. This presents any information about the risk as based on ‘unfair’ or unbalanced data. Further, they explicitly state that there is no risk – and do so by pointing to evidence from their study. “We have shown” implies a direct relationship from the facts of the case to their presentation of them, all they have done is indicate what the situation is; I will consider how they present their study as being competent and capable of producing this information shortly. In the meantime however, this is therefore a very confident statement that the risk does not exist, based on (their) facts.

Other articles also have a different view of the position of the airlines. If the risk does not exist or is not known about, then they cannot be held responsible for preventing it:

[51] Hirsh and O'Donnell, 12/5/01 Vol 357 p1461

1 It would be premature to legislate that airlines change the seating configuration or introduce other costly prophylactic procedures until there is more information on the extent of the problem and on the effectiveness of much simpler preventative measures.

It is presented as unreasonable to force the airlines to undertake any measures without evidence on the problem, especially if they are as dramatic as mentioned. The airlines are not being held responsible for the condition here, but are described as being at the mercy of potentially costly and premature legislation that may not even be required. The idea is given that research will uncover more information – expensive measures should not be implemented “until” such a time as more is known, which implies that this time will come. Collingridge and Reeve (1986) describe that one of the ideals of science is that it is fact finding and will feed into policy. This is a clear example of
such an idea being drawn upon. It is not the case that the airlines should have to do anything, but that science will find the answers and form the basis upon which such decisions will be made.

9.2.2 The position of the passengers

I will now consider in more detail the different presentations that are given of the position of the passengers:

[52] Fitzpatrick, 18/10/03 Vol 361 No 935 p729

1 Lawyers are now seeking compensation for the thousands of people who claim to
2 have been affected by this previously unrecognised condition

This is not a flattering presentation of the passengers. They only “claim” to have had a DVT, they did not ‘suffer’ one or are not ‘victims’. This implicitly casts doubt upon whether they have or not. Further, they are only “people”, which does not carry any associated category associations of having the knowledge to know whether they were actually affected by it or not. They were not medical practitioners, and their claims are not presented as having been validated by anyone with the qualifications to know. They are only represented by lawyers; and worse than this, compensation hungry lawyers. This does nothing to substantiate their claims, and has the effect of implying passengers are cashing in and taking an opportunity, rather than because a need has arisen. Furthermore, it is interesting that the condition is described as “previously unrecognised”. This might be seen as a tacit admission that the condition does exist. However, I think in this context it is used to dismiss the seriousness of it. If it was a severe problem, it would surely have been recognised before now. Further, it is implied that it is these “people” who have been doing the recognising. The discovery is not credited to medical research, or even being a simple statement of fact that can be referenced because it has been proved to be true. The implication is that those who are doing the claiming have brought attention to this condition, and have done so to seek compensation for it.

However, other articles view passengers in a slightly less mercenary light:

[53] O’Donnell, 1/10/88 No 8614 p797

1 Dr Cruickshank and colleagues (Aug 17, p 497) emphasise the thromboembolic
2 hazards of long-distance air travel in their report on six cases. This hospital has
3 treated similar unfortunate travellers.

Passengers are sympathetically regarded in this extract. That they are “unfortunate” implies that they are undeserving of what has happened to them. They are presented as being at the mercy of a risk; it is not just their timely claims that have brought it into existence in this extract. This reality of the risk is stressed by citing an ‘emphasis’ on the “hazards”, the evidence that has been used to prove this. The author’s personal experience of this – “this hospital” – substantiates his view. He is at the coal-face of treatment, not conducting experiments in laboratories but treating the actual consequences of the risk. This draws attention to the effects that the risk has, and emphasises his authority to reiterate the clearly presented causal link between flight and incidence of it.
9.3 Principles of Science: Ideal and pragmatic research

I will now consider how science is both used and constructed by the articles. It becomes apparent from the data that there may be a difference between ‘ideal science’ on one hand, and a more pragmatic approach on the other. Both of these concepts are used to critique or defend claims. Notions of ideal science are used to criticise a study that does not live up to them, or to substantiate how well the study in question has been carried out, following Gilbert and Mulkay’s (1984) account of an empiricist and contingent repertoire. However as well, the pragmatic nature of science is brought to the fore in debates over what science can and cannot do and what it is reasonable to expect. The point is that what science is and can do is used to substantiate favourable claims or dismiss unfavourable ones in the same way, whatever those claims are; both ‘sides’ in the debate use the same tools.

9.3.1 Ideal science as evidence based

It is firstly apparent from the articles that scientific enquiry is based on the belief that the facts exist and it is possible to determine them. This concords with what Woolgar (1996:13) describes as the ‘received view of science’. The first principle of this is that objects in the natural world are objective and real, and enjoy an existence independent of human beings. Human agency is essentially incidental to the objective character of the world ‘out there’. The second that follows from this is that scientific knowledge is determined by the actual character of the physical world. Cozzens and Woodhouse (1995) describe this as the “old understanding” which assumed that science produced truth. These authors and others have highlighted that science may not operate in this way, and the scientists themselves sometimes acknowledge this. Barnes (1984: 22) for example points out that scientists “treat their own knowledge as valid only in certain circumstances or under certain conditions”. What I want to do here is illustrate how scientists draw on the received view of science to substantiate favourable claims and dismiss unfavourable ones. How they might use acknowledgements that such ideas do not exist will be considered in due course.

Some articles present the view that science is a fact finding mission, discovering what exists about the world. It is the evidence from this that determines knowledge:

[54] Calliard and Clerel, 17/2/01

1 These 109 cases, currently the most serious emergencies on arrival at Paris airports, convince us of this pathology, which relates to economy and business or first class.

These authors have seen the facts of the situation; as Yearley (1981:418) states, “correct belief is textually presented as arising directly from the facts”. In this case, this evidence is unrefutable enough to have “convinced” the authors and determined their knowledge. They are able to make claims – the cases were “the most serious” and can happen anywhere in the plane – because they have witnessed what is going on. The direct access they have had to the facts validates these claims.

Drawing on the way science translates the world into knowledge is also a means to critique studies that do not demonstrate this. For example, unfavourable studies may be criticised on the basis of assumptions they have included. Doing so presents the
study as contradicting the principles of science by not adhering only to facts and evidence, and of therefore producing problematic results:

[55] Bendz and Sandset, 8/9/01 Vol 358 No 9284 p1476

1 Sir - John H Scurr and colleagues report a rate of symptomless DVT of up to 10% in long-haul flight travellers. This incidence was seriously questioned by Jack Hirsh and Martin O'Donnell in their 12 May commentary.

4 Based on the assumption that the annual incidence of thrombosis in the general population is one in 1000 and that air travel is associated with a three-fold excess risk of thrombosis, they estimate that the absolute incidence of symptomatic venous thromboembolism within 1 month is one in 4000. These assumptions might not be valid.

8 We did a study of a simulated long-haul flight in a hypobaric chamber and noted a substantial, but transient increase of markers of thrombosis in healthy volunteers.


The authors of this article had previously produced a study which found a link between DVT and the conditions experienced during flight (Bendz et al., 11/11/00, vol 356, no 9242 p1657-58 - see Appendix). The study they are critiquing here discusses a much lower incidence rate than they had predicted. Bendz and Sandset construct this view as inaccurate and invalid by highlighting what they present as the “assumptions” and “estimates” in it. “Assumptions” is a very unscientific word; it is not a ‘hypothesis’ or a ‘theory’; to ‘assume’ something implies that it has been ill-thought through and taken for granted – not concurrent with the way scientific inquiry should be. It is clear that the results of the study they are referring to are dependent on these assumptions – they were “based” on it. This draws attention to those results and suggests that they, as well as the assumptions, may not be “valid”.

9.3.2 Ideal science is replicable

Articles present the idea that if science is evidence based, then studies will find that evidence. Moreover, if one study has accurately discovered what the true facts of a situation are, then such results should be reproducible. Mulkay (1988:81) notes the ideal that “valid claims are supposed to be ‘reproducible’ by other competent experimenters” in his analysis. Further, Potter (1983) describes how testability is used in scientists’ claims. For the scientists’ claims he studied, “each variably characterises the told of testability; it is a central determinant in the choice of the speaker’s own theory, while being unimportant or irrelevant in the choices of certain other scientists”. This is key. Not only is replicability held up as a principle, but highlighting its absence in studies that produced unfavourable results is a way of dismissing them. For example:

1 I am mentioning Bendz et al.'s previous study because I think it is relevant to the analysis of their account here. I am however taking into account Taylor's (2001a:25) warning about not intertwining data and background information; see section 4.6. What I am intending is that the relevance of including this comment becomes apparent through analysis of the participant's account.
If indeed the results of the randomised trial are valid, they should be easy to reproduce. If confirmed, they would clearly establish lengthy air travel as an important risk factor for thrombosis.

This text draws on the principle of replicability, and uses its construction of this ideal to dismiss the chance of these results being valid. Replicability is so important that it confirms facts. If the results of this study can be reproduced then they would be true – they would “clearly establish” the facts of the issue. Indeed, replicability is such that valid results will be “easy” to reproduce; if facts exist then there should be no difficulty in demonstrating this again, they will still be available to be assessed in the same way. What the article manages to do is imply that the results that were found are not replicable. The phrase “if indeed” implies disbelief that they are valid. Repeated use of “if” casts doubt on the confirmation of the results. And outlining these principles at all, when they are so fundamental to fact development and scientific inquiry is interesting. If they are so obvious, there would be no need to reiterate them. That they are mentioned here serves to imply that the results could not live up to such assessment. The authors are using the idea that replication has not yet been achieved to case doubt on whether the risk exists.

9.3.3 Ideal methodology

Debates about the ideal nature and practice of scientific research arise in relation to the methods used. A way of criticising research is to highlight the method used as not meeting the standards of scientific practice. Woolgar (1996:13) describes that in the ‘received view of science’, there is a “unitary set of methods and procedures, concerning which there is, by and large, a consensus”. As he goes on to detail however, analysis suggests that “science is not an objective set of activities and practices that are readily available and straightforwardly identifiable” (1996:14). Indeed, as Mulkay et al. (1983:198) point out:

“Scientists.. regularly present correct belief, which is almost without exception taken to be identical with their current views, as arising unproblematically from the experimental evidence; whilst incorrect belief is explained by reference to the distorting effect of personal, social, and generally non-scientific factors”

Unfavourable studies can therefore be critiqued by pointing to the non-scientific factors in their methods (Gilbert and Mulkay, 1984). To illustrate this, I will focus on the debate surrounding two key studies. Kraaijenhagen et al. (28/10/00), and Scurr et al. (12/05/01) both investigated the risk of inflight DVT and produced different results; Kraaijenhagen et al. found no increased risk of clots among passengers, while Scurr et al. found that up to one in ten passengers develop them. The publication of each of these studies led to a series of correspondence and a number of critiques. However, the ways in which these are carried out are remarkably similar. Problems with methodology are highlighted and contradictory results explained by pointing to these deficiencies.

For example, the choice of sample is highlighted as a critique:
Until the relation between travel and the control group is known, Kraaijenhagen and colleagues’ study cannot tell us whether there is an extra risk of thrombosis in travellers.

Sir--John Scurr and colleagues (May 12, p 1485) presented some of the data for their study of frequency of deep-vein thrombosis (DVT) during long-haul flights at the 3rd Pacific Vascular Symposium in Hawaii in November, 1999, and reported a 20% prevalence of DVT. No mention was made of a randomised trial at that stage.

An exclusion rate of 248 participants seems excessive in a study population of 419. In the report, we can find reasons given for only 55 exclusions. This high rate raises a concern about bias within the study. Perhaps they did not intend originally to do a randomised trial? Was it simply that some patients enrolled at the beginning of the study did not receive stockings?

In both cases, deficiencies with the sample are presented as a possible explanation for why such (unfavourable) results have been produced. Cates critiques Kraaijenhagen et al.’s study by stating that because the relationship between the travel and control group has not been expanded upon, the results are meaningless; the use of the extreme case formulation emphasises this – the results “cannot” be used. This relationship is presented as so crucial that not knowing about it undermines the whole study. Similarly, Burnand et al. cast doubt on the validity of the sample in Scurr et al.’s study by querying the sample chosen. Quoting the two figures for the numbers in the study, and those who were excluded allows the reader to easily compare them, and saying that this “seems excessive” invites the reader to agree. Asking “was it simply that..” makes the research seem very unprofessional. This is a straightforward part of the study that has not been appropriately or sufficiently dealt with. To ask the question about stockings casts doubt on the basis of the study; was it the case that certain people were deliberately not given stockings, or was this was a mistake? Neither of these associations are flattering because they present a study ill-thought through, or one that has made mistakes – or indeed both. For the authors to state that they are “concerned” about the “excessive” rate implies that the results produced by such a study will be inaccurate.

However, other authors present a more pragmatic view of the way science operates, and cite this to defend themselves and their results. Indeed, Yearley (1994:249) notes that while the rules of scientific method are a useful guide, scientists “reserve the right to disregard (in the case of science, even overthrow) them when the need arises”. For example, Scurr et al. describe the practicalities of carrying out research, and the difficulties this may bring:

The logistics of the study made it difficult for passengers to attend Stamford Hospital on two occasions before travel and this part of the investigation was abandoned in the remaining volunteers.
and these people were “volunteers”, taking part in the study out of good will. Scurr et al. present this as entirely reasonable, and suggest that such flexibility is a necessary requirement of researchers carrying out scientific study. The difficulties of carrying out research are therefore described, but in such a way as to not reflect badly on the expertise of the researchers.

Furthermore, authors may use such criticisms of method offensively and defensively (Billig, 1991) not only to attack results but to build up their own study. Yearley (1981:419; 423) describes how pointing out that some important (and often obvious) material has been overlooked casts doubt upon the claim; in such a critique, material which should have been seen (but was not) may be supplied. In the data studied here, doubt is cast by authors pointing to an important methodological issue that was not addressed, but that now has been in their study. In this extract, Scurr et al. give a critique of Kraaijenhagen et al.’s study, and then point to where their study had overcome such deficiencies:

[60] Scurr et al. 12/5/01 Vol 357 p1485

1 Although Kraaijenhagen and colleagues recorded no association of DVT with travel, many of their airline passengers have flown for less than 5h. These case-control studies indicate that DVT related to air travel is not a major healthcare problem, perhaps because only a small proportion of the population undertakes long-haul journeys at any time. These investigators included people with several potential confounding factors such as previous venous thrombosis whereas we excluded such individuals.

The results of Kraaijenhagen et al.’s study contradict those found by Scurr et al.; therefore, pointing to problems in Kraaijenhagen et al.’s method is a means not only of dismissing their results, but also of increasing the likelihood of Scurr et al.’s own being taken more seriously. Starting off with the word “although” orients the reader to the idea that what is being presented here is about to be contradicted, and encourages them to view it with a critical eye. Kraaijenhagen et al.’s method is then cited as deficient; it included patients who had flown for less than five hours, and people with a potentially higher risk. By citing these factors, Scurr et al. construct them as being significant in determining the results produced. These are therefore the issues that they present themselves as having addressed. The results that Kraaijenhagen et al. produced are presented as being directly derived from this (flawed) methodology, which casts doubt upon the validity of the results. Indeed, the study only “recorded no association”, it is not necessarily the case that one does not exist, but that this study did not manage to find it. The presentation that Scurr et al. give is that their study note this association, because it did take proper account of these important factors.

9.3.4 Subjectivity in science

A further issue in debate is subjectivity in scientific research. Ideal science is presented as an objective translation of facts into knowledge. Martin and Richards describe that “traditionally, the neutral, disinterested, and objective expert has been portrayed – not least by scientists themselves - as the rational and authoritative arbiter of public disputes over scientific or technical issues. But this old ideal has been [...] eroded by the increasingly obvious limitations of experts and expert knowledges”. As Woolgar (1996:15) points out, work in the sociology of scientific knowledge has
described how scientific procedures and decisions are "highly dependent on local conditions, circumstances and opportunities". This leads to the conclusion that "scientific practice is much more creative and contingent than is portrayed by idealised versions of 'science'" (1996:16). What I am interested in exploring is how these idealised and contingent versions of science are used in discourse, and to what effect. If any subjectivity can be pointed out in a study, it is a means of criticising it and dismissing its findings. However, the debate between the theoretical and pragmatic nature of science is illuminated here, as other articles maintain that subjectivity is part of the everyday operation of science and removing it is an impossible ideal. I will illustrate this by drawing attention to the debate about the subjective interpretation of ultrasonography; a method of scanning for blood clots. While those in opposition use the principles of science to attack claims, in defence, a pragmatic view of the operations of science is used.

Firstly, highlighting subjectivity is a means of discrediting the results of a study. For example, Burnand et al. describe the inclusion of human judgement in Scurr et al's study:

[61] Burnand et al., 8/9/01 Vol 358 No 9284 p1476

1 Scurr and colleagues used duplex scanning to assess the presence or absence of DVT.
2 Despite their citing five studies in support of the accuracy of this method, a meta-analysis
3 has shown that it is only 70% accurate in the calf segment in patients with symptomatic
4 DVTs, and even less so in those without symptoms. Duplex is highly operator-dependent.
5 What external audit was applied to the sonographers who were obviously not masked to
6 the exposure to flight? For instance, are the scans available to a third party for review?

They state of the method for scanning for blood clots in patients’ legs that: “duplex is highly operator-dependant”. The implication is that the results produced by this technique are affected by this; it would not be mentioned at all without a reason. Stressing that the technique is “highly” operator dependant emphasises the degree of subjectivity. It is not just that it is carried out by human operators, but that it is dependant on them; the results are determined by the person using the equipment. This implies that the results produced may not be valid; good science does not incorporates fallible human judgements but deals in objective measurements only.

However, Scurr et al. present what they see as a more realistic view of science. As Yearley (1994:247) points out, judgement is indispensable in science, and this is utilised in this extract:

[62] Scurr et al., 8/9/01 Vol 358 No 9284 p1476

1 Duplex ultrasound imaging was done by experienced vascular technologists.
2 We did not confirm these results independently because we rely on technologists’
3 opinions in clinical practice.

Scurr et al. both defend what they have done in their particular study, and present a different conception of how science works. The findings produced by this technique were not simply a 'subjective judgement' but a result obtained by competent and qualified staff. Giving them the title of “vascular technologists” further confirms this; these are people who specialise in this. The activities accorded to such a membership category imply that these people are extremely knowledgeable about this particular branch of medicine and well able to use the equipment. When Scurr et al. state that
they “did not confirm these results independently” this implies that this was because there was no need, and they have no doubt about the results produced. The mention of clinical practice then goes on to give a different view of science. Rather than being an objective fact finding mission, opinions are fundamental to science; it doesn’t just use them but has come to “rely” on them. Using “we” encompasses more than just the authors of the study, and seems to imply that research generally does this. Scurr et al. therefore place their research in a much wider context to justify their actions. The construction given is that anyone contesting the authors’ results would in effect be contesting the way that medical research is carried out by everyone.

9.3.5 Ideal science as free from bias

Related to subjectivity are ideas about bias. Freedom from bias is crucial; as Nelkin (1995:452) points out, the very “authority of scientific expertise has rested on assumptions about scientific neutrality”. If science is evidenced based and yields the truth, then it should be free from human distortion. What has been pointed out (for example by Collingridge and Reeve, 1986:9; Woolgar, 1996:23) is that while this is asserted, it may not always be the case. Authors use notions of bias and ideal science is as an attempt to justify their own study and its result. In this example, the authors use this to present their work as what science should be:

[63] Kraaijenhagen et al., 28/10/00 Vol 356 p1492

1 In 1998 the term economy class syndrome was coined to describe the association between travel and thrombosis. A fair risk estimate, however, has not been done.
2 We report the results of a prospective study, in which we kept the effect of bias to a minimum. We compared travel history in 788 patients with venous thrombosis with that of controls with similar symptoms but in whom the disease had been excluded.
3 For air travel alone, the odds ratio was 1.0 (95% CI 0.3-3.0); also, no association was recorded for other methods of transportation. We have shown that there is no increased risk of deep vein thrombosis among travellers.

9 Previous work provides evidence and theoretical explanations for the hypothesis that long-distance travel is a risk factor for venous thromboembolism; however, the actual risk is poorly quantified and possibly overestimated, since the association is based on uncontrolled or inappropriately controlled studies. To diminish the effect of bias, an ideal control group should consist of people with similar signs and symptoms as potential cases who originally sought care but who, in fact, did not have venous thrombosis.

15 From April, 1997, to January, 1999, consecutive outpatients older than 18 years and with clinically suspected deep vein thrombosis (DVT) of the leg only, were eligible for study.
16 At presentation, the patient’s medical history, including specific questions about symptom duration, presence of malignant disease, recent surgery, immobilisation, trauma, and family history of venous thromboembolism, was obtained with a standardised questionnaire. The patient was also asked if they had travelled by air, motorcar, bus, train, or boat for more than 3 continuous hours in the past 4 weeks. This information was obtained before diagnostic testing, which was done without knowledge of travel history.

The authors orient the concept of bias, with the implicit assumption that science would not include this; an “ideal” control group would be one that was not affected by bias. Indeed, they present the avoidance of bias as one of the key defining characteristics of their study by discussing it in the opening sentence of their article. Myers (1985a:596) notes that scientists may “start by making high level claims for the importance of their findings”, and this seems to be just what the authors are doing.
here. The mention of bias is a use of both offensive and defensive rhetoric, as it builds up their study by outlining how they have avoided it, and implies that others that have been done were biased. This idea is given some detail, as is the effect that it has. The previous studies that did find a link between travel and blood clots were “inappropriately” “based”: doubt is therefore cast on the findings they produced. The authors describe how they have improved on this. They outline what an ideal control group “should” consist of – and then how theirs meets these principles. Using the word “should” externalises this description of the control group as a universal standard, which makes it more commendable that their study conformed to this, rather than them setting their own model. To substantiate their study and their claims, Kraaijenhagen et al. critique the methods of previous studies in relation to bias, describe what ideal science should look like, and then outlined how their research achieves those aims.

9.3.5 Ideal measurements

A further issue which is used to attack and defend claims, and over which differences between ideal and ‘real’ science emerge, is measurement. As Knorr-Cetina (1995: 152) notes, what counts as “sufficient measurement” is negotiable in scientific work. In the texts studied, answers to the question of what counts as valid measurement are again used to back up a favourable study or to contradict an unfavourable one. For example, it is apparent that the methods chosen determine the results found and that different ways of measuring produce different results:

[64] Calliard and Clerel, 17/2/01 Vol 357, p554

1 This number is underestimated, since only symptomatic pulmonary embolisms
2 on disembarkation were registered.

[65] Hirsh and O’Donnell, 12/5/01 Vol 357 p1461

1 If one applies strict criteria for causality, as of 1999 there was no good evidence
2 that long flights are a risk factor for VTE.

How the phenomenon is measured affects the results; or more aptly in these cases, measurements may be selected to fit different results. These quotes also illustrate how measurements can be politically useful in attacking or defending a claim. Calliard and Clerel highlight how a particular measurement may “underestimate” the risk as they attempt to build it up. Hirsh and O’Donnell present a dismissal of the risk by arguing for “strict criteria” in measuring it, which would produce a result that it does not exist. Calliard and Clerel substantiate their claim by giving a reason why the incidence rate has been underestimated, and is actually higher. Use of the word “registered” is interesting here; it implies that the rate is higher because it is only cases that have been reported and recognised that are being counted; not that other cases do not exist. Hirsh and O’Donnell point to the need for “good evidence” of the causality. This is very difficult to argue with; if science is based on evidence, how could anything other than ‘good evidence’ be required. This also implies that such a thing exists as ‘bad evidence’ and it is only this that has led to suggestions that there might be a link between blot clots and flights.
9.3.6 Consensus

The final issue I will consider is consensus. As Collingridge and Reeve discuss, this is one of the principles of ideal science: "consensus is the normal state of science, debate and disagreement marking at best, an inadvertent failure to apply scientific method properly, or, at worst, outright bias and distortion by one of the parties. If the experts have correctly followed the rules of scientific method and have considered all the available data, then they ought to reach the same conclusion" (1986:9). Potter (1997:150) points out that constructing a consensus and "presenting a description as shared across different producers" is a way of establishing the facticity of that description. What is interesting is how this is done.

In the articles studied, agreement in science was maintained as a key principle; obviously, if something exists, studies will find it and agree with each other. Consensus is therefore used by authors to substantiate their study by pointing out that it fits in with wider established knowledge or that others agree. It is also used to attack claims, by pointing out that they do not concur with that is known, and so cannot be true. A third and interesting way that these principles are invoked is where a study is presented that does not fit in with previous work. In such cases, this existing knowledge may be redefined, or outlined to be deficient in some way. Authors presenting a new claim may argue that it should not necessarily be dismissed as not fitting in with the consensus view, if they can show that view to be lacking in some way. Moreover, authors may express surprise at what they have found if it is an unusual result, in order to present what they have found as fact; even if unexpected, it still exists.

9.3.6.1 Consensus as substantiation

A way for authors to back up their own claims may be to call on previous research. As Potter (1983:311) says, if it can be demonstrated that everyone agrees, then it is easier to present what they agree about as true. Pointing to consensus from a wider context may therefore be used to back up a claim:

[66] Scurr et al. 12/5/01

1 In our study no symptomless DVT was detected in the stocking group.
2 In hospital practice there is evidence that graduated compression stockings
3 are effective at reducing the risk of DVT after surgical treatment.

The authors state that other evidence confirms their finding, and thus makes it seem more likely. What the authors have found exists in hospital practice and that it does is stated very definitively as a fact: "stockings are effective" (line 2-3, emphasis added). "Hospital practice" is a term that implies the pervasiveness of this knowledge; it is so widely acknowledged to be true that it is part of the routine of medical care – and the implication is that this is in all hospitals. This is not attributed to any other study in particular, which could be critiqued, but is presented as something established and well known about. The Scurr et al. are presenting is new and the results contentious; backing up their findings with the experience of practice helps to substantiate and add credibility to them.
9.3.6.2 Lack of consensus as critique

Just as pointing to a consensus on a view is a way of substantiating it, so highlighting that results do not fit in with what is known is a means of criticising a study:

[67] Ferrari and Morgan, 17/2/01 Vol 357, p553

1 Roderick Kraaijenhagen and colleagues question a well established concept
2 in venous thromboembolic disease that is supported by published work.
3 We do not believe that Kraaijenhagen and colleagues’ report invalidates
4 the established concept. As reported by R Sarvesvaran, pulmonary embolism
5 is one, and probably the main, cause of sudden death among travellers.

That Kraaijenhagen et al.’s study does not fit in with what is known is used to critique it. It is described as being in contradiction with the “established” concept, something that is accepted and agreed upon. A temporal element is added to the establishment of this concept, it is “well” established, not something new or unproven, but accepted over a long period, and now recognised and reputable. Evidence of this concept is additionally given just to emphasise that the current study does not concur. Other research is cited and very definitely: pulmonary embolism “is” the cause, and not only that, but it could even be the “main” one. That this has been “reported” is also significant, it is not an opinion or an assumption, but the relaying of an actual occurrence. The word “report” is used in relation to Kraaijenhagen et al., but as a noun. When used to Sarvesvaran, it is used as a verb to imply the existence of evidence. The current study does not fit in with the established consensus, and the implication therefore is that the current study is wrong.

As has been previously indicated, the same tools may be used to attack or defend claims, regardless of what those claims are. So just as the previous authors dismissed a report that found no risk of blood clots by pointing to the lack of consensus for such a view, so this extract does the same about Scurr et al.’s study that did find a link:

[68] Burnand et al., 8/9/01 Vol 358 No 9284 p1476

1 Our final concern is the enormously high numbers (one in ten) of passengers
2 who developed DVT during travel. This rate does not correspond with any previously
3 published study; prevalence is normally estimated to be 1% or less

The results here are presented as so different from what is known (producing numbers that are “enormously” high) that they cannot be true. The authors express their “concern” that results so clearly in contradiction with what is known are being presented as accurate. This is emphasised by pointing out that they do not concur with “any” previous research; and describing it as “published” research accords greater authority to it. It is interesting that the incidence is “normally” only “estimated” to be 1%; the results being presented are so clearly wrong that even against an estimation, they are utterly implausible.

9.3.6.3 Redefining what is known

When new findings are being presented that do not fit in with established knowledge, the quality of that knowledge may be challenged or re-cast so that the current findings may avoid being dismissed. Haggett and Smith (2004) have shown that when
controversial claims that are being presented against the prevailing consensus, attempts are made to redefine what that consensus is.

What is interesting is that both ‘sides’ do this. New studies may unpack just how previous work was lacking, and how their study has overcome such problems. Kraaijenhagen et al., and Scurr et al., whilst presenting different new results, both engage in this:

[69] Scurr et al., 8/9/01 Vol 358 No 9284 p1476

As to Burnand and colleagues’ wild speculation on one long-haul flight, every year about 30 people die at London Heathrow from pulmonary embolism, but an unknown number might die later or develop symptoms of DVT in a lower limb. Frequency of thrombotic events needs to be measured, not guessed at from indirectly related data.

Scurr et al. are presenting results that do not fit in with previous studies – so they attack the quality of those studies. Calling previous work “wild speculation” makes it seem very unprofessional and not based on facts or scientific reasoning. Scurr et al. imply that the other research has not been well proved or backed up, only “guessed at”. This is in contrast with the obvious proper model of what scientific results should be – “measured” from “data” – is a way of dismissing the claims of previous research. For Scurr et al. to then place their new findings against this means that theirs are less likely to be dismissed for not being in agreement, if that research can be presented being inappropriately or inaccurately derived.

Similarly in this extract, what is previously known is re-cast, and how it was arrived at critiqued, in a way that may be seen to suit the current results being presented:

[70] Kraaijenhagen et al., 28/10/00 Vol 356 p1492

Previous work provides evidence and theoretical explanations for the hypothesis that long distance travel is a risk factor for venous thromboembolism; however, the actual risk is poorly quantified and possibly over-estimated, since the association is based on uncontrolled or inappropriately controlled studies.

The authors dismiss previous studies by characterising them as bad science: they were “uncontrolled” and “inappropriate”. This led to results that are inaccurate – the association of a risk was “based” on these poor studies, which therefore negates any chance of it being true. Interestingly, it is not just this explicit reference to these low quality studies that diminishes the association. What the previous work found were “explanations” for the “hypothesis” that the association existed. They did not ‘prove’ it, only presented information in support of it; and a hypothesis is not a fact, just an idea. Further, these studies only found that travel was a risk “factor” – not the only or even the main risk, again diminishing the likelihood of a causal link between flights and blood clots. Now that they have dismissed the previous (contradictory) work, the authors can present their study (see extract 65). They imply that they, in contrast to these previous studies, are in command of the facts, because they are able to make comparisons about the “actual risk” – through their study, they know what this is.
9.3.6.4 Surprise

A final consideration in terms of consensus is the concept of surprise and how this is used. Woolgar (1996:18) notes that "the idea of discovery is central to popular conceptions of science. It is the one activity above all other that one most commonly associates with scientific activity"; see also Knorr-Cetina (1995:161). Here I am concerned to show how authors presenting findings that contradict other research may express surprise about the discovery of their results. Doing so is a way of orienting to the possibility that what they have found does not fit in with the consensus view, and yet at the same time stressing that they have now found the facts of the issue. These facts have presented themselves, they were not as expected, but this is what they are. This may also be a way for authors of pre-empting criticism that their findings do not fit in with the consensus view.

For example, Kraaijenhagen et al. state that:

[71] Kraaijenhagen et al 17/2/01 Vol 357 p554

1 Surprisingly, we found no scientific confirmation for the theoretical assumption
2 that travel increases the risk for thrombosis.

The authors describe their surprise that their results do not fit with the existing knowledge. However, they construct their text to argue that this is because of the nature of that previous work. For example, the authors describe it as a "theoretical assumption". Not only is it just something that has been ill-thought through, but it is theoretical – it has not been empirically tested. The authors use a contrast between this and their own study – which was "scientific". Dismissing this previous work presents what they have found (through "scientific confirmation") as even more likely to be true. That whilst looking for and expecting to find one result they found another constructs this conclusion as irrefutably forcing itself upon them. It was a fact that was there and could not be ignored.

Presenting a different view, Scurr et al. use a similar tool.

[72] Scurr et al. 12/5/01 Vol 357 p1485

1 About one in ten passengers not wearing elastic compression stockings developed
2 symptomless DVT after airline travel, which is a surprisingly large proportion
3 of the study group. The passengers were all aged more than 50 years and undertook
4 long journeys by air (median 24h), both of which are factors that could increase
5 the risk of thrombosis. As far as we are aware no other workers have undertaken
6 such a prospective study.

The authors express their surprise at their results that one in ten passengers developed a DVT after flight. By expressing their surprise, they orient to previous work that had suggested the incidence was not this high, and try to avoid having their own results dismissed as being too high. However, they then go on to give details to substantiate their result. They give factors which are more likely to produce such a result, such as the age of passengers and length of journey, thus making it seem more plausible. They then also point out that no other research conducted in such a way has been carried out before, again making it less easy to dismiss their findings because there is nothing to directly compare them against. Therefore, while the authors may be
surprised at the unusual result found, they do not believe it necessarily to be inaccurate, and present a case that argues that it is not.

9.4 Conclusions

In this chapter I have examined the construction of the risk ECS from the articles in *The Lancet*. The need to consider how such constructions are achieved has been particularly pertinent here because of the vast variation in the views presented. The risk is presented in some articles as extremely serious. Causal links are made, and the 'facts' of the issue are clearly stated. Similarly, the risk is equally definitively stated not to exist in other reports. The responsibility of the passengers and airlines are also differently constructed, depending on whether the risk is being built up or dismissed.

In this chapter I have also considered how scientific research is both used by and constructed through these articles. What has been discussed here is a divergence between (using Collingridge and Reeve's 1986 terms) the myths and realities of science. These 'myths' are: it is possible to find facts, and science will make discoveries about them; science is determined by the nature of the world; science is replicable; scientific methods are principles which should be upheld; science is neutral and not subjective; and consensus is a necessary determinant of fact. In contrast, the 'realities' are sometimes also presented. These are that there are practical difficulties to scientific work; methodologies are not straightforward sets of procedures that may be uncontroversially applied; a lack of subjectivity is an impossible ideal and judgement is essential; and an existing consensus can be redefined. What I have attempted to show in this chapter is that the myths and realities of science are constructed and presented to substantiate and dismiss claims – whatever those claims are.
This chapter is an analysis of two online aviation and health discussion forums. One is a mail-based list, the other an Internet forum. I outline how members use a number of devices to present their version of ECS. Messages often present entirely contradictory views but use the same tools to do so, and it is these methods that will be highlighted here. I discuss how members present themselves, to achieve authority for their claims, and to attack other accounts. I consider how other groups in the debate are presented (including passengers, airlines, and the media), how this is achieved, and how it impacts on the wider constructions of the risk. I then consider how science is used and how scientific work is constructed through the debate. While the opinions presented may vary considerably (and indeed it is often the moments of heated contradiction and debate that may be most illuminating), the point to be made is that convincing claims are constructed in the same way.

The two groups being analysed here have been described and discussed in sections 5.2.2.4, and 6.2; additional comments are relevant here. In the mail-based list, email addresses are clearly displayed and full names, titles and signatures are frequently used. In the Internet discussion forum, messages are commonly signed from pseudonyms or nicknames. This means that it is very difficult to discern anyone’s position, authority or occupation. Clearly the Internet is a forum where false identities can be assumed with ease; and in these forums members and guests are not encouraged to reveal any personal details about themselves. This may mean that members feel more able to leave honest, open, relaxed posts, without fear of any comeback. It may also mean of course that members have to work harder to give any authority to their claims.

In this research, the details and the addresses of both the mail based list and the Internet forum and all individual members have been anonymised. Dates have been given as these may be relevant to the content of the message. I have given initials to each member so that they may be distinguished from one another.

10.1. Presentation of self

In this chapter I consider how members persuade that their account of ECS is credible. Similarly to the other groups considered in this research, how authors present themselves is key. What is interesting and different here is that members may be anonymous, and can assume any identity that they wish. This is more easily accomplished in the Internet forum where members use pseudonyms and registration requires very few personal details. The mail-based list gives more details about members (an email address for instance) and members sign each post with a name and usually have a signature at the bottom of their email, but there is nothing to say that these are genuine. This anonymity may mean therefore that members have to work harder to establish their authority. Just stating that they are a doctor or expert may not carry much weight – it may have to be ‘proved’, a point made by Herring et al. (1998)
in relation to presenting oneself on the Internet. For the purposes of this research, it may not matter whether they are doctors or not; what is important is how they present themselves as having the authority to speak on this issue, and the same devices might be employed by doctors or those masquerading as medics.

10.1.1 Knowledge, experience and concern

As members are not automatically accorded any authority, they may have to work to establish it. When Potter argues that “certain categories of actors are treated as entitled to know particular sorts of things, and their report may be given special credence [...] participants can work up their category entitlements in a number of ways” (1997:114-115) members have to prove that they are in these `certain categories’. In the examples that follow it can be seen that they do so in a number of ways. These include reference to medical experience, demonstrating a knowledgeable command of the issues, or using highly specialized language.

Members may present themselves as having sufficient experience to speak on the issue:

[73] Member DJ, mail based list, 25/04/02

1 Sitting down for a long time and not moving is a risk, and I have noted,  
2 in my clinical practice, that sitting in front of the TV for hours on end,  
3 taking all-day car trips, and being extraordinarily inactive have been  
4 associated with DVT and PE in my patients.

In terms of experience, reference is made to what “.. I have noted in my clinical practice..”. The member gives a presentation of self as well-informed because of their direct experience – they have seen things for themselves that are relevant here. That this is in “clinical practice” implies that they are a qualified medic and may therefore hope to assume the associations of this membership category, of educated, knowledgeable, and with the authority to speak on medical issues. Furthermore, that they have worked in “practice” implies a day to day working experience of the issues, not just a theoretical grasp of them.

Being accorded sufficient authority to have claims taken seriously may be established by using very technical medical language. A message to the mail based list responds to the previous quote:

[74] Member IF - mail based list – 29/04/02

1 Your TV set does not shoot you up to a virtual 8000ft altitude,  
2 in a relatively low %O2 (let alone pO2) environment, with the inherent stress  
3 of flying, the typical tourist class discomfort, and other amenities.  
4 Ask your digital microcirculation, your myocardial syncitium, your nephrons,  
5 neurons and glia, your O2-deprived aggregated platelets and rbc and  
6 its viscous environment, the blood. Those are the silent majority in this scenario.

The message describes the scenario using a range of complicated medical terms. In it the member refers to the environment of the aircraft in technical language and list a number of biological expressions. The terms used are complicated and specialised, and the minute detail given substantiates the claim. As Potter says, people will provide increasingly technical support for positions as a way of “giving a basis to
their claims" (1997:158). In doing so, the member gives a presentation of self as extremely knowledgeable, both about the relevant pathology, and specifically in relation to a flight. They are therefore presenting their view on the issue as one that should be taken seriously.

What is significant about such posts is that the presentations of self that members give construct their views of ECS in a particular way. They give a presentation of self to substantiate their view, or to avoid having it dismissed:

[75] Member MK - Internet forum - 9/11/00

1 “DVTs/PEs are a significant problem in hospitals, mainly because few of us
2 will ever forget the patients of ours who (after surgery/trauma ranging
3 from the trivial to the severe) unexpectedly dropped dead from a massive PE.
4 Much attention has been given to preventing DVTs/PE, ranging from aspirin
5 to heparin to early mobilisation to compression stockings, etc., etc”

6 I wholeheartedly agree that we need further studies (doesn’t everything?),
7 but the current evidence really does not point towards airline passenger DVTs
8 being a major epidemiological phenomenon.

This is interesting because the member gives a presentation of self as caring, concerned about DVT and patient care, and knowledgeable about the topic. They are aware of and have tried a wide range of treatments and preventatives for DVT, so many that they are forced just to put ‘etc., etc’ to save having to list them all. This is significant in light of Fahnestock’s (1989:37) comments about *copia*, especially when applied to lists. *Copia* refers to “fullness or amplification [...] but can also be applied to the technique for enumeration or listing, creating a series that suggests a large number of things, too many for the speaker to specify. This stylistic device is especially useful when the arguer’s purpose is to appeal to quantity”. In this instance, the appeal to quantity is not only about the large number of preventative methods, but the author’s extensive knowledge of them. It is also an appeal to shared knowledge, presenting an assumption that others will know what this ‘etc etc’ stands for – it places the member within a wider community of similarly knowledgeable people. Furthermore, use of the terms “ours” and “us” is interesting in also doing this (following Herschell, 2001 on pronouns). Here, the use of “us” not only aligns the member with the rest of the medical profession (thus strengthening their claim) but personalises the account and makes the member seem very much in touch with the situation. These patients were real people who they cared for, and the author was very much involved in their cases; they were not just statistics or patients that they had just heard about. The member portrays the sense of the tragedy that the patients’ deaths had occurred, in spite of everything that they, the doctor, had done for them, and that they had tried to do everything they possibly could. The tragedy is such that the member will not “ever forget”. The member is not dismissing the issue, indeed, they state that it is a “serious problem”, but this emphasis here is on “hospitals”; it is not a serious problem generally, or outside of this context, so, by implication, on aircraft. This serves to dismiss the seriousness of the risk of inflight DVT. Because this member is knowledgeable, it cannot be because they are not fully aware of the issue that they are dismissing it; they present as a medical practitioner with a great deal of experience of treating DVTs. It cannot be because they are unsympathetic and consider a DVT to be trivial, they very much care about patients, and become
involved personally in their treatment. Their dismissal of the issue is presented as being because the risk of an inflight DVT is simply not worthy of consideration.

10.1.2 Using authority to substantiate or counteract claims

Comments about personal status are also used to attack other posts, and to provide the authority to do so. As Billig (1991:143) notes, justifying an attitude also involves criticising the counter position. For example, in the second post below, the member uses their position to substantiate their claim and to disprove a counter argument:

[76] Member CO - Internet forum, 18/07/01

1 So the ambulance-chasers are finally moving in.
2 I realise this is essentially a medical issue but the consequences could affect
3 the whole industry, so I'm posting here...

4 >DVT ‘VICTIMS’ SUE AIRLINES
5 >BBC News Online 17 July 2001
6 > An Australian law firm has launched legal action against three international
7 >airlines over blood clots suffered by passengers on long-haul flights

[77] Member HD - Internet forum, 19/07/01

1 What a load of codswallop! In 33 years of flying, sitting 20,000hrs+
2 in various cockpits and simulators, I have never encountered DVT
3 amongst my colleagues or myself. What a pity ambulance chasing
4 has finally caught on amongst the legal professions in Australia!

Considerable personal experience and the authority that may be accorded to this are used in the second message to counteract claims about the risk in the news report. This is done very forcefully, and putting figures on the claims adds extra weight to them (noted by Potter and Wetherell, 1995:50). For the member to state that they have “33 years” of experience is more persuasive than saying ‘very many’ and is presented as a fact, whereas describing ‘many years’ of experience could be dismissed as a judgement only. The member also uses forceful terms such as “never”, an extreme case formulation (Pomerantz, 1986). Here it is used to emphasise how unlikely the risk is. The member also shows how relevant their particular experience is, by talking in terms of “sitting”, and discusses the range of experience they have in “various” different circumstances. The reference to “cockpits and simulators” of course implies that this member is a pilot, and so naturally extremely knowledgeable about flying. They are using the category of ‘pilot’ to imply that they have the knowledge and experience associated with the membership of it (see Potter and Wetherell, 1987). The member also describes their “colleagues” who are presumed to be similarly experienced and knowledgeable, adding weight to the idea of the lack of evidence. The effect here of the presentation of self is to dismiss any link between blood clots and flying and to provide an authoritative claim that it does not exist.

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1 The full text of the article is given in the post; it is a long article and is not relevant to the point I am wishing to make here about the establishment of authority in the message that responds to it, so I am not reproducing it here.
10.1.3 Managing stake

Presentations of self can include stake management:

[78] Member MB - mail based list- 26/4/02

1 And without any commercial intent, many airlines (including BA)
2 have given in-flight advice on exercise in relation to 'improving circulation'
3 for many years (in the case of BA at least 10 years). Also there is information
4 available to the travelling public on the airline web sites
5 (eg www.britishairways.com/health)

Although the post is stated to be about "many airlines" it can be read as being about British Airways, and the member signs off as an employee of BA. Couching the post in terms of other airlines may be an attempt to avoid having the content of this message disregarded as a product of stake - why would a member of a rival airline want to praise the actions of others? Of course, the details are all about BA, but starting the post with the statement that the advice given is "without any commercial intent" orients to these matters of stake, by confessing them (Potter, 1997). In this extract, mentioning "information" is significant. It subtly implies that the information is there, the airlines (particularly BA) are providing it and it is up to passengers to find it and take it, constructing the risk and the responsibility for avoiding it in a particular way.

10.2. Political Motivations

Having addressed how and why members portray themselves in certain ways, I will now consider how others are presented. One way for members to do so is to highlight political motivations behind the behaviour of others being described. This can also emphasise the authority of the member. The presentation of a well considered case makes their construction of the risk more plausible. For example, this quote assigns political motivations to the airlines for their behaviour:

[79] Member DL - email based list - 25/4/02

1 However, I suspect that one of the reasons why the airlines don’t do this
2 is legal – if they openly admit that flying is hazardous to your health,
3 at least in the US they increase their liability to be sued
4 by anyone who develops a DVT or PE in time-relation to any flight.”

This quote points to the legal reasons why airlines may have adopted this particular stance. Pointing to the motivations behind their behaviour constructs the risk and the behaviour of the airlines in relation to it in a very particular way. It also implies that the risk exists – the message states that airlines could “admit” this, which constructs the risk as real but hidden by the airlines. The reality of the risk is emphasised by the possibility that “anyone who develops a DVT” could sue – this is not those who ‘claim’ to have a clot, or who ‘think’ they have, but those who have actually developed one. The causation with flying is made clear – clots occur after “flight”. This stresses that it is being on board a plane that causes a clot. Nothing else is mentioned, and that it can happen after “any” flight, implies that flying is the common denominator in occurrences. The member constructs ECS as real, as known about by the airlines, but as not being revealed by them because of the risk of being sued.
However, highlighting political motivations can also be used to counteract a particular construction of the risk:

[80] Member QA - Internet forum - 20/07/01

1 I was sickened the other night to watch a DVT ‘victim’ burst into tears on television, obviously for the sole purpose of getting the public’s sympathy.
2 I am not a cold person, and my sympathy goes out to those who have DVT, however, in most cases, the ‘victims’ are not living healthily anyway!
3 The majority of cases have been smokers, or had other unhealthy habits that largely contributed to the onset.

This quote draws attention to the motivations of passengers. It does not encourage sympathy for them and their plight. Rather, it presents them as calculating individuals acting in emotive ways purely to elicit compassion, but who have brought the condition on themselves. Such acts are their way of presenting themselves as “victims”, but the author quashes this idea out of hand. The exclamation mark after “not living healthily anyway” stresses what a ridiculous notion the passenger as victim is (as does the use of ‘victim’ in inverted commas). This is a title the passengers have attempted to assume, not one they have warranted or deserve. It can also be observed that the author also uses a ‘disclaimer’ (Hewitt and Stokes, 1975). They state that “I am not a cold person and my sympathy goes out to those who have DVT, however...”. The author is taking care to ensure that their ascription of the passengers’ motivations is not dismissed as a measure of their own hard heartedness.

Furthermore, by stating that they are sympathetic if a DVT does occur, the implication is that they would be if a ‘genuine’ case occurred, and that this is not the case here. Instead, passengers only have themselves to blame, but then manipulate the media and the public to generate sympathy for what has happened. Attributing these motivations to their behaviour is a persuasive construction of the issue.

10.3. Taking things out of context

Another device used to substantiate or contradict a claim is engaging with issues about context. This may be used to encourage sympathy and consensus with a particular view. For example:

[81] Member GV - Internet forum - 29/10/01

1 From today’s Scotsman – as if our industry doesn’t have enough
2 to worry about, here’s something else that will drain it of millions...
3 >AIRLINES FACE LEGAL DVT ACTION
4 >Tanya Thompson, Home Affairs Correspondent
5 >HIGH Court writs are to be issued against two major airlines over alleged cases of
6 air travel-related deep vein thrombosis.

This post then gives the rest of this news story. Placing the legal action within the wider context of airline industry difficulties (and this message was written just after September 11th) de-emphasises the seriousness of it and categorises it just as something that will “drain” the airlines, not as an issue that is important or serious or that people will need to be made aware of, and certainly not in comparison to other

2 Again, this is a long story, and not relevant to the analytical point being made, so I have not reproduced the entire text here.
problems. "Drain" is also an interesting word to use, rather than just "cost" because it implies that it may take everything that the industry has, and has a very negative and demoralising tone to it. That this may be in terms of "millions" does not only imply that the issue is innately important or serious, but encourages sympathy for the continued predicament that the airlines are unjustifiably having thrust upon them. There is also an interesting externalising device here (Woolgar, 1988:75). The detrimental effect of ECS claims is not presented as the member's speculation or opinion. It is firstly something that they have found from a source independent to them (The Scotsman), and it is presented as a factual occurrence ("here's something"). If the risk exists beyond the member's presentation, then it is more serious – it is a recognised issue, and they are only relaying the information about it.

Placing calculations of risk in a wider context is also a way of minimising the risk:

[82] Member TG - Internet forum - 12/11/00

1 You state that 'at no stage do the airlines inform passengers of the health risks
2 associated with flying, and that is where the difficulty lies'. Good God man,
3 are you wanting 'this flight could kill you' stamped on your ticket? Or 'BEWARE
4 you have a 99.9999% chance of walking away from this aircraft without a scratch'

This message is responding to (and quotes from) a previous post, and counters the construction of the risk used in it; again, it is employing both offensive and defensive rhetoric. Describing the risk in the terms here detracts from the seriousness of it, and has the effect of making those stating that it is serious look foolish. The phrase "Good God man" really emphasises the incredulity of the author about this alternative view. Instead, they present a different conceptualisation of the issue. Rather than focusing on the responsibility for a clot occurring, the member puts any risk into context by constructing a probability of it happening. They present this chance is an extremely small one; their hypothetical statistic makes it seem ridiculously insignificant. Using a wider context effectively serves to minimise the risk.

Bringing issues of wider context into consideration is also a tactic employed by those in opposition to such views:

[83] Member BS - Internet forum - 3/12/00

1 To do a bit of research and require airlines to stick warnings on
2 airline tickets, it doesn't cost the government much money
3 (certainly less than it would cost to fix NHS problems).

This message was posted in a debate about the amount of government money being spent on ECS research, contrasted with what was viewed as an extremely small amount on the NHS and hygiene problems. This message uses notions of this wider context to maintain that the money spent on ECS research need only be relatively minimal, and it presents ECS as a simple and contained problem that might be easily addressed with only a little time and effort compared to problems in the NHS. The use of a contrast is interesting here; these can be used to show the naturalness of one side, against the wrongness of the other (Herschell, 2001:124-5). Here the 'naturalness' of addressing ECS is worked up by presenting it as something that could quickly and easily be dealt with – a "bit of research" and to "stick warnings on tickets" is all that is required, compared to what fixing NHS problems would cost. Using this contrast is a way of seeking support for this view.
10.4. 'Economy class syndrome': misnomer or medical snobbery

The name is chosen for the risk and how it is used constructs both the existence of the risk and the responsibility for it. For example:

[84] Member TG - Internet forum - 1/11/00

1. I hope the idiots who believe in 'economy class syndrome'
2. keeping taking the brain cell replacement medicine

In the message and others, where members are persuading that ECS does not exist, the term is given in speech marks. This detracts from it being a normal term used in everyday language, and implies that it is only what this issue is called, not actually a description or a very appropriate name for it, and indeed, that it doesn't exist at all. The author of the message uses stark language to present their position on the issue; that those who advocate that the risk exists require "brain cell replacement medicine" is damning indeed. Emphasising the strength of this opinion is a means of persuading about it. Use of the word "believed" is interesting here as well. To believe something, rather than to know it, carries an implication of blind faith that may or may not be rational or justifiable. This is drawn on in this message to further discredit 'ECS'; it is 'believed', and not described in terms of having an objective reality. As a concept, only "idiots" would subscribe to it. It is clear from this message that the member does not assign much credibility to the risk and using the term in this way is a means of detracting from it.

More direct challenges to the meaning of ECS detract from the unfavourable implications that the term has:

[85] Member CM - Internet forum - 24/7/01

1. 'Economy Class Syndrome' is a complete misnomer in that it affects people
2. subject to prolonged immobility be they in economy, business, first, on a bus,
3. or in a hospital bed. The problem has nothing to do with seat design and
4. everything to do with people not leaving their seat for 12 hours. There are very
5. simple ways of avoiding DVT on a flight such as taking a walk if possible,
6. and if not then carrying out simple in-seat stretching exercises regularly"

This post challenges the term to construct the issue in a very particular way. It constructs the blame away from the airlines; for how can they be held responsible when it is nothing to do with "seat design" or being on board a plane; and firmly onto the passengers. Preventative measures are phrased in terms of the passengers, with "people" being the object of the sentence. There is also a stress on what they do, in terms of "people not leaving their seats", rather than 'people not having the opportunity to leave'. Interestingly, the message does orient to this possibility, but still maintains the responsibility of the passengers. Where walking is not "possible", then passengers should carry out exercises in their seats, "simple" enough that no one has an excuse for not doing them. Unpacking the associations of the term 'ECS' is a way of highlighting how invalid they are.

The seriousness of the issue can further be built up or detracted from by providing reasons for why such a term is used, as these two messages highlight:
Calling DVT from flying 'economy class syndrome' is just an easy way of talking about deep vein thrombosis occurring due to flying in cramped seating on commercial aircraft. I really do not see a phrase like this as a problem (medical snobbery anyone?)

This message contends that there are no inaccurate associations with the phrase ECS, it is just a more manageable phrase. The member stresses the ridiculous and unwieldy nature of the full term they give, especially with the comment "deep breath!". They emphasise this by giving a very detailed name for the issue, thus contrasting it with the ease of 'economy class syndrome'. Doing so constructs the issue in a particular way. ECS does not falsely describe the issue as other members have pointed out; the issue is about "cramped seating", not inactivity or laziness. The message is also rhetorically oriented at some of the previous messages that have challenged the term. "Medical snobbery anyone?" casts doubt on their difficulties with the term; it is not that ECS is an improper term that builds up the issue into something it is not, it is just that its headline friendly quality is distasteful for those who do not wish to be associated with such non-expert terms.

This second message was posted in response to the previous one, and again, highlights the motivations behind the use of the term, but this time to discredit it:

Accurate terminology is very important when you're dealing with medicine or science. To simply make-up a fanciful, media-genic, if wholly inaccurate name is thoroughly inappropriate.

The message cites the previous post (lines 1-2) that uses the term 'economy class syndrome'. The author here makes clear that such a term exists because it is 'media friendly', and not because it accurately describes any risk. The post is quite definite that the name is not descriptive, does not have a factual basis, and has been 'made-up'. It is so lacking in substance as to be "fanciful". This detracts from anything that the term purports to describe, for example that it is caused by flight and cramped conditions. Indeed, the member stresses the importance of "accurate terminology" in relation to such serious issues, and this implies that they have a thoroughly proper and appropriate approach to such matters. This constructs the issue as something that should not be taken seriously by anyone who cares about such things.

10.5. Presentation of other groups

I will now outline how some of the main groups in the debate – passengers, airlines, and the media – are constructed by members of the discussion forums. The motivations of all these groups are questioned, and aspersions cast on their position, whatever that particular position might be. I will consider how this impacts upon the construction of the risk.
10.5.1 Media as friend and foe

In messages studied, comments about the media, the way it operates, and the effect this has, were a common theme. There is the idea of ‘good’ and ‘bad’ media coverage; and this depends on the particular construction of the risk being presented. A way of counteracting the media’s construction is to present it as hype and speculation. When reporting on the ‘facts’ of the issue, the media is a useful information giving tool, and is not constructed to be subject to biases and errors.

Examples of how the media portray information are therefore given to substantiate or dismiss the risk. For example, it is implied that no coverage of something means there is nothing to report on. This is used to reject the risk of ECS:

[88] Member GC - mail based list - 12/2/02

1 Given the indifference of the UK press to the quality of medical research
2 and their infatuation with the opinions of Mr Farrol Kahn,
3 it is inconceivable that a VTE occurring on the VERY SAME DAY as a flight
4 would not be widely publicised as being casually related to that flight.

The workings of the media are constructed in such a way to dismiss the reality of ECS. Contrasts are set up between facts and research, and dramatic events and “opinions”. The media are presented as only interested in the latter. Part of this involves an “infatuation” with a link between flight and blood clots. Farrol Kahn is a spokesperson for the Aviation Health Institute, and has discussed widely the risks of inflight DVT. This is a very unprofessional term to use to describe the relationship of the media to Mr Kahn. They are not presented as drawing on the information provided by him, or carefully evaluating it, but being obsessed by it and only able to focus on this aspect of the issue. This image of the way the media works is used to dismiss the risk. Because the media are seeking to highlight the risk, any occurrences of it would be given coverage; that they are not means the risk does not exist.

It is also argued that there may not be such a direct relationship between the facts and accounts, which can be used to support a particular view. For example, this message alludes to the idea of such a divergence:

[89] Member FD - Internet forum - 12/5/01

1 DVT is a very high profile ‘in’ condition which has just been brought
2 to the general public’s attention only just relatively recently.
3 Cases are now fairly media-hyped but in relation to the actual number
4 of passengers flying, the risk of having a DVT is low.

It is the way the media operates that has led to the coverage and the belief in the widespread nature of the risk. The risk exists outside of the media exposure, it existed before it was “brought to the public’s attention” but it is a smaller risk than such “hyped” coverage could lead one to believe. Describing it as an “in” condition implies that the issue has the characteristics that make it media-friendly, but that the focus on it is transient and may not last. A focus on the operations of the media counteracts the claims made, and describing the difference between coverage and the real situation allows for a construction of that situation as less serious or important.
However, when the risk is being emphasised, the press are constructed in a less unflattering light, and more benign motivations are ascribed. For example, one member states that “the press highlights” what is going on (TG, Internet forum, 4/12/00). Using the term “highlights” implies that what is being described exists, and that the media are merely relaying information about it. Similarly, the media may be constructed as working to obtain facts, information and answers:

[90] Member MK - Internet forum - 22/11/00

1 Living where I do, I’m very very glad that our press is still free to ask embarrassing questions

This constructs the media as part of the right of freedom of speech. The phrase “living where I do” carries an implicit comparison to other places where free speech might not exist, or suggests that given all the bad things happening where the member lives it is essential that they have a press who are free to report. The press is not presented as sensationalist or manipulative, but as working for the people to provide them with information; it can be seen that (following Herschell, 2001), use of the pronoun “our” constructs this image. The idea is presented of the media actively investigating issues by asking “questions” about them, which implies that the issues exist, rather than being merely ‘hype’ or written about to increase circulation figures.

10.5.2 Passengers and blame

I will consider how messages construct the position of the passengers, and how blame may be ascribed to them for the incidence of ECS. In the forums studied, whether blame can be levied and on whom depends on two key factors: information, and behaviour. Do passengers know about the risks of ECS and how to avoid them? Do they choose to behave in such a way to avoid ECS or is such a choice denied to them? How these issues are framed constructs the risk in a very different way.

10.5.2.1 Knowledge

Some members argue that airlines need to take an active role in investigating DVT, and that even though passengers may have characteristics that make them more susceptible to a DVT, the airlines are to blame for the lack of information they give:

[91] Member BS - Internet forum - 6/11/00

1 What is interesting is that some people are predisposed to DVT either due to medication or some other disease process. The reason for media and passenger interest in this is that at no stage do airlines inform passengers of the health risks associated with flying, and that is where the difficulty lies.

This message takes the blame for ECS away from the passengers; it is not about their behaviour but about health factors. Use of the word “predisposed” constructs ECS as something latent in passengers, triggered by air travel, rather than being their fault because of what they do. That people may be taking “medication” and that this increases their likelihood of ECS further takes the responsibility away from them; an incident caused by someone’s medication cannot be their fault. Diseases are presented as things that happen to people; there is no element of their own agency here. The message also offers an explanation for the interest in the issue – this is not media sensationalism or passenger hysteria but a legitimate interest perpetuated by a
lack of information from the airlines. The media are cast in a relatively benign light here, acting in the interests of uninformed passengers, seeking to spread the word on the issue, and compensating for the lack of information from the airlines. The author is very clear about this, as at "no stage" do the airlines reveal this information.

The issue of knowledge is key and much in debate, and other messages present this differently:

[92] Member TG - Internet forum - 3/12/00

1 If passengers indulge in known activities that encourage overt symptoms,
2 then is that the fault or negligence of the airline?

It is made clear that these are "known" activities, there is no doubt here that these passengers are informed and know what they are doing - even their symptoms are "overt"; no symptomless clots stealthfully creeping up on unsuspecting passengers here. It is also significant that they are described as "indulging", implying that passengers are making a deliberate behavioural choice. It also implies a conscious decision to treat themselves to more enjoyable, even slightly selfish and decadent, activities, rather than the sensible straightforward activities that they know they should be engaging in.

10.5.2.2 Voluntary or imposed risk: Risk as a passenger's responsibility

The second key issue in the construction of the passengers is whether any risk is assumed voluntarily or is imposed upon them. Do passengers knowingly subject themselves to the risk of a DVT or is it something they are held hostage to by a secretive and uncaring airline? Messages use similar tools to construct this idea in different ways.

[93] Member TG - Internet forum - 12/11/00

1 If you were ill or harbouring some ailment prior to your flight, then don't fly-
2 nobody is forcing you. The 'lack of leg movement' is as much your fault for not
3 getting your bum off the seat and having a wander about; you are not tied in or
4 handcuffed you know - there is no extra charge for taking a walk up and down
5 the aisle. The 'lack of exercise' is a bit thick; 99% of people do not take proper
6 'exercise' anyway, never mind having the facilities for such 'exercise' anyway.
7 I'm sure there are some good books you can buy on seated exercise manoeuvres.

In this message, avoiding an inflight DVT is presented as passengers' responsibility, not the airlines'. Not only do passengers voluntarily assume the risk when they choose to fly, but they could take precautions against it if they wanted to. It had previously been stated that the airlines make this difficult or impossible (such as not giving passengers the opportunity to move about), but these reasons are summarily dismissed and causes are instead couched in terms of passenger laziness. The message is structured in terms of the passengers' agency to emphasise their responsibility: "if you are ill"; "getting your bum off the seat"; "you are not tied in". The member also puts the issue into a wider context to detract from the seriousness of it. Instead of it being a scandal that the aircraft does not permit room for sufficient exercise and the crew actively discourage it, this is a ridiculous criticism when people do not exercise anyway, especially when they point to a situation in which they
perceive they are being deliberately prevented. The reference to books on exercise states very clearly that it is the passengers’ responsibility not only to avoid a DVT, but to find out the information themselves that they need to be able to do this.

Passengers are also presented as assuming the risks of ECS themselves because they choose to sit in cheaper seats where the risk is greater. They could have more room, but deliberately decide not to. The airlines cannot be held responsible for this:

[94] Member TG - Internet forum - 12/11/00

1 If it’s more leg room that you’re really after, then buy a seat in a class which gives
2 you the leg-room that you want. You pay for what you get. How much leg
3 movement/exercise area does your car give you? Do you spend more time in your car
4 than on an aircraft? Dehydration is self induced-- if you do not drink, what do you expect?
5 Does the airline you are talking about not give you a cup of tea or coffee, or a glass
6 of water every time you ask for one? Be prepared is a good old motto.

The author presents the airlines as doing all they can, but that it is up to passengers to be prepared — and it is reasonable to expect them to be: a “good old motto” is an interesting phrase. This is an interesting use of what Edwards and Potter (1993:37) describe as the ‘vagueness of idioms’. They note that such phrases may be used because they are difficult to challenge whilst giving the impression of a “distillation of a common wisdom”. Here, the phrase implies that being ready for eventualities is something that people should think about, this is not a new or controversial idea. This also makes it harder to undermine, as it is presented as something that no one could argue with. This therefore also applies to flying. The duty of care that an airline has is also brought into question here, but it is clear that the onus rests with the passengers. They choose where they sit, and how much they would like to pay. They put a price on how much they value their health and comfort, and it cannot be up to the airlines to do anything more about this, if passengers only value their safety up to a certain point. The leg room on an aircraft is compared to that of a car, and the point is made that these things are comparable. It is not the case that when someone is onboard an aircraft, the airline assumes responsibility for how much room they have, how comfortable they are, and what arrangements there are for them. These are all still the choice of the passenger, and how much they choose to pay for them.

10.5.2.3 The imposition of the risk

However, other members use ideas of voluntary and imposed risk to argue that passengers have little choice over the service they receive or the behaviour they can engage in. This post describes the impracticality of exercising during a flight:

[95] Member FP - Internet forum - 28/07/01

1 For those who are very tall, the notion of being able to do ‘at the seat’ exercising is a joke
2 (and the airlines know it), when the knees are pinned hard against the seat in front.

The member is clear that there is little choice over whether to take exercise or not, and it is not a case of laziness or ignorance but the physical confines of the aircraft restricting any movement at all. It is made clear that exercising is simply not possible — it is ridiculous enough an idea to be “a joke”. As a ‘notion’ it is only a view or opinion, and is only vague and insecurely based — not a ‘possibility’ or even an ‘idea’.
The member presents the image of having no choice about carrying this out. Further, knees are “pinned hard”, an ‘extreme case formulation’ (Pomerantz, 1986) that carries a lot of force. “Pinned” is a word that implies being fixed in that position without any choice or possibility of movement - it is not just that conditions are ‘cramped’ or ‘uncomfortable’. It is also phrased in terms of being something that happens to one’s knees - the passenger has no agency here in what happens to them or to do anything about it. This is contrasted with the image of “being able to do” exercises - the ability that passengers have to do something has been taken away from them. What makes this worse is that this situation is presented as a risk definitely imposed by the airlines, who are well aware of this problem. The presentation given is that the airlines say one thing but know another - they may advocate exercising but this is contrasted with their actual attitude. The implication of course is that they choose to do nothing about it.

Personal experience is also used to challenge the constructions about passenger behaviour and their ability to avoid DVT:

[96] Member PR - Internet forum - 23/01/03

On a recent flight I tried to stand in/near the back galley because I had leg cramp, I was told to sit down, the stewardess told me I was in the way and there was nowhere for me to stand on the aircraft. I refused, and an argument ensued to the point where I was afraid that I will become accused of instigating an air rage incident, and I decided to sit down, still with leg cramp.

The member describes trying to take action to avoid a DVT, and being very clearly prevented from doing so. The member was prohibited from standing and describes being told that there was “nowhere” to stand - so the airline allows passengers no opportunity to move about at all. What is more, the airline will make determined and continued efforts to ensure that passengers do not move about - staff will instruct passengers, explain to them, ‘argue’ with them (in what is implied to be a heated manner), and make them feel intimidated enough to sit down. The member presents this as passengers being “in the way” if they try to look after themselves - the airline does not value them and their concerns. Passengers are denied any opportunity to help themselves. They can “try” but this agency is taken from them and the only decision they are allowed to make is which is the greater risk - accusations of air rage or cramp and possible ECS. The member therefore presents the issue as a case of an imposed risk that passengers are not given any opportunity to avoid. This particular post opened up an interesting thread of messages. The following is a message that was given in response:

[97] Member BS - Internet forum - 23/01/03

Unfortunately, the legal situation is that you must obey the lawful instructions of the Flight Crew. I would imagine that they had work to prepare or carry out and that you would have been in the way.

While this message is seemingly sympathetic to the plight being described in the previous post, it carefully dismisses any blame being directed at the airlines. It does this subtly, for as Potter (1997:109) says, actions that are delicate or sensitive may often be carried out indirectly. The member describes ‘imagining’ that the crew had work to do. This has the effect of softening the comment, rather than baldly stating
‘the crew had work to do’. The member also starts off with “unfortunately”, implying support and sympathy for the plight of the passenger, but very quickly construct the airline crew as behaving exactly as they should have done, stressing twice the “legal” requirements behind their actions – something that is hard to argue with. The message goes on to emphasise that the crew were trying to carry out procedures as part of the airline service (“they had work to do”), so the member’s behaviour was interfering with the operations of the crew. Interestingly, the staff are called “flight crew” here, in contrast to the “stewardess” in the previous message. ‘Stewardess’ implies someone who only serves refreshments to passengers, while flight crew is a more generic term and could encompass the pilots, inflight staff manager or any member of the team. While refreshments might not be a priority if someone has a cramp, the safe flight of the aircraft might be. Using this term, a more modern one for inflight staff, brings with it assumptions about the importance of their role and the need to obey their instructions. The presentation in this second message is of the crew not being difficult or unusually awkward but merely trying to get on with their job, issuing “lawful” instructions - and the passenger as preventing that.

Other messages also attempt to counter claims about DVT being the fault of passengers because they are not prepared to pay for what the service costs:

[98] Member JN - Internet forum - 12/11/00
1 And I’d be happy to pay a little more for human conditions, but don’t necessarily want
2 (and can’t always afford) Business Class. We’re talking about expecting a reasonable,
3 tolerable degree of comfort and safety when we travel, not luxury. The last time I flew
4 to the West Coast with BA, I had even less space than I’ve ever had in a bus, train,
5 or even the back seat of many cars, and that simply isn’t good enough. On that
6 particular route (Phoenix) there is no competition, and £520 should have bought
7 me something closer to a proper standard.

This message invokes ideas about what it is reasonable to expect and to pay for on a flight. It talks in terms of “human conditions”, clearly emphasising that what is available at the moment does not even reach this most minimal of standards. The member also uses terms such as “tolerable” implying that not much more is being asked for here; and in terms of such basic things as “safety”, requests that can hardly be dismissed as unreasonable. Using such ‘extreme case formulations’ (Pomerantz, 1986) as “less space than I have ever had” really stresses the poor quality of the service in relation to other forms of transport, and this comparison is used to emphasise the reprehensible position of the airlines. This is compounded by mention of the cost of the flight, on a route where “there is no competition”. This implies that the airlines are not charging what the service costs but the highest price that they feel they can get away with. It is not therefore a case of passengers being too irresponsible to pay for a service which gives them decent conditions, but that the airlines charge prices that most people would not be able to “afford” to pay and give a substandard service for it.

10.6. Science

Having considered how airlines, passengers and the media are variously constructed, I will now turn to science. Analysis of messages reveals how members use science to back up or dismiss a claim. The way science is constructed is also revealing about
members, their perception of the issue, and their view of the operations and principles of science itself.

I have so far indicated that messages attempt to create a particular construction, and while these constructions may be radically different, the same tools may be used. Messages may use science to do this in a number of ways. They discuss the need for science, how science proves their case, and how it can highlight the deficiencies of other claims. What is key here is that whilst making different claims, the ways in which this is done are remarkably similar.

Useful to note here is Gieryn’s (1995) discussion of the construction of boundaries, and how the border between science and non science is built, maintained, and defended. As he describes, these boundaries are not fixed by logic, rather they are drawn up by local actors and are temporarily specific. What I am interested in is how the members of the forums use claims about boundaries to discredit others, and to substantiate their own claims. Gieryn goes on to describe that one of the critiques of essentialism is that it defends a boundary around science because of the special nature of scientific inquiry and knowledge. As Woolgar (1988:18) points out, this is a view that has been roundly dismissed. In this chapter I want to highlight how the members use essentialist ideas in their claims – so in Gieryn’s terminology, be a constructionist watching the essentialists at work (1995:394). As Wynne (1995:375) says, social constructionist research has a “commitment to avoiding a priori assumptions about what science is”. I want to explore how others define this.

10.6.1 The need for evidence

A common theme in many posts is that for a final decision to be reached about the risk of ECS, evidence is needed. Some authors have already reached this decision, and this is because they have the evidence that it does or does not exist. Therefore, pointing to evidence is a way of backing up the claim being made, whatever this claim is. For example:

[99] Member RK - mail based list - 01/05/02

1 With all due respect and deference, I am not aware of any scientific proof that air travel and DVT are causally related. Instead, I believe that the only real evidence we have is that patients with risk factors are at risk of developing DVT/PE any time that they travel (any mode, any time, anywhere) for a prolonged period of time. There is not a single bit of defensible proof that suggests that normal passengers will experience DVT/PE at any rate greater than that expected for the general population.

This member forcibly makes the point that no evidence equals no risk. This is interesting in light of what Fahnestock (1989:39) notes about scientific rhetoric: the “absence of evidence is presented as evidence of absence”. The member uses a number of extreme case formulations (Pomerantz, 1986) to emphasise this – there is not “any” and “not a single bit” of proof. In the message, the member is using both offensive and defensive rhetoric; the member’s claim is presented and other contradictory ideas are oriented to at the same time. The member implies that there is a distinction to be made between evidence which is “scientific” or “real”, and that which is poor or improper. The rigours such evidence can withstand are also described, and if evidence is genuine it will be “defensible”. This orients to the other ‘evidence’ that exists on the topic, and implies that this would not stand up to scrutiny.
and is not real. The notions of what proper scientific evidence is are called upon here to maintain that the risk does not exist. Further, a contrast is built up between the evidence that exists and that which would be needed by use of the word “instead”. There is no proper scientific proof about air travel – the only evidence that is available is that risky passengers are at risk. This is “real evidence”, and it is emphasised, again by use of extreme case formulations – risky passengers are at risk any time they travel, anywhere, by any mode of transport. This is contrasted with the situation for “normal” passengers for which no such evidence exists. Because they are normal, the risk of ECS from air travel for them does not exist, and there is no proof of it.

However, when the link between DVT and flying is being supported, a lack of evidence does not necessarily indicate no risk; merely that not enough research has been carried out:

[100] Member FP - Internet forum - 30/7/01

1 As any medic/scientist would tell you, the reason for a lack of scientific evidence
2 showing a link is due to a lack of good studies, and the inability to get reliable results
3 because of the number of factors involved.

This again draws attention to ‘good’ and ‘bad’ science. Not enough good studies have been carried out, the ones that exist and found no link are unreliable and clearly not good science. A reason is given to substantiate this claim – there are a “number of factors” involved, and scientific inquiry is difficult. This is why studies have not found a link yet, not because it does not exist. The message implies that, because the “link” exists, reliable studies would – and will – prove it. This idea is backed up by presenting it as something “any” person from the membership category “medic or scientist” would say. The activities of these people include being qualified to speak on such topics – and furthermore, all of them would say the same.

Discussions about evidence may be used to build up claims; the substance of the claim may be different but the means to substantiate it the same. From examining members’ accounts, a difference becomes apparent between the principles and practicalities of science (as Woolgar, 1996; and Collingridge and Reeve, 1986, have noted: see section 9.3). Pointing to a disjuncture between theory and practice is a way of substantiating the particular claim being made. For example, while it may be useful to state the evidence based nature of knowledge, acknowledgements are presented that there may not be such a linear progression of information leading to certain knowledge. In the messages that follow, arguments about the nature of evidence are used to substantiate the views being presented:
[101] Member BS, Internet forum, 6/11/00

1 Re DVT
2 I agree with the ideas expressed about the lack of definitive studies into this problem.
3 I disagree therefore that DVT due to flying does not occur.

[102] Member AD, Internet forum, 6/11/00

1 [BS's] response raises some very interesting points.
2 As I wrote in my earlier posting the data that is available and credible indicates that
3 air travellers are NOT at an increased risk of DVT. Reading the papers mentioned
4 earlier should allay your concerns in this matter.
5 As for 'definitive studies' ... we all live in hope but so little of our scientific knowledge
6 base is built on definitive studies. Our knowledge tends to develop bit-by-bit as myriad
7 not-so-definitive studies are interlinked and cross referenced.

The second post highlights a divergence between a theoretical ideal of the way
science works and a more pragmatic view. That we "live in hope" stresses the ideal,
but "hope" does not imply that this is very likely to happen; it can be desired and
maintained as an ideal, but is unlikely to be fulfilled. This is something that occurs
not just to the knowledge about flight and health, or even medicine, but to "scientific
knowledge" generally, so the author aligns to a view that is widely applicable and
accepted.

What is particularly interesting about this message is the variation in it. The text here
is just as it appeared, nothing has been deleted. In two consecutive paragraphs, the
member seems to be presenting different views of how science works. In lines 5-7,
the member gives a pragmatic view of science and the impossible ideal of definitive
studies to determine knowledge. In lines 2-3 however they seem to be asserting that it
is possible to know something from the data – not only do data exist but they can be
used to determine the risk of inflight DVT. The member even lists the studies that
prove this. The way to consider this is to try and understand the effects that these
paragraphs achieve. This may be similar to Potter's argument that "people can make
strong statements about what should or ought to be the case in principle, while still
accepting that this is unrealistic in practice" (1997:208). In the message, the member
is suggesting that there will never be anything that is "definitive". Therefore, the only
option is to look to the studies that have been done; and these have outlined that the
risk does not exist. The member is also responding to the previous post (extract 101),
which had assumed that lack of studies did not necessarily mean lack of risk. The
second author is using a pragmatic construction of the workings of science to dismiss
the call for "definitive" work and at the same time presenting the evidence that
contradicts the view of the risk they are constructing.

10.6.2 The good, the bad, and the anecdotal

The use of 'evidence' and what can be included in this term is also interesting. This is
both in terms of the need for 'good science' to form the basis for evidence, and what
types of knowledge or data can be considered as proper evidence.
Firstly, while evidence is required, this must come from ‘good science’. Only good science is presented as being able to find the answers. Details are also given of exactly what this might entail:

[103] Member MD, Internet forum, 30/10/01

1. In order to establish a definitive causal relationship, a large controlled study with statistical validity would have to be performed.

The idea is presented that it would be possible to establish a “definitive” relationship; science could find the answer. However, it is apparent that this would depend on what sort of science that was. The results of a study depend upon the method, and only a particular sort of method would be able to address this. The criteria that this method would have to meet are stated – it would have to be large, controlled, and statistically valid. It might therefore be difficult or idealistic to perform such a study – but it would “establish” the relationship if it were carried out.

The idea of good science of course implies that ‘bad science’ exists. This is used by members to counter unfavourable claims which are based on bad science – highlighting unreliable methods casts doubt on the results. For example, the following message was written about a study that conducted a number of experiments and concluded that there was an increased risk of DVT from flight, and it describes some of the conditions of the study:

[104] Member TG, Internet forum, 12/11/00

1. The doctors conducting this very limited experiment which could be said barely related to normal airline ops admit “despite the lack of an adequate control group at normal atmospheric, our study suggests that RAPID exposure to an air pressure encountered in aeroplane cabins activates coagulation”. On a similar footing, a diver RAPIDLY coming from the depth to the surface faces the ‘bends’ – so what does these rapid exposures to simulated airline passengers count for?

The author is clearly very disparaging about the results of the study, and uses a critique of the method to construct this view. Extreme case formulations emphasise this; it is described as being a “very limited” study, and one that was “barely related” to the normal conditions of flight. The author emphasises that the conditions that the experiment were conducted under were not the same as in an aircraft and make the knowledgeably presented point about speed again to emphasise this. The author even put the word “RAPID” in capital letters in the quote from the authors to make this particular deficiency stand out. The reference to diving stresses this still further, and taps into everyday knowledge to substantiate the point. It may be assumed to be widely known that divers become ill if coming to the surface too quickly; it is not surprising then that the people in the study also fell ill when subject to such conditions, but these conditions were nothing to do with those on a plane. This casts doubt on the applicability of the results to the actual experience of flying. The doctors are quoted directly, but the author describes what they are saying as an admission, rather than a statement, implying that they are conceding that there were problems in their study.

What is also interesting to consider is what is constructed to count as evidence. For example, some ‘information’ is discounted as being ‘evidence’; it can therefore safely be dismissed if it is contrary to an argument:
I would agree, that by published articles alone, the evidence ‘con’ is slender, but on the other hand we do not actually have much evidence ‘pro’ either, apart from a few anecdotes of people who have presented with DVTs after flying.

This is an interesting denigration of what are called mere “anecdotes”. It is not the case that there is evidence; the only data are these anecdotes. The contrast between “evidence” and “anecdotes” is interesting. Evidence is something that appears in “published articles”, and it is what is used to make decisions. “Anecdotes” are not part of this decision making process. This constructs the risk of inflight DVT as negligible and not something worth taking seriously, when what matters are facts and rigorously proved evidence. It is interesting also that people “present” with DVTs, they do not ‘suffer’ them, or they do not ‘occur’. This would be to grant the condition with an independent and real status. That a DVT is “presented” implies that passengers have decided for themselves that they have one, it is their opinion only, rather than something that happened and unavoidably came upon them. Also, there is an emphasis here on clots being presented “after” flying. This detracts from the responsibility of the airlines and from the direct causation of flying with the onset of a DVT. Instead, people decide afterwards that they may have one, when the cause is far more in doubt. The ‘evidence’ of passenger accounts is dismissed as invalid in a debate where evidence is key; and of course, presenting such input as unworthy of consideration undermines much of the argument supporting the link, thereby detracting from its urgency or importance.

The debate over what counts as evidence is also something that is discussed by those with a different claim to make. While in the previous message, anecdotes were classified as not being evidence and were dismissed, this message argues that they should be counted. They argue that the risk is serious, and for what they consider to be compelling evidence (that backs up their case) to be included:

The tendency of the scientist to ignore all anecdotal evidence as being invalid is just stupid. Young, healthy, fit people have died as the result of DVTs after long-haul economy flights.

The author contrasts a political debate over what should or should not be included with what are presented as the stark facts of the situation. This detracts from discussions over whether passengers’ accounts can be considered and what form good evidence might take, and boldly presents elements of the risk that are important enough to overcome all of this. It is acknowledged that anecdotes might not be part of scientific inquiry – it is “scientists” who ignore them – but this does not mean they are not important. Whether such cases are ‘anecdotes’ or not, such is the urgency of the issue that they cannot be ignored.

The response to this message highlights the debate over the nature of what counts as evidence:
Member TG, Internet forum, 22/11/00

1 You say 'Young, healthy, fit people have died as a result of DVTs after long haul flights'.
2 Forgive me, but I cannot recall any reported post-mortems nominating such passengers
3 who have allegedly died of DVT post long haul flights, as being "Young, healthy, fit...".
4 Can you give me the data (who, when, where, how, why) on half a dozen of whom you
5 pledge died in such circumstances please?

The stark assertions in the previous post are countermanded. In order to discredit
them, this author implies that the claims are both improbable and not proper evidence
to be included in the debate. If they were, it would be feasible to provide the
accompanying factual details. However it is implied that this will not be possible
because they do not exist, and because such cases are so unlikely. The pseudo-
politeness of the tone is particularly cutting, as is the direct quoting of the "young, fit
and healthy" description. This is an attempt to show up such a phrase as a sweeping
generalisation, not something that can be proved or that carries any weight in the
evidence based world of medicine, science and research in which the debate is being
played out. This debate over what counts as evidence clearly constructs the issue in a
very particular way, and here it is damningly used to counteract any 'evidence' that
the risk exists.

10.6.3 Difficulties with measurement

A further way of supporting, but more frequently countering an argument, is to
examine and critique the measurements it uses. Knorr-Cetina (1995:152) notes that
what counts as sufficient measurement is negotiable in the making of scientific
knowledge, and Yearley (1994:247) describes how this can be particularly pertinent in
the study of a controversy. Measurement is a particularly contentious topic in relation
to the risk of inflight blood clots. Can the incidence rate be measured, and if so, will
the rules for measuring shape the result? How long after a flight can the cause be
identified as the flight? What if the condition goes unnoticed? What if the condition
is found by the patient but not diagnosed medically? Or if it is misdiagnosed? Debate
rages on these issues. The points made are interesting to consider not just as a way
that members critique each other but for what they say about scientific work more
generally. For example, there are certainly different ways of measuring:

Member BS, Internet forum, 6/11/00

1 Indeed, one of the difficulties with patients suffering from DVT is that
2 the most severe effects may not become apparent until some time has elapsed
3 after the patient has gone home.

This post attempts to increase the seriousness of the risk by pointing to the passengers
with a DVT who may not be included in current calculations of its incidence. This
message builds up the risk; the risk is real, patients are experiencing it. They are
described as "suffering from DVT". This not only portrays them sympathetically, but
presents a clot as something that happens to them, not that they have brought on
themselves. It is a serious enough issue that it has "severe effects". There is no
indication that only some patients suffer these; the presentation is given that DVT is
something that causes these. Ideas about measurement are therefore used to build up
the seriousness of the risk. What is interesting is that they are also used to dismiss it:
How exactly are airlines/doctors going to pin the entire blame on an airline for DVT when the life threatening condition takes weeks sometimes to manifest itself? "..between the development of the initial small thrombi and such an embolism may be anything from days to weeks”. The airlines have thus become an easy scapegoat for the “weeks” of a pre-existing condition to develop through the patients own contributory pre or post flight actions, which are unmonitored and covert.

The difficulties of determining the incidence of DVT and what may count as a DVT caused by flight are used here to construct a ridiculous notion of the airlines being blamed. The member states that because DVTs manifest weeks after a flight it is quite absurd to maintain that the flight is the reason for it. Such measurements are constructed as deficient because they do not take account of crucial factors such as the behaviour of the passengers in the intervening weeks. The message is very clear that such calculations will lead to passengers being absolved of any responsibility yet all the time engaging in irresponsible behaviour. At the same time, the airlines are having the “entire” blame “pinned” on them. They have not been proved in any way to be responsible but have been chosen as easy “scapegoats” instead. Therefore, criticising a method is a way of presenting a different construction of the risk, and the position of different groups in relation to it.

10.6.4 Consensus

The messages studied considered a further necessary requirement for good research – consensus. If facts do exist then surely everyone can agree about them (Fahnestock, 1989; Collingridge and Reeve, 1986; Potter, 1983). To point therefore to a consensus on a finding is a way of substantiating it. Pointing to a study seemingly without this is a way of criticising it.

For example, a way of authenticating a claim being made is to place it in the context of widely established facts:

But I am not the original proponent of this theory of the causative effects of O2 deficiencies in acute and chronic diseases and conditions. I believe that the basic science behind it has been firmly laid some 20 years ago and more, mainly by German, Austrian and Russian scientists, some of them not physicians but physicists and physiologists.

This post backs up its claim by pointing to the longevity of the knowledge it uses, and its wide range of proponents from different disciplines and different countries. The member gives details of how well established the knowledge is, and implies that these are only the bare facts; the knowledge is twenty years old or “more”, developed “mainly” by Germans, Austrians and Russians. The knowledge is actually even better established than the member has mentioned, so much so that there is no need to add any further details, it is so obvious as to not require any additional description (Fahnestock, 1989). The facts of this issue have been “firmly laid” and because it is the “basic science” this is presented as being even more difficult to argue with. The member is not going out on a limb or even trying to claim credit as being the “original proponent”. Instead, the member backs up the claim by placing it in a long and agreed history.
Highlighting a consensus is used to substantiate a claim; and pointing to a lack of agreement is a means of dismissing one. The following message was posted in response to a number of points made by a member in support of a link between flying and DVT. This member attacks this assertion by highlighting the lack of agreement on such ideas:

[111] Member AG, mail based list, 30/4/02

1. If Dr [name of member] thinks his points are valid, could he possibly provide us with a substantial body of evidence to provide a little support for his theories?
2. They do seem to fly in the face of generally perceived knowledge.

Stating that these ideas do not fit in with what is described as “generally perceived knowledge” is used to threaten their validity. The tone of this message makes it very clear that such claims, in support of a DVT-flying link, are not maintained, and it emphasises their lack of grounding in current knowledge. It asks for a “substantial body of evidence”, implying that it would need to be so large to counteract the huge amount that exists in contradiction; and even then, such an amount would only provide “a little” confirmation. The member calls on the principles of science here – of course claims cannot be taken seriously unless there is evidence to support them, especially if they go against what is known – to make the desired point and in order to counteract the previous claim.

10.7. Conclusions

The constructions of the risk of ECS and the positions of the passengers and the airlines in these forums are in many ways a microcosm of the views presented by the passengers and airlines themselves. In the messages here, the responsibility of the passengers is presented in terms of their risky characteristics and behaviour, or in terms of the information given or agency allowed by the airlines for them to protect themselves. Similarly, airlines are presented either as being responsible for the risk, or at the mercy of litigious claims from disingenuous passengers. Whether the risk was voluntarily assumed or imposed is also differently constructed. Messages presented these opposing views, but did so in remarkably similar ways. For example, a presentation of self as knowledgeable and authoritative was given regardless of the claim being made. Contexts and contrasts were used by both ‘sides’ in the debate. The media was invoked in the same way to support and dismiss claims by authors presenting different views.

This chapter has also included an examination of the use of science in messages. This has highlighted how members invoke principles of scientific work to attack or defend claims. Firstly, for example, science is deemed to be evidence based. This is used to present a view that lack of evidence means lack of risk; but also that lack of evidence means that science has not found the answers – yet. Secondly, there are debates over what counts as evidence; anecdotes can be included if they back up a particular view, or disregarded if they do not. Thirdly, scientific inquiry is deemed to be based on a proper methodology; so critiques of the methods used can be used to build up or dismiss results. Fourthly, consensus is deemed necessary; so demonstrating consensus can defend a claim, while an absence can be used to attack it. The point is that this is done by members in remarkably similar ways.
A final point is a comparison of the view of science presented here, and in Chapter Nine. Gilbert and Mulkay (1984:51) have described the systematic and meaningful differences which often exist between scientists' formal and informal accounts. What I have shown here is that the same principles of science are invoked to support or dismiss claims, and that how these are used is similar between both formal accounts in published journals, and in informal internet discussion forums. In both, science is held up as evidence based, capable of finding the facts of the issue, and being based on a number of key principles. In both, those principles are highlighted where a study does or does not demonstrate its correspondence with them. In both, some of the "realities" of scientific practice were discussed as well and the "myths" (using Collingridge and Reeve's 1986 terms). The way that members and authors do this is surprisingly similar.
Chapter Eleven:

Conclusions, Comparisons, and Constructing a 'Model of Risk'

This research has been an analysis of discursive constructions of risk. I have demonstrated this through the case study of ECS. In this chapter, I draw some conclusions about the construction of ECS, by making some comparisons between the groups studied. I also discuss how the processes of construction take place.

I then move on to consider whether these conclusions are applicable beyond ECS, by reflecting on whether they apply to a case study of another risk. I then discuss the significance of the findings of the research, and the wider resonance of the aspects of risk construction documented here.

What I am able to conclude about ECS and any other risks is obviously dependent on the method used to generate the conclusions, and whether DA is a method through which it is possible to make conclusions at all. This will be more fully discussed in the next chapter.

11.1 Key conclusions about the construction of ECS

11.1.1 Risks do not 'just happen'

A fundamental part of the construction of the ECS by all groups is that incidences of it do not 'just happen'; they are not constructed as unforeseen, unpredictable, random events. For example, part of the passenger groups' presentation of the issue focuses on the conspiracy of silence by the airlines – the risk existed, they knew about it, but chose not to tell passengers. There was a risk even before passengers knew about it, before it became an issue; so even when clots were happening without the 'recognition' of what they were, they were still not coincidental. That the risk is not 'an accident', and that it can be discovered, quantified, and known about is the whole ethos of medical research on the issue. The risk exists, and it is science that will find the answers about it. All groups also emphasise the discriminate nature of the issue. Certain passengers are more likely to contract a clot than others. Pre-existing medical conditions may make it more likely. Behaviour onboard a flight is a crucial factor. Immobility increases the chance; so it cannot be randomly distributed. What these factors are, and who these risky passengers might be, is part of the debate over the issue; but the point is that it is possible to identify these people – and to know about the risk.

11.1.2 Measuring the risk

While all the groups presented the idea that it is possible to know about the risk, very different constructions of it, its frequency, seriousness and prevention were given. Issues about measurement, and what the rules for measurement are, were key. Two issues were crucial – conceptions of timing, and conceptions of diagnosis. Conceptions of timing concern the degree of temporal specificity both of the
occurrence and causality of the clot. A clot might occur while a passenger was onboard a plane, immediately afterwards, or three weeks later. Differing conceptions of timing were therefore applied either to link the clot directly to the flight, or to dismiss any causality at all. Further, if a passenger develops a clot some time after a flight, the construction might focus on what they have been doing in the intervening period. It might also focus on what they did before the flight. These issues were therefore used to determine both the incidence rate for flight related blood clots, and the culpability for those that do manifest.

Conceptions of diagnosis concern the differing experiences of a clot, and how a clot is ‘discovered’. Presentations may stress that the condition can be symptomless and go unnoticed; that it might be found by the patient but not diagnosed medically; that it might be misdiagnosed altogether; or that if it exists it will be diagnosed and measured. How these issues are treated has implications for the measurement of ECS that is reached. Further, differing presentations are given of the incidences that are measured. Clots may be described as being discovered, diagnosed or believed to exist. If they are ‘discovered’ this implies that they existed independently of the passenger and are real; if they are ‘diagnosed’, this implies an authority to be able to do so and substantiates their existence; if they are ‘believed to exist’ (or ‘reported’ or ‘presented’) this casts doubt on whether they an ‘objective fact’ and presents them as a subjective opinion only.

Extrapolations of the risk are also used a way of measuring it; and again, these are contentious and differently used. Figures may be presented for the number of people who are diagnosed with a blood clot each year. These may be compared to the number of people who fly and an estimate of the proportion of flyers who would be expected to get a blood clot is reached. But this is fraught with difficulties. Are flyers the same cross section of the public who are diagnosed with clots? Many people are frequent flyers, how does this affect their risk? How are the other stated risk factors built in? Answers to these questions, and questions about timing and diagnosis, shape the existence, frequency, and seriousness of the risk, and have implications for who can be blamed for it.

11.1.3 Prevention is better than cure

A simple presentation is maintained in the texts analysed - if the risk can be known about, it can be managed and prevented. How that might be done is contested by all groups - because how the risk can be prevented depends on what causes it. Knowledge is presented as key, but again, what knowledge that is, and moreover, whose knowledge it is, is crucial. Prevention is also closely related to presentations of the seriousness of the issue. If the risk is something that can be avoided with a few simple measures, then this can be used to dismiss it. It cannot be that serious, and does not need much action taken, beyond just making people aware of what those measures are. Conversely, the risk may be constructed as a needless risk and easily avoided – and this makes it more tragic that people are not given the opportunity to be able to do so. Indeed, it may be possible to avoid it all together. The key point is that because incidents of ECS do not just happen, and knowledge exists on causal and contributory factors, this can be used to manage the risk. How the risk can be prevented is dependent on its cause. Whether the risk is voluntarily assumed by passengers or imposed upon them by airlines is a crucial and
highly contested part of the debate. If it is assumed by the passengers, then it is their responsibility to prevent it. If it is imposed by the airlines, then avoidance is their responsibility. Prevention may be constructed to be in terms of actions that are required. For passengers these may include doing in-seat exercises, drinking lots of water, and walking around the cabin. For the airlines these may include improving seat pitch, giving out lots of water, and allowing passengers the chance to move about. Prevention may also be constructed in terms of knowledge. If passengers voluntarily assume the risk they should make them themselves aware of it and the measures to combat it. If the airlines impose it, they should provide passengers with the information they need and dispel the 'conspiracy of silence'. Prevention may finally be constructed in terms of a 'moral responsibility'. If passengers assume the risk, then they have a responsibility to themselves. They only have themselves to blame if a clot occurs – especially if they do have one of the risky characteristics, and ignore the advice on prevention. But if airlines impose the risk, passengers are helpless against it. They are at the mercy of the airlines to tell them the risk exists and what can be done to avoid it. In particular, if certain people are at greater risk, then it is particularly important for the airlines to protect them, and especially tragic if they do not.

11.1.4 Naming and blaming

One way of apportioning responsibility is through the name that is used for the issue. Debates over the 'correct' terminology are a key characteristic of the construction. The name of the risk is crucial in presenting whether it exists or not, how serious it is, what causes it, and of course, who can be blamed.

The term 'ECS' can be used to present or dismiss a risk. 'ECS' has a number of associations; that it is a condition caused by flight, and caused by the particular conditions of that flight. It is something to do with being in economy class that causes it. This focus on location therefore focuses attention on the airlines, and away from the passengers. It is not what they are doing but where they are that causes it. It can therefore be used to imply that the airlines are responsible, and can be blamed. 'ECS' is a term therefore variably used by different groups who may either want to adopt these associations, or disregard them.

Interestingly, both British Airways and Airhealth describe 'ECS' as a "misnomer". BA may be trying to avoid the implications outlined above. For Airhealth however, the risk is still flight related. Indeed, describing the term as inappropriate is used to emphasise the risk, because anyone on a plane can suffer. Blood clots are therefore directly connected to the experience of air travel and are presented as even more serious and insidious.

Other terms for the issue are also used. It is frequently referred to as 'the risk of DVT', or just 'DVT'. This is a medical term and means the focus is much more on what happens, rather than where it happens or why. This does not of course mean that this is therefore a more 'neutral' term. Use of 'DVT' has effects that may be drawn on, such as this removal of focus on the conditions and experience of air travel.

Another term that is used is 'traveller's thrombosis'. This was developed by British Airways, and they use it as the name for the issue. It has very different associations than 'ECS'. With 'traveller's thrombosis' the focus is on the passengers, and away
from air travel. It is something that anyone who is travelling or who sits still for a long time may contract. It is not location specific, but about peoples' actions and agency. The very phrasing of the term portrays it as belonging to the passengers; it is their responsibility.

As well as which name was used, how it was used was also key; this could be either defensively or offensively. If the term being used was unproblematic, then little attention was drawn to it, and the assumptions and associations with it were not questioned; they were either explicitly or implicitly drawn upon. If a term that had undesirable associations was being referred to, then the term was problematised. For example, where it is being suggested that ECS does not exist, the term may be given in speech marks. This detracts from its meaning as a normal term used in everyday language, and implies that it is only what this issue is called, not actually a description or a very appropriate name for it. Additionally a different name for the issue altogether may be used, either explicitly or implicitly as a replacement for 'ECS'. More direct challenges to the meaning of ECS therefore detract from the unfavourable implications that the term has. The name that is used for the issue therefore constructs the existence and nature of the risk, and who can be blamed for it.

11.2. Comparing constructions

As the analysis in the preceding chapters and this summary demonstrates, ECS is constructed quite differently by different groups. What is notable, however, is that groups actually construct these different images in very similar ways. I will now explore four main processes by which this is done.

11.2.1. Presentation of self

For each of the groups studied, presentation of self was crucial. If claims are to be taken seriously, then the author has to establish themselves as competent, knowledgeable, and with the authority to speak on the issue. The status that a group or individual has may have to be 'worked up'; it may not automatically be accorded. This was particularly pertinent for individuals in the discussion forums. They are anonymous, and can assume any identity. This may mean that they have to work harder to establish this authority because just stating that they should be accorded it may not be effective. While very different views were being presented, these means of authoritative self presentation were remarkably similar.

Authors portray themselves as having access to the facts of the situation. While rumour, controversy, and incorrect versions of the issue exist, they are able to report on the truth. They give an impression of having a thorough command of the knowledge of the situation. They present the facts they have as proven and beyond doubt. Of course, this is exemplified by the medical researchers. Not only do they have access to the facts, but it is through their investigations that those facts are determined.

Externalising devices may be used so that the group or individual seems unbiased, independent and distant from their accounts. For example, a common procedure was to use an 'active voice' and present the views of an expert to substantiate the particular claim being made. An empiricist repertoire was also adopted to make it seem as if the
facts were ‘speaking for themselves’, rather than having been ‘narrated into being’ by the author.

As well as a presentation of self as knowledgeable and having access to the facts, a presentation was given of self as responsible and caring. This was regardless of the claim being given, but was used to substantiate it. It was also a way of engendering support for the group themselves as well as their construction of the issue. Similarly, presenting the proactive role being undertaken was used to gain support for self and the view of the risk. Groups and individuals presented themselves as addressing the issues and taking action on them.

11.2.2 Management of stake

Issues of stake were similarly key for all groups. No group or individual wants to have what they say dismissed as a product of their interest in the issue. The groups studied here cannot pretend that they do not have an interest. For example, airlines have a commercial interest in playing down its significance. Campaign groups were set up in the aftermath of ECS. They both use two processes here; stake management and stake confession.

To manage stake, both groups try to appear as if they are presenting the facts; but of those facts being independently established. The implication is that because facts are value neutral, the group cannot be biased in their presentation of them, as they are merely outlining what is already known and proven about the issue. Different groups may also present themselves as being on the same side as the passengers. For the airlines this manages stake because it makes them seem as if the information they are presenting is in the interests of passengers as well as themselves. The implication is that the information provided is reliable and accurate because they have a self interest in making it so. For campaign groups, stake is managed by presenting themselves as acting on behalf of passengers, and doing everything they can to improve things for them. Of course therefore the information they present will be accurate because it would be entirely contradictory to their aims and ethos if it were not so.

Both groups also engage in stake confession. To acknowledge that the risk exists and their involvement in it is a way of disarming criticism. An airline cannot be accused of being involved in a conspiracy about ECS if they are stating that it exists and providing advice on how to prevent it. Once this has been established however, the risk that is stated to exist can be minimised and factors other than the flight be blamed for it. For campaign groups, stake confession can be used as a powerful appeal for support for them and their view of the issue. To describe themselves as formed to fight ECS is a way of engaging sympathy and encouraging empathy with their position. They know people who have suffered because of ECS, they know how serious ECS is, and it is because of this that they want to take action on it.

11.2.3 The use of science

Scientific fact and research is drawn on by all the groups, in both their presentation of the issue, and of themselves. Texts may use science to do this in a number of ways. They discuss the need for science, how science proves their case, and how it can highlight the deficiencies of other claims. Of course, different scientific facts are drawn
Upon, and they are used to give very different presentations of the issue; but the way that science is used is very similar.

For example, to characterise themselves as authoritative and responsible, groups may quote from scientific figures and studies— but those that support their case. The airlines examined emphasised research findings which bolstered their course of action. For example, BA state that they have supported a recent scientific study, that showed an association between long journeys and the occurrence of DVT— but no evidence that flying is a specific risk. They cite a consensus view from research that it is immobility rather than the environment which is a factor. By appealing to what is accepted, and pointing out that they have taken part in research and have nothing to hide, they use science to confirm the idea that they cannot be held to blame. Appeals to medical research are used as proof of the airlines’ lack of liability, yet responsible attitude towards the issue.

Campaign groups want to seem to be in command of the facts of the issue and as presenting accurate information, and scientific research is drawn upon to do this. Assertions are referenced to scientific sources. Where scientific research has found no link between blood clots and flying, the research carried out is denigrated so that the conclusions it draws cannot be taken seriously. Research that gives findings in keeping with a group’s aims may not be subject to the same methodological scrutiny, and the results are taken as “proof” of the existence of the risk.

The use of science in the construction of the issue is exemplified by examining the accounts produced by online discussion groups. These highlight the way in which the principles of science are used asymmetrically both to attack and defend claims. Different ideals about science are invoked to demonstrate that a study did or did not live up to them; or the ideals of science are questioned if this supports or dismisses a claim. Because science is presented as evidence based, translating information about the world into knowledge, and dealing only in facts, then using science to back up the argument being made can be a powerful tool.

11.2.4 Offensive and defensive rhetoric

The use of offensive and defensive rhetoric was pervasive. As has already been indicated, it was part of all the processes identified here. Groups present themselves as giving the facts on the issue; contrary to the rumour, speculation, and false information that exists or is presented by others. Stake may be managed by admitting that the risk exists, but presenting it as someone else’s responsibility. Scientific research is described in ways that support studies and simultaneously critique others.

There are many other ways in which offensive and defensive rhetoric is employed. For example, airlines acknowledge that the risk exists, thus warding off critics who might accuse them of ignoring or hiding it; yet they discuss it in terms of the influence of immobility not of flying per se. British Airways redefine the issue both to emphasise their own pro-active role and to orient to their critiques; they describe themselves as providing information, not responding to panic. Campaign groups present themselves as giving the information on the risks of ECS; with the implication that the airlines have not done this. The positions of the passengers and the airlines are often juxtaposed with one another. Defensive rhetoric may be used to describe the
measures that passengers can take to avoid ECS. This may also mean offensive rhetoric is used to construct the position of the airlines and the degree to which they make it possible for passengers to carry these measures out.

Offensive and defensive rhetoric is also pervasive in accounts of science. For example, where authors point to aspects of a study as being biased, this can be to both criticise that particular study, and to imply that others that have been carried out were free from bias. Authors may use criticisms of method offensively and defensively. They can cast doubt on particular results by pointing to a methodological issue that should have been addressed, and then describing how it was in their study.

It has therefore been possible to identify the same discursive patterns being used to justify or dismiss very different views. This suggests something of the universality of some of these patterns, if they can be analysed as performing diverse substantive tasks but achieving similar effects. The generalisability of these conclusions will be further considered now, and in Chapter Twelve.

11.3. The applicability of analysis – developing a ‘model’ of risk construction

One of the key questions raised in Chapter Three concerned generalisation, and the extent to which the analysis from one study was comparable or useful in another. This theoretical issue will be re-considered in more depth in the following chapter; here I will consider the applicability of the analysis of this research for another case study.

I am proposing is that it may be possible to develop a ‘model’ of the construction of a risk which is applicable to other cases, using the four themes that I discussed in relation to the ECS data. While it will not be possible to expand on this in much depth, the example I will focus on is the controversy surrounding wind farms.

11.4. Tilting at Windmills?: The risks of wind energy

11.4.1. Risks do not ‘just happen’

The development of wind energy is complex and controversial. While opinion polls consistently report high levels of public support for wind energy, applications in particular locations are often met with vocal and vociferous opposition. What I intend to show here is that elements of the issue are constructed using similar processes to ECS. From the ECS data, I discussed how the risk of a clot was constructed by all groups as patterned instances that could be predicted and prevented. There are aspects of the debate over wind energy that are similarly constructed.

The most commonly cited risk from windfarms is the risk of damage to the landscape. There are other associated risks, such as the risk to birds, the risk to house prices, the risk of noise pollution, and so on. All of these are balanced against the global gain of generating renewable energy and reducing the use of fossil fuels. These issues are all differently constructed by the stakeholders in the debate – such as developers; local and national opposition groups; environmental groups (such as Greenpeace, Friends of the Earth and WWF); local and national government; and the media.
Those in favour of windfarms present these risks as things that can be known about, that can be prevented, or indeed, construct them as not being an issue at all; however, the point is that it is possible to know whether they do pose a risk or not. Indeed, the whole ethos of environmental impact assessment (EIA) is that it is possible to know about and take account of risks. At the same time, those opposed to wind farms also construct the risks as something that can be known about. What is interesting is that even risks that are acknowledged to be subjective, such as landscape impact, can still be assessed and evaluated.

For example, the following is from the summary of the EIA produced by a developer for an off-shore windfarm:

[1] Extract from AMEC: Lynn Offshore Wind Farm Environmental Statement Non-Technical Summary [http://www.amec.com/uploadfiles/LynnNTS.pdf downloaded 24/06/03] [line numbers added]

1 The following document is a Non-Technical Summary (NTS) of a full  
2 Environmental Impact Statement (ES) that has been produced for the development.
3 The ES provides the results of the Environmental Impact Assessment (EIA),  
4 the process of predicting and evaluating the impacts of a project on the environment.
5 The ES is submitted, with the application for consent, to be taken into account by the  
6 competent authority in forming their judgement on whether the development should proceed.
7 The ES covers all the potential significant impacts caused by the development proposals.
8 The EIA has been managed by AMEC, with independent experts commissioned for specific  
9 studies. Specialist consultants deal with land/seascape and visual impact, ornithology, marine  
10 ecology, archaeology, coastal processes, hydrology and geology, commercial fishing, shipping  
11 and navigation. All other areas have been assessed in-house by the developers’ own specialists.

In this opening to the document, the company makes it clear that while there are a number of issues when building a windfarm, they have all been assessed. This not only presents the risks as measurable, but presents the company as responsible and knowledgeable in having addressed them all. They state that “all” (line 7) the impacts have been taken into account – this extreme case formulation emphasises that nothing has been excluded. Furthermore, that it is all the “potential” (line 7) impacts that have been considered is a indication of just how comprehensive their approach is; it is not just impacts that are likely or are certain to happen, but everything that could possibly happen has been addressed. This constructs the risks of the impacts in a very particular way. Even those that are only ‘potential’ can be assessed and known about. The company goes on to make it clear that these impacts have been properly assessed. They address issues of stake in the results by describing the “independent experts” (line 8) they have employed, thus distancing themselves from the work and its findings. That they employed experts for “specific studies” emphasises that these consultants really were authoritative in the particular field they were addressing, which reflects well upon the company for having gone to this effort to find them. The word “results” (line 3) is interesting as well. The EIA process does not just produce opinions or conclusions, but ‘results’, factual findings of the expert-led studies. Therefore, the risks of a wide variety of different impacts can be known about.

Opposition groups also persuade that the risks of a windfarm can be described and taken into account, and not need be dismissed as merely being subjective. The following is from the opening statement on the website for a campaign group set up to oppose a windfarm in Whinash, Cumbria:
An unspoilt stretch of Cumbrian countryside, itself worthy of National Park status, would be sacrificed for a politically correct fad which experience has shown gives small return for an immense cost. The landscape has been acknowledged by central government organisations and committees as being of national significance.

The group make their intentions clear; they are opposing the scheme because of the value of the landscape. That the landscape is valuable is emphasised. It is “worthy of National Park status”, a high honour indeed, and it is “unspoilt” which of course implies that turbines would ‘spoil’ it. Indeed, it is stated that the turbines would do more than this, and the area would be “sacrificed” by a windfarm; implying the loss that would be incurred and what would have to be given up and destroyed. Crucially, the group distance themselves from their description of the value as merely their opinion and instead point to both “central government organisations and committees” (line 4; emphasis added) who have determined this. The use of the word “acknowledged” implies that the committees realised what was already known; it is not even just their opinion that the landscape is valuable, it objectively and unarguably is. It is also not just the opinions of the group and their local concerns that the turbines would be unsuitable; they point to “experience” that has proved this. The landscape is valuable because it is of “national” significance; this is not a debate about local or selfish interests but preserving the assets of the nation.

11.4.2. Measuring the risk: invoking the global crisis

With ECS, while groups maintained that the risk existed, they presented different constructions of the seriousness of it. Issues about how to measure it were key. Similarly, measuring the risks of climate change (and the necessity therefore of building wind farms) is a highly debated aspect of this issue.

The implementation of wind power is taking place within the broader context of claims about climate change, global warming, and the need to address these issues. One interesting aspect of the debate therefore concerns the seriousness of global warming, and how this is assessed and measured. If climate change is imminent and deadly, then actions to tackle it may be more readily accepted. If it is doubtful, then windfarms not only sacrifice the landscape, but do so needlessly.

For example, developers may place considerations about windpower in the context of a global environmental crisis, and present themselves as being motivated by concern to take action on it. For example:

As environmental protection and sustainable development are now top priorities worldwide, we all need to consider carefully how the energy that we consume should be produced.

National Wind Power is committed to developing and promoting wind energy as a major renewable energy source for a sustainable future.
This is the opening of the text from National Wind Power, and immediately sets the tone for their approach. They are developing wind energy as a response to the “environmental protection” (line 1) that is required. It is not their judgement of the situation alone, but something that has been acknowledged “worldwide”; these are global issues, and moreover require urgent attentions; they are “top priorities” (line 2) that the company are therefore taking action on. A causal link is implied between protecting the environment and energy production, and the responsibility for addressing this is made clear – this is not just something that the energy companies need to consider, but something that “we all” (line 2) need to do. NWP therefore present themselves as proactively taking action on this, and state that they are “committed” (line 4) to developing windpower as a direct means to achieve this necessary environmental protection.

The commonsensical nature of the benefits of renewable energy and windfarms are evoked in the documents produced by supporters. For example Linley-Adams for WWF (2003), in a report about off-shore renewable energy potential, states that:

“there is wide acceptance of the need to reduce our national reliance on fossil fuels for well-rehearsed geopolitical and environmental reasons”.

Who accepts this is not stated; it is so obvious that this consensus exists and that the information it is so well accepted it does not need even to be stated there; the arguments can be summarised as being “well-rehearsed” because they are so familiar.

However, opponents of windfarms may seek to redefine what is known about this ‘global crisis’. Data from the national campaign group ‘Country Guardian’ highlights this:
The Case for Wind “Farms” Examined

Those who advocate wind “farms” base their arguments on three propositions:
1) that they produce energy without the problems associated with nuclear power
   - risk of accident, problems of waste storage;
2) that they do not deplete fossil fuels, which are finite;
3) that they produce energy without harmful emissions – CO2, SO2,
gases associated with global warming and acid rain.

Fossil fuels are certainly finite resources. The question is whether they are in such short supply
as to cause us concern. A Club of Rome report in 1972 predicted that they would run out by 1990.

The burning of fossil fuels is a major source of CO2 emissions, which have risen dramatically
over the last twenty five years and been linked by many scientists to global warming. Estimates vary about how much the world will warm over the next century, about what the effects will be
and the extent to which human activity rather than natural cyclical effects are the cause of climate change. According to The New Scientist there is broad agreement that the global average temperature
will rise by 1.5 degrees by 2100. It is a welcome phenomenon that governments are beginning
to look at the issue and to form polices to head off potential dangers.

There is a risk, however, that governments will avoid the more difficult political decisions. If we accept that global warming is a major threat to human kind, why did the UK government
impose a moratorium on the move to relatively clean gas-fired power stations
and offer a large cash subsidy to the coal industry? Why has it avoided measures to deal
with traffic growth (emissions from cars are our fastest growing source of CO2
and air travel is becoming a serious contributor)?

In each paragraph of their response to the propositions, the group present themselves as
being in agreement with knowledge about environmental concerns, and concur with them enough so that their claims will not be dismissed as ridiculous; and yet at the same time they subtly undermine them. For example, they agree that fossil fuels are “certainly” finite (line 8). They then change the emphasis of this issue so that it is not about if they will run out, which they can afford to agree with, but when. They cite a seemingly reputable report, one that could be expected to be afforded credibility, and highlight how wrong its predictions were. The implication is of course that any evidence produced today that stresses that fossil fuels will run out soon enough “to cause concern” (line 9) may be similarly flawed.

In the second paragraph the group state that fossil fuels are a “major source” of carbon
dioxide emissions, that these have risen “dramatically” and that “many” scientists have agreed about this (lines 10-11). Yet CO2 has only been “linked” (line 11) to global warming, not ‘proved’ or definitely stated to be a causal factor. Indeed, agreement about this is downgraded to mere “estimates” in the next sentence (line 12), educated guesses only rather than proven knowledge. This uncertainty is not only about what will happen, but also what effects it will have, and additionally about the causes of it; the state of the knowledge is very under-developed. This issue about causes is crucial. Rather than stressing human responsibility for damaging the planet and having to take action, this all may be down to “natural” environmental effects (line 13). The group then cite “broad agreement”(line 14) that temperatures will increase, but again then detract from the seriousness of this by stating that this is 1.5 degrees, and that this
change will take a hundred years. This is not presented as an urgent or pressing problem. Again, they seem to concur with the initial propositions when they state that they “welcome” government action on this; who could not? And yet by saying that governments are only “beginning” (line 15) to look at the issue and that the dangers are only “potential” (line 16) further detracts from their seriousness. This is emphasised by the motives that are ascribed to the policies of the UK government; they are not an attempt to address concerns about global warming. At the same time, suspicion is cast on the actions of the government, and the “threat” (line 18) (not reality) of global warming is detracted from.

What the group have done in this text is attempt to redefine what is known about the state of the global environment and fossil fuels. In doing so, they have created a different background of accepted knowledge in which the windfarm debate is played out. If the group can present global warming as not imminent, fossil fuels as not about to run out, and government policy as suspect, then in this light attempts to site turbines become at best unnecessary and at worst the cause of “social and environmental damage” themselves.

11.4.3. Prevention is better than cure: voluntary and imposed risk

If a risk is known about, then whatever its scale, it will be possible to prevent it. With ECS, a key aspect of this was whether the risk was felt to be voluntary or imposed. Texts about windfarms show a similar phenomenon.

For example, developers may present themselves as taking action on global problems – on behalf of the people. This text is from a public information leaflet produced by United Utilities for a proposed windfarm off the coast of South Wales:


1 We are committed to working with communities that will be directly influenced by
2 the Scarweather Sands project. We aim to deliver significant value
3 not only to these local communities but to Wales as a whole

The project is presented as being about the delivery of “significant value” (line 2) by the developer; they are working to benefit not even just the local community but Wales as a whole, such are the beneficial ‘influences’ that the project will have. This use of the word “influenced” (line 1) is interesting, because it is more neutral than ‘impacts’ or ‘affects’, which might imply that the influence would be negative. Using the word “influenced” with the following sentence about value implies that this may be advantageous. The company present themselves as working “with” (line 1) the community, for the community, and for people everywhere in tackling global environmental problems.

However, opposition groups present wind farms as something unwanted that is being imposed upon their communities by outsiders:
The Meikle Carewe Windfarm Action Group was formed in 2000 as the voice of a small rural community concerned with the plans of a large developer to construct a wind energy power station in the N.E. of Scotland near Stonehaven (south of Aberdeen).

Our primary concerns include health & safety issues, damage to the environment, visual impact and noise disturbance.

The contrasts are clear - the group represent a “small” community against a “large” developer; they represent a “community” of local people against an outside interest; and they are “rural”, based in the countryside, against a company who want to build a “power station”, something that jars with this notion. The text serves to highlight the disparities in power that the two groups have. That the group has been formed to provide a “voice” against the development implies that if this is necessary, local people are not being listened to, and they are having to fight to have their views heard against the might of the developer. When the group describe that “Our primary concerns are...” (line 4), this implies that these issues are not being addressed by the developer, and heightens the need for them to represent the community on such important issues. The developer is presenting as constructing a development that is of major concern to local people, and being unconcerned about the impact that it will have on them.

11.4.4. Naming and blaming: Down on the ‘farm’

As with ECS, the name of the issue is crucial. To describe a group of turbines as a ‘windfarm’ seems uncontroversial enough, but is a key part of the debate.

The British Wind Energy Association, the trade body for the UK wind industry, uses the terms “wind farm”, “wind power”, “wind energy”. These are interesting terms. Both ‘power’ and ‘energy’ are positive terms, and present the issue in terms of the benefit it brings. A ‘farm’ is an obvious and fitting part of the countryside. The term has connotations of working with nature, and of productivity. ‘Farms’ will be a part of the rural landscape, not an alien imposition upon it.

Opposition groups describe the issue differently. Country Guardian always put inverted commas round the word farm - wind “farm”2. This problematises the term and draws attention to the use of the word. Describing turbines as ‘wind “farms”’, they draw attention to the assumptions about countryside acceptability, and suggest that while the word is used, these added assumptions are not applicable to wind energy.

Other groups are even more explicit about this, and groups of turbines are given very negative terms. While in the previous extract, the Meikle Carewe campaign group described the turbines as a “wind energy power station”, others do not even include the word wind. The headline of a story by a campaign group in Mid-Wales states:

Massive Power Station Planned for Cefn Croes3


2 http://www.countryguardian.net/index.htm, accessed 17/10/04

3Extract from Cefn Croes Campaign Website, http://www.users.globalnet.co.uk/~hills/cc/ downloaded 17/10/04
Using the phrase ‘power station’ is a very different idea to ‘wind power’. A power station conjures up images of large factories with chimneys belching smoke and pollution. It is an effective contrast with the usually rural locations where turbines are planned and opposed. The negative associations of ‘power stations’ are used by groups to construct the issue of wind turbines in a very particular way – as a real imposition, not something that fits with or will blend into their location; as a major development; and one that may even damage the environment.

11.5. Case study conclusions

In these examples I have illustrated the wider applicability of some of the conclusions about ECS. Even though ECS and wind energy are ostensibly very different issues, I have shown that the themes in the ECS data are not necessarily exclusive to that data. All language use is occasioned by its context; but some similar constructions may be used in the different contexts in which they are developed.

As well as the four themes in the ECS data having relevance for the case of wind energy, the rhetorical processes identified in ECS case also had relevance beyond it. The wind energy texts also included features of self presentation for example. Authors engaged in stake management; both developers and opposition groups stress that they are involved because of the importance of protecting the environment, at a local scale for local groups, and a global one for developers. Not being dismissed as ‘NIMBY’’s’ is key for opposition groups, as is not being accused as motivated solely by profit for the developers. Different views, but constructed in similar ways.

In this chapter I have discussed the common themes in the data from ECS, and the processes used to present these constructions. I have then applied these conclusions to another case. Of course, two case studies does not a generalisation make. The confines of this thesis (word limits, reader patience) meant that it has not been possible to consider this case or any others in any greater depth. Nevertheless, other studies have been conducted on much less data than this, and I do not wish to call for ‘more research’ as if that could find the ‘answer’. What I would like to do is point to areas that might be interesting to explore.

What I am proposing is that it may be possible to develop a ‘model’ of the construction of risks and issues which is applicable to other cases. I think that examples as diverse as floods, GM foods, parenting, train crashes, and Gulf War syndrome would display comparable characteristics. I use the term ‘model’ in the loosest sense of the word to imply some similar constructions that may be used by participants who identify a risk. I think that there may be some. It would be very interesting to find out more.
Chapter Twelve:
Discussion - Discourse Analysis as a Theory and a Method Revisited

In this chapter I (re)consider some issues raised in Chapters Two to Six (particularly Chapter Four) in the light of the analysis presented. I briefly summarise these issues, and how they were managed. This leads to conclusions about how to carry out DA that may have wider applicability beyond this research.

12.1. Research on risk

In Chapter Two I briefly outlined some previous research on risk. This included work on the objectivity or subjectivity of risks, lay and expert knowledges, whether risks are voluntary or imposed, apportioning blame, and their management and control. What I have attempted to do is show how these classifications and categories are issues for the participants.

For example, the literature discusses the increasing management of risks. This was a key theme highlighted by analysis, because participants themselves oriented to it. The campaign groups present ECS as a manageable risk. For them, this was a crucial characteristic, because they present the airlines as deliberately avoiding their responsibility. Similarly key was the voluntary assumption or imposition of ECS. This was discussed in Chapter Eleven; and what I have done differs from previous research because I leave the drawing of this dichotomy to the participants. I have shown that the classification of ECS as in/voluntary is itself a highly contentious issue, and how groups themselves go about presenting it. This research was not intended to assess the magnitude of the risk of ECS but to consider issues to the extent that they have been relevant for those studied.

12.2. Antaki et al.’s critique

I will now reconsider the difficulties of carrying out DA. Chapter Four drew on a paper by Antaki et al. (2003) and their critique of work that purports to be ‘discourse analysis’, and I have attempted to address their comments in carrying out this research. For example, while I tried to avoid ‘under-analysis through summary’, I have used summaries of data to make the text more readable, to introduce and conclude sections, and to guide the reader through the argument. I have intended this to be in addition to analysis however, rather than as a substitute for it. In some instances, this may also be because I am trying to comment on the construction of the topic. For example, comparing the constructions of ECS between two online-authors may be relevant for the narrative structure of the chapter and the conclusions being drawn. In some cases, analysis of the text may include attempts to comment about the topic (rather than just the structures of language use).

Ideas about summarising are associated with ideas of what analysis is. This may mean unpacking the construction of a sentence, considering what each word brings, how it adds to the presentation. It can also mean noting what is said, the absence of
another phrase, and noting that the very fact that a phrase is present is meaningful (following Gilbert and Mulkay, 1984:76, when they describe the construction of characterisations through (amongst other things) the “appropriate selection of descriptive phrases”). This is not taking the content of an account at face value, nor summarising (although it may sometimes seem like it); but examining the use and effect of language.

For example, in Chapter Eight (p106), I used the following phrase to lead into analysis of the text:

[39] www.airhealth.org/index.html accessed 20/02/01

1 ECS is a misnomer because while cramped economy class seating may increase
2 the risk, flight related thrombosis strikes first class passengers and pilots as well.
3 A more appropriate name would be Air Travel Syndrome to include
4 all classes of passengers plus pilots

ECS is stated to be a “misnomer”. In this presentation however, the risk of a
DVT is still flight related, not about travel generally as the airlines construct it.

While this may appear to be summary without analysis, it was intended to lead into
analysis highlighting how this was done. I have also attended to the constructive
features of such summaries. Had I used the phrase “ECS is described as a misnomer”
this would have given a different interpretation of the group’s action. It might have implied that ECS had existence beyond the group’s construction of it, and this was just their interpretation of it. Of course, using the word “stated” to appear neutral is not a simple reflection of what is there, but a deliberate device of factual construction.
The point is that I have tried to avoid summarising without analysing, and of summarising at all because it can reinterpret what the participants may have intended.
At times when it was necessary I have tried to do so as carefully as possible. In Chapter Four I noted how DA texts are not immune to analysis and deconstruction themselves, and of course that these texts could then be deconstructed, and so on – and that this potential for an infinite deconstructive spiral is one of the criticisms of DA work. While there are many other examples of summarising and language use in this thesis that I would like to highlight and justify here, lest I be accused of descending into this spiral, I will move on.

A second shortcoming that Antaki et al. identify is “under-analysis through taking sides” (2003:4). To take a position of not taking a position is, of course, to take a position. But this is the nature of academic work, and of any use of language. To say one thing is to not say any of the other infinite possibilities (following Schegloff, 1972, and Wooffitt, 1992). The point is to be explicit about this and not to subsume a participant’s orientation with analysis of it. In this research, I have attempted to remain agnostic to the data, and indeed, did not carry out interviews as I felt their analysis might compromise this principle. I have also attempted to use ‘neutral’ language (with the caveats listed above) to remove any implication of adopting a position — I tried to avoid phrases such as ‘the airline appreciates that action needs to be taken’ for example. I discovered how difficult this could be, and it meant a balance between not attributing intention, mental processes, or the necessary existence of phenomena, and not being too verbose (‘the presentation that it seems as if the member may be trying to give…’ or ‘the member views’…).
Thirdly, Antaki et al. describe how a reliance on quotations may be a substitute for analysis. While it is tempting to list a number of different examples of the same phenomenon to substantiate a claim, I have used one extract for each point being made, and only used two quotations to make a comparison between them. Antaki et al. (2003: 15) also describe 'under analysis through false survey', sometimes implicit in demographic categories used to refer to people. I have tried to avoid this, and for example tried to refer only to the 'airlines studied' rather than necessarily to the whole of the airline industry. I have also tried to avoid under-analysing by allowing quotations to stand for themselves without any further analysis. In short, this has been research using DA, and the aim throughout has been to use and to demonstrate the use of analysis.

12.3. Intention

I will briefly re-consider some of the other issues raised in Chapter Four. The first of these was whether participants deliberately use constructions in their accounts. In this research, I have tried to avoid implying that authors intended the effects achieved. My aim has been to study these effects, without recourse to a theory of underlying cognitive processes. The analysis of airlines, and campaign groups, included a section on changes made to their texts; but I aimed to show the effects of these changes, rather than make assumptions about whether they were intended or not. The account produced by participants was the focus, not their motivations or intentions.

12.4. Generalisation

I noted in Chapter Four a difficulty between the principle of interaction as context dependent, and claims about the applicability of analysis. I have concluded that while all language is occasioned by context, it is possible to give examples of where similar themes and usage occur, and my analysis suggests that the same patterns of language were used by different groups to achieve similar effects. Discourse is not generalisable, and the interactional context has to be examined for it to make sense; but from this it is possible to observe processes (and tools and strategies) that are generalisable.

This tension may be due in part to a theoretical emphasis on the context of language use, and a practical need to have work valued. Increased interest and academic credibility may result from not only describing a significant rhetorical feature, but highlighting its applicability. Indeed, I briefly considered a second case study in Chapter Eleven, in order to demonstrate similar themes and language use in another risk. These are not necessarily universal processes or generalisations, but they can be observed in different accounts; so while the specific contexts that rhetorical features are identified in are unique, those features are perhaps not.

12.5. Participants' orientations

To elucidate common occurrences of language use, I have focused on participants' orientations - what an author seemed to be doing at a particular time with a particular piece of language. Doing so, it was possible to understand apparent variations and contradictions within the data. For example, both British Airways and Airhealth describe ECS as a misnomer. Focusing on their orientations highlights the effects of
ECS is a 'misnomer' because it applies to all travel; or because it is not restricted to economy class. Similarly, the campaign groups construct two images, one of the universality of ECS; and one of a dichotomy between passengers and airlines - 'them and us'. Examining participants' orientations allows an understanding of this. The first image presents the seriousness and pervasiveness of the risk; the second constructs blame onto the airlines and away from the passengers. I have therefore used the "intractable methodological liability" of participants' interpretative variability as a "productive analytical resource" (Gilbert and Mulkay, 1984:13).

In Chapter Four I noted a tension between the emphasis on participants, and the imposition of categories and terms. While I have aimed to focus only on issues as they are of concern to participants, describing them for an academic audience requires certain terminology. It is unlikely that participants would identify with an 'extreme case formulation' even while being observed to be using one in their account; and yet to highlight this feature and not use the term 'extreme case formulation' or cite Pomerantz (1986) might imply ignorance or plagiarism. Perhaps the way to address this is to focus on participants' orientations as far as possible and then, in Potter and Wetherell's (1987:182) terms, "simply get on with it", indicating where and how the categories, classifications, and analysis were used.

There is a further point. McGhee and Miell cite Billig (1991) to argue that the analyst can "attempt to be sensitive to what is not written because the absence of references to certain events or relationships may be significant" (1998:70, emphasis added) - but is this going beyond the data?

Considering absences from texts is certainly common. Mulkay (1988:94) for example states of his texts: "there are no examples in my material where such denials are self referential”. Potter and Wetherell argue that they are “comparing actual variation but also potential variation” (1995:56, emphasis added). And both Gilbert and Mulkay (1984:76) and Te Molder (1999:256) argue that ‘selective omission’ can be revealing and should be studied.

This is a difficult issue. In this research I have attempted to analyse only what was present in a text, and what was oriented to by participants. However, comparing a phrase with an hypothetical alternative highlights the effect of the former - because any word or phrase does not simply present itself but is chosen from myriad other possibilities. Comparisons are a way of highlighting that this choice has taken place, and the effect that it has. I have adopted this approach in this research because of these analytical benefits.

Similarly, at times the absence of a feature is notable - for example a question left unanswered. This is more difficult to address in texts than spoken interaction, where texts may not be written in direct response to each other. I have addressed this by only considering it when texts were direct responses (for example, when online messages refer to each other). The aim throughout has been to not impose ideas about what should or should not be in a text, but to understand how and why participants address this. Potter (1997:184) states that in texts “one realm of entities is constituted in the description while another is avoided”. I have tried to demonstrate how this is done.
12.6. Imposition or unmotivated looking

In Chapter Four, I noted that 'unmotivated looking' for features in an account has to be balanced against building on existing studies. I have taken a specific topic and analysed it using DA. This research is therefore part of an increasing trend, as Potter (1996:6) points out, of studies examining the accomplishment of specific actions, and the construction of factual discourse. I have intentionally placed this research within empirical research and theorising on DA. To do so is part of good academic scholarship; and certainly necessary for writing a thesis.

But does this mean imposing ideas and categorisations upon the data? It is certainly necessary to acknowledge the relevant author when describing a feature; Edwards and Potter (1992) for dilemmas of stake, Hewitt and Stokes (1975) for disclaimers and so on. But are features 'discovered' in the text and then related back to the literature, or recognised because they are known about? Of course DA is more than just the identification of tools and processes (what Antaki et al., 2003:16, describe as "feature spotting") – but themes and features are still searched for in the data.

In this research, it was hard not to recognise how data might fit into classifications for analysis. However, I made efforts to show that participants were orienting to these issues, if not to the labels that these classifications have. To be able to do research, it seems necessary to strike this balance between 'unmotivated looking' and a focus on participants' orientations, and imposition of categories. If this is done, what seems important is to acknowledge it.

12.7. Context

I discussed issues of context in Chapter Four. Presenting all the details of a context is problematic because of reader patience, space, and the impossibility of knowing or capturing 'all the data'. To give extracts of data is to take them out of context. Describing the context of an extract means moving beyond the data, will be constructed version, and not open to validation.

A decision was necessary on how much data to present, and how much contextual detail was required. The size of each extract I gave depended on the amount required to give a sense of it. I aimed to make it large enough that the meaning of the extract could be addressed; and yet not too large that it became dull for the reader, or had so many other interesting features that the importance of the one being addressed was lost. As was discussed in Chapter Four, this is not to imply that is possible to know the 'meaning' intended. But what I have done is to give an extract, from which an understanding of meaning can be gained, through an examination of the participants' orientations in it. It can also be difficult to find extracts which neatly present the feature being described, which led to a careful selection that I deemed best demonstrated the feature. This may be a consequence of trying to address an issue

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1 It was hard at times to 'ignore' features of the text and focus on those that I have made relevant to the analytical point being made; indeed, Yearley seems to have experienced similar difficulties when he states of his analysis that "there is much of Kirwan's text that has gone uncited" (1981:425). I noted these on occasion in the analysis chapters. Alternatively I also noted points in the analysis chapters where I had not reproduced a full extract because it seemed too long and unnecessary for the point being made.
through different data extracts, rather than focusing on the structure of one or two accounts only – being able to do this seems at this particular time to be a real luxury. Addressing a topic means attempting to comment on it, even while not aiming to find the ‘truth’ about it. To analyse only one or two texts means being able to comment on discursive construction, and while this is extremely valuable, is perhaps less meaningful to those without an understanding of DA, or practical in a thesis where analysis, however in-depth, of more than one text might be expected.

There are times when it is however also necessary to give some background information from beyond the data. In the Introduction, I described the issue of ECS, the different groups and the data sources. These descriptions were included to make the data meaningful. However, I do not pretend they are objective summaries. What seems important is to acknowledge the contingent, constructed nature of such description, to avoid the impression that the ‘facts’ of the issue can be accessed, or that some language is neutral and may be unproblematically used. I have therefore described a wider context where necessary but drawn on Potter and Wetherell’s comment that “it would be counter to our practice as discourse analysts not to be self conscious about our own methods of constructing a factual account” (1995:51). This ‘self consciousness’ will be elaborated on shortly.

12.8. Validation

Because DA analysis cannot be compared to ‘the truth’, alternative methods of validation exist. To summarise sections 4.7, and 5.2.6, these are: coherence; an emphasis on participants’ orientations; fruitfulness; presentation of deviant cases; and the presentation of the research report. How these methods might be implemented in practice, and what they imply about the nature of DA work needs consideration. I will therefore briefly outline how they were addressed in this study.

Firstly, efforts were made to make the analysis as coherent as possible, and I have already discussed issues about ensuring a clear argument and logical narrative structure – even when this meant summarising text; see section 4.1.1. Secondly, I attempted to ensure an emphasis on participants’ orientations; I think probably enough has been said about this already. Thirdly, I have addressed the need for fruitfulness. The balance between the need to acknowledge existing research, and to find new and interesting concepts has already been considered; see section 4.5. In this research I attempted this by applying some of the previous DA work to a new topic (ECS) and a seemingly under-developed area (risk), using multiple data sources to draw out interesting themes through their comparison with each other.

The fourth process is deviant case analysis. The benefit of addressing what seems to be deviant has been noted (see sections 4.7, and 5.2.6). For example, articles in The Lancet seemed to suggest contradictions in authors’ views of medical research practice. Their critical approach to methods did not seem to fit with the presentation of self as providing factual and reliable results; how could it, if the methods that generated those results were seemingly flawed? However, closer examination of the texts revealed two things. First it showed the benefit of trying to understand the effect of each piece of discourse rather than reading for the gist; if this was being done, decisions would have to be made about what the apparently contradictory accounts were ‘actually’ trying to say. Second, following Potter and Wetherell (1995),
examination of ‘deviant cases’ served to strengthen the argument being made. Close
analysis revealed that scientific methods were critiqued when they had been used to
generate results that were unfavourable to the author. The process was a way of
supporting their own view and denigrating the opposition, and thus fitted into and
confirmed the original analytic argument. However, continual searching for deviant
cases could mean a constant redefinition of the analytic categories; analysis has, at
some point, got to stop.

Finally, validation is possible through presenting and opening up research. Issues
about the amount of data that it is possible and practical to give – and whether it can
be “rich and extended” (Potter, 1996:12) – have already been discussed see sections
4.7, and 5.2.6). In this research I managed these issues by presenting as much data
related to the analysis as was practically feasible. The reader is therefore invited to
read the data and consider whether they concur with the analysis of it. Of course, the
extracts chosen are a good example of the point being made, and of course I am
inviting the reader to reach the same conclusions as me. But it would also seem
almost a little foolish not to do this. However, assessing the validity of analysis also
requires, according to Taylor (2001a:41), Wetherell and Potter (1988:183), and Tuffin
and Howard (2001:200), the analyst to present not just the ‘finished product’ of data
and analysis, but reveal how they reached their conclusions. As this is a thesis, it has
been easier to open up the research than it would be in an article; as well as presenting
data and analysis, it has been possible, in this Chapter and Chapters Two to Six, to
give a comprehensive consideration of the research. I think the heavily annotated data
extracts, covered in highlighters, shorthand, crossings out and general scrawl can
remain safely in a drawer.

There is a final issue about validation: does saying that analysis can be substantiated
by presentation of the data it is based on amount to a realist claim about the existence
of textual features? It certainly seems clear that, as Wetherell says, “findings is the
wrong word. The results are not found, they are narrated into being” (2001b:396,
emphasis in the original). There are two points to make here. The first is that it is
actually very difficult to write about research without using words that imply that
things exist: ‘the analysis reveals.’; ‘I have identified.’ and so on. Wetherell is quite
right that ‘findings’ is the wrong word, but perhaps it is not always intended to imply
that features exist in a text, regardless of their interpretation by analysts. Thinking
about this implies it is possible to separate what is said and what is actually meant. Of
course, I have no wish to do this. It also illuminates the constructive power of
language, and the impossibility of using ‘neutral’ words.

Second, I think it is useful to consider validation as a means to assess the particular
claims being made - rather than it leading to a presumption that the analyst is saying
that what the claims are highlighting, actually exists. In this research I have attempted
to avoid implying a realist orientation to the analysis, and presented my analysis,
albeit as convincingly as I can, as one possible interpretation that may be highlighted
by the data. I am therefore not excluding the possibility that there may be others.
I drew on Potter et al. (1999) to consider this. While it seems as if they are making
realist style statements - “most of the descriptions of relativism in Parker's article are
wrong” (1999:81) - they state that “relativists make judgements (such as judgements
that relativism makes sense, that this article's account of relativism is wrong, and that
the article is confused); relativists make assumptions about the world, but they hold
these to be permanently open to examination and critique" (Potter et al., 1999:81). This is what I have attempted to do.

12.9. Considerations of reflexivity; or reflexive considerations

In this research, I have addressed three reflexive issues (see section 4.8). First is ontological gerrymandering, where an issue is selected for study, and referential language is used to be able to do so. Second is the recognition that all (and therefore this) research is constructed. Research draws on the analyst's identity and competence. Data are only data when they are selected as such by the researcher. Accounts are deliberately constructed to be as convincing as possible. Third is the potential for an endlessly deconstructive spiral, where the texts that DA produces can themselves be deconstructed; and so on, infinitely.

In Chapter Four I asked: are any of these issues a problem? And if so, what can be done about them? While not wishing to adopt a realist mode of argument and attempt to find 'solutions', I will discuss how a position was reached on them in this research.

12.9.1 Ontological gerrymandering revisited

Firstly, 'ontological gerrymandering': problematising the claims made about an issue, but not the issue itself (Woolgar and Pawluch, 1985a, 1985b). To address this, I have tried to avoid creating a disjuncture between ECS and claims about it. I have focused only on what participants say about ECS, making clear that none is any more valid than another, and stating no position on the 'reality of ECS'. I am still left feeling that I may be ontologically gerrymandering in the very selection of an issue, but take comfort from the fact that Woolgar and Pawluch's comments seem to be aimed at those who do not acknowledge that they might only be problematising the claims rather than the issue. Woolgar and Pawluch also state that a way of moving beyond this is to adopt an awareness of the process of research. As Potter says, we should be encouraged to "consider the reality producing practices of social scientists and the tropes that they (we!) use to establish versions as solid" (1988:40), and Woolgar and Ashmore describe this as "an awareness.. of explanatory practices" (1988:1-2). This is what I have attempted to do, and I will detail this awareness now.

12.9.2 An awareness of 'explanatory practices': awareness of topic selection

I am aware of the selection of ECS as a topic. This incorporates an awareness that choosing a topic implies that it exists, 'narrates it' into being, and makes decisions necessary about data to include and exclude. I have tried to avoid implying anything about ECS myself, whilst at the same time acknowledging the comments by Myers (1985a:595): "I tried to avoid privileging my own outsider's perspective, but that perspective is the basis for my narrative": and Wowk (1984:75) that we use our cultural concerns and values when making sense of accounts. Of course, I have done this. Further, there may be a need to ontologically gerrymander for the research to be about a topic. Gilbert and Mulkay orient to this: "we have compiled our own history of oxidative phosphorylation in order to introduce some of the terms and issues to which participants will constantly refer in subsequent chapters" (1984:38). Indeed, Ashmore (1987:140) outlines a description he gives as "a gloss on a highly generalised version of the immediate local history of discourse analysis". Identifying
the topic of ECS, writing a description of it in the Introduction and at the beginning of
each analysis chapter, were all examples of this. The need to provide a context for the
data meant this seemingly realist presentation of the ‘story’ of ECS. This is what
Horton-Salway (2001b:250) describes as the “scene setting”, making relevant
particular parameters which shape what follows. MacMillan and Edwards (1999:152)
describe such summaries as “pseudo-neutral”; I take this to mean they conform to the
(necessary) conventions about telling a story, but acknowledge the active construction
in making it seem real. This is what I have done in this research.

12.9.3 Awareness of data collection

Just as Billig says that the analyst brings presuppositions about the nature of the
phenomenon to the data before the analysis is conducted in detail (1999b:574), I have
similarly collected data that I deemed to be significant (following Taylor, 2001:42),
and analytically manageable (following MacMillan and Edwards, 1998:325). I have
also given descriptions from outside the data, and chosen extracts to best illustrate my
analysis. There seems little point in arguing against doing this, especially because it
is not clear that such practices are detrimental – they are certainly designed to be
helpful to the reader in guiding them through the argument, and to the analyst in
substantiating their account. The point instead perhaps is to be aware of the processes
of doing this.

I collected data from four groups – from a choice of many others. The most obvious
is the media; all the groups studied acknowledged the media coverage of the issue,
and airlines, campaign groups, and research from The Lancet are all included in media
reports. The role of the media in the shaping of social problems has been well
documented (Gamson and Modigliani, 1989; Hilgartner and Bosk, 1988; Hansen,
1991; Stallings, 1995; Schoenfeld et al., 1979). And although some work does make
a distinction between media reports, and what ‘actually happened’ (for example,
Anderson, 1997; Kitzinger, 1999:55; Ungar, 1992), DA studies have highlighted that
this need not be a necessary focus. They have examined the rhetorical construction of
media accounts, and produced a wealth of interesting findings; MacMillan and
Edwards (1999) for example studied how reporters asserted their independence and
undermined the credibility of a rival source. Clayman (1992) applied Goffman’s
(1979) concept of ‘footing’ to news reports to illustrate how speakers distance
themselves from, or present as factual, the account they are telling. Antaki (1988:12-
13) documents the construction of newspaper accounts so that they are easy to
understand and familiar.

Indeed, the wealth of studies on the workings and impact of the media, and those
more specifically on discourse was a reason why I did not include media analysis.
Media analysis is important; and because of this, it has been done before. Therefore,
when selecting data, I concentrated on other sources, and made decisions about them.
Airlines and passengers I deemed crucial as the two main ‘sides’. The Lancet I
included as the main source of scientific research, the use of science being a key part
of the constructions of other groups. The Internet forums were included, not
necessarily because of their importance, but because of the value of analysis. They
were an opportunity to access ‘facts in debate’, and a multi-vocal discussion of the
issue. I have discussed that no interviews were analysed in this research (see Chapter
Six). This meant a key focus of DA, consideration of interaction, could not be
applied. Analysis of the online forums gave some opportunity for this. Including forums was also a way of making this research original and fruitful, and applying existing DA work to a new and interesting topic area.

There were other data sources that is was not possible to include. One interesting category are merchandisers of ECS preventatives – such as flight socks and inflight exercisers – and analysing how they persuade ECS is serious enough that people will buy their product, but not so serious that they will be put off flying altogether. Other sources include Department of Health documents; Hansard records; data from court cases where victims and relatives sued airlines for compensation; and international comparisons. For example, in October 2001, a UK court found that airlines were not liable for ECS; on the same day as a court in Australia announced that they were. Further, the work of Latour and Woolgar (1979), and Myers (1985b), on scientists’ negotiation of their claims in the review process is interesting, and would be useful to explore here. I have studied the final articles that were published in *The Lancet*: how the claims in them were “moved along the scale towards factual status, trying to avoid mitigation and hedging in the endeavour to increase the certainty of claims” (Fahnestock, 1989:32) would also be interesting.

Of course, it would be possible to collect and analyse data *ad infinitum*. At some point it has to stop. Potter and Wetherell (1987:161) point out that a successful DA study does not depend on the quantity of data analysed, but should be determined by research question. I have sought to understand how groups construct both the risk of ECS, and their account as accurate. I have attempted to include sources of data of sufficient size and relevance to address this and provide interesting and justifiable analysis.

12.9.4 Awareness of language

This may seem a little obvious; this whole thesis has been about an awareness of language. But this also means being aware of the language used to write it. Doing so, I have moved between the two states outlined by Taylor (2001b) – of assuming that language is both constructive and referential. For example, even in this chapter and Chapter Four, quotations about the importance of studying discourse have been used and taken at face value, and presented as justification for such a study. They have not been deconstructed to understand how they present the view that discourse is valuable for research, and have been unproblematically seen to reflect the underlying belief that this is true.

Considering this, it may be interesting to draw on Gergen (1998:152), who points out that if a social constructionist screamed “‘Run, there’s a fire!’ he or she would not wish others to look with suspicion and retort ‘Oh, that’s just your construction’”. As well as always bringing a wry smile, is there an important point here necessity of referential language? This is not assuming it cannot be deconstructed, but just that it is not being at this particular time. Although referring SSK studies, Collins and Yearley seem to be making a similar point when they describe the possibility for ‘meta-alternation’. They state that while SSK brings an awareness of knowledge quality and content –
in spite of this achievement, all of us, however sophisticated, can switch to modes of knowing that allow us to catch buses and hold mortgages. We all engage as a matter of fact in what we might call 'meta-alternation'. Our argument here is that social studies of science ought to erect meta-alternation as a principle, not treat it as a failing" (Collins and Yearley, 1992a:301-2).

I think that research has to engage in assuming a referential quality to language. This may mean switching between the two modes described by Collins and Yearley – so being a super-aware super-sophisticated discourse analyst with a confident grasp of the constructive nature of all language, while being able to but 'overlook' this to be able to catch buses and write theses. It is clear that the two modes (while being of course a constructed division) overlap a great deal – it can be very difficult to 'switch off' from being a discourse analyst, and to stop deconstructing the news, conversations with friends, advertisement hoardings and so on, almost without realising it3. The point is that both are possible – to have a conversation and at the same time be thinking ‘that was an interesting way they phrased that’; in fact, there are times when being able to do so almost seemed like an unfair advantage.

The alternative to 'alternation' seems to be to choose a new literary form. I described the practical difficulties of these in Chapter Four, and ultimately they may only demonstrate what has been described about the constructed and referential nature of academic writing. The position I have adopted is to acknowledge using language as referential, and not assume that any language is beyond being deconstructed.

There are other aspects of language use that are important. The style of writing used is one particular style, deliberately chosen, and does not simply 'reflect' the data. For example, I was helpfully told to change the third person writing style used in early drafts of this research, and that I should acknowledge my work by writing about it in the first person. I had intended an aura of professionalism; to adopt an empiricist repertoire, and use as many externalising devices as possible. I am now using the first person (albeit through gritted teeth) to achieve a different effect. Further, writing a thesis also requires certain sections, features, and styles. For example, I am aware that Chapter Two may not be very exciting. Would it be boring for an experienced discourse analyst, and unfathomable for a newcomer? But such things as the definition and scope of DA have to be described, to introduce the topic; and more importantly to demonstrate competency and understanding about these issues.

12.9.6 Awareness of names and labels

Of particular significance for this research are names and labels. I have called the issue 'economy class syndrome', but of course, this is hardly a neutral, factual label. Summarising constructionist work on social problems, Woolgar and Pawluch (1985a:216) state through naming "authors inevitably give definition to the putative behaviours and conditions they discuss". The name given to an issue is hugely...
significant, for it can construct its very existence. But this applies to analysts, as well as just the participants.

Deciding which term to use for the issue was difficult; and very difficult to write about. Even the last sentence implies a difference between ‘the issue’ and its label, implying that the issue exists beyond whatever name. Whether it does or not was left as a matter for participants. But this does highlight that whatever term was used has a powerful constructive effect on how the issue is perceived. To draw on other research, Horton-Salway (2001a:179) interestingly describes how she used the term ‘M.E.’ in her research because much of her data were collected from members of an M.E. self-help group and it is a “participants’ category”. She used this instead of ‘CFS’ (chronic fatigue syndrome), a term that “it is clear many researchers and clinicians prefer”. She does not explain how she chose one group of “participants” over another, when her research involved talking to both sufferers and doctors, but the resonance of these issues beyond this study is clear.

In this research, a decision was necessary on which term to use. It was not practical to say ‘the contended and possible risk of a blood clot forming in the lower limbs after remaining seated for long periods in flight’ or any other such phrase every time to refer to the issue. Neither of course would any phrase be neutral and uncontentious. I used ‘economy class syndrome’, shorted to ‘ECS’ for readability, in preference to ‘Deep Vein Thrombosis’ (DVT), ‘Traveller’s Thrombosis’, or any other name used by participants. This was firstly because ECS was a term recognised and acknowledged by all participants, even if not used by all of them. It was also the term that first turned the possibility of a link between flights and blood clots into an ‘issue’4. ECS is very often not a participants category – it is described as a “misnomer” on occasions; but they would understand it; and all names are contested, and there is a need to choose one.

12.9.7 The value of a reflexive approach

In Chapter Four I outlined some benefits of a reflexive approach. Final comments are relevant here. Potter argues that “far from being futile and circular, this sort of reflexivity is required if we are to critically address our own constructions of the social world. the alternative would be to claim a special privilege: a position beyond the sorts of questioning and criticism that our research participants undergo” (1988:63). This is similar to Mulkay’s (1988:99) description of the “arbitrary interpretative asymmetry” that gives sociologists a privileged discourse to deconstruct participants’ discourse, but which is not accessible to them. If adopting a reflexive approach at the very least avoids adopting a privileged position, then it has to be explored. It certainly has more appeal than Burman’s way out of the “circularity of warranting an interpretation via simply re-describing what is said in the text”, which is to “elaborate the analysis or categories to relate to structures outside the detail of the text” (2003:4). Indeed, Potter (2003:788) points out that “[s]urely the widespread failure to consider reflexive issues in other analytic approaches is more of a worry for them than DA’s consideration, however far from ideal it is”. Even while reflexivity raises more issues than it addresses, an awareness of the sorts of topics considered

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4 This was in a research report in The Lancet in August 1988
here is clearly beneficial; and surely the only way to proceed (especially if, according to Ashmore, 1989:143, the alternatives are giving up or pig farming..).

In this research I have used discourse analysis to study the topic of ECS, and to make some comments about the constructions of risk, blame and responsibility. I have identified some of the discursive features in the texts, and highlighted the effects that they have. I have demonstrated that these features may be applicable beyond the cases studied here. I have also tried to deconstruct what it means to carry out DA, what the principles of DA study are, and how these might be applied. Tensions have been noted, and attempts to resolve these made. Throughout this research I have tried to adopt a reflexive view on the processes of research and their constructive effect. I have therefore intended this research to make both a substantive and a theoretical contribution to discourse studies.

So that's really it then?

Yes. Well no. I mean, there's an awful lot more to say, that could have been said, and that will probably be said in the future. This is just a 92,000 word thesis, and there are only so many things that one can do in that. I think she's tried to say something about a topic, about method, and grapple with big questions about epistemology and ontology and the differences between theory and practice.

That's rather a lot.

Quite. Her supervisors must be sick of reading it all by now as well, especially as she doesn't know when to use 'effect' or 'affect', and has been banging on about ethics for three years already.

And if this text were to be subjected to DA, what do you think the contextually situated, ethically developed, methodologically relativistic focus on the orientations of the participant would lead the analyst to say?

Over to you...
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