

LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Discursive intersections of newspapers and policy elites:

A CASE STUDY OF GENETICALLY MODIFIED FOOD
IN BRITAIN, 1996-2000

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Thesis submitted to the Department of Media & Communication at the London School of Economics for the degree of Doctor of Philosophy.

Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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Abstract

This thesis explores the under-researched terrain of policy elite-newspaper engagements and in so doing makes a substantive contribution in formulating an original conceptual framework for understanding how the interactional dynamics of the political-media complex work. This framework is then applied to the GM food row in Britain by asking how contestation emerged, was sustained then subsided in the political-media complex. This reconstructs the processes by which the pro-GM government consensus was challenged by newspapers, conflict escalated to fever pitch, threatening policy elite agenda and was finally negotiated through key compromises.

Drawing on a theoretical framework that combines participatory politics, the political-media complex and new risks, the thesis conceptualises interactional dynamics as 'discursive intersections'. These are shifts in claims and counter-claims that emerge during engagement at the interface of different sets of knowledge, cultures and agenda in the political-media complex. However there is an element of unpredictability in discursive intersections that arises from the paradoxical interdependence-independence of the relationship in the political-media complex; the elective and episodic nature of engagement on particular issues; and the variable form this may take with potential for conflict, negotiation or consensus. Historical and wider argumentative contexts are crucial to how and what form engagement takes place but do not define it. Thus, the trajectory of discursive intersections needs to be explored empirically rather than predetermined theoretically. This is done using a hybrid methodology that draws attention to the dialogical, persuasive nature of discursive intersections. The substantive contribution of the research is the formulating of this alternative framework for the analysis of interactional dynamics and its application to the GM food row in Britain.

It does this by exploring how – that is the process in which - engagement emerged, escalated into contestation, was negotiated and then subsided. What emerged were the following findings.

- (1) Parallel, sustained and conflictual systems of argumentation about risk were developed between media and political elites despite elite consensus, abstract debates and short news cycles.
- (2) Newspaper contestation was constructed around a deeply ambivalent suspended certainty based on claims that there was no evidence of risk or benefit, harm or safety and demands for elite responsiveness to acute public anxiety over this.

- (3) Elite responses to this were shaped by New Labour-style, neo-liberal hegemonies within a new repertoire of entrepreneurial managerialism. This was manifest in the recognition of the importance of limited consumer agency and new forms of (functional) participatory governance. These sought to depoliticize and decentralize food safety but within mechanisms intended to safeguard strategic technologies such as GM food.
- (4) The negotiation and subsiding of conflict over GM food emerged out of a common neo-liberal paradigm, newspaper ambivalence and elite desperation to neutralize the threat to their innovation-based agenda.
- (5) However, it also signified a lost opportunity in which newspapers having forced a stalemate in policy then accepted a weak apology from Blair and diluted compromises on consumer agency.

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Chapter 1: Introduction

Studies have explored media coverage of policy but little work has been done on the implications of this for the ‘substance of political decisions’ (Koch-Baumgartner & Voltmer, 2010: 1) or vice versa. The consequence is that 80 years after Lasswell (1927, 1942, 1951a, 1951b) first started writing about communication *and* policy, little progress has been made on understanding the interactional dynamics between the two. This shortfall is even more surprising today given the prominence of mass media, the pervasiveness of policy over nearly every aspect of everyday life, the nature of mass-mediated politics (see Meyer, 2002; Page, 1996) and the institutionalization of media monitoring by the British government after 1997 (Heffernan 2006).¹ The manifestation of this knowledge gap can be seen in studies of risk interactions with their asymmetrical privileging of one at the expense of the other and predilection for out-dated, reductionist assumptions about linear, hierarchical and non-persuasive communication (see Chapter 2). Here, other reviews have noted a lack of engagement between risk studies and media studies of risk whereby ‘reconstructions of public discourse and the media tend to neglect institutional and organization historical changes within the media and ... how this impacts or is intertwined with risk reporting’ (Tulloch & Zinn 2011 p.2). This thesis sets out to explore this under-researched terrain in policy elite–newspaper engagements over risks. In the process it makes a substantive contribution by formulating a unique conceptual framework – discursive intersections – for understanding how the interactional dynamics of the political–media complex work. Discursive intersections as defined in this research is concerned with institutionally-grounded shifts in claims and counter-claims that take place during engagement in the political–media complex.

The conceptualization of discursive intersections is:

- (1) Housed in a tripartite theoretical framework comprising the political-media complex (Swanson, 1997), new risks (Beck, 1992) and participatory politics (Teorell, 2006).

Footnotes

¹ Prior to 1997, monitoring of the news media was the responsibility of individual departments and tended to get done in an ad hoc manner. After 1997, a Media Monitoring Unit was set up to monitor all the news media and distribute the findings to the relevant departments. Thus policy elites had a much more systematic and pervasive awareness of coverage.

- (2) Rooted in a hybrid discourse theory which combines the persuasive dimensions of Billig (1987) with the criticality of Fairclough (1992) to facilitate the empirical² capture of shifting claims and counter-claims during engagement in the political-media complex.
- (3) Concerned to direct attention to the critical question of *how a particular form of media-government engagement emerged, was sustained and was then negotiated.*

This framework is then applied to a critical case study of intense policy elite–newspaper contestation: that of GM food in Britain between 1996 and 2000. The rationale for the selection of an extreme case such as GM food is that it would throw into sharp relief elements of engagement that might in less extreme cases be more subtle, and so difficult to discern. What emerged first was an evolving controversy that prepared for the emergence of a ‘grand narrative’ of GM food in which policy elite–newspaper contestation was a crucial driver. Second, what also emerged were critical insights into and a framework for the analysis of the interactional dynamics of the political–media complex in other cases.

The ‘grand narrative’ is of an initially successful launch of Europe’s first genetically modified (GM) food³ product in Britain in 1996, in spite of deep newspaper distrust and a ‘crisis of public confidence’ in elite management of food safety controls but which turned controversial and conflictual. There was a pro-GM consensus amongst the policy elite

² Here I argue that discourse can be understood as a social phenomenon expressed in text and action. If we take empirical to mean the source of any object of study then the analysis of discourse (texts) becomes a legitimate inquiry irrespective of whether the texts are written (policy or media) documents or oral (interviews or recordings). The turn in the social sciences to discourse or argumentation has been discussed by Fairclough (1992); in policy studies by Fischer (1998, 2003c); and the methodological implications and criteria by which they can be assessed by Bauer and Gaskell (2003).

³ Genetic modification is a form of biotechnology, and while both terms have become common parlance, confusion potentially arises when two different definitions are used to further two different arguments. The first definition, used in the Convention on Biological Diversity (UN, 1992), claims that modern forms of biotechnology are an evolution of historical practices of modifying plants or animals by breeding which go back thousands of years. Proponents therefore argue that new technology merely speeds up what happens naturally and so there may be less risk, uncertainty or ethical conflict associated with it than the lay public might believe. A second definition provided by the Cartagena Protocol on Biosafety recognizes a much more intrusive technology whereby scientists recombine or modify key parts of the DNA of the cell across natural barriers in ways that are outside the organism’s natural reproductive processes. Thus, the claim is that it involves more than an evolution of nature: it represents the transference of the genes of one species into another species in the form of deliberate manipulation to create a genetically modified organism (GMO). This meaning of the term, usually distinguished from the previous meaning by the phrase ‘modern biotechnology’, has been used by governments in justifying their regulation of biotechnology. However, it has also been used by opponents who claim that GM involves tampering or interfering with nature using an uncertain science and with unknown effects.

and broadly across Westminster; newspaper coverage was sporadic, fragmented and ambivalent towards the novel food; and retailers claimed that consumer sales were good. This changed in mid-1998. Critical interventions by Prince Charles and Professor Árpád Pusztai tapped into submerged doubts about the novel food and opened a parallel system of argumentation in which newspapers were able to challenge the elite consensus. Newspapers re-positioned themselves with the anti-GM 'camp', their engagement intensified and its content increasingly diverged and conflicted with that of policy elites. Although sales of GM food collapsed and societal opposition escalated, the elites continued to justify their pro-GM policies with discourses that had already been discredited during the BSE/CJD crisis.

Within six months, four newspaper campaigns had been launched to mobilize readers and influence policy change. Prime Minister Tony Blair counter-attacked the campaigning newspapers, accusing them of misinformation and fictionalized scaremongering. Rather than discredit the newspapers, this only gave added momentum to their campaign: societal resistance expanded and high street names announced a de facto retailer boycott to accompany the consumer one. Elites, fearing that mounting opposition to GM food could undermine their neo-liberal agenda and technocratic hegemonies, sought to negotiate compromises. They empowered retailers to decide how to respond to consumer demands and negotiated a five-year voluntary moratorium with the biotechnology industry, whilst Blair apologetically conceded that the science of GM was uncertain. Newspapers claimed a victory and their campaigns against GM food largely subsided. However, the arrangements for the new de-politicized, decentralized Food Standards Agency highlight the extent to which elites had felt threatened by the newspaper-driven escalation of resistance and their determination to insulate the future development of novel food technologies from similar controversies. These new institutions sought to assimilate future resistance into a wider neo-liberal, capitalist paradigm; however, the measures taken illustrate the traces the GM food controversy left in the institutional processes, practices and discourses that followed.

It is hardly surprising, given this 'grand narrative', that the GM food row should have become a cause célèbre with environmental campaigners and politicians. It has spurred a plethora of parliamentary and policy documents (see Science & Technology Committee, 1999; House of Lords, 2000) and academic literature about science and risk-based controversies (see Chapter 2). However, most academic studies have focused on media-public attitudes or government-public attitudes; only one has examined newspaper-policy elite engagements (Bauer & Gaskell 2002) and this is conceptually

and methodologically problematic for reasons that are explored in Chapter 2. The rest of the present chapter briefly outlines the rationale and choices that underpinned the selection and use of existing potentially relevant literature, the devising of the conceptual framework, methodology and the research parameters.

Criteria and critique of existing literature

The main challenge of this project is that the research is caught between, on the one hand, voluminous bodies of potentially relevant literature on media, public policy and risk and, on the other hand, a paucity of studies that deal with or can potentially deal with the interactional dynamics of all three at a substantive level. Two criteria that support the research focus and case study in this project were used to select the literature for evaluation: that it potentially affords both key roles in risk debates, and that it has the potential to be adapted to support an analysis of interactional dynamics between them.

These criteria lead to a focus on five theoretical strands in the literature that are potentially relevant:

- (1) Media-centric frameworks: (a) moral panic thesis and (b) social amplification of risk (SARF);
- (2) Policy-centric frameworks: (a) advocacy coalitions and (b) discourse coalitions; and
- (3) Biotechnology/GM food specific frameworks: social representation-cultivation analysis.

All five were dismissed as unsuitable for the purposes of this research because they involve media or policy centrism and asymmetrical research designs that obstruct any adaptation for the analysis of interactional dynamics between them. They also draw on problematic understandings of the relationship between media and policy elites as largely irrelevant to the development of risk policy debates (coalition frameworks) or as autonomous (social representation), and so run counter to political communication studies that highlight the imperative to engagement that arises from the inter-relationship between them (see Herman & Chomsky 1986; Meyer, 2002). They either focus too narrowly on the moral dimensions of a panic, rendering fears over material dimensions problematic (moral panic thesis), or too broadly on collective engagement, which precludes the privileging of media–government interactions within this (coalition frameworks). Lastly, they offer a limited conceptualization of interactions as linear (SARF), hierarchical socialization (social representation) or as devoid of persuasion

(social representation and advocacy coalition), thereby obstructing an understanding of interactions as dynamic.

Most promising for the capture of interactional dynamics were the constructionist approaches: moral panic and discourse advocacy coalition. They point towards a useful conceptualization of interactions as dialectical, dialogical and persuasive, and so capable of capturing the shifting claims and counter-claims that lie at the centre of interactional dynamics. They also offer an alternative to the relatively rigid compare-contrast-converge analyses of positivist-informed quantitative approaches, which are ill-equipped to capture these shifts (see discussion of SARF, advocacy coalitions and social representations in Chapter 2). Despite the advantages of discursive methodologies used in moral panic and discourse advocacy coalition, they have been dismissed for the reasons outlined above. Thus it is clear that a unique theoretical and conceptual framework needs to be devised to support a discursive methodology for the analysis of interactional dynamics.

Before outlining the original framework formulated here it is first necessary to dissociate this conceptualization from other approaches to risk interactions reviewed in Chapter 2. To do this the term discursive intersections, as mentioned earlier, was used to refer to the shifting claims and counter-claims that emerge during engagement in the political–media complex. This is not to say that contributions – other than the methodological pointers identified above – could not be gleaned from these other studies of risk interactions to inform the new theoretical and conceptual framework. For instance, these studies highlight the importance of locating media–government engagement within institutional, argumentative and social contexts that shape and are shaped by their interactions. There is also the possibility that media–government discursive intersections may take different forms depending on what phenomena are involved and how the risks associated with these are constructed. The social representation frameworks highlight the particularities of the UK controversy over GM food compared to its international counterparts. Lastly, the discursive approaches draw attention to exploring the significance of the controversy as emblematic of a deep disturbance, leaving traces in discourses, practices and processes long after the controversy has subsided (see Hajer 2005a; Schmidt, 2008, 2010). The limitations of these approaches meant that a new framework had to be formulated and in which the contributions identified above were synthesized.

Theoretical and analytical choices: An alternative location and framework

The theoretical framework emerged out of the need identified in critiques of existing literature of risk interactions for one that is symmetrical in the sense of affording equal attention to both media and government; that draws on a more sophisticated understanding of the institutional dimensions of both and their interactions; and conceptualizes these as discursive. What emerged was a macro-institutional framework comprising the political-media complex (Swanson, 1997), new risks (Beck, 1992) and participatory politics (Teorell, 2006).

The political–media complex

A framework based on the political–media complex addresses the problem of asymmetry and problematic, out-dated understandings of the inter-relationship by giving equal attention to both and locating engagements within a historically located, institutionally-grounded relationship. The relationship is characterized as one of a paradoxical interdependence-independence at the interface of different knowledges, cultures and agendas, from which arises the potential for conflict, consensus or negotiation (Deacon & Golding, 1994; Swanson, 1997; Voltmer, 2006). Thus, the relationship dynamics provide an imperative for engagement but do not prescribe whether, when, how or in what form it may occur, leaving this open to empirical analysis rather than theoretical predetermination. This means that, on the one hand, the framework acknowledges a degree of unpredictability about the emergence, nature and trajectory of discursive intersections in the political-media complex. On the other hand, it recognizes that these are shaped by and shape the institutional particularities of media and government at a given moment in time. It also means that *how contestation emerged, was sustained and was then negotiated* is a critical empirical question that to date has been largely unexplored in studies of risk interaction.

New risks

The existing literature has also identified but has yet to explore how engagement in the political–media complex may vary depending on the policy domain (Howarth, 2010; Koch-Baumgartner & Voltmer, 2010). It also varies depending on the nature of risk constructions (Kitzinger, 1999). New risks emerge out of the advanced manufacturing processes of late modernity, exist only in knowledge and are constructed as qualitatively

different from 'old risks' in ways that generate radical uncertainty (Beck, 1992, see also Wilkinson, 2000). This uncertainty arises from constructions of new risks as pervasive, proximate and invisible, that present unknown effects and potentially catastrophic, unlimited consequences that cannot be managed (Beck, 1992). The role of the media is to 'spotlight' the uncertainties (Beck, 1992; Cottle, 1998); the role of government is to manage new risks while lacking the knowledge to do so (Giddens, 1998) hence their attempts to 'veil' these discursively (Beck, 1992). Media–government engagement, therefore, is central to the escalation of controversy over new risks, and it has the potential to take the form of definitional struggles over the problems presented by new risk uncertainties and fundamental disagreements over knowledge, values and how to proceed (Beck, 1992; see also Wilkinson, 2000, 2001; Cottle, 1998). These struggles also have the potential to evolve into intractable controversies in which the old strategies for negotiating conflict fail because disagreements are too fundamental and no point of consensus can be found (Pellizzoni, 2003).

The advantages of applying Beck's new risk theorization (1992) to an analytical framework for discursive intersections over GM food are that it directs attention to the particularities of debates over 'technological toxins' (Garland, 2007); it not only affords both media and government equal attention, but also ascribes them particular roles; and locates their engagement as central in the escalation of controversy. It also directs attention to the institutional–discursive nature of engagements and to how divergent, conflictual constructions of the problem of uncertainties are central to this. However, existing research has highlighted how media do not always engage with risk controversies because the abstract nature of the debates does not readily fit with news values; when they do so it is not always in conflict with government (see Kitzinger, 1999). Other studies have highlighted two other obstacles to the conflictual engagement of newspapers. First, media coverage tends to follow elite dissent: thus, where there is elite consensus oppositional media discourses may not emerge (see Kingdon, 2003; Robinson, 2001). Second, discrepancies between short news cycles and long policy ones mean that elites can usually wait for newspaper paroxysms to subside before resuming policy business as usual thereby undermining media potential to influence policy (see Miller, 2001; Reese, Gandy and Grant, 2001; Stromberg, 2001).

The implications of these opportunities and constraints are that on the one hand new risk type debates have the potential for highly emotive conflictual engagements in the political–media complex. On the other hand, for this to emerge the media need to negotiate three operational constraints: abstract debates, elite consensus and short

news cycles. The empirical findings in this research highlight how the negotiation of these depends on the perception of journalists that the phenomenon is emblematic of a deeper disturbance in society, (relatively) unpredictable interventions by credible alternative sources and the use or adaptation of professional mechanisms to concretize risks and sustain coverage. In the absence of these, policy elites are able to draw on old strategies, including certainty claims about no evidence of harm, which are intended to reassure the public and buy time for the media engagement to subside.

Participatory newspapers and participatory governance

The analysis of the ability of parts of the media to negotiate these constraints, the form this took and particularities of elite responses to it required the third dimension of the tripartite theoretical framework: that of participatory approaches. These view enhanced public participation as critical to the revitalization of mature democracies; however, the concept is elusive, arising from different rationales and taking different forms (Newman & Clarke, 2009). This thesis is concerned only with those forms most relevant to the case study here: newspaper campaigns and the participatory governance of food safety controls.

The focus on these two forms supports the commitment to a more symmetrical framework identified earlier and addresses key gaps in media studies and policy studies. On the one hand, its application to traditional media responds to critiques of classic liberal approaches rooted in eighteenth-century struggles between the state and media as 'out-dated' (Scammell & Semetko, 2000). This thesis adds two additional critiques of the normative premises of impartiality and rational debate in the classic liberal media. Impartiality is problematic when newspapers construct their identity as campaigning and legitimize this within discourses of over-riding public interest. Rationality is problematic when the facts are constructed, contested and unknown and when what is rational or reasonable in the context of a decade of food scares becomes a key part of the accusations and counter-accusations. Furthermore, restricting campaigns to a political economy rationale of market competitiveness does not adequately account for how newspapers construct their identity as campaigning titles and choose to do so even when it is financially disadvantageous (see Howarth, 2012a). These critiques suggest an alternative normative paradigm is in operation with campaigning newspapers that cannot be adequately addressed through existing classic liberal or political economy frameworks.

The advantage of applying participatory theory to newspaper campaigns is that it avoids the presupposition that these are deficient because they signify a departure from the professional ideals of journalistic impartiality and rationality. Instead, it suggests that campaigns are a legitimate form of newspaper intervention, which, normatively speaking, aims to enhance political participation and, operationally speaking, provides a mechanism by which to sustain engagement beyond relatively the short news cycles that obstruct media influence on the 'substance of policy' (see Chapters 3 and 8). It also justifies the focus in this research on newspapers whose campaigning capacities are a crucial factor in their ability to set the medium- to long-term media agenda (see McNair, 2000). The focus in this research on newspapers to the exclusion of broadcast media is further justified in that it was printed campaigns that the elites singled out for counter-attack, suggesting it was these they perceived as posing the greatest threat to their agenda (see Chapter 7).

However, there is a challenge in applying participatory approaches to newspaper campaigns in that, first, these frameworks have previously been applied to new media (see Rheingold, 2007) and to media activism (see, Huesca 1995) or community media (Howley, 2005) but not to mainstream media campaigns. Second, media campaigns have been under-researched and under-theorized (see Birks, 2009; Howarth, 2012a; Milne, 2005). One of the contributions of this research is a theorization of newspaper campaigns within a participatory framework. This supports a conceptualization of them as deliberate, self-labelled interventions that take a particular form of sustained engagement constructed around the stated intention to influence policy and mobilize readers thus ensure greater elite responsiveness to public concerns. However, they differ from media activism in that they are concerned with reforming the existing system rather than destabilizing and revolutionizing it; thus there is an inbuilt limit as how far, and on what issues newspapers are willing to campaign.

On the other hand, when participatory approaches are applied to the political-media complex they draw attention to the missing media in studies of participatory governance (see Newman & Clarke 2007; Thorpe 2010). These new forms of seemingly more inclusive decision-making processes need to be located within a systemic and structural transformation from centralized, welfare states to the decentralized, depoliticized regulatory state, and from government to governance and then to participatory governance (see Hood, James and Scott, 2000; Majone, 1997; Moran, 2001). The shift to a participatory agenda in the New Labour government has its 'roots in the political ideology of the Third Way' developed in the 1980s and 1990s and was manifest in a

variety of participatory mechanisms not only in science policy domains such as biotechnology but also in urban regeneration and hospital governance (Newman & Clarke, 2007; Thorpe 2010). What is absent from these discussions, however, is any exploration of the role of the media in the shift to participatory mechanisms – a gap all the more puzzling given the extensive literature on New Labour’s pre-occupation with media management (see Scammell, 2000; Stanyer, 2003). The chronology here means it is implausible to claim that the participatory mechanisms of the new Food Standards Agency were the result of newspaper campaigns on GM food, because the ideology had been under development in the Labour Party since the 1980s (see Thorpe, 2010). It is possible to argue, however, based on empirical analysis in Chapter 7 and 8, that the particular form it took – such as the strategic/proactive dimensions and the measures to neutralize the media – did follow from newspaper campaigns. However, this requires empirical analysis.

The empirical analysis in this research brings together participatory newspapers and participatory governance at a particular moment in time in the evolution of the political–media complex and debates over new risks. What the theoretical framework outlined above provides is a macro-institutional approach to interactional dynamics in the political–media complex and informs the research question as to how contestation over the new risks of GM food emerged, was sustained and was negotiated. It also informed the proposition intended to guide the empirical exploration of the case study: that *escalating uncertainty, increased media engagement, divergent and conflictual problematizations led to media–elite contestation over GM food*. However an additional analytical level – that of discursive intersections – needs to be added in order to capture the discursive, dynamic and persuasive dimensions of shifting claims and counter-claim in the empirical material of the study.

Discursive intersections – a unique analytical framework

One of the main critiques made in Chapter 2 of existing studies of risk is their analytical and methodological inability to capture interactional dynamics in the political–media complex. The previous section outlined a theoretical alternative that would facilitate such a capture by directing attention to: (1) a relationship of paradoxical independence–interdependence at the interface of different knowledges, cultures and agendas, (2) the potential for engagement to take a particular form when dealing with new risks and evolving participatory politics at a particular historical moment, and (3) a degree of unpredictability about the nature and trajectory of interactions in the political–media

complex and hence the need to explore how contestation emerged, was negotiated and subsided. However, this framework needs a supporting methodology. The literature review (Chapter 2) argues that positivist-quantitative approaches to risk interactions are ill-equipped to explore the dynamic, dialectical and dialogical dimensions implicit in such a question about the processes of interactional dynamics. At best they offer a relatively rigid and linear, hierarchical or non-persuasive notion of argument or controversy that supports compare-contrast-converge analyses. The turn in this research to discursive intersections in the political–media complex offers an original alternative that is capable of addressing the question of how contestation emerged.

The concept of discursive intersections was derived from post-colonial studies, where it refers to discursive changes that emerge from ‘constant negotiation and conflict’ at the interface of different knowledges, agendas and cultures (Nakata, 2004). Its adaptation here to the political–media complex draws on discursive policy studies (see Chapter 2), definitional struggles over risk (see above) and action theory (see Chapter 3). What emerges is a novel discursive intersectional framework that differs from the post-colonial version in that: (1) it is concerned with struggles in the political–media complex over control of the public agenda, problematization of uncertainty and what solutions – or behavioural actions – are deemed most appropriate, and (2) it emphasizes the element of unpredictability in political-media engagements by conceptualizing these as episodic and elective, with potential for conflict, negotiation and consensus.

These distinctions have been further developed into the following analytical categories (see Chapter 3 and Appendix 1 for more detailed accounts):

- (1) Engagement – given the (relative) independence of both media and policy elites and the obstacles to it – cannot be assumed but needs to be empirically examined.
- (2) Problematization is the process by which issues are discursively re-defined as problems capable of being addressed (Hajer, 1995; Majone, 1989). How a problem is defined circumscribes what solutions – or behavioural actions – are considered, hence the potential for contestation. With new risks, problematization has the potential to centre on uncertainty.
- (3) Contestation: Divergent problematizations are necessary but not sufficient for contestation. That is, differences can be ignored or accommodated – they need to include acrimonious claims in which the other is included in the problematization.

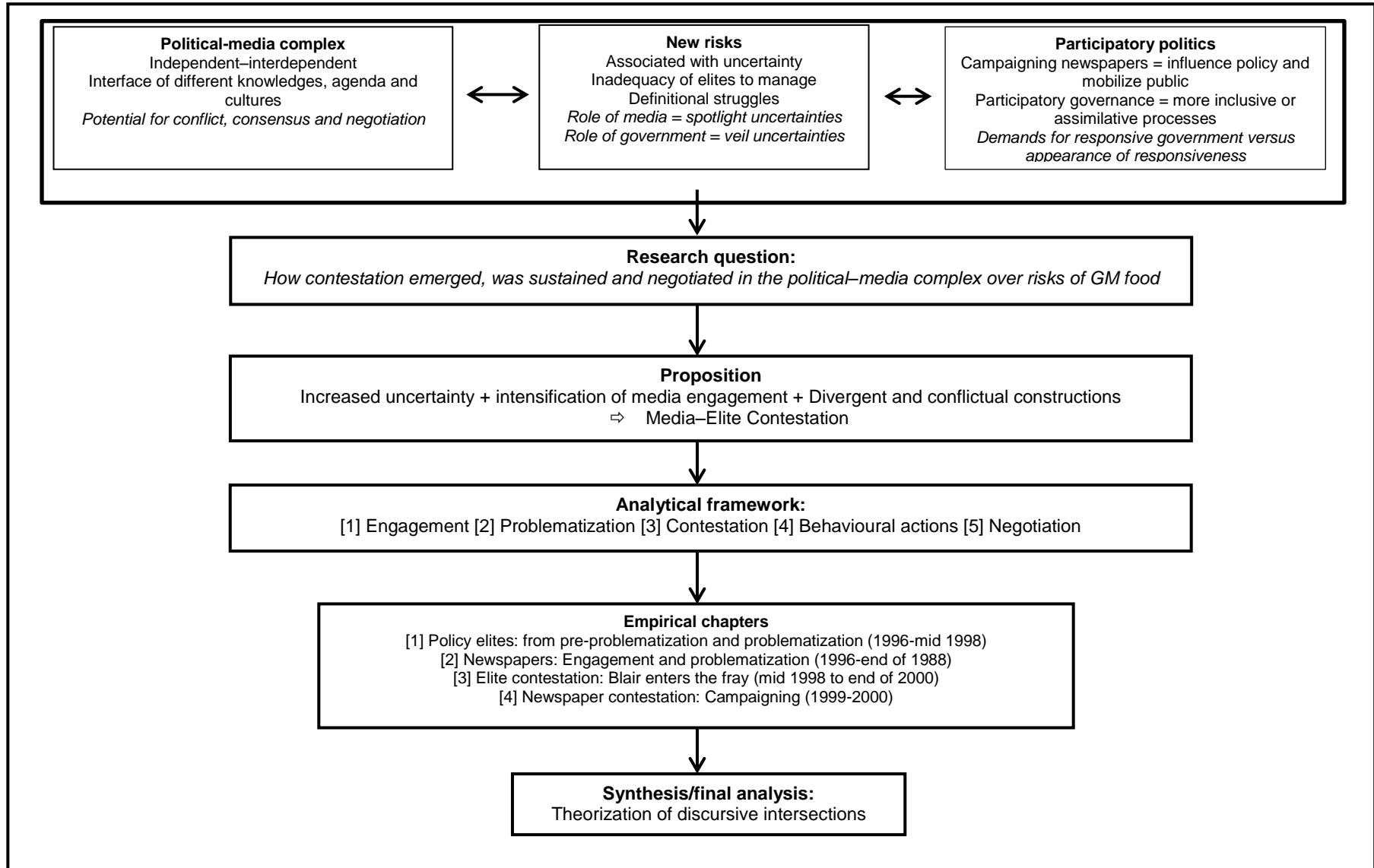
- (4) Negotiation: Discursive intersections can become a metaphor for intersecting discourses of negotiation when supported by a methodology capable of capturing shifts in claims and counter-claims. When, how and in what form negotiation takes place needs to be empirically explored.
- (5) Behavioural actions are non-routinized, deliberate and discrete forms of agency. Boundaries between behavioural action (action) and discursive action (text) are blurred and a matter of emphasis rather than exclusivity. Nonetheless, the distinction is important in that 'behavioural action' or the lack of it can signify important elements and shifts in argumentation.

This analytical framework of discursive intersections (summarized in Chart 1) offers a very different understanding of risk interactions to positivist-informed approaches with their linear view of argument, quantitative methodologies and rigid compare-contrast-converge research designs (see Chapter 2). Instead, argument is seen here as dynamic, dialogical, dialectical and persuasive. However, it needs a methodological framework to support it.

Methodological rationale and research design

The review of existing studies in Chapter 2 draws attention to the frequent use of case studies in discursive approaches to risk interactions. This is because case studies facilitate in-depth analysis of the changing nature of multi-faceted phenomenon (Yin, 1994). However, a key issue is the rationale for the selection of the particular case study. The review also draws attention to the particularities of GM food row in Britain in that policy elites had identified it as a strategic technology linked to British national interest, a greater intensity of newspaper engagement than anywhere else and a cultural resonance with evolutionary genetics (see Bauer, 2005). This research argues that two dimensions need to be added. First, there was climate of deep distrust of elite management of food safety and a questioning of the legitimacy of technocratic governance following a decade of food scares. Second, a realignment of the newspaper industry meant they had increased capacity, freedom and confidence to challenge policy elites directly. The stage was set for potential confrontation; however, a methodology to capture this needs not only a rationale for the case study but also a way to locate it within argumentative and historical-institutional contexts and a rationale for its focus on particular media and policy elites.

Chart 1: Schematic of conceptual, analytical and methodological framework



Theorists have long argued that discourse needs to be contextualized (see Fairclough, 1992) and the review of discourse coalition approaches in Chapter 2 reinforces the idea that interactions need to be placed in their institutional-historical contexts. Where this research goes further is in an empirical exploration of the dialectic between policy elite–newspaper engagement and the argumentative context. It argues that, on the one hand, both sets of actors positioned themselves within wider debates in the argumentative context from where they extracted discourses in constructing their own problematization. On the other hand, escalating policy elite–newspaper contestation altered the discursive balance of the argumentative context as newspaper-backed maximalist (anti-GM) arguments became ascendant and elite-backed minimalist (pro-GM) arguments lost credibility as societal resistance to the novel technology widened and deepened.

Second, studies of media and journalism have tended to focus on the newest developments and neglected the historical dimensions (Carey, 1989; Catterall, Seymour-Ure & Smith, 2000). Conversely, historians and policy analysts have long argued that present features need to be understood within institutional and discursive ‘trajectories’ that originate in the past, highlight the ‘continuities which persist’ (Tosh, 2008: 141) and commit both the speakers and their successors to action (Schmidt, 2008: 309). The application of this in this research supports the argument that an understanding of the historicized and institutionalized contexts in which the GM food row developed is essential to understanding the intensity of contestation, its emotive dimensions and its influence on newspaper and policy elite responses to each other. However, contextualized discourses – including articulations of historical *and* contemporaneous events, the problematization of other scares and the management of these – informed but did not predetermine how both problematized GM food. The principle of a degree of unpredictability in the political–media complex and risk domains means that engagement is elective – it does not have to take place.

The third major methodological question is which actors to focus upon. The earlier discussion concerning the ability of newspapers to campaign and hence set the medium- to long-term news agenda justifies the focus on them here. This directed attention to four newspapers – the *Daily Mail*, *Express*, *Independent on Sunday* and *Mirror* – that encompass the full demographic and ideological breadth of the newspaper industry,

including pro-Labour and anti-Labour titles. This thesis does not claim that these were representative of newspapers in general: they were not in that other titles chose not to campaign or were broadly supportive of government policy (see Chapter 4). Their significance lies in the extent to which policy elites perceived the campaigning newspapers as posing a threat and responded first with a counter-attack and then through negotiated compromises (see Chapter 8). Before explaining how particular policy elites were selected it is first necessary to define and justify the term. Policy elites is used as a collective term for policymakers comprising ministers, civil servants and expert advisors/advisory committees (see p. 26). The “policy” collective is a signifier not a fixed category so it allows for the possibility of differences and conflicts between policy elites. The “elite” component is also a signifier of the argumentative strategies used by policymakers to exclude the public from debates on the new technologies, control public debate, co-opt them, limit consumer choice and so exclude their preferences from consideration in decision-making processes (see chapters 5 and 7). Implicit in these strategies are assumptions that policy elites and their experts “know” and conversely a potentially irrational, adverse public reaction could derail this.⁴

Narrowing the focus to particular policy elites was also challenging because of the large number of departments and committees with direct or indirect responsibility for aspects of biotechnology policy. The focus in this research on GM food directs attention in the first instance to the Ministry of Agriculture, Farming and Food (MAFF); then, as this became discredited and contestation over GM food escalated, the locus of decision-making shifted first to the Cabinet Office and Prime Minister and then, after 2000, to the Food Standards Agency. Thus the object of study – GM food – has itself directed the selection of which policy elite discourses to analyse.

The merging of the analytical framework and these methodological principles was operationalized in a research design comprising chronologically ordered yet alternating empirical chapters:

- (1) The analysis of problematization between 1996 and the end of 1998 is tackled in:
Chapter 5: Policy elites – from pre-problematization to problematization; and
Chapter 6: Newspaper engagement and problematization.

⁴ It is beyond the remit of this PhD to explore this, but these assumptions are rooted in elite theories of democracies in which it is assumed that those most competent to govern should do so and the role of the electorate – or public – is limited to the selection of the competent. Beyond that the public is assumed to be irrational, volatile and largely uninformed (for more on these democratic approaches and the role of the media within them, see Scammell & Semetko 2000). The use of the term ‘elite’ here captures these implicit assumptions. It is not intended in the pejorative sense.

(2) The analysis of contestation, negotiation and the subsiding of contestation between early 1999 and 2000 is tackled in:

Chapter 7: Escalating policy contestation – Blair enters the fray; and

Chapter 8: Newspaper contestation and campaigns.

The analysis of critical texts in these was based on the conceptualization of discursive intersections as dialogical and dynamic, and is supported by a hybrid methodology that seeks to capture these in shifting claims and counter-claims. It draws on Billig's (1987) theorization of interactions as argument and persuasion as well as on Fairclough's (1992) understanding of discourse as critical and dialectical. This draws attention to shifting claims and counter-claims in:

- (1) The argumentative context; that is, the macro-context of all circulating discourses on a particular issue that are organized during processes of societal argumentation into positions and counter-positions;
- (2) Repertoire and counter-repertoire; that is, the total configuration of discourses used by elites that summarize key arguments and the challenges to these by newspapers; and
- (3) Order of discourse; that is, shifts during argumentation in the dominant, subordinate and silent discourses used by elites and newspapers. Silent discourses are those that are not drawn on.⁵

The findings were checked against a timeline compiled prior to the empirical analysis (see Appendix 3) to ensure not inadvertent historical fallacies crept into the conclusions. Furthermore, much of this research is innovative, aimed at deriving new conceptualizations and theorizations about discursive intersections and participatory media-governance. Thus, as findings emerged these were reformulated into new conceptualizations and included in the glossary (see Appendix 1).

Parameters, limitations and contributions

A final methodological consideration needs to be negotiated: the issues of research credibility and significance. Questions of significance are often seen as synonymous with questions of generalizability particularly in quantitative studies, where there are clearly defined criteria for the evaluation of the latter. However, qualitative studies avoid such a conflation by seeking significance in what is emblematic but at the same time struggle with

⁵ Both the argumentative context and order of discourse are concerned with the totality of discourses so they are overlapping concepts. However, they differ in how they view the organization of the discourses. The former draws attention to the organization of discourses into positions, arguments and counter-arguments. The latter draws attention to hegemonic discourses that underlie arguments and counter-arguments.

questions of generalizability that arise from interpretative methods, researcher subjectivity and the use of critical – or extreme – case studies (see Marston 2004).

Here the thesis draws on Hajer's (2005a) argument that the generalizability of qualitative research lies in its contribution to social theory and its significance in the extent to which it elucidates the emblematic nature of the phenomenon studied. First, the substantive contribution of this thesis is its exploration of the hitherto under-researched terrain of interactional dynamics in the political–media complex and its unique formulation of a conceptual framework – discursive intersections – for the analysis of it. This research applies this to one particular form of engagement – contestation over new risks of GM food – however, the framework has been designed for application to instances of less intense contestation, consensus and negotiation. Further studies are needed of how these emerge, in what conditions and with what implications for discursive shifts if a richer picture of discursive intersections in the political–media complex is to emerge. This would also support subsequent research on why certain forms of engagement and not others emerge in the political–media complex.

Second, Hajer (2005a) draws attention to how the significance of extreme reactions and controversies lies in their emblematic nature. That is, they signify the eruption of a deep disturbance in a society (see also Garland, 2007) and they leave traces in new discourses, institutional processes and practices when they subside (see also, Schmidt 2008, 2010; Marston 2010). This thesis introduces an added dimension: that is, the emblematic itself is a site of struggle over what past is included and how. For instance, with GM food newspapers increasingly incorporated BSE/CJD in claims about 'why government could not be trusted' on GM food while the new Labour Government sought to exclude such associations from their problematizations. There is also a futuristic dimension in the ways in which key actors may attempt to forestall repeats of the past. For instance, the analysis of the arrangements for the new Food Standards Agency highlight how policy elites determined to avoid GM food-style scares threatening future innovations (see Chapter 7); however, subsequent research needs to explore the implications of this for other food safety issues dealt with by the new regulator. Emblematic traces can also be found in the plethora of investigations into Science in Society after 2000, which highlighted a new sensitivity on the part of policy and political elites to the social acceptability of novel technologies and risks (see House of Lords, 2000).

There remains however the issue of credible and generalizable findings given a high level of researcher subjectivity and the use of an extreme case. In this thesis, researcher

subjectivity has delivered previously unidentified insights that question the methodological premises used – and hence findings – in supposedly more reliable quantitative methods (see the critique of social representation approaches in Chapter 2). This is supported by Flick’s argument (2002) that researcher subjectivity is a valuable part of the research process. These findings still need to be subjected to scrutiny if they are to be considered credible. Here the research draws on ‘functionally equivalent criteria’ of transparency, thick description and reflexivity (Bauer & Gaskell, 2000). These have been operationalized in a clear articulation of the rationale for research decisions, the inclusion of key extracts in the appendix and the cross-referencing of these with empirical analysis in Chapters 5 to 8.

Apart from these limitations – or opportunities depending on your epistemological premises – the following research parameters or caveats must also be added:

- (1) This research is not concerned with an ontological reality against which media or elite articulations can be assessed for ‘truthfulness’ or distortion. It assumes a constructionist epistemology in which knowledge is formed of and is informed by beliefs, values, ideas, culture, etc., so it is relative, negotiable and contestable.
- (2) It is not concerned with linear causality but with exploring shifting and evolving discursive intersections in which each party may revise their own arguments slightly or substantially to accommodate, reject or neutralize opponents’ arguments. That is, it sets out to map the trajectory of discursive struggles while recognizing that these may not lead to a ‘victor-loser’ scenario but often messy compromises.
- (3) There are overlaps between genetically modified food and genetically modified crops, not least in their irrevocable intertwining within constructions of the food chain. Some of these linkages will be explored, but agriculture is not the primary focus of the research; it is only relevant in so far as debates about it inform those about GM food and contextualize this within government.
- (4) In May 1997, primary responsibility for novel food regulation passed to the EU. This research recognizes that this limited the ability of the government to respond to demands for a ban on GM food. However, the specific interpretation of directives was left to national governments, so there was considerable variation across the EU (Bauer et al., 2002). It was at national level that most opposition to GM across the EU was experienced. This research can therefore legitimately focus primarily on the British case.

Thesis structure

The remainder of the thesis is structured as follows.

Chapter 2 identifies key criteria for the selection of literature to review, then critically evaluates their usefulness for a study of the dynamic interactions between media and government. It argues that the main limitations are an asymmetrical privileging of media or government, reductionist or out-dated understandings of communication, and methodologies that are ill-equipped to capture dynamic interactions.

Chapter 3 justifies an alternative location from which a theoretical framework comprising the political–media complex (Swanson, 1997), new risks (Beck, 1992) and participatory politics (Teorell, 2006). This not only addresses the asymmetry of other studies but also supports the conceptualization of discursive intersections in the political–media complex. This is seen as arising out of a paradoxical relationship of interdependence–independence at an interface of different cultures, agendas and knowledges with potential for conflict, negotiation and consensus.

Chapter 4 outlines a constructionist, qualitative methodology that offers an alternative to those critiqued in Chapter 2 and supports the operationalization of discursive intersections as shifting claims and counter-claims during processes of argumentation. This methodology draws on a hybrid discourse theory that merges Fairclough's (1992) critical discourse analysis and Billig's (1987)/Bakhtin's (1982) emphasis on position and counter-position, argument and counter-argument. It also justifies the methodological selection of the case study and the focus on newspapers and elites in MAFF, the Cabinet Office and the prime minister.

Chapters 5 and 6 empirically locate emerging problematization by policy elites and newspapers in their particular institutional interfaces, which informed which claims they drew on and how they constructed their particular arguments. It also traces how problematizations increasingly diverged and conflicted.

Chapters 7 and 8 trace the escalation of contestation with the launch of four newspaper campaigns, the counter-attack by Blair and the emergence of a retailer boycott. It also explores how elites sought negotiated compromises, the subsiding of the newspaper campaigns against GM food and the assimilation of resistance into new discourses and structures.

Chapter 9 outlines the findings and contributions, parameters, limitations and areas for future research.

Chapter 2: The Weakest Link – Media And Government Interactions in Existing Studies

Introduction

This chapter sets out to evaluate critically the existing literature for what can be used or adapted to inform the current research agenda; that is, interactional dynamics between newspapers and policy elites over GM food risks. This presents two challenges. First, there are substantial bodies of literature on the increasingly central role played in politics by the media, and political responses to this. However, most studies have centred either on representations or on policy processes but few have examined both (see Koch-Baumgartner & Voltmer, 2011). One of the most commonly used frameworks – the CNN effect – is limited to television (see Robinson, 2001) and has not been applied to risk or to other media platforms.⁶ Agenda-setting has been, but this is only concerned with one type of effect so has limited applicability to interactional dynamics. Second, there is considerable literature on risk and media; risk and policy; as well as of media and of biotechnology or GM food policy but little on media-policy engagements and only one on these in the particular risk domain studied here. The following criteria were therefore used to ensure the selection of literature for evaluation was manageable and focused:

- That it conceptually – explicitly or implicitly - affords both media *and* government roles in risk debates.
- That it has the potential to be adapted to support policy elite–newspaper interactions over risk.

Five frameworks met these criteria but were then rejected because of: (1) media/policy centrism, which creates an asymmetry that undermines the analysis of media-government interactions; (2) a limited understanding of the nature and role of media or policy elites; and (3) methodological frameworks that were ill-equipped to capture interactional dynamics. The review of the literature identified an additional problem: the term interactions means different things in different approaches. Hence the preference here for an alternative terminology of discursive intersections to refer to shifting claims and

⁶ A number of studies suggest that the policy domain or type of policy may have major implications for whether the media engage, how they do so and how policy elites respond (see Baumgartner & Voltmer, 2011; Robinson, 2001).

counter-claims that emerge during sustained engagement. This chapter concludes by arguing that despite the rejection of these frameworks they do include elements that can inform the original conceptualization of discursive intersections here developed.

Selection and qualification

Five frameworks were derived from the criteria outlined above and grouped as follows:

- Media-centric frameworks: (1) Moral panic (2) Social amplification of risk (SARF).
- Policy-centric frameworks: (1) Advocacy coalitions (2) Discourse coalitions.
- Biotechnology/GM specific frameworks: Social representation and cultivation analysis.

This chapter evaluates each of these in terms of:

- The context in which it emerged and the influences on it;
- An outline of the framework, its predominant epistemology and understanding of its applicability to the research agenda here; and
- A critical evaluation of the contribution and limitations of the framework when applied to an analysis of media-government interactions over GM food.

Before reviewing this literature a qualification and an explanation need to be added. First, any chronological sequencing of the literature does not signify a linear or cumulative progression of knowledge of interactional dynamics over risk. There are temporal overlaps between the frameworks, and sequencing broadly follows shifts in the focus in risk debates from moral panic to 'technological toxins' over time. However, there has been little systematic engagement between frameworks – with the exception of the two coalition-based approaches – so little sense of cumulative knowledge building from one to the next. Cross-fertilization of knowledge has been further hampered by considerable differences in the focus, aims, objectives and disciplinary influences of the different approaches. This research, for the first time, brings together these disparate literatures into a critical review of our understanding of the interactional dynamics of risk in the political-media complex.

Second, existing frameworks need to be evaluated in terms of the relative methodological capacities of realist-positivist and constructionist-interpretivist approaches to capture interactional dynamics. On the one hand, realist epistemologies and positivist-informed methodologies assume external reality exists and is objectively knowable provided that scientific methods of research are used systematically (Crotty, 1998). Credible research

therefore relies on the application of broadly standardized research procedures, quantitative methods and scientifically rooted criteria of validity, reliability and generalizability. On the other hand, constructionist⁷ epistemologies and interpretative methodologies contend that risks exist only in knowledge as social constructs that emerge out of interpretations, which are in turn interpreted by the researcher. Such constructs emerge through ‘the collective generation of meaning as shaped by the conventions of language and other social processes’ (Schwandt, 1994: 127). Thus social constructionism ‘emphasizes the hold our culture has on us: it shapes the way in which we see things ... and gives us a quite definite view of the world’ (Crotty, 1998: 58). So what matters are not media distortions but how social practices construct risks and the subjectivities involved in this. This directs research attention to qualitative research methods such as discourse analysis. This chapter argues that the latter is better equipped to analyse interactional dynamics because of its focus on discourse as dialogical and dialectical.

The following sections explore the five frameworks identified and argue that to varying degrees they offer useful insights into interactions but their limitations are such that a new framework needs to be designed to meet the research aim here – that is, an exploration of the interactional dynamics of policy elite-newspaper engagements over new risks of GM food.

Media-centric frameworks: moral panics and SARF

Both moral panic and SARF emerged out of growing public awareness and proliferation of risk discourses between the 1960s and 1990s, are media-centric in their focus on media ‘amplification’ of risk, and in focusing on exaggeration infer a researcher bias against this. However, they differ quite fundamentally in the type of risks they analyse and the theoretical influences on their understanding of interactions, and hence their applicability to case studies of media-elite discursive intersections over GM food. The outcome of the critical evaluation of these concludes that moral panic, for all its sophisticated appreciation of interactions and discursive methodologies, is too narrowly focused on moral threats posed to the dominant culture by marginalized cultures to be readily applicable to technological risks that potentially impact populations. Conversely, SARF has been specifically applied to technological risks, so in principle should be well suited to an analysis of GM food, but its reliance on transmission precepts supports a linear

⁷ Although constructivism and constructionism are sometimes used interchangeably in the literature (see Crotty, 1998) they are not synonymous. The former is concerned with how individuals construct meaning; the latter with socially-constructed – that is, collective – meanings.

understanding of communication that undermines an understanding of the dynamic and dialogical nature of interactions.

Moral panic frameworks and questions as to their relevance

Moral panic thesis, which initially emerged out of attempts to use social reaction theory, labelling theory and interactionist studies (Erikson, 1966; Lemert, 1967)⁸ to explain the social upheaval of the 1960s, is concerned with moral threats to the dominant culture. The radical interactionism at its roots informed a critique of exaggerated media coverage, public over-reaction and government attempts to increase social control of stigmatized, marginal groups who were perceived to threaten the core values of a society (Cohen, 1972; Young, 1971). This critique was further expanded with the introduction of Gramscian-influenced theorization of interactions as the manufacturing of a media-government consensus through the stereotyping of black youths as 'folk devils' intent on street robberies (Hall, Crichton, Jefferson, Clarke & Roberts, 1978). This emphasis on exaggeration and stereotyping informed constructionist approaches and qualitative methodologies.

By the 1990s a rich body of studies had emerged, the findings of which were distilled by Goode and Ben Yehuda (1994) into a five-part framework of moral panics:

- An event which generates concern or anxiety;
- Hostility towards folk devils as a result of media coverage;
- The building of consensus around the need for government action;
- The reaction that follows is disproportionate to the actual risk; and
- Media engagement is volatile in that it can emerge and subside suddenly.

Garland adds two other critical features: the moral elements and the construction of deviance as symptomatic of a wider malaise (2008: 11). These 'point to the true nature of the underlying disturbance that gives rise to extreme reactions, namely the anxious concern on the part of certain social actors' that an 'established value system' or way of life is under threat (Garland, 2008: 11). 'Successful moral panics', further argues Cohen, 'owe their appeal to their ability to find points of resonance with wider anxieties' (2004: 13).

⁸ The three main tenets of 'classic' symbolic interactionism as posited by Blumler (1972) are that 'we know things by their meanings, that meanings are created through social interaction, and that meanings change through interaction' (Fine 1993). In the late 1960s and 1970, interactionism was heavily critiqued for ignoring history, structures and power. One response to this was the work of Cohen (1972) and Hall et al. (1978) on moral panics. Another from within symbolic interactionist approaches was the work of Hilgartner & Bosk (1988). They offered an 'arenas' model in an attempt to address this and more on their framework has been included in the review of ACF.

Thus the rich theoretical and analytical framework provided by the moral panic thesis meets three key criteria identified earlier in this chapter: an emphasis on interactions, the ability to explore media-government engagements in a risk domain and recognition of the potential for conflict and consensus in these (see Garland, 2008). Furthermore, it points to an exploration of the significance of panics not only in their particular nature but also to underlying anxieties, threats and resonances. Its emphasis on changing discourses of folk devils suggests that there is potential for the analysis of discursive intersections where phenomena are stigmatized. However, a closer examination of moral panic thesis also highlights why it is inadequate for this research.

The first obstacle is whether a moral framework can be applied to technological risks such as GM food. Researchers have applied it to nuclear power scares where the 'exaggerated fear' of contamination, sensationalist discourses and discrepancies between public perception and expert accounts of risk have obstructed the building of new power stations in the US (see Ericson, 1990). Similar arguments have justified the application of moral panic thesis to the analysis of food scares (see Beardsworth, 1990)⁹ and to GM food in particular, where the sophistication of the moral panic framework is seen as preferable to SARF's 'out-dated' linear understanding of communication (Murdock, Petts & Horlick-Jones, 2003).¹⁰ Critics are unconvinced. Miller and Reilly argue that 'food scares just don't fit the model in that 'folk devils', in Cohen's analysis, are marginalized sections of a society labelled as 'deviant' by the control culture (1995: 329). However, recent studies note that Cohen's original definition of 'folk devils' is not limited to people so does include conditions and issues (see Crichton, 2003; Ungar, 2001). Thus, food or technology *per se* is not excluded from moral panic analysis.

The question, then, is whether moral frameworks can adequately address 'technological toxins' (Goode & Ben Yehuda, 1994) – such as radiation, pesticides, and GM food and crops. The latter are constructed as *qualitatively* different in ways that extend beyond the pre-eminence of the moral dimensions stressed by Garland (2007). Attempts to apply moral panic thesis to technological toxins were based on the claim that the consequences

⁹ A distinction is made here between the use of the theoretically and analytically robust framework of moral panic thesis outlined here and the use of the term moral panic as 'an essential argumentative device ... [a] way of saying "no" to the forces of hyperbole and hysteria' (Garland, 2008: 9). (For examples of this in academic texts, see Bauer, Kohring, Allansdottir & Gutteling, 2001: 35.)

¹⁰ These studies of GM food did not analyse media-government engagements, only media-social reaction; however, the conceptualization of interaction identified does not preclude an expansion of the frameworks to include this.

were wide ranging, serving to 'contaminate rather than merely damage; they pollute, befoul and taint rather than just create wreckage' (Erikson, 1990: 120, 125) and that the exaggerated anxiety associated with them stemmed from 'deep, primordial feelings that may be impervious to machinations' (Goode & Ben Yehuda, 1994: 163). At the same time, researchers were uneasy about the fit between technological toxins and moral panic acknowledging that constructions of the former were more extensive and included the 'involuntary, delayed, unknown, unfamiliar, catastrophic, dreaded and fatal' (Perrow, 1984: 325). This understanding of the construction of 'technological toxins' and the primordial reactions associated with them anticipated the subsequent the translation into English of Beck's Risk Society (1986 (1992)). This thesis argues the latter provides a more fruitful location for this research (see Chapter 3).

A much bigger question, however, arises in the moral panic literature and that is whether extreme reactions, such as those that emerged during the social upheaval of the 1960s, are still relevant at the turn of the century. McRobbie & Thornton (1995) argue not because the growing fragmentation of society, media and politics has disrupted the potential for major social reactions and a broadly collective media. Moral panic theorists acknowledge that society has changed but add that there are still occasions of 'a genuine moral panic' – for instance, over child abuse – but 'this is much less common than moral crusades, symbolic politics and culture wars' (Garland, 2007: 17).¹¹ Furthermore when 'genuine' moral panics do occur, the nature, intensity and trajectory of their interactions tend to differ from those identified in the early research. For instance, the familiarity of moral panics has encouraged a more self-conscious, deliberate and adept handling of the media by governments. Furthermore, participants align themselves accordingly and the media 'ironicize its own sensationalism, pointing out its alarmism at the same moment that it sounds the alarm' (Garland, 2007: 18; Thompson, 1998). The consequence is that the power dynamics of moral panics are less asymmetrical and the extreme reactions lack the 'mobilizing power' they had in the past (Garland, 2007).

This section has argued that although moral panic thesis has been applied to technological toxins other frameworks that evolved subsequently – such as Risk Society – may be better suited to the research agenda here. However, the theoretical and empirical richness of moral panic thesis support two reflections that can inform the exploration in this thesis of GM food: the need to view extreme social reactions as symptomatic of

¹¹ Culture wars are 'where specific social groups engage in moral politics in order to redistribute social status and declare one form of life superior to others' (Garland, 2007: 17). For more on this, see Gusfield 1986 and Garland 2007.

deeper disruptions in society; and, if socio-political fragmentation has undermined the mobilizing of extreme reactions, how was broad-based contestation over GM food possible.

Transmission approaches: Interactions as the missing concept in SARF

SARF, unlike moral panic, is less narrowly focused so in principle better able to explore media–government interactions over technological risks and their environmental and health implications for populations. However the framework, despite claims to the contrary by its proponents, is too flawed to facilitate the analysis of interactional dynamics. Later attempts by its proponents to detach the framework from its theoretical roots in transmission assumptions have not adequately addressed criticisms of out-dated, reductionist view of interactions. An alternative to SARF is needed.

The framework emerged in the 1990s out of an interdisciplinary concern with the perceived proliferation of ‘false or exaggerated views’ of ‘hazards’ in the media, the impact of these on public anxiety and the resultant societal distrust of the policy institutions that manage risks (Hohenemser, 1983; Kasperson, 1992; Pidgeon, Kasperson & Slovic, 2003). The framework is premised on the notion that ‘risk events’ – ontological events – are irrelevant or localized unless communicated (see Luhman, 1979). The aim, therefore, is to study the amplified trajectory through society of ‘risk signals’; that is, ‘messages about a hazard or hazard event’ that affect perceptions about how serious or manageable risk is (Pidgeon, Kasperson & Slovic, 2003: 16). This analysis is structured within a tripartite conceptual ‘template’ of communication that comprises:

- A ‘social amplification’ metaphor drawn from transmission models of a linear progression of messages from events through channels to receivers (Lasswell, 1957; Westley & Maclean, 1957; for an overview of transmission approaches, see McQuail, 1993).
- Processing, in which ‘signal stations’ or channels generate, receive, interpret and pass on ‘risk signals’. Contextual factors amplify or attenuate messages as they pass through stations so the ‘volume of information’ is increased or decreased, salience is heightened or lessened and messages are reinterpreted or elaborated in symbols and images (Pidgeon, Kasperson & Slovic, 2003: 15).
- Amplification/attenuation, in which risk messages have ‘ripple effects’ as they pass through society, ultimately influencing public perceptions of risk.

Thus SARF offers an (adverse) media effects framework that is structured around assumptions of ontological hazards, premises of linear communication and a primary emphasis on the amplification or attenuation of risk messages within society. This approach has predominantly been applied within – but is not limited to - positivist-informed approaches which use quantitative methods to analyse media representations (content analysis), public perceptions of risks (surveys) and, in some cases, the statistical testing of correlations between them (see Kasperson, 1992; Pidgeon, Kasperson & Slovic, 2003).

SARF has made important contributions to our understanding of risk communication, not least in its recognition of the importance of cultural contexts in processing risk messages and the centrality of the media in this. It also offers an important counterfoil to instrumentalist approaches with their emphasis on risk assessments, the objectification of hazards around quantifiable measures of consequences and the valorising of experts able to conduct these assessments (for a critique of these approaches see Wynne 1996). Proponents also argue that the application of SARF to a wide range of different types of risks – including technological, health, environmental and food – is ‘evidence’ of its flexibility and adaptability (see Pidgeon, Kasperson & Slovic, 2003). They have acknowledged SARF’s limitations, such as ambivalent findings based on the difficulty in isolating media influences from other factors (see Frewer 1993, 2002; Breakwell 2000) and an empirical centrism in the shortage of studies of governments as signal stations, but counter that the framework does not preclude such an examination (Pidgeon, Kasperson & Slovic, 2003).

However, it is the response of SARF proponents to substantive critiques that is less convincing. These critique the reliance on transmission-based assumptions of linear and hierarchical communication in which “authoritative” messages travel from centres of expertise and legitimate power to lay publics who receive these messages passively’ (Murdock, Petts & Horlick-Jones, 2003: 158). This neglects ‘thirty years’ of media studies research and leaves ‘unresolved tensions at the heart of SARF’ between the ‘logic’ of linear, hierarchical communication and the ‘operations of democracy’, which ‘presupposes a dialogic model in which the claims of the powerful are continually tested in open debate’ (Murdock, Petts & Horlick-Jones, 2003: 158). The conclusion of the critics is that the framework itself is fundamentally flawed.

In response, defendants acknowledge an implicit ‘reductionism’ in the ‘baggage’ of the metaphor of amplification (Pidgeon, Kasperson & Slovic, 2003: 13), but counter that their intention is not ‘to reduce social complexity to a particular communications theory or to a

gross electronic metaphor' (Kasperson & Kasperson, 1996). Thus, in an attempt to release SARF from the 'baggage' of transmission models, proponents have sought to de-theorize the framework suggesting that it can be adapted to almost any communication theory and to 'remove any existing doubt' that SARF 'as we conceive it, recognizes that the development of social risk perceptions is always likely to be the product of diverse interactive processes' (Pidgeon, Kasperson & Slovic, 2003: 13, 39). The metaphor is therefore retained but detached from its roots in transmission theory, presumably freeing SARF for other theories to be built around it so facilitate more interactive rather than linear analyses. However, the application of this highlights how attempted de-theorization does not address the problem and that an acknowledgement of interactions is not an analysis of them. For instance, Bakir's study of 'interactions' between Shell, Greenpeace and television in the Brent Spar conflict (2005: 7) concluded that SARF is not inherently flawed but that the application of it has been (Bakir 2005: 691). This project disagrees. The Bakir analysis illustrates how the de-theorizing of SARF merely renders implicit rather than explicit the problems with classic transmission assumptions of interactions as stimulus-response (see L'Etang and Pieczka 2006). SARF proponents, in detaching a transmission framework from its historical roots in mid-nineteenth and early twentieth-century theories leave unproblematized struggles for control of messages (see Carey, 1989).

Thus, attempts by proponents to address the substantive critique of linearity have not provided SARF with adequate analytical tools to capture interactional dynamics in which communication is dialogical and dialectical. Nor is SARF able to capture the power struggles and shifts in discourse that moral panic thesis facilitates.

From moral panics and SARF to new risks

Both moral panic thesis and SARF focus on the exaggeration of panics/risks by the media and heightened public anxieties. In principle both frameworks are capable of analysing media *and* government, but in practice their application has tended to privilege the media. However, they also differ quite fundamentally in the type of risk they analyse, its construction and scale, and their understanding of interactions. Of the two frameworks, moral panic offers more useful insights about the deep disturbances that underlie extreme reactions and the challenges posed by the fragmentation of society. However, the applicability of the moral panic framework to technological toxins has always been somewhat laboured and surpassed by understandings of new risks. Existing literature (see Garland, 2008; Ungar, 2001) has highlighted the differences:

- Type of risks: moral threats versus material risks such as global warming, nuclear disasters or biotech/biological hazards.
- Construction of the nature of risks: exceptional panics versus everyday, pervasive, proximate and potentially apocalyptic risks.
- Scale: narrow focus on deviant groups versus environmental and health risks to populations unbounded by state borders.
- Intensity of social reaction: moral anxiety and disapproval versus acute anxiety.
- Predominant characteristic of media-elite interactions: predominantly but not always consensual versus conflictual.
- Focus: processes of social control aimed at 'deviant groups' versus conflict between diverse interests over relatively intractable scientific claims.

The characteristics of new risk-type anxieties are explored in more detail in Chapter 3; it suffices to say here that the distinctions identified illustrate why this is more useful to an analysis of GM food than moral panics. Even so, some of the insights from moral panic literature about the deep disturbances in society and the challenge of societal fragmentation need to inform this thesis. Its main limitation however is its tendency to media centrism. Conversely, the coalition frameworks tend to be policy centric.

Policy-centric frameworks: advocacy versus discourse coalitions

While moral panic and SARF are media-centric, coalition frameworks are policy-centric. Both the advocacy coalition framework (ACF) and its discourse rival (DCF) emerged out of growing dissatisfaction in the 1980s with the dominant paradigms in policy studies and critiques of inadequate accounts of policy stability and change. While ACF sought alternatives within existing positivist-informed epistemologies and methodologies (Sabatier & Jenkins-Smith, 1987, 1993), DCF looked to an emerging subfield of discursive policy studies with its constructionist epistemologies and discourse theory. What emerged were two competing frameworks for the study of how policy dynamics - stability and change -emerge from interactions between groups or 'coalitions' comprising informal alliances of a wide range of actors, including the media. While ACF focused on shared beliefs, ideas and knowledge; DCF focused on discourses. Both have been used to analyse technological/new risks, including GM food. This chapter, however, argues that DCF with its emphasis on discourse offers a more useful understanding of interactional dynamics but its focus on collective engagements obstructs an exploration of the role of media-government engagements in the expansion of conflict.

Advocacy Coalition Framework (ACF)

ACF emerged from a critique that saw existing paradigms as too narrowly focused on the role of interest groups to explain policy stability and change. It offered instead an explanation based on the '*interaction* of competing advocacy coalitions' (Fischer, 2003c: 100, my italics). Interactions are therefore collective, taking place between informal groupings – including the media - around particular policy positions.

The framework is based on the following core assumptions:

- The central role of scientific and technical information in policy processes;
- A time period of 10 years at least is needed to understand policy change;
- Policy subsystems of interacting, competing coalitions are the primary unit of analysis;
- These subsystems comprise a broad set of actors, including media, consultants, scientists and NGOs, grouped into coalitions;
- Policies and policy processes are understood as 'translations of belief' into ideas and values about causation then into practices (Sabatier & Jenkins-Smith, 1999: 118–20; Weible, Sabatier and McQueen, 2009).

Thus, advocacy coalitions form around beliefs, ideas and scientific-technical knowledge, and then seek to influence policy to reflect these (Fischer, 2003c: 95; Sabatier & Jenkins-Smith, 1988, 1993, 1999). Interaction takes the form of argument, not as persuasion but as an interchange of normative and ontological beliefs, the strategies adopted to promote these and the instrumental manifestations of these in policy practices. ACF argues that despite continuing engagements between coalitions, policy remains stable for long periods, but when change does occur it takes place along four 'paths':

- External events in the form of: (a) 'shocks' such as changes in socio-economic conditions, public opinion, party in power or a major disaster; and (b) 'policy learning' as a result of experience or new scientific information, for instance of a link between BSE and CJD (Sabatier & Jenkins, 1999).
- Internal events in the form of: (a) failures in existing system practices (Sabatier & Weible, 2007: 204–5); and (b) 'cross-coalition learning in professional forums' that gives rise to negotiated agreements involving two or more coalitions (see Weible, Sabatier and McQueen, 2009).

Research designs drawn up for these have used positivist-informed empiricism, quantitative methods and statistical testing.

Although ACF does not specifically theorize risk, a number of studies have used it to analyse risk-related policies (see for instance Hsu, 2005 and Nohrstedt, 2005 on nuclear power), hence its inclusion here. It has also been applied to GM food to explain the emergence of a pro-industry stance in the European Commission (Barling, 2000: 247), an 'emerging coalition' in the US in opposition to European labelling policies (Young, 2003) and vigorous opposition in Germany to the novel food concluding that it arose not out of external events, but out of perceptions arising from the privileging of different types of information (Bandelow, 2006).

These studies highlight the value of the framework in expanding our understanding of the range of policy actors to include the media; highlighting the importance of struggles over beliefs, ideas and expert information; and identifying the importance of external and internal disruptions to existing belief systems. Despite these contributions, a number of limitations can be discerned in the understanding of interactions and of the media in these.

Proponents of ACF admit that research is needed on the interactive dimensions; that is, on coalition strategies and the 'learning' within and between them coalitions (Weible, Sabatier & McQueen, 2009: 135). However, whether ACF can fill these gaps is debatable given the framework's understanding of argument as interchange rather than persuasion thus under-theorizing the communicative dimension of interactions; proponents' privileging of positivist approaches; and their 'aversion to interpretative methods' (Fischer, 2003c: 99, 100). This informs a 'technocratic cognitivism' and a decontextualizing of debates (Fischer, 2003c: 99, 101) manifest in a failure to recognize how 'modes of argument and technical processes serve as instruments of social control' and persuasion and how the privileging of technocratic rationality and objective science valorises certain beliefs while excluding those of 'lay experts' as irrelevant (see Durant, 2008; Wynne, 1982, 1996, 2001). This book argues that such a valorisation of certain types of knowledge over others inevitably locates media within a 'deficit' position (see Ziman, 1991) in which even those journalists with some scientific, technical or other specialism are seen as less competent than expert advisors to government. Furthermore, the assemblage of lay reportage and specialist-expert commentary in media raises questions – unaddressed in ACF – as to what informal role mass-mediated expertise may play in policy debates on technological risks. The role of the media is further marginalized in ACF frameworks by collapsing the particularities of media interactions into a collective unit of analysis – the coalition – in which it becomes difficult to distinguish the role of members of a coalition and dynamic interactions between them (see also Fischer, 2003c: 101; Hajer, 1993).

A related framework that emerged at the same time as ACF but out of sociology rather than policy studies is Hilgartner & Bosk's public arenas model (1988). While this was developed without any consideration of ACF – or vice-versa – there are a number of ontological, epistemological and conceptual overlaps. Both are concerned with including a wider range of actors than moral panic and SARF including but not limited to media and policy elites. Both view discourse as synonymous with public debate. Both view interactions in terms of exchange, but Hilgartner & Bosk add a competition dimension in which different actors 'compete' for limited 'carrying capacity' (1988: 64) and so draw on some of transmission assumptions used by SARF and critiqued above. Both deal with problem definition: ACF from ideational/knowledge premises and arenas from labelling theory.

An alternative to ACF and 'arenas model' is needed that includes a communicative dimension able to capture the persuasive and dialogical elements of argumentation; a conceptualization of contested science, not only in terms of expert knowledge but also in ways that legitimize 'lay knowledge' so avoiding inferring deficient contributions that devalue these; and a framework that locates interactions within wider societal arguments yet is capable of capturing the particularities of engagements between particular actors – media and government.

Discourse-based coalitions

DCF addresses some of these limitations. It emerged out of a critique of ACF and a concern with the changing nature of sub-politics in the 1980s and 1990s. That is, the 'structural displacement of important decisions' to extra-parliamentary realms such as scientific councils or when the activities and discursive struggles of protest movements or media results in a 'redefinition of a political issue' and hence a policy (Hajer, 1995: 39).

The framework is rooted in the counter-tradition of discursive policy studies, which is critical of the limitations of 'rationalist mainstream of instrumental policy analysis' (Fischer 1980; Fischer and Forester 1987; Hajer 1995; Rein, 1976) and seeks an alternative that views policy not as objective, technical assessments of alternatives, but as rhetoric, argument and values (see Majone, 1989: 1). What emerged was the 'argumentative turn', which argued that the object of policy studies was not objective indicators or competing beliefs and ideas captured in compare and contrast analyses but the struggles over meaning, hegemonic and counter-hegemonic discourses, and the social-political practices from and within which constructs emerge and actors engage (Hajer, 1995).

While the 'empirical realists' in ACF 'relegate the politics of discourse to the expression of power resources *through* language', this new tradition explored power *in* discourse (Fischer 2003c: 39, *my italics*). That is, discourse is seen as constitutive of reality emerging out of contextualized and dialectical discursive interactions. They emerge out of and constitute existing and changing institutional routines and (social, political and economic) contexts. Policy stability and change is therefore analysed in the way these different elements mutually influence and reinforce each other at the level of discursive interactions (Fischer, 2003c; Hajer, 2005: 299). Argument is therefore not the presentation of competing sets of ideas, knowledge and interests as ACF claims, but is discursive, dynamic and persuasive. DCF therefore offers a more sophisticated, dynamic understanding of communication than ACF and hence a more effective framework for the analysis of interactions within and between coalitions.

The DCF alternative developed by Hajer (1995, 2005, but see also Bulkeley, 2000; Jensen, 2003; Marston, 2004; Szarka, 2004) comprises the following:

- Storylines are statements, facts and condensed summaries conveyed in story form.
- How and why particular storylines emerge lies in the socio-historical and institutional contexts in which they are produced, received and interpreted.
- Social interaction is organized around discursive affinities – coalitions – based on a common position and the use of a common storyline to put forward one argument and refute another.
- Shifts in dominant storylines require central actors to recognize the rhetorical power of a new discourse and for this to be institutionalized in policy processes and practices.
- The phenomenon itself becomes emblematic, signifying of – for instance – the perversion of the natural (BSE/CJD) and signifiers of the impact of industrialization (acid rain, nuclear power).
- These constructionist-discourse premises privilege qualitative methods.

The analysis of discursive affinities and storylines entails a methodological examination of what is being said to whom by which discursive affinity or coalition in what context (Hajer, 2005).

A major focus in DCF studies has been on technological risks: for instance, air pollution (Hajer, 1995), climate change (Bulkeley, 2000; Szarka, 2004) and oil extraction (Jensen,

2003). It has also been used to explore coalition conflicts in Europe between GM crops and alternative agricultures (Levidow & Boschert, 2006); to the 'mobilization' of resistance to GM crops in India, South Africa and Brazil (Scoones, 2008); and to political conflict between coalitions of economic development discourses versus farming/environmental interest discourses in India (Ramanna, 2006). However, what is conspicuously absent is a specific privileging of media-government interactions and the implications of this for 'discursive affinities'.

However, labelling this as a weakness of the framework would be unfair in that both DCF and ACF are primarily concerned with collective engagements rather than those between particular types of actors. The emphasis on coalitions, however, does obstruct the empirical privileging of media-government interactions within and between coalitions. This poses a conundrum for a framework that is concerned with the discursive 'mobilization of bias' (Hajer, 2005) yet unable to adequately explore the particular role of the media-government engagements in the expansion of conflict and the mobilization of resistance.

DCF – and other discursive policy approaches – have attracted the usual criticisms about the credibility of interpretative approaches (see Fischer, 2003c) regarding the absence of criteria of reliability, validity and representativeness. This follows out-dated quantitative versus qualitative debates that have been overtaken by the volume of qualitative research and the emergence of 'functionally equivalent criteria' – researcher reflexivity, thick description and research transparency – to evaluate the credibility of interpretivist approaches (Bauer and Gaskell, 2000: 349).

A related critique centres on issues of significance and the generalizability of findings from detailed case studies and discourse analysis. A case study approach and a highly interpretive sampling of extracts from analysis raise questions about the generalizability of the research. Proponents argue, first, that a case study, discourse analysis approach to policy change 'is only able to tell a small story about language, space and time ... It has the capacity to generalize about social processes and question theory but not about the effects of orders of discourse across related fields' (Marston, 2004: 124). Second, the significance of qualitative research does not necessarily lie in the generalizability of the findings but in what is emblematic. Issues such as acid rain, air pollution, global warming and BSE 'come and go but what remains is the emblematic level', that is, they 'fulfil a key role in institutional change', defined as the emergence of new discourses as dominant and entrenched in policy practices, and hence institutionalized (Hajer, 2005: 305).

A third reservation raised in this research is whether a primary focus on storylines obscures or facilitates an analysis of argument. Defendants of DCF would counter-argue that implicit in narratives is an argument about and a problematization of a phenomenon (see Fischer, 2003c). However, as the empirical examination of the GM food in this thesis highlights, there are times in media–government interactions when conflict centres explicitly takes the form of explicit claims and counter-claims, argument and counter-argument and from which a ‘grand narrative’ emerges. The empirical privileging of the former can better highlight the sharp edges of media-government conflict.

A critical, comparative evaluation of advocacy and discourse coalitions

Both ACF and DCF focus on collective engagements within ‘coalitions’ – which can include media – and purport to examine interactions as argument. However, they differ quite fundamentally in their conceptualization of argument, interactions and methodologies. ACF examines collective argument based on the interchange of ideas, values and knowledge through positivist-informed quantitative methodologies; DCF focuses on discursive affinities constructed around storylines and examined through constructionist-informed qualitative methodologies. The latter is more useful for the analysis of *interactional dynamics* because of its richer theorization of communication. This draws attention to the potential contributions discursive–persuasive approaches can bring to a study of interactional dynamics. It also, as with moral panic, draws attention to the phenomenon as emblematic of a deeper disturbance. The search for significance therefore needs to include the exploration of residues in discourses, practices and understandings and struggles over which discourses from the past should be included in understandings of the present or future. However, the collective emphasis in both ACF and DCF presents an obstacle to the privileging of media–government engagements between coalitions.

Biotechnology/GM specific frameworks: cultivation analysis framework

This third grouping of frameworks for the analysis of risk interactions – a longitudinal, comparative series of studies led by Bauer and Gaskell (2000, 2002) – is the only research dealing with biotechnology or GM food to privilege *both* media and government. The studies explore ‘how and under what conditions social representations enable, constrain or change the “trajectory” of the new technology’ (Bauer, 2002b: 94). The significance of the studies is not only the direct relevance of the subject matter to this thesis and their longitudinal, comparative analysis of media, policy and public

representation of this across the EU.¹² They also offer the only framework reviewed here – with the exception of the two seminal moral panic texts (Cohen, 1972; Hall, S., Critcher, C. Jefferson, T., Clarke, J. & Roberts, B., 1978) – that avoids media/policy centrism. They are located within the realist-positivist traditions on which SARF and ACF draw, so are open to some of the methodological critiques already identified. However, unlike these two frameworks, Bauer and Gaskell draw on a rich theoretical tradition of social representations and communication. Yet ultimately the framework is unsuitable for adaptation to the analysis of media-government interactions because of its problematic understanding of media and of interactions.

Bauer and Gaskell (2000) locate the 1990s controversy over biotechnology within elite presumptions that genetic engineering ‘would become a strategic technology for the 21st century’ much as nuclear power and information technology had in the 20th century (Bauer, 2002, 2005). This presumption, they argue, was challenged by press and public reactions to ‘two watershed developments’ – the increasing importation of GM soya from 1996 and the cloning of Dolly the sheep in 1997 – which sparked global debates over the innovations and a split between agri-biotechnology (GM food and crops) and medical-biotechnology (the human genome project) (Bauer, 2002, 2005). Broadly speaking the European press contested government policies on the former but formed a broad consensus on the latter (Bauer, 2002, 2005; Bauer & Gaskell, 2000; see also Nerlich, Dingwall & Clarke, 2002).

These developments are analysed at the level of representations, defined as ‘re-presenting something that is absent with semiotic tools such as iconic images, indexical markers or word symbols’ in public forums and in ways that focus ‘attention, motivate, legitimate or question and resist new technologies’ (Bauer, 2007: 30).¹³ The framework was influenced by Moscovici’s theorization of social representations in a communication system (1961, 1976, cited in Bauer, 1999) and Cultivation Analysis, used to assess ‘the existence and size of longer-term mass media effects’ through a ‘drip feed’ of particular social representations (Bauer, 2002: 99; Bauer & Gaskell, 2000, 2001).

The key elements of the framework are as follows:

¹² The trajectory of representations of biotechnology was traced – through EU-wide collaborative projects – across time (30–50 years), locales (EC and 12 EU states), and arenas (policy, media and public) (Bauer & Gaskell 2000, 2002).

¹³ This notion of re-presenting is clearly distinguishable from meaning-making in the concept of discourse as discussed in Chapters 3 and 4.

- The contents of communication are concerned with how abstract knowledge is rendered accessible to non-scientists through naming, metaphors and associations.
- Processes of communication are concerned with propaganda, propagation and diffusion.
- Communication consequences are manifest public stereotypes of technology
- Long-term cultivation of common beliefs takes place in 'social milieus' or communication systems in which representations are elaborated, circulated and received in symbolic processes (Bauer, 1999: 169; 2005: 68)
- The conceptual basis of cultivation is 'socialization rather than persuasion ... a drip feed with cumulative effect' (Bauer, 2002: 98–9).

This analytical framework was then applied to three arenas through a research design comprising a content analysis of 'opinion-leading' newspapers, surveys of public opinion, document analysis of policies and statistical mapping of convergence or divergence between data sets. 'What is at stake', they argue, is a triangulated 'convergence' of 'reader's perceptions and press coverage' (Bauer, 2005: 68) and of media representations and changes in the regulatory institutions. Their conclusion: that the 'quality press *cultivated* a representation of biotechnology' that 'prepared for and legitimized the new regulatory framework in the UK' (2002: 94).

The relevance of such a study of biotechnology to a thesis on GM food is self-evident, as is the identification of its significance within public and press challenges to government premises about strategic technology. The other substantive contribution of Bauer and Gaskell's work is its comparative nature in which they dispute assumptions about a global convergence of oppositional representations (2008). Bauer and Gaskell identify broadly positive approaches to agri-biotechnology in Argentina and China; examples of 'successful' communication of innovation in the USA, Canada, Philippines and India;¹⁴ and major resistance in Europe. Even following an EU harmonization of biotechnology policy in the 1990s, Bauer and Gaskell argue that there have been 'considerable divergences in timing and substance of biotechnology debates' across Europe and variation in the responses of national governments to these (2001: 32). The uniqueness of the British experience, they argue, lies in a 'saliency' that far exceeds any elsewhere, elite representation of genetic research as being in the British 'national interest', and a cultural-historical resonance of genetics that dates back to Darwin (Bauer, 2002: 96).

¹⁴ For more on the following see: USA (Nisbett & Lewenstein, 2002); Canada and the USA (Priest, 2006), Philippines (Aerni, 2006); Argentina (Mucci, 2004).

Despite these contributions, Bauer and Gaskell's social representation-cultivation analysis is problematic in terms of press-government engagements. First, their conceptualization of policy, press and public as 'relatively autonomous', linked only by timing and content (Bauer, 2002a), is problematic. It ignores extensive research in political communication on complex relationships of independence, interdependence or both (see Herman & Chomsky, 1988; Meyer, 2002; Swanson, 1997; Voltmer, 2006) and thereby omits any institutional imperative or logic behind how or why media and governments engage with each other over issues of risk. Engagement becomes arbitrary – a matter of chance and choice on how to represent the 'watershed events'.

Second, direct media–government engagement is not addressed. Only indirect engagement, via the effects of the media on public attitudes and policy elites' reading of the press as an 'index' or proxy of public opinion and 'converging' representations (see Bauer, 2002a; Bauer & Gaskell, 2000). But the press–public axis in Bauer and Gaskell's framework is also problematic. It assumes a hierarchical cultivation and socialization – not persuasion – by the press of particular public attitudes to biotechnology through a 'drip feed' of certain representations over time (Bauer, 2007: 31). The same critique that Murdock, Petts & Horlick-Jones (2003) made against SARF about the dialogical nature of struggles can be made here. Furthermore, Bauer and Gaskell's framework excludes questions of how the public is inscribed *within* political discourses (Lewis, 2001: 14). In particular it ignores the ways in which the 'public' – constructed in the proliferation of polls and surveys – becomes a site of conflict between press and government and a rhetorical device to add credibility to arguments within a 'symbolic bid for authority', and hence part of the power struggles (Entman & Herbst, 2001; Lewis, 2001: 4).

Third, the problems identified earlier of capturing dynamic interactions through quantitative methodologies and compare-contrast-converge analyses apply here. However, this project has an additional methodological reservation about the Bauer and Gaskell sampling strategy based as it is on misconceptions of British newspapers. In order to render a huge project manageable they selected one 'opinion leading' title able to serve as a 'proxy' for the 'mass media' (Bauer, 2002b: 23). This selection – of the *Times* until 1987 and the *Independent* thereafter – was based on a British Library claim that this constituted the 'daily newspaper of record with an opinion-leader function for the other media' (Bauer, 2002: 108). This claim was then verified statistically to show that a 'single source is a good enough long-term indicator' (Bauer, 2002: 108).

This runs counter to findings in media and journalism studies of a highly fragmented British media and newspaper industry (McNair, 2000; Murdock, 2003; McRobbie & Thornton 1993). It ignores how key agenda-setting – and opinion-leading – functions in the British press lie in their campaigning capabilities (see McNair, 2000) and how all Britain's national newspapers construct their identities as campaigning. Market fragmentation is seen in that different newspapers are therefore able in principle to serve as opinion leaders on different issues, at different times (see Howarth, 2010). Furthermore, no rationale is provided by Bauer and Gaskell (2002) for the privileging of the 'elite' press. Existing studies highlight how a major re-alignment of the newspaper industry had taken place by the mid-1990s in which the mass market continued to shrink, the mid-market had become the politically significant space and the elite market continued to struggle to hold its readerships (see Cole, 2007; Davies, 2009; Greenslade, 2004; Howarth, 2012).¹⁵

These misconceptions raise doubts about the premises underpinning Bauer and Gaskell's sampling strategy (2000, 2001) and their findings about the timing of newspaper engagement and what constituted 'watershed' events. The use of a different sampling strategy and the selection of different newspapers (see Chapter 4) led to different findings (see Chapters 6, 8 and Appendix 8). These include: (1) initial engagement that was more sporadic, fragmented, ambivalent and belated than Bauer and Gaskell (2000) assume; (2) the critical juncture for GM food was not the 'watershed' events – the import of GM soya in 1996 and Dolly the sheep in 1997 – but the interventions of Prince Charles and Professor Pusztai in mid-1998, which facilitated the engagement of the mid-market and mass market press ignored in the Bauer and Gaskell (2000) studies; and (3) a significant factor in the sustaining of newspaper contestation was the launch of four campaigns by newspapers with a wide demographic, ideological and political reach. As Bauer rightly notes, a 'key problem is how representations come about, are sustained and change over time in any public forum' (2007: 30). However, Bauer and Gaskell's sampling strategy means that one of the primary devices available to the British press for sustaining engagement beyond relatively short news cycles is bypassed.

¹⁵ Industry analysts and former editors argue that the emergence of mid-market as the most politically significant emerged out of major social demographic changes that had seen the shrinking of the working class and the growing middle classes with the expansion of education, increased professionalization and more working women (Greenslade, 2004). Within this market, years of ownership struggles, changes in editorship and an ideological re-positioning had weakened *The Express* in relation to the *Daily Mail* (Davies, 2009). The perceived significance of these changes for politicians has been discussed in Alastair Campbell's diaries (2011).

An alternative conceptualization, methodology and sampling strategy for newspapers, policy elites and the relationship between the two is needed to that offered by social representation–cultivation analysis. Despite a number of critical contributions to this research, in the final analysis the social representation–cultivation analysis framework offered by Bauer and Gaskell is ill-suited for conceptual, methodological and empirical reasons for an analysis of interactional dynamics between press and government over GM food

Towards an alternative framework

The criteria used for the selection of the five frameworks – their potential adaptability for this research – also formed the basis of their evaluation. It is beyond the remit of this research to explore more fully their respective contributions here. All have been rejected for different reasons. These can be synthesized as:

- Media/policy centrism and asymmetrical research designs that undermine an analysis of interactions between two powerful actors;
- A problematic understanding of the relationship as largely irrelevant to the development of risk policy controversies (coalition frameworks) or as autonomous so at odds with existing research on political communication (social representation frameworks);
- Too narrow a focus on one aspect of risks involving a small group and limited in potential consequences (moral panic);
- A limited conceptualization of interactions as linear (SARF), hierarchical socialization (social representation) or as arguments devoid of persuasion (ACF); and
- Methodologies that focus on compare-contrast-converge analyses that are ill-equipped to capture the dynamic, dialectical and dialogical dimensions in interactions.

The problem in reviewing these frameworks and providing an alternative is that they use the term ‘interactions’ to mean different things depending on epistemology and communicative theory used. To avoid further confusion and to distinguish this thesis from these approaches ‘discursive intersections’ has been used here to refer to shifting claims and counter-claims over a policy issue in the political-media complex and to locate this research within the broad trajectory of the frameworks identified here as having the most potential for development, that is, those derived from the discursive traditions in media studies (moral panic) and in policy studies (DCF). The novelty of the framework posited in

the next chapter therefore does not lie in a paradigmatic shift but in the formulation of one able to address the limitations and gaps in the approaches reviewed here while at the same time incorporating the useful elements identified in this chapter. Key existing or new features identified for inclusion comprise:

- A relationship that is independent and interdependent, from which arises a logic of engagement yet is non-prescriptive, allowing for the possibility of consensus, conflict and negotiation.
- A contextualization of media-government engagement within wider social, institutional and argumentative conditions that shape and are shaped by their interactions.
- The possibility that interactions may take different forms depending on the (historical) socio-political context, what risks are involved and how these are constructed.
- Interactions that are dialogical, dialectical and discursive hence dynamic.
- Recognition of the particularities of GM food controversy in Britain.
- A focus on significance discernible in the ways in which GM food was emblematic of a much deeper disturbance and when contestation subsided how it left traces in changed discourses, processes and practices.
- An exploration of generalizability not in the particular case study but in the analytical framework devised and in the social theory that emerges.

Chapter 3 uses these pointers to locate and theorize media-government engagements within a tripartite framework comprising the political-media complex, new risks and participatory approaches to media and government. The analytical framework for discursive intersections is located within the discursive traditions that have enriched moral panic and DCF but is adapted to take into account the limitations identified in this chapter and the particular theoretical framework.

Chapter 3: Conceptualizing Media– Elite Discursive Intersections

Introduction

The previous chapter argued other risk frameworks as inadequate for an analysis of the interactional dynamics between media and government over GM food. Instead it argued for a new, framework that builds on discursive approaches identified as potentially fruitful but eschews their media or policy centrism, offers a nuanced theorization of the relationship, recognizes that the form interactions take may vary depending on the construction of risks, and locates engagement within (historical) socio-political and institution contexts. The term discursive intersections was preferred to interactions partly to distinguish it from these and partly because of its emphasis on the dialogical, dialectical and dynamic. This chapter sets out a tripartite theoretical framework – based on the political-media complex, new risks and participatory approaches – in which to house the concept of discursive intersections, then conceptualizes this and outlines the unique analytical framework devised.

This framework is relatively flexible and is designed to facilitate empirically-driven theorizations of the interactional dynamics of the political-media complex. The starting premise is that engagement – or contestation – cannot be assumed but needs to be investigated – *hence the research question as to how it emerged, was sustained and then subsided*. This is explored through the proposition that media–elite contestation emerges out of increased engagement, escalating uncertainty and divergent, conflict problematizations. The components of this proposition are not new. Literature on the public understanding of science and the sociology of scientific knowledge has drawn extensively on concepts such as problematization and contestation. Discursive approaches have been used to study media and policy (see chapter 2). What is new is its particularization to the political-media complex and interactional dynamics of risk.

The political-media complex, new risks and participatory politics

The unique theoretical framework formulated here is based on a starting premise about interactional dynamics. That is, any imperative to engage lies in a paradoxical relationship of interdependence and independence at the interface of different knowledges, cultures

and agendas with potential for conflict, negotiation and consensus (the political–media complex). What form this takes depends on the nature of the risk domain and how risk is constructed (new risks). It also depends on how newspapers and elites (re)construct their roles as conflict escalates (participatory politics). However, engagement and contestation cannot be assumed – how it emerges and evolves needs to be empirically investigated.

The political–media complex: an interactionist perspective

The starting premise in frameworks of the political–media complex is that neither is dominant nor dominated but at a generic level is in a state of perpetual negotiation or struggle (Blumler & Gurevitch, 1996; Deacon & Golding, 1994; Swanson, 1997; Voltmer, 2006). These negotiations and struggles take place at the interface of ‘different cultures, agendas and institutional needs’ characterized by a paradoxical independence-interdependence with ‘incentives for co-operation and conflict’ (Swanson, 1997: 1266). The result is a ‘complex web of interactions’ over (Voltmer, 2006: 61) over the definition of policy problems, the addressing of these and so ultimately control of the public agenda. So how they engage, whether this is manifest in conflict or consensus, and the outcome cannot be theoretically pre-determined – it needs to be empirically investigated. Existing studies have highlighted conflict over GM food (see, Bauer, 2002a, 2002b; Bauer & Gaskell, 2002; Frewer, Miles & Marsh, 2002), so the issue in this research is not whether or why conflict emerged but how. The political–media framework argues that addressing this requires the location of engagements within the (historically) evolving nature of institutions and the implications of this for engagement.

Political changes

The GM food controversy is located at a critical juncture in long-term institutional and processual, ideological and discursive changes in the nature of the state dating from the 1970s (see Fischer, 1980; Hood, James & Scott, 2000; Majone, 1997; Rhodes, 2000). These have seen a restructuring of the state in response to the problematization of the growing complexity of policy as well as increased societal anxiety about risks and distrust in the inability of traditional centralized structures to address these (see Majone, 1997; Rhodes, 2000). The consequences have been a ‘hollowing out’ of the central state (see Hood, James & Scott, 2000) comprising key shifts:

(1) In the power and nature of the state from centralized to regulatory, that is:

- from a strong executive
- to an ‘archipelago’ of different sole-purpose risk committees and agencies with statutory decision-making powers.

(2) In the processes of governing from government to governance, that is:

- from hierarchical, centralized decision-making by generalist ministers and permanent officials
- to expert committees and regulatory agencies with considerable autonomy, specialist expertise and clearly delineated technocratic decision-making procedures.¹⁶

(3) In forms of participation from non-participatory to participatory governance, that is:

- from secretive and exclusionary, expert and elitist decision-making in which scientific views took precedence over consumer, environmental and other views¹⁷
- to relatively transparent and participatory decision-making in which individual consumers/the public or their representatives sit on key decision-making committees.

The GM food controversy of the late 1990s is located between the expansion of governance under the Conservative Government and the emergence of participatory governance by New Labour; so a key question is what role, if any, the media played in these institutional shifts. These broad changes – decentralization, governance and participation – in science policy areas emerged in response to challenges to post-war hegemonies of authoritative, impartial and uncontested science able to contribute to and legitimize rational decision-making (Locke, 2002; Yearley, 1994, 1996, 2005) particularly after BSE/CJD. The challenges centred on legitimacy discourses. The shift from government to governance had been accompanied by shifts from representative legitimacy based on decision-making by democratically elected ministers to technocratic legitimacy based on claims about expertise, impartiality and the independence of advisory committees (Majone, 1997; Moran, 2001). However, by the mid-1990s technocratic legitimacy was being challenged as undemocratic, enabling ministers to use technocratic rhetoric to deflect responsibility for controversial decisions and evoke the ‘rationality’ of decisions based on the ‘best scientific advice’ while at the same time the secretive nature of the committees was open to ministerial interference in expert decision making (Van Zwanenberg, 2005; Van Zwanenberg & Millstone, 2000; Yearley, 1994). Technocratic rhetoric had also been used to restrict public debate since the ‘solution of technical problems is not dependent on public discussion’ (Habermas, 1971: 103–4; see also Van Zwanenberg, 2005; Yearley, 1996: 116). The shift to participatory governance – including

¹⁶ These have incorporated nearly every facet of the state that are not deemed core functions, that is policymaking including auditing/financial risks (National Audit Office and Financial Services Agency) and regulators for utilities and transport networks.

¹⁷ The Food Standards Agency and the communication regulator, OfCom, were among the first to include participatory and strategic advisory functions.

the Food Standards Agency – was in response to these criticisms, a perceived need to de-politicize and decentralize science-based decision-making as well as New Labour's wider commitment to enhancing public engagement in a range of policy areas.¹⁸ At the same time, this was part of a wider ideological shift in the Labour Party away from old-style welfarism to a more neo-liberal ideology 'premised on the extension of market relationships ... a preference for a minimalist state' and an emphasis on deregulation, efficient markets and competitiveness (see Lerner, 2000 p.5). The inclusion in the 1997 Labour Party manifesto of dominant discourses of 'efficient markets' and 'competitiveness' highlighted how far the party had moved away from the old welfarist, more socialist-orientated doctrines.¹⁹

The issues, however, were particularly acute with reference to food safety controls. A decade of food scares was problematized by media and policy elites as having arisen from deregulation and allowing unfettered markets. They are also seen as contributing to a 'crisis of confidence' and a 'climate of public mistrust' in the institutional arrangements (see Chapters 6 and 8). This hastened the shift in food safety controls from central state to independent regulator, from governance to participatory governance. This case study is located within the critical juncture of these shifts. One of the central contentions in this research is not only that the media played a crucial part in these institutional, processual, ideological and discursive shifts, but also that the nature of the state was changing in response to this shifting context.

Media changes

Two challenges arise in applying the political-media complex here: the literature on the changing state barely mentions the role of the media in this and media studies have highlighted the diverse, fragmented and contradictory nature of the British media (Murdock, Petts & Horlick-Jones, 2003) but ignored the implications for the changing

¹⁸ Thorpe has traced the ideological roots of New Labour's commitment to participatory governance in the Third Way sociology of Giddens, their commitment to the promotion of science in the knowledge economy and a managerialism in which the 'new culture of consumerist individualism' could be harnessed not only to serve the market but also be channelled into public action – a form of democratic individualism (2010: 402). Participatory governance mechanisms were not only used for food regulation but also urban regeneration and hospital governance.

¹⁹ This working definition of neo-liberalism needs to be caveated in that it is 'more an ethos or ethical ideal, than a set of completed or established institutions' (Dean 1997 p.213). This renders the notion of neo-liberalism relatively nebulous; but important nonetheless in the way in which it signifies a converging of political party ideologies around a middle ground where the discourses of the market had become dominant. However, as Lerner (2000) notes as an ideology neo-liberalism is contradictory, comprising multiple values. A key element of the analysis here is of how, within this market-orientated predisposition, key shifts did take place with the change of government in the degree of emphasis placed on individual consumer choice.

state. The questions then are which media to focus on, based on what criteria, and what role might they play in the shift to participatory governance.

Different media play different roles in policy debates (McNair, 2000) depending on different types of regulatory structures, operations and power dynamics (Curran, 2003; Curran & Seaton, 2003). Television has a short-term or immediate agenda-setting role while national newspapers have a primary agenda-setting role in the medium to long term because they have the 'power to set the dominant political agenda' by taking the 'lead in establishing dominant interpretative frameworks' and can serve an 'investigative' or campaigning function 'on the back of which major agenda-setting interventions can be mounted' (McNair, 2000b: 30). They are able to do this because they are not subject to the same regulatory constraints as broadcasters and so have greater freedom to take sides in a debate and challenge elite problematizations.²⁰ So newspapers – while not the only media actors in the political-media complex – have particular capabilities that potentially place them at the forefront of media-elite contestation over policies, hence the focus on them in this research.

The launch of campaigns against GM food policy by four newspapers signifies the exercising of just such capabilities. The timing came at a critical juncture in the newspaper industry. By the mid-1990s a major re-alignment had taken place that followed an expansion of the middle class and a shift to the middle ground as politics and policies became more centrist (see Davies, 2009; Greenslade, 2004; Hagerty, 2002). These changes were reflected in the shrinking mass market, an elite market struggling to retain readers, a mid-market dominated by the *Daily Mail* that became the most politically significant and ideological clustering of the press around centrist positions (see Boyce, Curran and Wingate 2007; Davies 2009; Catterall, Seymour-Ure & Smith 2000; Greenslade 2004). At the same time, there was also a weakening of the political allegiances of newspapers as party ideological positions shifted (Greenslade, 2004; Thomas, 2005) and as news became more issue- and event-driven (see Livingston & Bennett, 2003). Thus, a title could remain broadly supportive of the government yet campaign on policy issues it perceived contrary to readers' interests. This meant on key issues – GM food, the euro and immigration – a number of newspapers had greater freedom to campaign simultaneously than might have been the case previously.

²⁰ The statutory frameworks that govern Britain's terrestrial broadcasters require 'impartiality' which is usually taken to mean the refrain from taking sides in a political or policy argument.

This increased potential for ad hoc collective campaigning was a significant development. The British press has a 100-year history of campaigning and all of the national newspapers construct their identities in this way. However, financial constraints meant relatively few campaigns were launched between 1945 and 1999 (see Frank, 2006; Heller, 2008; Milne, 2005; Miraldi, 1988). By the mid-1990s they were ready to resume.²¹ Less tied to party loyalty and with an increase in issue-driven coverage, newspapers had greater freedom on what to campaigns to wage. Thus, with GM food, instead of single newspaper campaigns, ad hoc collective campaigning became possible across the demographic, partisan and ideological spectrum of the national press (see Chapter 8), overriding the market fragmentation mentioned in Chapter 2 and ensuring a formidable mass dissemination of certain ideas.

There were also changes in how campaigns were waged. While most newspapers, with the exception of the *Daily Mail*, were financially constrained in the 1990s, earlier de-unionization and technological innovation (digitization) had changed resourcing in other ways. Production costs were lower, enabling new titles to be launched in the late 1980s. Pagination increased and new supplements were added (Curran, 2003; Greenslade, 2004; McNair, 2008; Whittam Smith, 1996); columnists, comment and analysis proliferated, providing 'a larger platform for debates'; and coverage of human interest, entertainment, sport and women's features expanded (Curran, 2003: 93; Greenslade, 2004). Content-wise the boundaries between serious and popular, male and female, political and lifestyle blurred, so that campaigns such as GM food could be covered across a wide range of sections and with an emphasis on analysis, opinion and debate.

Thus by the mid-1990s newspapers had also reached a critical juncture. Paradoxically competition, financial constraints and fragmentation were further accentuated. At the same time, editors had greater freedom as to what they campaigned on, how, and what pagination resources they would commit. This did not require a paradigmatic shift in editors' professional understanding of the appropriateness of such active engagement in policies because of a history and culture of campaigning. It did, however, depend on what they perceived as significant enough for a campaign, how they negotiated other professional obstacles and, having done that, what form a campaign took.

²¹ How and why this was possible at this period needs further research than is possible here.

New risks and definitional struggles

The contribution of the political-media complex to this research is, first, its emphasis on (historically) located and institutionally rooted interactions. Second, it offers a relatively open framework in that it does not presume conflict or consensus and so enables an exploration of how media–elite contestation over GM food emerged and evolved. However, it under-theorizes the particular form engagement may take in different contexts and the discursive nature of struggles in the political–media complex. This section seeks to address this gap by drawing on Beck’s conceptualization of new risks and radical uncertainty associated with it. It argues that when dealing with new risks such as GM food, media–elite engagements have the potential to take the form of definitional (discursive) struggles over uncertainty, the management of this and the democratic acceptability of proceeding. However, it cannot be assumed that this will materialize.

New risks are constructed as qualitatively different from natural disasters or controllable man-made risks in that they are manufactured, emerge out of the technological advances of late modernity and have novel impacts (Beck, 1992 (1986), 1999; Giddens, 1998; see also Wilkinson, 2000; Cottle, 1998). However, they ‘initially exist only in knowledge’ so that struggles over them are epistemological and discursive, involving the contestation and negotiation of uncertain knowledge claims (see Beck, 1992 (1986)).²² These struggles are also ‘definitional’ in that they are constituted around conflicts over the nature of the risk, the implications of managing them in conditions of uncertainty and whose definition should predominate (Beck, 1992 (1986); Miller, 1999). With new risks, definitional struggles are likely to centre on radical uncertainty.

Discourses of radical uncertainty emerge out of a philosophical critique of the ‘progress’ of modernity, the ‘potentially catastrophic consequences’ of this and the scepticism about knowledge claims of safety (Beck, 1997). Uncertainty also resonates in discourses about the pervasive proximity of threats to life-sustaining air, food and water. At the same time, the threats are invisible and their effects unknown and potentially unlimited spatially and temporally so that ordinary people are powerless to take evasive action (Beck, 1997).

²² Beck (1992) and Giddens (1998) are not the only ones to have identified the emergence of risks that have not previously been experienced. Kousky, Pratt & Zeckhauser (2010) have as well but they label these ‘virgin’ to refer to those we have ‘neither experienced nor considered’ (p.1). These might include the unforeseen and exceptional (such as the financial crash) or those we never think will happen to us (the car crash) where there is a low probability of occurrence but serious consequences when they do. This concept of ‘virgin’ risks differs in that it assumes a different ontology and epistemology from the Becksonian-based ‘new risks’ I draw on in this research. My principle argument is that it is precisely because of the unknown – rather than the unlikely – that radical uncertainty came to characterize media-policy elite debates over GM food.

Governments are seen as complicit in facilitating 'progress' yet unable to manage the risks or control the consequences because possible novel impacts exceed the limits of existing evidence and scientific knowledge (Beck, 2003; Giddens, 1998).

This conceptualization of technological risks draws attention to three inter-related spheres of contestation. First, the public's helplessness in evading the risks, opposition to being subjected to unnecessary risks and resistance to new technology (Beck, 2003; Giddens, 1998) means that they becomes central in the problematization of new risks. Second, contestation over uncertainty centres on conflicting values of progress versus prudence in the face of unknown effects and the inability of governments to control or manage these (Beck, 2003; Giddens, 1998). Third, new risks exist only in knowledge (Beck, 1992 (1986): 22–3) so contestation also focuses on uncertain, contested science and lack of evidence.²³ Definitional struggles over these give rise to a new (scientific) reflexivity in which knowledge itself is challenged; government and manufacturers of risks are subjected to new forms of scrutiny as production is questioned; and there is the potential for a 'transformation' to a risk society with new forms of governance of uncertainty (see Beck, 2003; Miller, 1999; Ungar, 2001).

The media are crucial actors in definitional struggles and thus critical in the emergence of the new reflexivity. Beck affords them three roles here: to 'spotlight' the risks and uncertainties; to 'concretize' them by rendering the 'invisible visible' through concrete images, both graphic and metaphoric; and to scrutinise/challenge decisions that expose ordinary people to risks that policy elites cannot manage (Beck, 1992 (1986); Cottle, 1998). Elites respond by 'veiling the hazards ... through communicative strategies' in which rhetoric minimizes risks and legitimizes policies promoting the technology as 'progress' (Beck, 1995: 101). Thus, unlike moral panics, where there is a tendency for media and policy elites to form a consensus in favour of new forms of social control, with new risks governments are opposed by the media (Ungar, 2001). Their inability to govern uncertainty means they become the 'carriers of hot potatoes' in that they are no longer seen as part of the solution but of the problem (Ungar, 2001).

²³ Beck argues new risks are the 'result of objective changes in the quality of risks as well as societal transformations' (Taylor-Gooby, 2006: 42–3). This has led to critiques of 'epistemological-ontological slippage' in his writing which makes it unclear, for instance, whether he is talking about 'media revelation or media representation' (Cottle, 1998: 5). This is not a philosophical project so it conceptualizes new risks associated with GM food as a 'fundamental social construction referring to a specific social constitution, rather than a change in objective dangers' (Zinn, 2008: 42–3).

This theorization by Beck provides four central conceptualizations relevant for this research. First, there is potential for media–elite engagement to take the form of definitional struggles – what this research terms divergent, conflictual problematizations – over new risks and in which the public, values and ‘evidence’ are contested. Second, uncertainty discourses are central to these struggles. Third, there is the potential for media and elites to play particular roles when dealing with new risks. However, limitations in Beck’s theorization need to be addressed before it can be used in this research.

First, media do not always engage with risks because of operational difficulties. That is, the futuristic nature of the discourses and debates centred on abstract uncertainties present operational obstacles (Kitzinger & Reilly, 1997: 320) to journalists whose practice centres on the here, now and certain. Furthermore, existing literature has highlighted how critical newspaper coverage tends to follow elite dissent, so newspaper contestation may not emerge when there is elite consensus (see Robinson 2001, 2002). Second, policy elites may ignore media and vary in how they engage with different types of risks (see Hood, James & Scott, 2000). Third, any potential that newspapers may have to influence policy is undermined by discrepancies between short news cycles and long policy ones, so elites can usually wait for newspaper paroxysms to subside before resuming policy business as usual (see Reese, Gandy & Grant 2001; Miller, 2001; Stromberg, 2001). To a large extent these issues can only be addressed empirically by asking how contestation emerged in the political–media complex over GM food. However, the normative assumptions underpinning any possible answers needs to be unpicked if they are not inadvertently to foreclose on the analysis.

Participatory media, participatory governance

Another major innovation in this tripartite framework is the inclusion of participatory approaches partly in response to critiques elsewhere of an over-reliance in media studies on out-dated classic liberal approaches (see Scammell & Semetko, 2000) and in this research of policy studies for ignoring the role of the media in shifts towards participatory governance. While the gap in the latter is obvious, the weakness in the former needs exploring.

Normative assumptions in classic liberal approaches view the role of the media as holding government to account, the impartial conveyer of information and the facilitator of rational debate (see Scammell & Semetko 2000). The logic of this means any deliberate attempt by media to mobilize readers and influence policy would signify an unprofessional

departure from the norms. Such approaches, however, are inadequate in explaining how or why media may re-define their role as active participants in policy debates and legitimize this in discourses about a greater public good. Furthermore, the relevance of notions of impartiality and rationality are questionable where knowledge and facts are themselves disputed, hence the interest here in alternative theories of the role of the media. An alternative is needed that addresses the operations of both media and government in response to each other – hence the turn to participatory approaches.

Participatory approaches in democratic theory valorise participation as an ‘end in itself’ (Scammell & Semetko, 2000: xxxvii) and as a means to revitalizing democracy through greater public engagement and greater responsiveness on the part of elites to voters. There is an extensive literature on the new forms of participatory governance that have emerged during the 1990s, but this has tended to ignore the role of media.²⁴ The challenge in developing participatory approaches here is that the concept of public participation is elusive in theory and in practice. Proponents take it to mean more inclusive, transparent forms of governance, while detractors counter that these are an extension of a neo-liberalism that co-opts or assimilates the individualized public into ‘new regimes of power’ (see Newman & Clarke, 2009: 134–7). The practice is also elusive, arising from a ‘diversity of political imperatives ...and concerns’ and referring to different forms (see Newman & Clarke, 2009: 134–7). The focus here is restricted to two forms: newspaper campaigns and a form of participatory governance manifest in the Food Standards Agency. The empirical analysis will explore whether the new forms of governance amounted to forms of democratization or co-option and assimilation of newspaper resistance.

The inclusion of participatory approaches to the media in this project is innovative. Participatory approaches have been used to study new media (see Rheingold, 2008), alternative media (see Huesca, 1995) and community media (Howley, 2005), but they have not been applied systematically to traditional mainstream media such as the British national press in mature democracies. The key question, then, is what mainstream newspaper activities might be deemed participatory. The following three approaches were adapted from literature on participatory politics: (1) The application of ‘influencing attempts’ (Verba & Nie, 1972: 2) that aim to influence the choice of elites and policy choices by them (Teorell, 2006: 788) could be extended to include newspaper campaigns

²⁴ In this research, ‘participatory approaches’ refers to the normative theories of democracy and ‘participatory politics’ to the activities and discourses that are deemed to be participatory (see Teorell, 2006). A further distinction is made between activities of the public (‘participation’) and activities of the institutional media (‘engagement’).

that advocate policy change, seek to 'reveal certain truths' or educate/inform the public (see Chapter 8). The normative valorisation of participation would view campaigns, not as deviations from professional impartiality, but as legitimate forms of engagement able potentially to mobilize other forms of public participation. (2) The facilitation of discussion and the articulation of alternative views that elites would rather were not heard (Teorell, 2006) accords with strong traditions in media studies and public opinion studies (see Dryzek, 2006; Entman & Herbst, 2002; Habermas, 1989) about the role of the media in processes by which individual preferences are aggregated into collective choice through public debate. (3) There is the active inclusion of individual citizens in direct decision-making, especially in relatively small settings. By definition this exempts the institutional media from having a direct role; however, Chapter 7 explores how the newspaper campaigns created the conditions in which new forms of direct public participation were seen by elites as necessary.

Of the three, the strongest and most original is the conceptualization of media campaigns as a legitimate form of participatory politics that created the conditions in which new forms of governance emerged. In so doing, it facilitates an empirically-driven theorization of an under-researched form of media engagement (see Birks, 2009; Milne, 2005); provides the conceptual tools to capture particular editorial constructions of their role as exposing uncertainties and as demanding elite responsiveness to public concerns; and points to how newspaper engagement was sustained beyond short news cycles for long enough narrow the gap with long policy cycles and for significant discursive intersections to emerge. The book argues that campaigns are crucial to widening public participation through multiple forms of mobilization or resistance and in the pressure for government to facilitate greater public participation in the processes and debates by which food policy is shaped.

Summary

This section has outlined a tripartite framework in which each component complements the others. The political–media complex approach argues that engagement is interactive but does not suggest what form engagement might take in different policy domains. Risk society theorists argue that engagements have the potential to take the form of definitional – discursive - struggles over uncertainties when dealing with new risks. However, they under-theorize the interactive – as in interdependent and independent – nature of media and elites (see, for instance, Cottle, 1998). Participatory approaches value media engagement both in its own right and because of what it adds to wider participatory

politics. Synthesizing these approaches suggests that addressing the key research question as to how contestation emerged could be explored through the proposition that increased uncertainty, plus media engagement, plus divergent and conflictual problematization led to increased contestation. However, all three approaches discussed thus far lack a theory of discourse able to inform the analytical framework necessary to capture discursive intersections in the political-media complex over GM food.

Discourse, power and change

This chapter has already argued that how contestation over GM food emerged – that is, what conditions and processes made conflict possible at a particular point in time – was related, first, to the particular institutional, industrial and societal context in which it emerged. Second, it was related to the particular nature of a policy domain in which GM food was characterized as a new risk around which media-government contestation - definitional struggles over uncertainty and its management - could emerge. What is missing, however, is an exploration of the way in which discourses constrain or facilitate the particular nature of contestation. This requires a theory of discourse that explains the nature of discourse, defines it and expands it into critical concepts capable of supporting the analysis of discursive intersections.

Whatever theory of discourse is used needs to arise out of the critiques of existing approaches (see Chapter 2) and be compatible with the tripartite framework outlined in this chapter. This section argues that a theory of discourse as: (1) dialogical and persuasive supports an analysis of interactional and participatory dynamics; (2) as dialectical supports interactions between media-government contestation and wider societal debates as well as between institutional processes in the political–media complex and the emergence of contestation over new risks; and (3) as critical locates meaning-making processes in the reproduction of power relations in the policy and media domains.

Such an approach offers an alternative to SARF, ACF and social representation approaches that were dismissed in Chapter 2 as inadequate for an exploration of discursive intersections. That is, because their approaches are too rigid, linear or hierarchical to capture the dialogical and dialectical nature of interactions and partly because they ignore the rhetorical and persuasive nature of political discourse. Other approaches to discourse analysis that do incorporate these elements (see Button & Lee, 1987; Labov & Fanshel, 1977; Potter & Wetherell, 1987; Sinclair & Coulthard, 1975) have been rejected for failing to engage with the nature of society and its institutions (social

theory) or for under-theorizing the role of conflict and contestation in discursive practice (for a critical overview of such approaches see Fairclough, 1992: 15–25). In outlining an alternative, this research draws on a combination of literary theory (Bakhtin, 1981), discursive psychology (Billig, 1996) and Critical Discourse Analysis (Fairclough, 1992).

Discourse theory: dialogical and argumentative, dialectical and critical

This research uses a hybrid discourse theory which draws on understandings of discourse as the social production of meaning within particular contexts and draws on views of the discursive processes as, first, dialogical, argumentative and persuasive (Bakhtin, 1981; Billig, 1996). Second, discourse is viewed as critical, dialectical and constitutive of social change (Fairclough, 1992).

Bakhtin argues ‘consciousness can only realize itself, however provisionally, in dialogue with the other’ and that a truth claim ‘only emerges in contact with, or in anticipation of another’s truth [claim]’ (Dentith, 1995: 44). Billig similarly argues that attitudes are not intrinsic to the individual but emerge in a social context in which an attitude reflects a particular ‘stance in a matter of controversy’ (1996: 2). That is, collective meanings are derived through dialogue from claims and counter-claims within a particular context so cannot be understood in isolation. Dialogue therefore entails negotiations or ‘struggles between actors to invest discourse with their preferred meanings’ (Steinberg, 1998: 852) and to persuade the other so it takes ‘the rhetorical form’ (Bakhtin, 1981: 268). The main contribution of this Bakhtin–Billig approach is its conceptualization of discourse as an essentially dialogical process of argumentation and counter-argumentation with a view to achieving persuasive effects.

Fairclough (1992) also starts from the premise of discourse as the social production of meaning. While his approach omits the persuasive dimension of Bakhtin and Billig, it introduces the idea of discourse as dialectical, a critical methodology that interrogates hidden power relations and a theory of discourse linked to social change. Fairclough’s dialectic refers to the way ‘in which the impact of discursive practice’ depends upon how it interacts with ‘pre-constituted’ social structures, relations and hegemonies (1992: 60). These are not one-way interactions; rather ‘discourse is shaped and constrained by social structure’, while at the same time is ‘constitutive’ in that it ‘contributes to the constitution’ of the social structures, etc. that shape and constrain it (Fairclough, 1992: 64).

This focus on the dialectic requires a critical methodology for the empirical study of discourse. Critical approaches assume that relationships cannot be taken at face value, so a critical method is needed to show how hidden meanings are shaped by power relations and struggles and, in turn, contribute to reproducing these power relations through meaning/discourse (Fairclough, 1992: 15). Relations of domination within institutions and society are 'produced, reproduced, contested and transformed in discourse' (Fairclough, 1992: 10). So any analysis of social change needs to analyse change in discourse through the processes of dialectical – interactive – struggles over meaning.

This synthesizing of Fairclough's CDA and Bakhtin–Billig argumentation facilitates the conceptualization of discourse in this research as dialogical and persuasive, dialectical and critical. When linked to the tripartite framework used here the approach conceptualizes interactional dynamics as emerging from a paradoxical relationship of interdependence and independence at the interface of different knowledges, agendas and cultures with potential for consensus or conflict. When conflict does emerge, then engagements in the political–media complex take the form of definitional struggles over the problematization of uncertainties. This cannot be assumed, hence the need to explore how media-policy elite contestation emerges in the political–media complex. The integration into this of discourse theory further facilitates the study of these contestations as struggles over meaning that should, in seeking to advance arguments and produce persuasive effects, contribute to the reproduction of or challenge to the power relations of the policy–media complex and of public life/society at large. However, it is not enough to characterize discourse as dialogical, dialectical, persuasive and critical; it is also important to define what discourse is, given the multiple meanings accorded to the term (Mills, 1997) and given that the particular definition informs what elements of language will be empirically analysed. The next section first outlines, then expands on the definition of discourse used in this research around concepts of argumentative context, order of discourse and discursive/non-discursive action. These concepts are then operationalized in order to support the conceptualization of discursive intersections.

Key definitions and concepts in discourse theory

The concept of discourses, derived from Billig and Fairclough, is used in the following distinct but overlapping ways:

- Discourse as 'texts' and actions. The distinction is a matter of emphasis rather than discrete categories but remains important in how argumentation develops.

- Discursive groupings – or categorizations (Billig, 1996) – around: (a) specific regimes of meaning associated with a particular type, for example, political discourses, scientific discourses (Foucault, 1970); (b) the discourses associated with particular sets of actors – media discourses, elite discourses, expert discourses.
- Discursive practices or processes refer to the selection of meanings from existing texts during the ‘processes of production and interpretation’ (Fairclough, 1992: 4). This research is concerned with one particular set of processual forms – problematization, contestation and action (see below).

However, this definition is a relatively generic one that needs to be applied to the processes in which arguments and counter-arguments are formulated and re-formulated if it is to support the empirical focus on definitional struggles and discursive intersections over GM food. It is precisely because the political–media complex is engaged in definitional struggles that the argumentative context becomes important. The argumentative context is a macro-social context comprising all the circulating discourses on an issue or that have the potential to be associated with it. Media and policy elites extract from this macro context particular discourses in order to construct their particular argument and problematization. How they do this is captured in the concept of order of discourse, that is, the ‘total configurations’ of discursive practices or processes (Fairclough, 1992).

The order of discourse ensures that processes of extraction (from the argumentative context), problematization and argument construction are not arbitrary but follow the norms, values, principles, practices, and so on of the particular institutional actors. At the same time, the order of discourse is not fixed, that is, during dialogue – processes of engagement and interaction – discursive change becomes possible. The concept of discursive intersections applied here to the political-media complex aims to capture these processes and manifestations of change. It also means that when contestation intensifies, argumentative strategies become crucial. These may take the form of discursive or non-discursive actions; that is, specific interventions by one set of actors intended to persuade or influence, and thereby change, the order of discourse of the other set of actors.

Argumentative context

The critical deconstruction of discourse requires texts to be contextualized in terms of place and time. Context here includes the macro-social structures, the relations of power and the circulating discourses that inform the workings of specific institutional domains of

practice at particular historical moments. From a perspective of argumentation, context includes the structured repertoire of topics that at certain points in time are available for use in public debate and so have the potential to frame 'disputes about norms and values' and to define 'wider social dilemmas' of a society (Billig, 1996: 118). Bakhtin's (1982) notion of the 'historical situated-ness' of discourse refers precisely to this configuration of previous and current circulating meanings that are directly (or indirectly) relevant to a topic, such as GM food. Thus the argumentative context comprises, in this research, all the possible – present and past - circulating discourses that could be drawn on to construct arguments and counter-arguments, or to make new ones.

The relationship between the argumentative context and discursive intersections in the political-media complex is dialectical in that 'discourses' are extracted from this context during the construction of an argument, while at the same time the argument feeds back into the argumentative context, thereby informing other constructions. In this sense, the argumentative concept overlaps with 'social practice' in Fairclough's three-dimensional framework. The preference in this research, however, is for the term 'argumentative context' because of the emphasis that this concept places on a particular type of discursive interaction: argument and counter-argument.

(Societal and Institutional/local) orders of discourse

The concept of the order of discourse – the 'total configurations' of discursive practice²⁵ (Fairclough, 1992: 9) – is concerned with how society or institutions draw from the wider argumentative context and their own existing discursive practices to construct particular problematizations that accord with their specific norms and values. In structuring the totality of discursive practices within society, and hence the construction of argumentative contexts, the order of discourse draws attention to the ways in which certain discourses and practices become dominant in a particular institution, while others remain systematically marginalized (see the concept of hegemony as defined below). Orders of discourse, in this sense, are controlled by certain regulative principles, which prohibit certain topics, valorise certain concepts or legitimize certain forms of knowledge (Foucault, 1970 (1960), 2006 (1961); Rabinow & Rose, 2004). Crucially these regulative principles are not static or closed but are open to change as a consequence of actual interactions (Fairclough, 1992: 9). The analysis of orders of discourse is crucial to an exploration of how particular media and elite discourses were selected from the wider

²⁵ Fairclough's social practice comprises the wider macro-sociological dimensions that inform and are informed by discourse whereas discursive practice is more narrowly focused on the 'production, distribution and consumption of texts' (Fairclough, 1992: 73).

argumentative context, how these were reconstituted into particular problematizations of GM food, how these differed between media and policy elites and how they changed during processes of dialogical engagement.

Discursive action and behavioural action

Generic definitions of discourse include 'a mode of action, one form in which people may act upon the world' and 'a mode of representation' (Fairclough, 1992: 63). What is meant by action, what distinguishes it from text and what the relationship is between the two therefore becomes crucial.

Action in this research is conceptualized on three levels: the processes by which discourse is produced, distributed and consumed; the institutionalized practices, processes and outcomes of decision-making (Wagenaar, 2003: 41); and in the distinction between non-discursive and discursive elements, that is, as a 'constituent of economic forms of practice of a basically non-discursive nature, such as building bridges' and forms 'which are of a basically discursive nature, such as the stock market, journalism ...' (Fairclough 1992: 66–7, 79).²⁶

To clarify these distinctions, this research uses the term 'behavioural action' to refer to action that is non-discursive – a 'physical event' (Campbell, 1996) or discrete action distinct from embedded processes and practices; for instance, the de facto consumer boycott of GM food or activists' destruction of crops. This distinctiveness is relatively clear in Fairclough's illustration of the building of a bridge but there are many areas where the distinction is elusive, more a matter of emphasis than of distinct categories. The analysis of agency is not simply a case of 'objectively attributing responsibility for social actions' but, rather, a process by which we can 'focus on the tension between the way agency is constructed by individuals in their discourse and the way it [agency] is interpreted as [non-discursive] actions unfold' (Norris & Jones, 2005: 171). Thus behavioural action is interpreted through discourse (text). Despite this blurring of the boundaries and ambiguities some distinction remains important in that behavioural action or the lack thereof can be a key element in contestation and certain actions can be used to strengthen an argument, neutralize conflict or shift the locus of the discussion. These illustrate the subtly distinct interconnections between discursive and behavioural action.

²⁶ A more expansive view of action and agency can be found in the work of risk society theorists. The current research does not draw on this in detail mainly because at times action or agency is conceptualized as distinct from discourse or the relationship between discourse and action becomes blurred, such that the analytical clarity that this section is seeking is lost.

To sum up, this chapter has conceptualized the policy–media relationship in terms of dynamic interactions, identified the potential for conflictual engagement in the form of definitional struggles and argued that the critical question is how media–policy elite contestation emerged over GM food. It then argued that the addressing of this needs to take into account the dialogical and persuasive, dialectical and critical nature of discursive engagements. The last section expanded and operationalized the definition of discourse used here around three key concepts – argumentative context, order of discourse and discursive/behavioural action – which are ‘tools’ for the analysis of how particular institutional definitions or problematization emerge in particular places at particular times and how discursive change may ensue through processes of engagement and interaction. Implicit in the notion of orders of discourse open to change through interactions – or definitional struggles – is the possibility for reciprocal influence. Questions of influence raise questions of power and how this is conceptualized, as well as questions of how discursive change may be empirically captured and analysed.

Power and discursive change

The tripartite framework implicitly conceptualizes power and power relations however this needs to be made explicit. Thus, the policy–media complex presents the power relationship as one of uneasy tension and a degree of unpredictability arising out of mutual independence and interdependence, with neither dominating and with potential for consensus or conflict over control of the political agenda and public debate. When dealing with new risks, the potential is for conflict in the form of definitional struggles – that is, over whose problematization of uncertainty will predominate. Participatory approaches are concerned with mobilizing power in different ways. When these centre on definitional struggles, discourse then becomes not only a ‘site of power struggle but also a stake in power struggle’ (Fairclough, 1992: 67) in which the exercise of power is not coercive but persuasive.

Concepts of persuasion and hegemony are crucial to understanding the exercise of power and its implications for discursive intersections. Rhetoric – the art of persuasion exercised through discourse – is both an ‘attempt to persuade’ and the ‘taking a position in at least a two-sided controversy’ (Shotter, 1992: 10). When media and policy elites take a position they do so in ‘the public eye’, so their struggles are not only intended to shift the position of each interlocutor but also to influence public opinion. These attempts to harness the perceived power of public opinion take the form of arguments and counter-arguments, claims and counter-claims about the nature of uncertainty, conflicting values, questions

about government's ability to manage uncertainty, the implications of proximate and pervasive threats to everyday life-sustaining food, and so on. Thus, the inclusion of the 'public' into persuasive strategies has the potential to add immediacy, volatility and emotiveness to media-elite struggles and makes the outcome of power struggles potentially unpredictable. The response of policy elites to this potential volatility and escalation of controversy is a 'veiling of the risks in the form of cover ups, secrecy and self-deception' (Beck, 2000: xii). The media have the potential to respond through the 'portrayal of conflicting definitions' and 'spotlighting' risks, thereby seeking to unveil the risks and expose the certainty claims of policy elites as unsubstantiated by existing knowledge (Beck, 2000: xii).

The 'spotlighting' and 'veiling' of uncertainties is concerned with resisting or protecting existing hegemonies. Hegemony refers to one social group's domination over others in the economic, political, cultural and ideological domains. Thus it is a form of power that is based not on coercion but on the construction of alliances and the generation of consent precisely through the force of argument and persuasion. The outcome of hegemony as a power operation – when successful – is manifest in the commonsensical nature of the dominant discourses that appear to articulate the 'truth' without raising doubt or allowing for alternatives. The concept of hegemony best conceptualizes the workings of power in the societal and institutional orders of discourse, insofar as it draws attention to the structured processes (for instance technocratic processes) by which certain meanings become dominant and others are marginalized or silenced (Fairclough, 1992; Laclau, 2001 (1985)). Yet the dialectical perspective on discourse also emphasises that the 'orientations' towards discursive change 'lie in the problematization' of existing practices, conventions and so on by which publics may challenge the apparent commonsensical quality of truth claims and seek to articulate alternative discourses that produce competing arguments or claims on social reality.

When problematizations arise, throwing into relief the contradictory basis of all discursive constructions of reality, people are faced with dilemmas or contradiction. Change emerges through discursive attempts to resolve these contradictions – a process that 'leaves traces in texts' precisely 'in the form of the co-occurrence of contradictory or inconsistent elements' (Fairclough, 1992: 96). The present research suggests that argument and counter-argument in the political-media complex challenge the dominant discourses of the other by offering divergent and conflictual problematizations that expose dilemmas to scrutiny and highlight the contradictions and inconsistencies.

An analytical framework of discursive intersections

The previous sections highlighted the institutional dimensions of engagement, the particular form it may take in dealing with new risks and the possibility of reconfiguring roles into more participatory ones. They also explored discourse as dialogical, dialectical, critical and persuasive. What still remains is to conceptualize discursive intersections – shifting claims and counter-claims that emerge during engagement in the political–media complex – so that these components may be linked in ways that facilitate empirical analysis.

The concept is derived from theories of intersectionality (see post-modernist feminist theory, post-colonial theory and so on – Berensmeyer, 2006; Sondergaard, 2005; Valentine, 2007) where it is defined as the ‘divergent and conflicting problematizations’ that take place at interface of negotiation between different cultures, knowledges and agendas (Nakata, 2004). This idea of discursive ‘interfaces’ echoes Swanson’s conceptualization of the political–media complex (Swanson, 1997: 1266) and Beck’s notion of construction, contestation and negotiation of risks within different understandings and sets of knowledge. However, its adaptation here to the political-media complex differs from theories of intersectionality in that rather than negotiations over identity, discursive intersections are problematizations of policy; rather than being sited between the marginal and the powerful, they are sited between two equally powerful sets of actors; rather than constant, inevitable interactions, when applied to individual policies they are episodic and elective. When media do engage and conflict over new risks, discursive intersections may take the form of complex, contradictory and shifting definitional struggles over radical uncertainties. However, this is far from inevitable, so engagement, problematization and contestation need to be operationalized so that they can be empirically investigated.

Engagement

Engagement not only signifies at a normative level enhanced participation, but also needs to be empirically investigated rather than presumed. It also has additional analytical significance. (1) Given competing demands for media and policy elite attention, engagement or disengagement entails some degree of agenda-setting; that is, relative prioritizing or de-prioritizing of an issue (see agenda-setting literature, for instance, Dearing & Rogers, 1996; Kingdon, 2003; Soroka, 1999). (2) Increased engagement is likely to signify an emerging problematization, that when it peaks contestation is likely to be at its most intense, and when engagement subsides problematization may be resolved or media/elites may have decided it cannot be resolved. (3) It also forms a key site of

contest between media who may want to sustain it and elites who would prefer them not. Key argumentative strategies – including behavioural actions – may become key features of these struggles to sustain or neutralize engagement.

Problematization

In constructionist perspectives²⁷ problematization refers to: (1) Constructing definitions of the problem in terms of its nature, consequences, parameters and significance (Billig, 1996: 216; Fischer, 2003c; Majone, 1989). (2) The processes by which these constructions emerge and are contested. (3) The generation of ‘a critical consciousness’ through this symbolic process and hence a re-orientation towards ‘physical and social worlds’ (Billig, 1996: 216; Fischer, 2003c). However, problematization does not emerge in isolation. There is a dialectic between the argumentative context, institutional orders of discourse and the construction of a problematization. That is, both newspapers and elites select from circulating discourses in the argumentative context to construct their problematization, provide ‘evidence’ to support their particular problem definition, find associations with other (historical or contemporaneous) scares that can help them make sense of this one, ascribe significance and speculate about the potential consequences should their particular problematization go unaddressed. These processes of selection are informed by the institutional order of discourse – the ‘total configuration of discursive practices’ – that structures what discourses are dominant or marginalized and hence what can inform the problematization. These orders of discourse are open to change through interaction and contestation over particular problematizations. Contestation takes on an added dimension in that how a problem is defined informs what solution is sought, what alternatives are included or excluded from consideration and what alternative is preferred. Thus, problematization is a form of argument, is constructed in argument and is contested through it.

²⁷ Realist/post-positivist approaches to problem definition are concerned with ‘technocratic problem-posing’ or ‘solving’ (Fischer, 2003; Freire, 1970, 1973) and position experts as objective observers, distant from reality, who analyze situations, devise objective indicators to trace changes in conditions and prioritize indicators. Research in this area is concerned with how to devise relevant indicators, how to trace/measure relevant changes, how to define problems and how to identify alternatives and solutions (Fischer, 2003; Freire, 1970). Technocratic problem solving has been critiqued in terms of its post-positivist limitations as well as for reducing ‘the totality of human experience ... to those dimensions that are amenable to treatment as mere difficulties to be solved’ (Fischer, 2003: 217). The technocratic approach is distinguishable from problem definition in constructionist traditions, where it refers to the processes by which a problem emerges in discourses and is defined as such (see Problematization).

Contestation

The political–media complex leaves open the possibility of consensus, negotiation and conflict (Blumler & Gurevitch, 1995; Swanson, 1992, 1997; Voltmer, 2006); hence the research question as to how contestation emerged. In the same way that engagement cannot be assumed, contestation cannot either. Despite escalating contestation in the argumentative context, there may be media-elite consensus over problematization. Furthermore, divergent problematizations are a necessary but not a sufficient condition for contestation because differences can be ignored, accommodated or deemed insufficiently important to sustain any serious engagement in the debate. Divergences need to be accompanied by sustained engagement and include an acrimonious edge for them to be conflictual. This acrimony arises out of conflicting values, perceived threats and constructing the other as a cause of the problem. With new risks, contestation may evolve into an intractable controversy. New risks cannot be readily resolved or managed by policy elites using conventional strategies, nor can they be negotiated by appealing to shared knowledge based on unitary scientific research, witnesses, past experiences and so on. Such appeals are powerless because the foundations - knowledge, principles and values - are contested (Pellizzoni, 2003: 203).

Behavioural actions

Behavioural actions can become a key point of conflict and a means by which to defuse it. On the one hand, issues of agency or the lack thereof become hotly debated. On the other hand, behavioural actions can be a form of critical interventions intended to provide 'evidence' of their commitment to a position, strengthen an argument or register resistance, or to neutralize conflict or shift the locus of the discussion into areas with which a particular set of actors feels more comfortable. Thus behavioural actions can signify persuasive devices and important shifts in argumentation. Such interventions have been operationalized as: (1) changes in behaviour of key actors; (2) amendments to formal policy outcomes that prescribe what action may be taken; (3) altering the locus of communication, for example from one government department to another.

Incorporating the possibility of an added argumentative dimension begs the question as to when does a government claim transform into a claim plus behavioural action? This depends on how government responds to the particularization of media engagement and contestation. The current research proposes that if the critical media and counter-claims of uncertainty subside, then there is no need for government to intervene behaviourally. However, if uncertainty claims translate into intractable controversies, the media become

more critical and contestation escalates, then government may seek to act. In the same way, critical claims are transformed into media behavioural action when they perceive government to be insufficiently responsive to public anxieties or to adequately address the problem of uncertainty or when they fail to solve the media problem (media management).

In the case of intractable controversies, behavioural interventions may not have the desired result but neither party may have the energy or resources to continue and conflict may subside. However, this subsidence does not mean a reinstatement of original positions. Shifting claims and counter-claims during problematization and contestation – that is discursive intersections - mean that the issues or conditions are no longer constructed in exactly the same way as before. It is now possible to show schematically the links from research question, to proposition and to analytical framework and a deconstruction of components of that framework (see Chart 1 in Chapter 1).

Original contributions

This chapter set out to devise a framework for the analysis of interactional dynamics that builds on the discursive risk approaches reviewed in Chapter 2 but differs from all five reviewed in quite fundamental ways. Those reviewed were ultimately rejected because of an asymmetry that undermines the analysis of interactions; reductionist understandings of communication, media or policy; and too narrow a focus on the moral dimensions of panics, which excluded technological risks, or too broad a focus on ‘coalitions’, which obstructed the privileging of media–government interactions within these.

The unique framework devised here addresses these limitations. It does so first through an original tripartite theoretical framework that synthesizes three disparate, previously unconnected literatures: the political-media complex, new risks and participatory politics. This enables it to theorize the relationship and engagements in a novel way. That is, the relationship is characterized as paradoxically independent and interdependent. When dealing with new risks engagement has the potential to take the form of definitional struggles over uncertainties in which media play a key role in ‘spotlighting’ the risks while elites respond by ‘veiling’ them. Participatory activities such as campaigns enable the media to sustain engagement for long enough to threaten elite hegemonies; elites respond by seeking to neutralize these through new forms of (participatory) governance of uncertainty. Second, the framework addresses limitations elsewhere through a unique analytical formulation for capturing interactional dynamics – that of discursive intersections. This was adapted from post-colonial theory to refer to shifting claims and

counter-claims in the political media–complex that take place during engagement at the interface of different knowledges, cultures and agendas. Engagement was characterized as elective rather than inevitable, episodic rather than constant, and with the potential for consensus, negotiation and conflict – hence the need to explore how contestation emerges. A framework for addressing this entailed the further operationalization of the concept of discursive intersections around concepts including problematization and contestation. These have been used extensively in the public understanding of science and the sociology of scientific knowledge. What distinguishes them here is their application to the media–government engagement.

The next chapter translates this approach into a methodology and operationalizes key components for the collection of data around the proposition that contestation emerged out of engagement, increased uncertainty and divergent conflictual problematizations.

Chapter 4: A Methodological Approach to Discursive Intersections

Introduction

The previous chapter outlined a unique analytical framework for the exploration of interactional dynamics based on the concept of discursive intersections; that is, shifts in claims and counter-claims that emerge during engagement in the political–media complex. It offers a historically located, institutional-discursive approach based on the premise that dynamic tension in the relationship arises from paradoxical independence–interdependence. Engagements, therefore, are elective and episodic, taking place at the interface of different cultures, agendas and values in which lies the potential for conflict and negotiation. When this potential is realized in dealing with new risks, engagements take the form of definitional struggles over uncertainties. Protracted definitional struggles may also see media and government redefining their roles both in new risk terms of spotlighting and veiling uncertainties as well as in the participatory roles of newspaper campaigns and new forms of governance. The key question in exploring this is how contestation emerged. Addressing this through an analysis of discursive intersections draws attention to the discursive shifts that emerge from these interactional dynamics. This chapter sets out to provide a methodology suitable for the capturing of the shifts in discursive intersections.

In so doing it offers an alternative to the positivist informed, quantitative methodologies critiqued in Chapter 2 that draw on compare-contrast-converge research designs, which are useful for mapping the broad contours of a debate but inadequate for capturing dialogical, dialectical and persuasive interactions. The constructionist informed qualitative alternative used here is located in a methodological tradition that includes moral panic thesis, discourse coalition framework and discursive policymaking (see Chapter 2). It differs from these in its privileging of interactional dynamics in the political–media complex, but the methodological challenges that need to be negotiated are also common to these. They include:

- How to capture sets of discourses that are dynamic and interactive, text and action.
- How to capture the processes by which a particular argument emerges, shifts and potentially displaces others articulated within and between institutions.

- How to capture arguments that are multi-dimensional, comprising a number of claims that become differently prioritized as arguments shift.
- How to use a discourse analysis approach that facilitates the detailed analysis of texts typical of the method, but also allows for an analysis of a much wider range of texts than is usually the case.
- How to construct a data collection and analysis approach that is flexible enough to capture these but yet capable of delivering credible and generalizable findings.

More formal procedurally-driven methods such as content analysis are unable to negotiate these questions because of their emphasis on mapping the broad parameters of a debate and their reliance on rigid data sets. A more data sensitive, iterative and processual approach is needed. This chapter outlines how such an approach was arrived at by first locating the research in a methodological tradition that privileges discursive processes. It then justifies the selection of data and the methods of analysis within this chapter and applies these to an analytical framework for discursive intersections. The chapter concludes by reflecting on the contributions it makes in proposing an alternative to SARF and social representation approaches.

Devising a methodological approach to discursive intersections

This section negotiates some of these challenges by clarifying the methodological premises on which the research is based, devising a strategy that avoids the problems yet is capable of delivering credible findings, justifying a historically-located discursive-institutional approach, outlining the rationale for the case study and explaining why the focus on certain policy and media actors and not others.

From research location to methodological premises

The analysis of discursive intersections is located, first, within a tripartite framework (political–media complex, new risks and participatory politics). This draws attention to a historical moment in which media–government engagement centres on definitional struggles over uncertainty, and the management of these. Such engagement takes place at the interface of two powerful but different types of evolving institutions (see Chapters 2 and 3). Second, it is located in a hybrid discourse theory (critical–argumentative) that draws on a constructionist epistemology in which reality, knowledge and interactions are constructed through processes of collective meaning-making (discourses), so are interpretive, negotiated and communicated around different norms, values and ideas

(Crotty, 1998). Hence the following methodological premises, in which discourses about risk:

- Are historically and institutionally contextualized and emerge out of negotiations over norms, ideas and values.
- Are rhetorical or argumentative, as both newspapers and policy elites seek to persuade the other and the public of their viewpoint (A. Finlayson, 2004, 2006, 2007).
- Are both text and action. Text has implications for action: for what action is possible or not possible, for how it is justified or legitimized (Fischer, 2003c; Schmidt, 2008) and for what options for policy action are presented as solutions to particular problematizations. Action can also be used to persuade, to challenge the actions/words of others or to respond to a particular problematization.

These premises focus methodological decision-making on context and argument, text and action when exploring how contestation emerged and evolved in the political–media complex. What elements constitute relevant data to collect, analyse and address the research question and how these are collected in such a way as to meet the challenge of capturing dynamic yet non-linear debates depends on what research strategy is adopted and how the key concepts are deconstructed.

A research strategy for capturing discursive intersections

The research strategy outlined below is based on the following premises:

- Chapter 3 proposed that *escalating uncertainty, increased media engagement, divergent and conflictual problematizations led to media-elite contestation over GM food*. This proposition is not intended for hypothesis testing and causal inferences but to guide exploratory research and inform the evolution of empirically-based theory (see, Denzin, 1994; Flick, 2002; King, 1994).
- A qualitative case study was used for data collection on media-elite intersections in conditions of uncertainty. These are well suited to exploratory research because a case study facilitates an ‘in-depth, multi-faceted investigation of ... a single social phenomenon’ intended to ‘provide a more holistic picture of complexity (Feagin, 1991: 2) ‘within its real-life context’ (Yin, 1994: 13).
- The research is concerned with two different collective actors whose problematizations were negotiated in different institutions with their own agendas, cultures, norms, values and so on. They also change over time during engagement. In order to maintain the integrity of these distinctions, data for the two policy chapters and the two newspaper chapters were first collected

separately (for more on corpus construction, see Bauer & Gaskell, 2002) and chronologically (for more on avoiding historical fallacies, see Boyce, 2000). The empirical chapters were then re-ordered into alternating policy–media–policy–media chapters organized within two time frames: (broadly) January 1996 to December 1998 (emerging problematization), and January 1999 to December 2000 (contestation), to facilitate the analysis of interactions.

- The intersectional dimension required that linkages be made between elite and newspaper data at critical points of engagement, so an iterative strategy was used for analysis. That is, sequencing was checked against a timeline constructed during data collection (see Appendix 3). The empirical chapters were revisited and intersections were analysed in the two problematization chapters (5 and 6) and the two contestation chapters (7 and 8) to ensure synchronicity. This processual approach also entailed a constant movement between data collection, conceptualization and emerging theory. To facilitate this, a glossary (see Appendix 1) was used as a repository in which details were added as they emerged from data collection and analysis, before being re-conceptualized in the analysis and synthesis (Chapter 9).

A historical–institutional case study of a risk controversy

The theoretical framework outlined in Chapter 3 draws attention to the institutionally-rooted nature of interactional dynamics in the political–media complex as well as to the historical dimensions both in the evolving nature of the institutions and in the nature of new risks emerging as they do at particular moments of time in late modernity. The methodological implications of this are explored in this section. First, however, it is necessary to answer the question of why a case study of contestation over GM food when the political–media complex is also capable of a range of other responses: for instance, the relative non-engagement of the media over nanotechnology (see Kousis 2010), broad media–government consensus on probiotics (see Nerlich and Koteyko 2008), and highly variable, contradictory engagements over mobile phones and base stations (Litmanen and Tuikkanen 2008). Furthermore, why the focus on Britain?

Why a case study of GM food?

Chapter 3 argued briefly that the escalation of controversy over GM food between 1996 and 2000 occurred at two critical junctures. On the one hand, policy elites were facing increasing criticisms of the governance of uncertainty particularly over food, the

technocratic legitimacy of expert processes of decision-making was being challenged and in 1997 there was a change of government. On the other hand, there had been a major realignment of and increased competition within the newspaper industry, party allegiances had weakened, changes in industry practices had led to increased pagination, content had changed to include more opinion pieces and give more importance to lifestyle issues, and news had become more issue- and event-driven. That is, policy elites were struggling with a crisis of confidence, legitimacy and participation at the same time as the newspapers were perceived to have increased capacity and freedom to challenge policy elites directly. These junctures meant the stage was set for potential confrontation but this was far from inevitable so opens interesting questions about how contestation emerged and how responses to it informed the structures that followed.

This apart, GM food is particularly suited to an exploration of how media–elite contestation emerged over risks for a number of additional reasons. First, agri-biotechnology has attracted fierce debates over perceived risks (Bauer, 2002; Grove-White, 2000; Hansen, 2006; Nelkin, 2002; Priest, Bonfadelli & Rusanen, 2003; Uzogara, 2000), partly due to its construction as one of the ‘new risks’ of late modernity (Beck, 1992, 1999, 2001, 2003), and partly because the centrality of food in culture and society means there is the potential for highly emotive engagements. Second, there are documents that support the notion of media–government contestation over GM food (HC Science & Technology Committee, 1999: 25–27). Third, the unusual attack by the prime minister on newspapers over an apparently peripheral policy debate – that is, not on crime, health foreign policy or the economy – suggests that the elite’s agenda on biotechnology was more important than first appeared and that they perceived this to be seriously threatened by adverse newspaper coverage. Fourth, the research period spans the launch of Europe’s first GM food product and a change of government with its potential for shifts in British policy priorities, and ends with the subsiding of the controversy. These temporal-spatial parameters ensure that the project is bounded – and thus feasible – but also facilitates the tracing of the trajectory of discursive intersections over time and across governments in a critical case.

However, there are also issues of generalizability of findings whenever a critical case study and discourse analysis are used. Here they take a particular form. First, GM food signified extreme reaction, and engagement in the political–media complex varies considerably, including over new risks. Second, the British case was unique compared to those of the USA and the rest of Europe in the intensity of newspaper engagement, the strategic importance elites ascribed to the technological development and the cultural

resonances of genetic research (see Chapter 2; Bauer 2002a). Thus, there are challenges in generalizing particular findings on GM food to other new risks and in making international comparisons. Third, interpretive methods such as discourse analysis, which emphasize context, raise questions about generalizability and significance.

In response, this thesis argues that the extreme reactions over GM food do not mean that similarities and differences with other risks cannot be identified. A House of Lords report identified key factors that heighten public concern about risk, including a lack of personal control, difficulty in weighing risk against benefit and 'unacknowledged or understated uncertainty' (House of Lords Science & Technology Committee, 2000: 1). Thus, on the one hand, people are 'inclined to demand high and possibly unattainable levels of safety and certainty' where risks are seen to be 'imposed and regulated by others', such as public transport or food. On the other hand, they tend to be 'more pragmatic and even reckless' where they 'feel more control' such as smoking and driving (House of Lords Science & Technology Committee, 2000: 2). It is reasonable to suggest that the same distinctions and concerns are likely to be articulated by the media.

Furthermore, the research draws on the discursive approaches outlined in Chapter 2 (see discussion on moral panic and discourse coalition framework). This discussion argued that significance includes generalizability but is not limited to it. That is, qualitative research explores significance in the contributions to social theory (see Marston, 2004) and in how the particular case study is emblematic of deeper issues (see Garland, 2007; Hajer, 1995). The exploration of the emblematic nature of the phenomenon draws attention to how extreme reactions expose a deep disturbance in society (Garland, 2007) and in how the phenomenon becomes a "metaphor" through which people come to understand the bigger problem it signifies and in that even after an issue has passed it leaves a trace in institutional changes in the order of discourse and in policy processes' (Hajer, 2005: 3005).

The significance of this research lies, first, in the generalizability of this unique framework for the analysis of interactional dynamics in the political-media complex as well as in the conclusions that are reached about the changing roles of media and policy elites during contestation. Second, part of the empirical exploration of how contestation emerged will need to include an exploration of the deep disturbance - the conditions of uncertainty - manifest in the extreme reaction. It will also need to discern the emblematic traces left after the controversy subsided.

Why history? Why institutional contexts? Why argumentative contexts?

Another major methodological consideration is the contextual parameters of this research. Its temporal restriction between 1996 and 2000 ensures its feasibility. This is longer than most studies of GM food/biotechnology (the exception being Bauer & Gaskell, 2000), so permitting an exploration of the historical trajectory of contestation from its emergence, through escalation to negotiation. However, during data collection on the emergence of problematization (Chapters 5 and 6), it became clear that the discourses drew on wider (historical) argumentative and institutional contexts that needed to be understood if the claims and counter-claims in media–elite engagements were to be deconstructed. Contextualized discourses included articulations of historical *and* contemporaneous events, associations with the problematization of other scares and the (mis)management of these. These argumentative and institutional contexts provided a crucial discursive repertoire – a range of discourses (see below) – that, on the one hand, policy elites could draw on to problematize uncertainties, to justify escalating contestation and to legitimize certain actions and, on the other hand, around which newspapers could focus their counter-claims. Thus, arguments and counter-arguments were simultaneously historicized and contemporized in the everyday here and now. This addition to the methodological consideration is entirely consistent with the theorization of discourse in Chapter 3 as dialogical and argumentative, dialectical and critical as well as the distinction between discursive action and behavioural action. These distinctions facilitated the exploration of the dialectic between policy elite–newspaper interactions and the escalation of multiple forms of public resistance to GM food. They also enabled data analysis to include the ways in which present and past behavioural actions or the lack thereof became key elements in contestation.

Historians have long recognized the temporal links, arguing that ‘human institutions are explained by tracking their development over time’; that present features need to be understood within ‘trajectories’ that link these to the past to highlight the ‘continuities which persist’ (Tosh, 2008: 141). Studies of discursive policymaking have made similar observations. Discourse, says Schmidt, ‘not only commit[s] the speakers ... to action’, but also their successors, so that new leaders have to ‘honour their predecessors’ commitments’ and so are ‘trapped by their ... communicative discourse’ (2008: 309). In contrast, media and journalism studies have tended to focus on the newest developments and have neglected the historical dimension (Carey, 1989; Catterall, Seymour-Ure & Smith, 2000). While discursive studies of policy have included action alongside text in their analyses of discourse, discursive studies of media have tended to under-emphasize

action as discourse and how discursive and behavioural actions may be enabled or constrained by the historicity of discourse. These significant omissions are addressed in this research.

This section has argued that historicized and institutionalized discourses were crucial in how policy elites and newspapers problematized GM food. So, too, were the discourses and behavioural actions in the wider argumentative context. The ability of this research to cover all this material is limited so much of the contextual information is treated as supporting rather than primary material and has thus been recast from secondary material, inserted in footnotes where relevant in the empirical chapters and in supporting appendices.

Which policy and newspaper actors

Another methodological challenge is the sprawling network of policy and media actors with some interest in or responsibility for GM food (see Howarth, 2010). The research focus therefore needed to be narrowed. The main controversy between 1996 and 2000 in newspapers revolved around food safety issues and consumer choice, which were primarily the responsibility of MAFF. But in 1998 the Cabinet Office was given responsibility for co-ordinating communication of government policy and formulating an overarching government policy on biotechnology. Then, in 2000, an independent regulator and policy advisor on food was set up, located outside Whitehall but answerable to parliament via the minister of health. These changes in actors were crucial in how elites sought to address the problematization of GM food and raise the issues of discursive continuity and change that the empirical chapters address. It suffice here to say that the focus of newspaper–elite debates was food safety; the primary actors in this were MAFF, the Cabinet Office and the prime minister; and that future developments centred on the new Food Standards Agency so the corpus could be narrowed to GM food related statements and policies issued by these departments or institutions.

The British media environment is similarly diverse, fragmented and contradictory (McNair, 2000b). Chapter 3 justified the focus on newspapers based on their primary agenda-setting role in the medium to long term, and their ability to set the dominant political agenda, establish dominant interpretative frameworks and launch campaigns from which ‘major agenda-setting interventions can be mounted’ (McNair, 2000a: 30). The methodological implication of this is to direct research attention to the campaigning

newspapers. The problem, however, is that the boundary between a campaign and intense news coverage of an issue may blur.

This research is primarily concerned with newspapers that set out directly to challenge government policy. So, for analytical and conceptual clarity, this research defines a newspaper campaign as: (1) the strategic editorial decision by a particular media institution to move beyond normative articulations of professionalism as impartial purveyor of news and forum for public debate, (2) direct, explicit intervention in a debate with the stated intention of influencing policy and mobilizing readers (3) the self-labelling of this intervention as a 'campaign' to advocate a particular course of action in response to what is perceived to be an issue of considerable public interest. Campaigning therefore refers to the self-conscious positioning by newspapers of themselves as explicit actors intervening in policy debates. In this research, four newspapers met these criteria – the *Mirror*, the *Express*, the *Daily Mail* and the *Independent on Sunday* – and these formed the basis of the newspaper corpus. Newspapers' departure from norms of impartiality needs to be justified and legitimized, hence their claims about a threat so significant that the greater public interest is at risk. These are most commonly found in editorial columns.

However, a sampling strategy based on campaigns is methodologically self-selecting and so open to accusations of researcher bias. This bias is not as acute as might at first appear. All four of these titles are in 'stables' with a matching weekly or daily under the same editor-in-chief (for instance, the *Daily Mail*) or as part of a seven-day operation (for instance, the *Express* and *Independent on Sunday*). So, while these sister titles may not have campaigned as explicitly as the four titles focused on, they offer editorial support and follow the agenda, stance and so on set by their campaigning counterpart. The remaining national newspapers chose to retain the semblance of 'impartial reporting'.²⁸ However, as the empirical data highlights (see Chapter 7) it was the 'campaigning' newspapers that policy elites felt most threatened by and singled out for collective criticism. Thus, it is methodologically valid to analyse the collective discourses of their campaigning newspapers.

²⁸ To some extent it is more surprising that the mass tabloid *Mirror* chose to campaign given its pro-Labour sentiments, the abstract nature of the debates and a subject matter that was deemed less relevant for other mass tabloids such as the *Sun* and *News of the World*. The position of the other national newspapers was more varied. The *Guardian* engaged intensely with news and features but did not campaign in the meaning of the term here for reasons that are not immediately apparent and probably require interviews to ascertain (see Durant & Lindsay, 2000). The other titles – *Financial Times*, *Times* and *Telegraph* – are all pro-business and were more inclined to support the British biotechnology industry and hence the government agenda.

This is not to suggest that differences between them can be so readily collapsed. Data collection highlighted, for instance, the greater reluctance of the *Independent on Sunday* to use the emotive discourses of 'Frankenstein foods' found elsewhere. The more significant distinction is that the campaigning newspapers included pro- and anti-Labour titles. So, paradoxically, the self-selecting focus on campaign newspapers delivered maximum variety in terms of formats, readership reach and ideologies – hence the harnessing of extraordinary newspaper power. The effectiveness of this sampling strategy can be seen in the significant differences in empirical findings here compared with the Bauer and Gaskell (2000) study despite inclusion of the same publication – the *Independent on Sunday*. These include most notably the difference in the timing of contestation and the significance of intervention of Prince Charles on which the Bauer and Gaskell (2000) is silent (see Chapter 2 for more on the problems with their sampling strategy).

From conceptualization to methodology: operationalizing uncertainty

Chapter 3 argued that the definitional struggles over new risks such as GM food are struggles over the problematization of the 'radical uncertainties' associated with them. Three different types of uncertainties were identified and these can now be operationalized methodologically:

- Scientific uncertainty takes the form of discourses of uncertain science and unknown effects, and struggles take the form of claims and counter-claims about evidence.
- Public uncertainty centres on discourses of public anxiety, which is appropriated into problematization where on the one hand it is attributed to scientific uncertainties and individual powerless to take evasive action, and on the other hand is attributed to institutional failures and newspaper scaremongering.
- Policy uncertainty arises when the governance of uncertainty is exposed to scrutiny and found inadequate. On the one hand, it is claimed that elites are promoting 'progress' in conditions of uncertainty where they lack the appropriate knowledge to manage risk. On the other hand, it is seen as arising from institutional failure in the form of organizational culture or fragmented policy.

The linking of these three types of uncertainty enables them to mutually reinforce, feeding a spiral of escalating anxieties, a sense of powerlessness and the entrenchment of positions. Intractable controversies arise when these entrenchments centre on

disagreements over knowledge, values and how to proceed in conditions of uncertainty. With such controversies the usual communicative strategies of controlling information and debate no longer work.

This section has operationalized the central theme of uncertainty into: (1) three types of uncertainty – scientific, public and policy; (2) struggles over these can be deconstructed in terms of claims and counter-claims about: (a) the status of evidence/knowledge about new risks, (b) public acceptability/resistance to them and (c) management/mismanagement of them by policy elites; and (3) the potential to develop into an intractable controversy. What is still needed however is a framework for the collection and analysis of data.

Methodological framework – how the data was collected

The research explores how contestation emerged through the proposition that it did so from increased engagement, escalating uncertainty and divergent, conflictual problematizations over GM food between 1996 and 2000. The research strategy also identified the need for separate data sets for policy elites and newspapers; the deconstruction of dynamic interactions into text and action, context and argumentation; and the organization of the empirical work into four chapters as follows, organized chronologically and alternating as policy–media–policy–media:

Chapter 5: Policy elites: From pre-problematization to problematization (1996–1998). The purpose of this chapter is to locate subsequent elite problematization within the (historical) presence of a particular set of discourses about public health and food, and to identify the institutional–discursive context and emerging elite problematization in response to escalating newspaper contestation

Chapter 6: Newspaper engagement and problematization (1996–1998). This chapter will do likewise with newspaper analysis, and so follows a similar structure. It also identifies the critical junctures when newspaper engagement intensified and problematization emerged.

Chapter 7: Escalating elite contestation – Blair enters the fray (1999–2000). The purpose of this chapter is to explore how elite problematization first shifted to contestation in the form of a counter-attack by Blair on the newspapers, and then towards negotiation and attempts to neutralize the newspaper campaigns.

Chapter 8: Newspaper campaigns and contestation (1999–2000). The purpose of this chapter is to explore how newspaper problematization increasingly conflicted with that offered by government, and how it developed into contestation.

The empirical work is based on the analytical framework of discursive intersections and the proposition that increased engagement, escalating uncertainty and divergent, conflictual problematization led to contestation. The unit of analysis for the exploration of this is discourse, defined as discursive (text and action) groupings around actors and topics, the processes of argumentation between these and the discursive intersections that ensue as captured in shifting claims and counter-claims in the political–media complex.

An alternative qualitative approach of CDA–rhetorical analysis

The methodological limitations of SARF, advocacy coalition framework and social representation approaches were discussed in Chapter 2. It was argued that their quantitative emphasis is useful for compare-contrast-converge analyses but reductionist when used in the analysis of dialectical and dialogical engagements. Furthermore, their emphasis on formalized procedures and relatively rigid coding frames is ill-suited to the exploratory research of discursive intersections. These require more iterative processes of data collection and analysis for which qualitative discourse analysis is better suited. However, there are more than 50 different methods of discourse analysis (Gill, 2000), so an alternative selection rationale is needed.

Three factors informed the selection here. First, qualitative approaches invert the selection rationale used in quantitative studies so that the object of the study directs the selection of method (Flick, 2002). Second, the previous chapter rejected non-critical approaches such as conversation analysis as unsuitable for capturing hidden meanings, persuasive elements and power relations (see Fairclough, 1992: 12). Third, an alternative methodology points to two interpretative methods – critical discourse analysis (CDA) and rhetorical analysis – which share a constructionist perspective on discourse and are complementary, as can be seen from the selection of methodological tools drawn from both.

CDA–rhetorical analysis: methodological tools

Both CDA and rhetorical analysis are concerned with language in a social context and view interpretative methods as legitimate. However, they stress different dynamics and so offer different dimensions to the current research. The concern in CDA is with ‘discourse as shaped by relations of power and ideologies’ and ‘the constructive effects discourse has upon social identities, social relations and systems of knowledge and belief’ (Fairclough, 1992: 12). The contribution of CDA is its ability to bring a critical and dialectical approach to the study of discursive intersections whereby policy and media claims articulate agendas, knowledge perspectives and interests in the name of particular social groups.

However, CDA is not able on its own to meet the objectives of this research. First, it neglects ‘the strategic, argumentative context of political enunciation that, for politics, is unavoidable’ (Finlayson, 2004: 539), since politics is about persuasion and this needs to be analysed (Finlayson, 2002; Schmidt, 2008). Persuasion is central to rhetorical approaches. These view discourse as ‘responses in a continuing dialogue’ (Bakhtin, 1982: 268): that social realities are created through dialogue and ‘especially through the “traditions of argumentation”’ (Shotter, 1993a, quoted in Billig, 1996: 18). Central to argumentation is the taking of a position in a debate both in terms of what is implicitly or explicitly supported (justified) and what is rejected (criticized). Second, Chapter 2 argued that political discourse comprises text and action and argued that a distinction needs to be made between discursive action and behavioural action. Neither CDA nor rhetorical analysis provides the tools with which to deconstruct behavioural action. So the present research needs a methodological framework that can capture those persuasive and (behavioural) agency dimensions that are under-explored in CDA. Three methodological tools have been extracted from the CDA and rhetorical analysis portfolio as particularly useful. Two others have been added for methodological clarification of action and of intersections.

Order of discourse

The order of discourse refers both to the totality of meanings and practices and the structuring of the relations between these within society or an institution. This structuring delimits how an object is talked or thought about at a given moment in time. This takes place by, for instance, allowing some discourses and discouraging or remaining silent on others, valorising certain ideas and practices and de-valorising others, accepting certain types of knowledge and rejecting others, and so on (see Fairclough, 1989, 1992). It is

most clearly manifest in texts in a hierarchy of dominant, subordinate or marginalized and silent discourses. This hierarchy emerges out of negotiation over competing meanings, ideas, values and so on. So, although it is delimited at any given moment in time, the order of discourse is open to change as a consequence of actual interactions, in response to challenges from others, or the emergence of new circumstances. Such interactions or re-negotiations may lead to a re-contextualization of discourses as actors 'incorporate them into their own practices' (Fairclough, 1989, 1992). These changes in the order of discourse – in relative dominance or re-contextualization – take place 'in ways that accord with directions of change' (Fairclough, 1992: 9).

Argument and counter-argument

This is a key discursive process that captures the challenge and negotiation of competing meanings through argumentation. The basic components in an argument are claims and counter-claims. These are statements or actions the speaker wants accepted or rejected. In order to persuade others, the speaker may use 'evidence' and seek to legitimize the claim or counter-claim by linking it to the evidence (see Toulmin, 1969). The 'essential' features of an argument are justification and criticism. These co-exist and are socially situated (Billig, 1996: 117) in that criticism is meaningless 'unless some accepted norm, end or value has been violated'. Decisions or actions are criticized in relation to accepted rules or values ... by implication the same is true of justification' (Perelman, 1979: 33, quoted in Billig, 1996: 117). Argumentative discourse is a 'contest' between criticism and justification, the analysis of which requires a consideration of which positions – or claims – are 'being criticized and against which a justification is being mounted. Without knowing these counter-positions, the argumentative meaning will be lost' (Billig, 1996: 121)

Discursive repertoires

A repertoire is a discursive configuration available to a group of actors working in particular institutional contexts to discuss a topic. These configurations provide meanings on which the group draws to 'characterize and evaluate actions and events' (Potter, 1987: 187). They also highlight which discourses are dominant and emerge out of earlier responses to past problematizations.

Agency and behavioural action

There are also philosophical, ontological, epistemological and methodological disagreements about the relationship between text and action in action theory, discourse theory and discursive policymaking approaches (Campbell & Wilson, 1998; Hajer, 1995; Rein, 1976; Wagenaar & Noam Cook, 2003). Unresolved issues include what counts as

action; what distinguishes action, practices and behaviour; and what is the unit of analysis (Campbell & Wilson, 1998). These issues cannot be extensively addressed in this project. Instead, they are negotiated by acknowledging them within a conceptualization of discursive intersections that draws on Burke's (1969) study of agency as the capacity of actors to use specific discursive repertoires in order to position themselves strategically within specific contexts. This is explored, first, through understanding how actors position themselves in relation to their actions and how observers position themselves to interpret these actions (Norris & Jones, 2005: 169). This dialectic of positioning and counter-positioning around behavioural actions gives rise to a tension in 'the way agency is constructed by individuals in their discourse ... as actions unfold' (Norris & Jones, 2005: 170) and between justification and criticism of different types of actions. That is, action or the lack thereof can become a key component in argumentation or a tactic by which to mount a counter-argument. Actions therefore have persuasive dimensions.

This research, for the purposes of analytical clarity, distinguishes between three types of action: (1) discursive action, for instance the delivery of a speech; (2) routinized actions embedded in the processes and practices of decision-making; and (3) behavioural actions, which tend to be non-routinized discrete actions, such as direct action in the form of boarding a ship, changes in the actors themselves, amendments to formal policies that prescribe what action may be taken, such as the labelling of food, or alterations in the locus of communication, for example, from one government department to another.

Validity of the overall approach and research strategy

The overall research approach outlined above is consistent with a strand of policy studies known as the 'argumentative turn' (Hajer, 2005), which contends that 'public policy is made of language' (Majone, 1989: 1) and that argument and persuasion are central to politics and policy making (Hajer, 2002; Finlayson, 2004). 'The real challenge of ADA [argumentative discourse analysis] is to find ways of combining the analysis of discursive production of reality within the analysis of the socio-political practices from which social constructs emerge and in which actors are engage ... ADA is not simply about analysing arguments – it is much more about analysing politics as a play of 'positioning' at particular 'sites' of discursive production' (Hajer, 2000: 62). This justifies the significance attributed in this research to the *institutional and argumentative* contexts in which discourses are produced and from where argument and counter-argument are mounted.

From corpus construction to purposive sampling

Corpus construction is concerned with identifying relevant source materials for discourse analysis. The primary sources were written, that is, newspaper articles and formal policy texts. Consideration was given to interviews even though these are oral but this option was rejected. Pilot interviews were done with two policymakers but requests for interviews with the relevant editors at the time were rejected. Given that one of the main critiques of other approaches (see chapter 2) was of asymmetrical research designs it seemed inappropriate to perpetuate this imbalance here. Corpus construction therefore focused solely on compiling all the texts on GM food issues published by the four newspapers between 1996 and 2000 using a Nexis search of 'GM food' and 'genetically modified food'. Policy texts were identified through a search of different databases including www.parliament.uk, www.fsa.gov.uk, the various departmental sites and Google searches on particular ministerial names. This gave rise to 85 policy texts (see Appendix 4) and 701 newspaper articles. A timeline was constructed comprising policy announcements, media events and critical interventions (see Appendix 3). This provided a chronology for ordering each corpus, a checklist against historical fallacies (Adam, 2000; Boyce, 2000; Robinson, 2001, 2002) and synchronicity for analysing intersections. Each corpus was read repeatedly for familiarity with the trajectory of discourses and individual items were then divided into primary and secondary texts for analysis based on corpus-specific criteria.

A purposive sampling strategy was then used in which the researcher selected texts because they served a particular purpose as identified in the conceptual framework, research question, methodological rationale and approach (Tashakkori & Teddlie, 2002). This directs selection towards 'information rich-cases for in-depth analysis related to the central issues being studied' (Tashakkori & Teddlie, 2002). However, within purposive sampling there are a number of different strategies (Guba, 1985, 1990; Patton, 2007). Here critical case sampling was used. A small number of cases that emerge at critical junctures in debates were selected because they 'yield the most information and have the greatest impact on the development of knowledge' (Patton, 1990: 236). In this research critical junctures are defined as significant moments when the debate shifts; for instance,

as a result of a critical intervention by another actor or a change in actors. Having identified a critical text, key discourses on the central theme of uncertainty were extracted for further analysis. This selection process is subjective and interpretative. Constructionist approaches do not see this as invalidating the research but as a critical part of the research process. This does not mean, however, that the research processes should not be subject to scrutiny. Instead, the decision-making process and rationale need to be transparent so that the reader can judge the credibility of the findings and conclusion.

The policy corpus and sample

The total policy corpus comprised election manifestos, white and green papers on policy, legislation, and ministerial texts including parliamentary debates, speeches and articles in newspapers. The criteria for the designation of primary policy texts for detailed analysis were that:

- They articulate a turning point or critical juncture in policy discourses on GM food, for instance in election manifestos or white papers;
- They comprise a high degree of authority and authenticity in that they are attributable to key decision-makers;²⁹ this is usually verifiable with an official stamp or other appropriate designation (Bryman, 1989; Hansen, 1998; Hill, 1993), for instance, MAFF, the Cabinet Office, Prime Minister's Office and so on; and
- They signify a critical intervention by the prime minister in the form of explicit counter-claims to those made by campaigning newspapers.

These primary texts comprise different types of documents. However, the central theme in this research is constructions of uncertainty over new risks, so the methodological focus is on discourses on this within texts/actions; this provided the selection justification. (Uncertainty was operationalized earlier in this chapter into three types – scientific, public and policy – and claims within these about evidence/knowledge, public acceptability and management of risks.) All the other texts were designated the supporting texts, used to construct the shifting order of discourse or the argumentative or institutional context, and to inform explanations of how policy elite discourses evolved (see Appendix 4). However, during data collection it became clear that an understanding of how elite problematization emerged depends on an understanding of the broader discursive repertoires on which policy elites were drawing or that preceded the strict timeline of this crisis. Historical

²⁹ This does not mean that the document must be attributed to a single author. Most policy documents, even when they are attributed to a single author, are collective outputs in the sense that they emerge out of consultation with others. In some cases, these might be drafted by professional drafters (legislation) or by a communication specialist (articles attributed to the prime minister are often written by his press spokesperson).

contextualization was needed, so some earlier texts were included. The final outcome of this purposive strategy was the following sample of primary texts:

- Chapter 5: one during pre-problematization (1989), three during emerging problematization (1997 and early 1998) and two during problematization (June to December 1998).
- Chapter 7: two during heightened contestation (1999) and one at rapprochement (2000).

These were earmarked for more detailed analysis and critical discourses were identified around the research theme of uncertainty.

Newspaper corpus

The criteria for designation of primary newspaper texts for detailed analysis were that:

- They explicitly articulated the ‘voice’ of the newspaper on GM food debates, that is, in editorials; and
- These editorials signified newspaper responses to critical interventions by others – for example, Prince Charles, Professor Pusztai, Tony Blair – or an articulation of the newspaper’s rationale for its own critical intervention in the form of a campaign.

This research has already justified its focus on campaigning newspapers since these entail explicit engagements in policy debates in which newspapers consciously seek to challenge or influence policy and so set aside professional norms of ‘balance’ and ‘impartiality’ to become deliberate actors in a policy debate. The most explicit justification of campaigns will appear in editorials. These are routinely used for legitimate and explicit articulation of the ‘the opinion of the newspaper’ on an issue (Richardson & Lancendorfer, 2004: 75, 80) where newspapers ‘make use of their right to present themselves as autonomous actors’ (Eilders, 2002: 26; Firmstone, 2008: 2–3). This opinion explicitly interprets the issues of the day in terms of the particular ideology, values and positioning of the newspaper (Van Dijk, 1996). It also provides a forum in which editors can directly address particular audiences such as policy elites (Henry & Tator, 2002; Izadi, 1997: 141). With primary texts restricted to editorials, all other newspaper articles were classified as secondary texts. The population of editorials comprised seven editorials in 1996–1998 and 37 in 1999–2000. The second criterion about critical interventions enabled the narrowing of the sample to the following:

- Four editorials on the interventions of Prince Charles and Professor Pusztai;
- Twenty-five editorials on the launch of the campaigns and escalating contestation; and

- Two editorials on newspaper responses to Tony Blair's second newspaper article.

The remaining editorials, news articles and so on were used to inform a construction of the institutional and argumentative context of newspaper campaigns and their engagement with policy elites.

Operationalizing engagement and discursive intersections

As engagements, discursive intersections are episodic rather than constant, elective rather than inevitable (see Chapter 3). That is, media do not engage in every policy debate, and policy elites do not always respond or engage with media discourses. When they do engage it is at the interface of different institutional dynamics and when it is over new risks, there is the potential for contestation to emerge out of divergent and conflictual problematization. These key concepts in the proposition can now be operationalized methodologically.

Engagement

In this research, engagement refers to the shifting of involvement of *one* set of actors in a debate over time and so suggests different intensities of argumentation at different times. Data from the policy elite corpus and the newspaper corpus were distilled to create the following distinctions and hence capture changes in intensity:

- Unengaged, where there is media or policy silence on an a particular issue;
- Sporadic engagement, where involvement is irregular, scattered or isolated;
- Semi-engaged, where, for instance, there is more regular coverage in newspapers and where the title perceives the debate important enough to commit an editorial articulating the newspaper view on issues or where policy elites issue a string of policy announcements, papers and so on;
- Engaged, where a newspaper commits considerable resources in the form of sustained news coverage or a campaign, or where policy elites intervene with a formal policy document or a prime ministerial speech on the issues;
- Disengaged, when a debate subsides and the newspaper reverts to less regular coverage.

Thus, intensity of engagement captures both the attention given to an issue – partly captured in the descriptive mapping of the ebbs and flows over newspaper coverage (see Appendix 7) - and the content of the argument. The policy corpus delivered fewer outputs but was less readily depicted graphically so this was categorized, dated and labelled (see

Appendix 4). However, the substantive part of the analysis of engagement centred on shifts in the argumentative position and counter-positions and arguments and counter-arguments.

Problematization

This is concerned with how issues are re-categorized as problems in need of and capable of being addressed (Hajer, 1995; Majone, 1989) within arguments. These problem statements comprise claims and counter-claims, justifications and criticisms, evidence and counter-evidence. They also articulate what a particular set of actors perceive to be the nature, consequences and significance of a problem (Fischer, 2003c; Majone, 1989). They can be characterized as:

- Emerging from negotiations between conflicting claims, ideological dilemmas, conflicting values and so on within institutions;
- Drawn from argumentative contexts that provide current societal debates, past events, previous scares, cultural symbols from which policy elites or media claims when constructing their own problematization; and
- Persuasive in their use of 'evidence' and 'legitimacy' claims made to support their position. Thus, they not only draw on but also speak to the argumentative context.

This persuasive dimension is crucial. Discourses of problematization are constitutive of reality in that how a problem is defined has implications for what alternative can be presented as a logical solution.

Contestation

The current research is concerned with how contestation emerges in the political-media complex but as Chapter 3 divergent problematizations are necessary but not sufficient for this – they also need to be conflictual. These arise out of:

- Conflicting claims about which core values should take precedence over others (for example, prudence over progress);
- Claims that divergent problematization in some way threatens the core values of the other;
- Critical claims about the other (for example, 'hysterical' media or distrust of policy elites); and
- Counter-claims that directly challenge or rebut claims of the other.

Behavioural action

A key feature of contestation may centre on behavioural action or the lack thereof. Furthermore, actors may seek to strengthen their argument, weaken that of the other or defuse contestation through behavioural actions, which may include:

- Changes in actors, for instance, the firing of a minister or editor;
- Amendments to formal policy outcomes that prescribe what action may be taken; and
- Shifts in the locus of communication, for example, from one government department to another.

The possibility of this added argumentative dimension begs the question as to when a government claim is transformed into a claim *plus* action. This depends on how government responds to counter-arguments about uncertainty. If uncertainty increases, the media become more critical and contestation escalates, at which time government may seek to act.

Data collection: parallel and synchronous processes of data analysis

The research strategy detailed above comprises a two-phased approach.

(1) Parallel processes of data collection:

- Two sets of institutions were contextualized in terms of evolving ideologies and positioning then this analysis was incorporated into the relevant empirical chapters.
- Data in the form of argument and counter-argument was collected separately for the two policy chapters and then the two newspaper chapters to ensure corpus and chronological integrity as well as to ensure the distinctiveness of the two phases – problematization and contestation – of engagement.
- Key insights were compiled into a glossary, which served as a repository for the development of conceptualization.

(2) Synchronous processes of data analysis:

- The empirical chapters were presented chronologically and alternating, that is, as policy–media–policy–media chapters.
- The empirical data in these chapters were revisited in an analysis that identified critical points where the discourses intersect. In particular this considered: (a) re-contextualization in the form of the inclusion/exclusion of certain claims or a shift of priorities in the order of discourse (Chouliaraki, 1995; Wodak, 2010); (b) claims about behavioural action being a response to, for instance, policy elite

sensitivity/insensitivity to public concerns; and (c) actions justified as being a response to the argument or actions of the other.

- The sequencing was checked against a timeline that was constructed during data collection (see Appendix 3).

Intersectional analysis: credibility and contributions

The credibility of conclusions derived from interpretative methodologies depends heavily on the transparency, accountability and scrutiny of the research processes. (For more on this and the functional equivalence of qualitative methods, see Gaskell & Bauer, 2002). It also depends on the effective negotiation of the challenges identified in the introduction. It is now appropriate to evaluate these.

- How to capture the discursive processes by which a particular discourse emerges and displaces others used by an institution, and how to capture arguments that are multi-dimensional, comprising a number of claims that are prioritized differently depending on the development of a debate.

These are captured through the use of methodological tools and their component parts: (1) the order of discourse, (2) argument and counter-argument and (3) discursive repertoire.

- How to capture sets of discourses that are dynamic; that is, that change over time and are interactive.

These were captured first by tracing the roots of a particular problematization, then in changing problematizations in the order of discourse and finally in re-contextualizations in response to contestation.

- How to construct a methodological approach to data collection and analysis flexible enough to capture these but yet capable of delivering credible empirically-driven findings.

This was addressed through transparent and accountable decision-making and the use made of well-established bodies of literature.

- How to use a discourse approach that utilizes the textual analysis typical of the method, but also facilitates the examination of a much wider range of texts than is usually the case.

This was negotiated through a highly reflexive and constant negotiation of methodology and data as well as the utilization of both primary and secondary documents.

Methodological contributions

One of the major contributions of this research is the provision of a methodology for the analysis of interactional dynamics and capable of capturing discursive intersections, that is shifts in claims and counter-claims during engagement. It facilitates: (1) data collection and analysis of media *and* policy, (2) a critical account of how contestation emerged between them in conditions of uncertainty over new risks (GM food) and (3) the means to capture shifts in claims and counter-claims that emerge out of interactional dynamics. This has been achieved by combining a historical trajectory of a controversy, a discursive-institutional approach and a hybrid CDA–rhetorical analysis.

This methodology goes beyond approaches that rely solely on CDA by introducing the analysis of argumentation as an explanatory factor for changes in the order of discourse; it goes beyond approaches that analyse argumentation but ignore the discursive power in dominant discourses; and it goes beyond both by including an analysis of behavioural actions as crucial components of both argument and dominant discourses. It thus proposes a methodology for the analysis of the interactional dynamics of the political-media complex.

The case study approach focuses this analysis on discursive intersections between two powerful institutional actors in conditions of radical uncertainty. GM food provides a critical case study in terms of its uniqueness; however, the significance of this research lies in how it: (1) highlights (relatively) extreme contestation, which casts key elements into sharp relief that in less intense controversies may be present but less explicit; (2) directs attention to a deep disturbance at that time about the governance of uncertainty and the development of scientific, technological and industrial production; and (3) directs attention to questions of how extreme reactions come about and to traces in the institutional and discursive residues left after the conflict subsides.

The following chapter seeks empirically to account for how elites problematized GM food in particular ways and how they responded to escalating challenges to this in the argumentative context and in newspapers. This analysis provides the foundation for subsequent empirical chapters in that newspaper problematization was constructed as a reaction to elite positions (see Chapter 6) and the shift to contestation built on these (see Chapters 7 and 8).

Chapter 5: Policy Elites: From Pre-problematization to Problematization (1996-1998)

Introduction

The purpose of this chapter is to explore empirically shifts in the development of GM food policy in response to elite agendas, problematizations and repertoires, and to lay the critical foundation for the empirical analysis in the three chapters that follow. The premise is that elite problematization and responses to earlier scares over irradiated food and BSE/CJD framed the emergence of early GM food policy and the mechanisms put in place to reassure the public. By the time GM food discourses emerged in their own terms rather than as an adjunct to other food scares, elite frameworks – agendas, repertoires and patterns of behavioural action – had already been laid down in response to earlier developments in the argumentative context. These frameworks and patterned responses set the parameters within which elites subsequently problematized mounting controversy over GM food. They also provided argumentative fault-lines that newspapers first questioned then exposed and contested.

The analysis of the pre-problematization phase (from the late 1980s) argues that ambivalent discourses emerged in the argumentative context about scientific, public and technological uncertainties associated with novel technologies. Discourses analysed in the White Paper (1989) and Food Safety Act (1990) highlight the political sensitivity of novel foods and how elites problematized the irradiated food row in terms of public uncertainty and systemic inflexibility threatening and hindering the dominant agenda of innovation-driven economic growth. It was within this dual problematization that the behavioural actions of the elite formalized GM food policy in terms of ministerial control (democratic legitimacy), technocratic processes and 'objective' science (expert legitimacy). The analysis argues that these were intended to reconcile the economic agenda with safety discourses and so reassure the public about any uncertainties over novel foods. What emerged from this agenda, problematization and set of behavioural actions was a discursive repertoire – a grouping of dominant discourses around a topic – of technocratic rationality, objective and unified science, and (administrative) safety. However, this repertoire and the argumentative strategy used to justify it and address

criticisms of novel food policy also contained a number of fault-lines around subordinate discourses about consumers, silent discourses on uncertainty and tensions between the economic agenda and the safety discourses. These fault-lines contained the potential for subsequent conflict.

This chapter argues that the behavioural actions of biotechnology executives associated with the launch of the first GM food explicitly addressed these argumentative fault-lines in order to negate what they claimed was a risk that controversy over the novel technology could derail the new product. However, the dramatic escalation of contestation over BSE/CJD took place along these fault-lines and thus critical arguments about institutional failures centred on claims about conflicting economic agenda and safety discourses, silent discourses on scientific uncertainty and subordinate discourses of the consumer. This was the argumentative context in which an elite problematization emerged around food safety controls in general and later over GM food in particular.

The response of New Labour elites to this in their election manifesto (1997) and White Paper (1998) drew heavily on critical claims in the argumentative context about the 'crisis of confidence' in the Ministry of Agriculture, Food and Farming (MAFF). What emerged was a problematization of (institutional) cultural and organizational failure. The behavioural actions taken by the new government – mandatory labelling of GM food and a proposed independent food standards agency (FSA) – need to be understood within New Labour's policy agenda, problematization and the emergence of a new repertoire. On the one hand, the Conservative government had articulated an agenda of innovation-driven economic growth; on the other hand the New Labour government had recast the 'economic' hegemony within a market discourse of 'effective competition'. Where the Conservatives had sought to exclude discourses perceived to threaten its agenda, New Labour sought to co-opt discourses of consumer agency, market transparency and uncertainty within discourses of balance – consumer and producer, limited knowledge and realistic expectations, and so on – which it claimed were needed to deliver the agenda of 'effective competition'. On the one hand, the Conservatives had drawn on discourses of modernizing government, decentralization of regulation and governance; on the other hand, New Labour expanded these to include new discourses of participation and transparency. Thus, New Labour's discourses did not signify a radical departure *from* the neo-liberal paradigm of their predecessors but a shift in emphasis *within* this to entrepreneurial managerialism based on claims about the consumer, market transparency and participation. However, just as the previous repertoire contained the potential for future contestation, so too did the New Labour repertoire both in its claims for balancing

consumer and producer rights and agency and in its definition of uncertainty in terms of old risks (limited knowledge) and its exclusion of uncertainty in terms of new risks (contested knowledge).

Elite problematization of GM food from mid-1998 was triggered by critical interventions from Prince Charles and Professor Pusztai, which escalated societal resistance to GM food and increased newspaper engagement. Until this point a policy elite and Westminster consensus had ensured continuity in policy and little political conflict around which the newspapers could mount a counter-argument. The intervention of Prince Charles changed this by raising lay (moral) doubts, and prepared the way for the intervention of Pusztai, whose counter-technocratic rationality confirmed these doubts (see Chapter 6). More controversially, it pitched the heir to the constitutional monarchy against the political establishment and signified the first shift from low politics to high politics; that is, from relatively minor actors to socially and politically significant ones. Thus the intervention of Prince Charles provided the focal point around which sub-surface doubts about GM food could organize and a catalyst for a shift in newspaper engagement (see Chapter 6).

The counter-claims and behavioural actions in the argumentative context and in newspapers explicitly challenged New Labour's discourses of consumer agency, market transparency and 'effective competition'; exposed conflict over definitions of uncertain science in terms of old risks (limited knowledge) or new risks (ambiguity, contested evidence); and highlighted the limits of government powers of enforcement in an international market in food. Biotechnology companies claimed that as a consequence of newspaper coverage there had been a 'collapse' of confidence in the novel food and retailers that there had been a collapse in sales. Elites felt the need to respond. They problematized mounting contestation in terms of collective institutional failure – fragmented policy-making – to adequately respond to escalating newspaper and societal contestation. The complexity of this problematization required a multi-pronged argumentative strategy and set of behavioural actions but within the parameters of New Labour's neo-liberal repertoire of entrepreneurial managerialism. However, three fault-lines remained: consumer agency, scientific uncertainty and delays in setting up the FSA.

The most significant development by the end of 1998, however, was the setting up of a Cabinet Committee to co-ordinate policy on biotechnology. This signified three developments. First, a further shift from low politics to high politics; that is, from peripheral departments to close to the prime minister. Second, it entailed the moving of GM food

from a position off the policy agenda (no mention in the manifestos and no formal Labour Party policy) to central stage with Cabinet attention. Third, this institutional shift provides an important signifier of just how important the innovation-driven agenda was within government's overall 'economic' strategy, and just how threatened it felt by increased newspaper engagement and escalating societal resistance. The shift also set the stage for Blair's direct intervention into the debate in early 1999 (see Chapter 7).

Pre-problematization and emerging policy

Chapters 3 and 4 defined the argumentative context as the macro-social context of all circulating discourses structured into repertoires of topics. Elites and media select from these to construct their own arguments and counter-arguments, which in turn circulate in the argumentative context where they have the potential to frame disputes. This section first argues that two key developments – the Asilomar conference and the food irradiation row – introduced critical discourses into the argumentative context about uncertain science, the potential linkage of this to public uncertainty with implications for the future of the technology and the importance of public discussion for the social acceptability of risk. The critical analysis here explores how elites responded to these discursive shifts. It argues that elite problematization came in response to developments in the argumentative context but its construction drew less on these than on existing hegemonies. The outcome was elite problematization in terms of threats (public uncertainties) and hindrances (institutional inflexibility) to the dominant agenda of innovation-driven economic growth. The behavioural actions and arguments surrounding these informed the emergence of a new repertoire around novel food of technocratic rationality, objective science and (administrative) safety.

The argumentative context

The Asilomar conference

Within a year of the first gene being spliced in 1973 but before new products had been developed, a scientific conference was convened in Asilomar, California, to discuss the implications of the new technology. The Asilomar conference introduced into the argumentative context claims and counter-claims that were to circulate for the next 30 years about a potential problematization of GM food technologies around uncertain science and ethics, likely public opposition to the innovations and a potentially uncertain future for the technology unless policy elites adequately addressed public uncertainties. The conference recommended a partial postponement of some innovations in biotechnology and advocated public debate about the new technology with a view to

building acceptability of its development and risk management. (For conference proceedings, see Berg et al., 1981, 1995.) Thus from the birth of the new technology discourses about scientific, public and technological uncertainties as well as the potential for contestation over these were circulating in the argumentative context.

Early policy discourses

Early policy discourses on GM food in Britain responded indirectly to these discourses insofar as they sought to neutralize them but did not explicitly draw on them in the problematization of novel foods. Instead, elite problematization was informed by post-war hegemonic discourses and practices on food policy that valorised food security and scientific farming, technocratic processes and the privileging of scientific expertise. This translated into behavioural action in the early 1980s in the form of the establishment of informal expert scientific committees to provide ad hoc advice to ministers on the health and environmental implications of the new technologies, particularly as they concerned laboratory work (House of Lords, 1998: 26). From the outset, however, these scientific committees were non-participatory, and their discussions and advice to ministers' secret, so elite decision-making deliberations on uncertain, contested science remained behind closed doors. By the late 1980s, biotechnology companies had begun to prepare the first GM food products for the consumer market but at the same time a new scare emerged over another novel technology: irradiated food. Elites took the view that if future development of the technology was to be safeguarded in these circumstances they needed to control the development of the technology and the debates (House of Lords, 1998: 27).

Irradiated food: the precursor to GM Food

Elites responded to these developments by arguing for new legislation to give them statutory power over what novel foods were marketed and to formalize technocratic procedures in the scientific committees. Justifications for these behavioural actions highlight how they were less about addressing a perceived threat to public health and more about managing the social acceptability of new technologies. So, for instance, the primary rationale given for formalizing policy controls came not from debates in the argumentative context about the unknown effects of GM technologies but from an escalating controversy over irradiated food. In the late 1980s, the government proposed lifting a ban on the sale of such products in Britain and this sparked a furore in the

argumentative context³⁰ around two broad arguments that were to resonate in the later row over GM food.

On the one hand, proponents argued for the greater use of novel food technologies based on claims about progress and innovation-driven economic growth as well as the valorisation of scientific farming and the industrialization of production (Young, 1986, 1987). On the other hand, opponents argued that uncertain and contested science, unknown effects and limited knowledge necessitated a precautionary approach (Erlichman, 1987; Tucker, 1985). They also claimed that the collapse of the market in Britain for irradiated food following the media furore was ‘evidence’ of public anxieties about health issues and uncertainties about new technologies (Hornsby, 1989). The response of policy elites to this debate was to side with the proponents of the technology (see White Paper, 1989) and to seek parliamentary approval (Food Safety Act, 1990) for ministerial power of veto over new products and formalize the technocratic processes and mechanisms that would support their decisions. The 1990 act largely re-enacted its 1984 predecessor³¹ but added two new discursive dimensions: the inclusion of ‘safety’ in the title and the inclusion of specific provisions to deal with novel foods. The next section critically analyses arguments and claims about these in the White Paper (1989) and the Act (1990) in terms of what these signify about dominant discourses, norms and values, as well as behavioural action

The formalization of policy: the White Paper (1989) and Food Safety Act (1990)

This section explores how elite justification of behavioural action – new legislation – was informed by existing hegemonic discourses in MAFF about scientific farming/progress and by their primary policy agenda of innovation-driven economic growth. The discourse analysis examines argument and counter-argument deconstructed into claims and counter-claims. These arguments articulate the elites’ agenda, their problematization of the issues and their response – in terms of argumentative and behavioural actions – that was intended to address these problems. The dominant discourses in these three elements – agenda, problematization and response – together comprise the elite discursive repertoire. This section, as with the detailed discourse analysis of the four

³⁰ For more in the academic literature on this, see Bloomfield, 1990; Lang, 1989; Macfarlane, 2002; Meins, 2003; Scott, 1990; Webb, 1990.

³¹ Six years earlier the government had introduced the Food Act (1984) with the stated intention of introducing a modern food regulation system. It had ‘as its two principal stated concerns the protection of public health and the prevention of unfair trade practices harmful to the economic interests of both consumers and fair traders’ (Scott, 1990: 785; see also Bloomfield, 1990 and Grose, 1983).

empirical chapters, is concerned to trace patterns of argumentation across dominant and marginalized discourses rather than the minutiae of individual texts. The volume of texts analysed across a relatively long period also means it has only been possible to include relatively short quotations in the body of the chapters in support of the findings. In the interests of transparency and accountability longer extracts have been included in Appendix 5.

The primary focus in this section is the analysis of extracts from the White Paper (1989) in which GM food policy was first formalized. It argues that the existing elite hegemonic discourses and agenda influenced the claims they selected from the argumentative context to problematize novel food technology in terms of institutional hindrances and public uncertainty threats to their policy agenda. This problematization also informed how elites constructed an argumentative strategy to justify their actions and to negate or silence those counter-claims that might challenge their agenda. The outcome of this was the construction of a discursive repertoire of technocratic rationality, objective science and (administrative) safety intended to support this agenda. However, this response also under-problematized the potential for conflict between elite safety discourses and economic agendas and the implications of this for public confidence in safety controls. The elites' silence on scientific uncertainty and on the potential linkage of public, scientific and technological uncertainties as forewarned at Asilomar also contained the potential for later problematization and contestation over GM food.

Existing elite hegemonies, systemic hindrances and consumer threats

Existing (historical) hegemonies developed post-war in at MAFF around a discourse of progress, the valorisation of science and technological innovation, and the operationalization of these in policies which claimed to promote scientific farming, industrialization of production and food security.³² Policy elites drew on this existing hegemony in their selection of key discourses from the argumentative context for their problematization of the novel technologies of irradiated food and GM food. So, for instance, this discourse of progress appears in the White Paper in claims about 'rapidly changing science' with considerable 'potential applications in food production and processes' that 'offer the prospect of improved and more efficient food production' (MAFF, 1989: 6; see Appendix 5 [7, 8]).

³² For more on this historical context see Barling, 2003; Hennessy, 2003; Lang, Millstone, Raven & Rayner, 1996; Millstone, 2003, 2005.

Thus the benefits of the 'innovation and development' of novel foods lay in the 'potential for growth in the economy and greater convenience for consumers' (MAFF, 1989: 1; see Appendix 5 [3]). The strength of this hegemony and valorisation of economic/market benefits was articulated in a dual problematization. First, systemic inflexibility had been exposed, the elites claimed, as the 'rapid rate of technological change place[d] increasing demands on the flexibility of the system' (MAFF, 1998: 1; see Appendix 5 [2, 5]). Second, the benefits offered by the innovations were not self-evident and the elites claimed that 'consumers require assurances that the products of such processes are safe' (MAFF, 1998: 6; see Appendix 5 [8]). Claims about the need for consumer reassurance need to be seen in the context of the row over irradiated food and the perception of retailers that this had led to the loss of any market in Britain for the novel food. The inference in this context was that the failure to reassure consumers could threaten the government's policy agenda. Thus some form of behavioural action on the part of elites could be justified in claims of neutralizing the hindrances (institutional inflexibility) and threats (potential for adverse consumer reaction) in order to facilitate the agenda of innovation-driven economic growth.

The 'solution': ministerial control and formalizing technocratic processes

A problematization of (current) systemic inflexibility hindering and (possible) public uncertainty threatening the agenda of innovation-driven economic growth supported the preferred institutional response or solutions put forward by the elites. Behavioural action took the form of new legislation as the Food Safety Act (1990) gave ministers statutory controls over sales of GM food and the formalization of technocratic processes (expert advisory committees) as a mechanism for protecting and reassuring the public (see MAFF, 1989: 6; see Appendix 5 [6, 7]). This institutionalization of specialist committees by elites was based on the premise that the relevance and effectiveness of controls 'relied' on 'leading scientists and other experts' drawn from inside and outside government providing 'the best possible medical, scientific and technical advice' in the form of 'objective advice' (MAFF, 1989: 2; see Appendix 5 [4]). This was an argument for 'objective' science delivering authoritative advice – rather than arbitrary, partial and subjective decisions – and thus providing certainty for consumers.

Argumentative strategy: legitimacy and competing agendas

These behavioural actions not only sought to address the problematization of systemic inflexibility and public anxieties, but also served as key components in the elite

argumentative strategy. The centralization of control and formulization of technocratic mechanisms of decision-making could be justified in discourses of democratic legitimacy (decisions by elected ministers) and discourses of expert legitimacy (decisions derived from 'objective' science) (MAFF, 1989: 2; see Appendix 5 [4]). Technocratic processes could therefore provide a mechanism to reconcile the safety and economic agendas of government food policy.

Counter-intuitively, 'safety' was a subordinate discourse in this document despite it being crucial in claims about public anxieties about novel technology, its inclusion in the title of the act and claims about food safety being 'a top priority' (MAFF, 1989: 1; see Appendix 5 [3]). The subordination of the 'safety' discourse was manifest in a number of ways in the White Paper and 1990 act. Discourses about 'safety' appear much less frequently in the body of the White Paper and legislation than discourses about technology, innovation and progress.³³ Furthermore, the key sections make no mention of counter-claims of harm or unknown effects but do include claims about benefits (MAFF, 1989: 6; see Appendix 5 [7, 8]).³⁴ Claims justifying the formalization of safety controls in the hands of ministers and expert committees were based not on the need to protect the public (as had been the case for earlier laboratory controls), but on the recognition that in the case of future developments – such as GM food – 'consumers would require assurances that the products of such processes are safe' (MAFF, 1989: 6; see Appendix 5 [8]).

Therefore the argumentative strategy did articulate 'safety' discourses, ministerial controls and technocratic processes however not within claims of protection but within claims about the need to reassure the public about novel technologies. The inference, therefore, was that the agenda of innovation-driven economic growth would require not only systemic flexibility but also the management of public perceptions about possible risks. Thus, safety was viewed not as an ethical obligation to protect the public but as an argumentative strategy delivered through administrative mechanisms to reassure consumers and avoid the possibility of a food irradiation-type scare derailing GM innovations. Safety discourses were therefore subordinated to the dominant discourse and agenda of innovation-driven economic growth.

³³ See Scott, 1990.

³⁴ The claimed benefits included improved 'resistance of crops', improved 'efficiency of baking and brewing processes'; and with the possibility that 'products ... may soon be on sale' it was claimed there was a need to secure consumer support (MAFF, 1989: 6).

The emergence of an elite repertoire and the potential for future conflict

These four components – policy agenda, elite problematization, behavioural action and argumentative strategy – combined in the construction of a complex repertoire of technocratic rationality, objective science and (administrative) safety that was intended to support the policy agenda of economically-driven economic growth. However this repertoire, the claims on which it was based and the counter-claims in the argumentative context they rejected also contained the potential for future newspaper problematization and contestation over policy. Potential argumentative fault-lines lay partly in two significant silences and one unresolved tension. The White Paper and the 1990 Act do not mention uncertain and contested science, unknown effects or unpredictable consequences, but they do refer to ‘objective advice’ and technocratic scientific processes (MAFF 1989: 2; see Appendix 5 [4]). Similarly, there is no mention of the discourses that emanated from Asilomar on the need for public debate building social acceptability of the new technology. An argumentative strategy of silence was therefore adopted to deal with those discourses in the argumentative context about scientific and public uncertainties that policy elites perceived as potentially threatening to the agenda of economic growth and the reconciliation of this with public concerns through the administration of safety controls. Furthermore, technocratic mechanisms were used to reconcile potential tensions between the elites’ safety and the economic agenda, but if these mechanisms were to attract claims of being inadequate or compromised then these tensions could become a major line of criticism.

Summary

To sum up, then, existing hegemonies in MAFF about ‘progress’ (scientific farming and industrialization of production) were reconfigured into a policy agenda of innovation-driven economic growth and the valorisation of objective, unified science and technocratic processes. However, this was problematized as being hindered by systemic inflexibility or threatened by public anxieties about novel foods. The elite response was to legitimize behavioural action in discourses of democratic (ministerial control) and technocratic (expert committee decisions) mechanisms that were intended to deliver public reassurance about safety and reconcile this with innovation-driven economic growth. The result was the emergence of a discursive repertoire of technocratic rationality, objective and unified science, and (administrative) safety. However, this repertoire and its attendant processes were open to future problematization and contestation through the subordination (public concerns about safety) or silencing (uncertain science and the need for wide-ranging public discussion about novel technologies) of some discourses within

the argumentative context. Furthermore, the use of technocratic mechanisms as part of an argumentative strategy to reconcile potentially conflicting safety and economic agendas could leave exposed these conflicts should the mechanisms be challenged as inadequate. These potential argumentative fault-lines were exposed with emerging problematization of BSE/CJD and later media contestation over GM food.

New Labour and a discursive shift to entrepreneurial managerialism

This section argues that a number of developments in the argumentative context – the escalation of the BSE/CJD row, the launch of the first GM food and the advent of a new government – exposed the tensions in the argumentative strategy of policy elites constructed around the economic agenda and technocratic repertoire. Discourses about safety, the consumer and scientific uncertainty which had previously been subordinated or silenced became more prominent in the argumentative context. These discourses were given added emotive dimensions with claims about deaths, institutional mismanagement and a crisis of public confidence in food safety controls. The analysis of Labour's election manifesto (1997) and White Paper (1998) found that while those counter-discourses associated with E-coli, BSE and 'crisis of confidence' fundamentally challenged the economic agenda and technocratic repertoire of Conservative elites they did not lead to a rupture of existing hegemonies and valorisation but a re-calibration of existing elite discourses to safeguard their hegemonic agenda, values and technocratic processes. This recalibration was articulated within a new elite repertoire of entrepreneurial managerialism with the advent of the New Labour government in May 1997.

Argumentative context

Between 1990 and 1997 major changes took place in the argumentative context that had fundamental implications for how GM food was later to be problematized by elites.³⁵ Government scientists announced in March 1996 that contrary to their earlier certainty (reassurance) claims there was new evidence of a likely link between BSE in cattle and

³⁵ The focus in this research is Britain, but it is important to note the wider argumentative context of the EU. During the 1990s biotechnology policy moved towards harmonization at the European level while still allowing for considerable subsidiarity and hence variation in its implementation between member states (see Bauer & Gaskell, 2000). However, as EU-wide contestation over GM food and crops emerged, a split developed between the European Parliament, in which MEPs tended to side with opponents of the technology, and the Commission, which broadly favoured policies that promoted biotechnology. Within the Commission there was also a divide between those who argued that more precautionary approaches used for GM crops should be extended to GM food and those who argued against (see Barling, 2000).

CJD in humans. Two months later, the first GM food – a tomato paste – was launched onto the British market and targeted directly at consumers. Both of these initially unrelated developments need to be seen within the context of a growing prominence in the argumentative context of claims about safety, scientific uncertainty and institutional failures to protect the public. These claims challenged the existing technocratic repertoire intended to deliver authoritative decisions, ruptured elite silence on issues of uncertainty, invalidated the subordination of discourses of the consumer and exposed the conflict between the elites' economic agenda and safety discourses. A new dominant discourse emerged in the argumentative context around claims of a 'crisis of public confidence' and elite (institutional) mismanagement of food safety controls. An alternative repertoire and argumentative strategy was needed: the outcome of the 1997 election ensured New Labour's entrepreneurial managerialism came to the fore.

Britain's first GM food product: a 'successful' launch

The first GM food product to be marketed directly to consumers³⁶ in Europe was a tomato paste developed by the British biotechnology company Zeneca. Senior executives claimed that, on the one hand, they had selected the UK for the launch of GM tomato paste because of its clear, transparent and consistent guidelines and because food regulation was less prone to politicization than elsewhere in Europe (Austin & Lo, 1999; Poole, 1998). On the other hand, executives claimed there was potential problematization around claims about the launch of an unfamiliar technology onto a market 'sensitized' by a decade of food scares.³⁷ Hence they argued that there was a need to neutralize a 'sceptical' and potentially hostile public (Poole, 1998) and they initiated a series of behavioural actions, including considerable a priori consultation. They sought to do this through a series of pre-emptive behavioural actions including: advance consultation with media, consumer groups, MPs and so on (Poole 1998; Austin & Lo 1998); clear labelling of GM tomato paste; the distribution of in-store leaflets about genetic modification and the instigation of an early warning system comprising triangulated monitoring of helpline calls from customers, sales patterns and media coverage (Austin & Lo, 1999). As a result they

³⁶ The first GM products to enter the food chain in 1990 had been derivatives used in manufactured bread and manufactured cheese. These were sold to wholesale manufacturers rather than to consumers. The latter were unaware that GM products had entered the food chain and no media coverage has been found on these products.

³⁷ This had begun in 1988 with salmonella in eggs and by 2000 there had been eight such scares (Observer, 2004).

felt able to claim that they had given consumers transparency, information, choice and agency (Austin & Lo 1998) and that initial consumer and media response to GM food tomato paste was 'broadly welcoming' (Sainsbury, 1998; Zeneca, 1998). This communicative strategy highlighted the growing prominence within the argumentative context of discourses about 'consumer agency' and the perception of a highly 'sensitized' market.

Escalating controversy over BSE/CJD

However, the most significant development in the argumentative context was triggered by claims by government scientists of 'new' scientific evidence of a link between BSE and CJD;³⁸ elite discourses of new evidence of harm thus replaced discourses of no evidence of harm. A number of critical claims surfaced³⁹ around the argumentative fault-lines identified earlier, including that secretive decision-making processes 'covered up' a 'conflict of interests' in which consumer safety interests were subordinated to economic/producer interests. Secrecy also hid ministerial interference in expert committees to subvert objective science, suppress conflicting scientific evidence, silence dissident views and ensure that 'expert evidence' supported the elite agenda. The consequence of this, critics claimed, had been 'avoidable' deaths from CJD and the collapse of the British beef industry (see Phillips, 2000). These challenges in the argumentative context were articulated within a dominant problematization of institutional failure and accusations that elite safety discourses had been about reassurance rather than protection (see House of Lords European Communities Select Committee, 1998; Labour Party, 1997). These counter-discourses directly challenged the economic agenda and technocratic repertoire that had emerged in 1989 and 1990 and a new dominant discourse emerged in the argumentative context of a 'crisis of public confidence' in safety controls and a 'climate of mistrust' (House of Lords European Communities Select Committee, 1998). Thus, the potential identified earlier for contestation to emerge around the fault-lines in the argumentative strategy was realized. Contestation centred on tensions over BSE/CJD between the safety discourses and economic agenda, elite silence on scientific uncertainty and their subordination of consumer discourses.

³⁸ See Packer, 2007.

³⁹ See Jasanoff, 1997; Lang, 1997; Pennington, 2003; Pickrell, 2004; Van Zwanenberg, 2005.

The general election of 1997 and New Labour's 'radical solution'

Both the main parties problematized this 'crisis of confidence' during the election campaign in terms of institutional failures but disagreed on how to respond. The Conservative election manifesto of 1997 outlined behavioural actions that would reform existing institutional arrangements (Conservative Party, 1997); the Labour manifesto articulated radical action to dismantle MAFF and set up an independent food regulator whose sole remit would be consumer issues (Labour Party, 1997). It also outlined a recalibration of the neoliberal hegemonic agenda from an 'economic' centric one to a 'market' centric one in which consumer and producer interests and rights would be more balanced. This was articulated within an agenda of 'effective competition' and a new repertoire of entrepreneurial managerialism that was first outlined in the manifesto (1997) and the implications of which for food policy were more extensively detailed in the 1998 White Paper.

A critical analysis of key New Labour discourses

This section analyses discourses in three critical texts – the Chief Scientific Advisor's guidelines on science and policy making (1997), Labour's election manifesto (1997) and the Food Standards White Paper (1998) – extracts from which can be found in Appendix 5. It argues that the particularities of New Labour's problematization of institutional failure and a 'crisis of public confidence' in food safety controls needs to be understood within the emergence of a new discursive repertoire of entrepreneurial managerialism that accompanied the advent of a new government. On the one hand, this repertoire reiterated the previous government's economic agenda and neoliberalism, albeit within new discourses of market-related 'effective competition' (**Labour Party, 1997: 32; see Appendix 5 [3]**). On the other hand, greater prominence of certain discourses in the argumentative context rendered unfeasible the previous government's strategy of remaining silent on claims that they perceived as threatening to their agenda. Instead, New Labour sought to co-opt discourses of consumer uncertainty but restrict the parameters of debate by locating them within discourses of equilibrium – pro-consumer and pro-business, authoritative science and the limitations of knowledge, and safety as administration and ethics – so restricting them in various ways. However, this argumentative strategy also created the potential for dilemmas and conflicts over where the balance should lie.

Continuities and change in elite discourses

New Labour's repertoire of entrepreneurial managerialism was based on assumptions of how the public sector should be managed and how 'public goods' should be delivered.⁴⁰ It was constructed around two ideologies – those of entrepreneurial governance and managerialism. The entrepreneurial dimension reiterated the previous government's agenda of economic growth but recast it with market discourses to avoid the domestic sensitivity to issues of 'innovation' that had emerged around irradiated food and BSE/CJD. Thus, the agenda was articulated as 'competitiveness' (internationally) and 'effective competition' (domestically) (**Labour Party 1997: 31; see Appendix 5 [3]**); the mechanism for achieving the former was 'strengthening our capability in science, technology and design' and the mechanism for achieving the latter was the re-positioning of the public as citizen-consumer operating within a market (**Labour Party, 1997: 31; see Appendix 5 [1]**).

On the one hand, the Conservative government had articulated the public as prone to panic – and hence a threat to its economic agenda; on the other hand, New Labour sought to co-opt them as consumers into its 'competitiveness' agenda. The citizen-consumer discourses valorised enhanced consumer rights and information, choice and agenda, not at the expense of business rights but in consumer-business equilibrium which would facilitate 'effective competition' (**Labour Party, 1997: 31; see Appendix 5 [3, 4]**). Both the manifesto (1997) and White Paper (1998) make the classic neoliberal argument that only when market mechanisms fail to deliver 'effective competition' is elite behavioural action – that is government regulation – necessary. In these circumstances, such action should take the form of 'tough, efficient regulation' that was transparent, predictable and 'favourable to both consumers and shareholders' (**Labour Party, 1997: 37; see Appendix 5 [4]**). Thus, a neoliberal economic agenda was retained, but recalibrated in an entrepreneurial repertoire based on market discourses and changes to the mechanisms by which it was facilitated and evaluated ('effective competition'). What

⁴⁰ Entrepreneurial managerialism combines two major public management ideologies. The first, entrepreneurial governance, is concerned with promoting competition for services; it re-positions members of the public as citizen-consumers who should be empowered through choice, information and rights; seeks to decentralize authority and valorize participation; and wherever possible uses market mechanisms rather than bureaucratic mechanisms to deliver public goods (Du Gay, 2000: 63). The empowerment of the 'active sceptical citizen-consumer' (Clarke, 2000) was seen as facilitating more efficient markets and therefore complementary with rather than incompatible with Labour's pro-business, pro-competition and pro-innovation agenda. The second major ideology is 'new managerialism' – New Labour's extension of the Conservative government's reforms of the public service. This entailed the creation of new bodies located between the state and market to deliver public goods and a commitment to modernize institutions of government by democratizing and decentralizing government functions (Cutler, 2000).

also changed was the re-positioning of the public (threat) as a citizen-consumer (equilibrium) and the replacing of hierarchical discourses and silences with more co-optional and dialectical ones.

Elite problematization of institutional failure and ‘crisis of public confidence’

This entrepreneurial discourse set the parameters within which government response to problematization was constructed and the managerialism discourse outlined the particular behavioural actions proposed to address this. The parties had concurred during the election in their problematization of a ‘crisis of confidence’ resulting from institutional failure and a series of food scares, the consequences of which were experienced in lives lost, business failures and government subsidies (see Conservative Party, 1997, Labour Party, 1997). New Labour diverged, however, in ascribing institutional failure not only to the inadequate administration of safety controls (as the Conservatives had argued) but also to the organizational and cultural failure of MAFF (**White Paper, 1998: 1; see Appendix 5 [4]**). Their definition of this drew heavily on discourses in the argumentative context about BSE/CJD, that is, ‘fragmentation and lack of co-ordination’, ministerial interference in science-based decision-making, and a lack of transparency in decision-making which fuelled perceptions of conflicts of interests (**MAFF, 1998: 2; see Appendix 5, [4, 7, 10]**). This made, they argue, the ‘case for an independent food safety agency unanswerable’ (**Labour Party, 1997: 29; see Appendix 5 [5]**). The proposed form of this new agency was informed by the second component in New Labour’s repertoire of entrepreneurial managerialism – their public administration ideology of managerialism.

The ‘solution’: a proposed shift to new forms of governance

New Labour’s managerialism, as with their entrepreneurialism, built on existing elite ideologies and discourses about modernization of the institutions of government, decentralization of non-core (regulatory) functions of government and the creation of single remit, quasi-public bodies located between state and market that would be free from ministerial interference in the technocratic processes (**MAFF, 1998: 1; see Appendix 5 [7]**). However, the managerialism of New Labour manifest in their proposed new Food Standards Agency added a number of new dimensions (see Chapter 3). In addition to regulating food this would, the elites claimed, provide policy advice to ministers on the future direction of policy, its operations would be required to be transparent and subject to ‘public scrutiny’, and ensure that the ‘public voice could be fully heard’ (**MAFF,**

1998: 1; see Appendix 5 [2, 3]). It hence signified a shift from secretive governance to participatory governance.

A limited acknowledgement of scientific uncertainty

The other major shift in elite discourses was the inclusion of certainty/uncertainty claims. Elite silence on claims of scientific uncertainty was unsustainable given the prominence of these in the argumentative context following the BSE/CJD row. So prominent had these claims become that the Chief Scientific Advisor (CSA) Sir Robert May issued guidelines on the matter two months before the general election.⁴¹ These guidelines are a critical text because for the first time a formal elite document had explicitly addressed issues of communicating uncertain, contested science. The articulated purpose of the guidelines was to address the challenges of using and communicating science-based decisions where 'there is significant uncertainty' and 'a range of scientific opinion' and 'conflicting evidence', and where these have a 'range of potential implications for sensitive areas' such as health and the environment (**May, 1997: 1; see Appendix 5 [1]).**

One of the key challenges was the 'distinct[ion]' or discrepancy between scientific advice which 'often involve[d] an aggregation of a range of scientific opinion and judgements' and 'statements of assured certainty' (**May, 1997: 6; see Appendix 5 [4]).** The CSA argued that the presumption should be towards openness and transparency in the form of the publication of policy advice. This, he claimed, would improve the nature of scientific advice and subject it to scrutiny by 'stimulat[ing] greater critical discussion of the scientific proposals and bring to bear any conflicting evidence which may have been overlooked' (**May, 1997: 6; see Appendix 5 [5, 6]).** It could also 'in the long run avoid greater controversy' but the difficulties of presenting uncertain, conflicting evidence should not be under-estimated (**May, 1997: 6; see Appendix 5 [7]).** These guidelines therefore signified emerging shift among *some* elites in which science was no longer constructed as unified, authoritative and definitive but highly contingent, uncertain and conflicted. The document sought to outline principles for the use and communication of science in which discourses of pre-emptive openness and transparency were juxtaposed against the difficulties of presenting this in a way that did not cause undue public alarm. Discourses of uncertain evidence were juxtaposed against claims of 'assured certainty'.

⁴¹ The initial reluctance of the Blair government to follow up the implications of May's arguments were manifest in their claims about 'no evidence of harm' and 'robust' technocratic processes. This signifies one of those instances where there are discernible divisions on the policy elite 'collective'.

However, these were principles and the difficulties – and reluctance of some elites – of translating them into practice were manifest in New Labour’s White Paper of 1998. This included discourses of scientific uncertainty but naturalized such uncertainty as ‘inevitable’, omitted any reference to contested science or conflicting evidence and restricted the definition of uncertainty to ‘incomplete and difficult to interpret data’ making it ‘difficult for policymakers) to establish with certainty the nature and degree of risk’ (**Prime Minister’s Office, 1998: 2; see Appendix 5 [13]**). This is an ‘old risk’ definition of uncertainty as limited knowledge, the response to which is the acquisition of more knowledge from which certainty can be derived. Not only can additional knowledge be gained through new research but also incrementally built through technocratic processes of case-by-case assessment and ‘expert advice’ (**Prime Minister’s Office, 1998: 2; see Appendix 5 [13]**).

Thus, technocratic processes were articulated as mechanisms for moving from uncertainty to certainty, from knowledge limitations to authoritative science. Until this point is reached, the White Paper argues, decision-making should make ‘allowances for uncertainty’ (**Prime Minister’s Office, 1998: 2; see Appendix 5 [13]**) and where there is the possibility of harm to the public the presumption should be ‘precaution’ (**MAFF, 1998: 2; see Appendix 5 [13]**). Ultimately, however, whether or not to proceed was a matter of ‘political judgement’ and depended on the ‘level of risk a society regards as reasonable’ (**Prime Minister’s Office, 1998: 2; see Appendix 5 [13]**). Whose judgement were to be used highlighted continuities in an elitism that had emerged in the 1989 document (see above). The White Paper infers that consumer understanding of certainty may be utopian in that ‘complete freedom from risk is an unattainable goal’ (**MAFF, 1998: 2; see Appendix 5 [12]**); thus it would appear that it is for the policy elites to decide – based on limited knowledge and hence a degree of unpredictability – what was ‘reasonable’ (**MAFF, 1998: 2; see Appendix 5 [13]**).

Thus, the managerialism of New Labour and proposals for an FSA can therefore be located within a broad systemic trend away from the central state to regulatory state, from government to governance. However, New Labour’s entrepreneurial managerialism also signified discursive shifts from governance to participatory governance, from secrecy to transparency from the subordinating of the consumer to parity between consumer and business, and from silence on uncertainty to a co-option of uncertainty into elitist technocratic processes. The neoliberal justification was constructed around a dominant discourse of institutional failure leading to market failure (where the lack of confidence translated into an unwillingness to buy certain foods).

A new argumentative strategy

The argumentative strategy adopted by New Labour was diametrically opposed to that of their predecessors. While the Conservatives had opted for silence, secrecy and the suppression of debate, Labour sought transparency, co-option (consumer, uncertainty) and equilibriums (consumer-producer, etc.). However, in the same way that the Conservative technocratic repertoire contained the potential for contestation so too New Labour's entrepreneurial managerialism. The analysis of the manifesto (1997) and the White Paper (1998) has identified three argumentative fault-lines. First, the notion of balancing consumer and business rights and interests had the potential to become a source of friction if consumers chose to exercise what they claimed was their right to boycott certain products and so prevent businesses from pursuing what they claimed was their interests in recouping the cost of development through sales. Second, global trade in food meant that GM food needed to be identified and labelled at the source of production, but the British government had no power over what was produced outside the country, thus creating a potential for tension between the national and international dimensions of the policy. Third, the definition of uncertainty in terms of limited knowledge may work where there is a broad consensus about knowledge as is the case with old risks; however definitions of uncertainty in relation to new risks include ambiguity, ambivalence and contested knowledge. Thus increased knowledge may address the first type of uncertainty but exacerbate the second by making more interpretations available or escalate contestation when the premises of the knowledge are themselves contested.⁴² The next section of this chapter and Chapter 6 argue that intensification of newspaper engagement with and the hardening of their positions against GM food centred on these three potential fault-lines.

Summary

In summary, then, the escalation of the BSE/CJD crisis and the launch of the first GM food product between 1996 and 1998 were accompanied by a greater prominence in the argumentative context of discourses of consumer protection and agency, uncertain science and potentially harmful effects, institutional failure of MAFF and a crisis of public confidence. The election of the New Labour government in 1997 saw a shift from an elite

⁴² For more on the distinctions between certainties associated with new and old risks, see Chapter

repertoire of technocratic rationality, objective science and (administrative) safety to a repertoire of entrepreneurial managerialism. This new repertoire recast the elite agenda from economic growth to a market discourse of 'effective competition'. The entrepreneurial component shifted the consumer from a subordinate discourse to a more prominent one of consumer rights and market transparency but in an discourse of equilibrium that claimed that the balancing of consumer and producer rights was necessary to deliver 'effective competition'. The managerialism component claimed to want to shift from more hierarchical and secretive processes to more participatory and transparent – and hence democratic – processes. It also shifted uncertainty from a discourse of silence to an included but constrained discourse in which limitations of knowledge could be managed within technocratic processes. Despite these discursive shifts between the two repertoires, core hegemonies in food policy – a broadly economic agenda as well as the use and valorisations of technocratic mechanisms – remained largely intact. However, the new repertoire contained a number of argumentative fault-lines in the tension between consumer and producer rights and interests; international and national dimensions, uncertainty as constructed in terms of old risks and in terms of new risks. Increased newspaper engagement after the interventions of Prince Charles and Professor Pusztai in mid-1998 exposed these fault-lines (see Chapter 6).

Problematization: responding to discursive challenges

This section argues that the counter-claims and counter-arguments of Prince Charles and Pusztai need to be seen in the context of the intervention of the US agri-business conglomerate, Monsanto, into the British debate. All three exposed the fault-lines in the elite agenda, repertoire and argumentative strategy around consumer agency, scientific uncertainty and American multinationals. However, given that the setting up of the FSA was delayed until 2000 the elites needed an alternative strategy to address newspapers' problematization of GM food, which had escalated societal opposition to the technology and intensified resistance in the argumentative context to the novel food technology.

Argumentative context

Food discourses in the first half of 1998 were dominated by BSE/CJD with limited attention paid to GM food. This changed from June with a series of critical interventions by actors who were to become emblematic of critical positions in the debate.

Monsanto enters the debate amid NGO claims of a 'deluge' of GM

Monsanto, the US-based agribusiness conglomerate, launched a £1 million advertising campaign in June 1998 to 'encourage a positive understanding of food biotechnology' and 'foster' debate (Arthur, 1998). Newspapers dismissed this as a more a 'propaganda' campaign than a genuine debate (Arthur, 1998). British biotechnology companies labelled it 'monstrous arrogance' given the 'sensitivities' of the British food market (Hughes, 1998). Food retailers claimed Monsanto had consistently refused to segregate GM from non-GM soya and maize at source making it impossible for them to label accordingly and offer consumers choice (see Austin & Lo, 1998; Parr, 1999). NGOs warned that Monsanto was set to release 'massive' quantities of mixed soya on the UK market (see Greenpeace, 1997, 1998). These counter-claims explicitly challenged New Labour claims about mandatory labelling.

Prince Charles, Pusztai and escalating societal resistance

Newspaper engagement, notwithstanding the intervention of Monsanto, had been relatively sporadic and ambivalent but this changed with critical interventions by two men who were to become emblematic of independent voices. Prince Charles published a letter to the *Telegraph* in June 1998 and Professor Pusztai publicized preliminary research findings in a *World in Action* television programme in August 1998 (for an expanded analysis of newspapers' engagement with this, see Chapter 6). Prince Charles signified the 'lay' voice articulating scepticism about the certainty claims of elites, consumer anxiety about unknown effects and ethical dilemmas and moral doubts of the public about 'tampering' with life in the context of BSE/CJD deaths. Pusztai signified the powerful voice of the expert-consumer whose research had provided sufficient 'evidence' for him to doubt elite certainty claims and whose counter-evidence signified the contested nature of science. Both men claimed that given the choice they would not consume GM food but that they were denied the agency to exercise this because relatively few GM food products were labelled. Thus, the counter-claims of both 'independent' voices conjoined around the fault-lines of consumer agency, scientific uncertainty and multinational impunity in the elites' argument. They also marked a critical juncture in newspaper engagement and opposition to GM food in the argumentative context.

NGOs repeatedly claimed that there was an impending 'deluge' of GM products on 'supermarket shelves' and claimed government had failed to facilitate consumer agency despite public mistrust of the management of risk. Given the scientific uncertainty they began to call for a ban or moratorium on GM food and crops. Newspaper engagement with GM food issues escalated (see Appendix 7) and their problematization of the novel

food became increasingly emotive in the use of such discourses 'Frankenstein foods' and 'guinea pigs' (see Chapters 6 and 8).

At the same time, there was escalating societal resistance in the form of a variety of behavioural actions. Some of this was orchestrated by environmental NGOs, such as the use of opinion polls as 'evidence' of hardening public attitudes towards GM food, and behavioural action in the form of 'eco-warriors storming ships' (Lean, 1997) and trashing crops (Ingham, 1998c). Other resistance included individual actions such as legal suits to halt the expansion of GM food sales and crop cultivation (Daily Mail, 1998a; Daily Mirror, 1998a, 1998b; Lakeman, 1998). However, the strongest behavioural signifier of mounting resistance was claims by retailers of a collapse in sales of those GM foods that were labelled and a de facto consumer boycott which they directly attributed to adverse media comment linked to the interventions of Prince Charles and Professor Pusztai (see Austin & Lo, 1999).

A leaked memorandum from Monsanto claimed there was an 'on-going ... society-wide collapse of support' for GM food and crops (Grocer, 1998). These counter-claims and behavioural actions explicitly challenged New Labour's discourses of consumer agency, market transparency and 'effective competition'; exposed contestation of the restricted definition of uncertainty in terms of old risks (limited knowledge) rather than new risks (ambiguity, contested evidence); and challenged elite claims to be pro- consumer agency while failing to ensure multinational corporations complied with labelling laws. In response to escalating articulations of public uncertainty and the intensification of newspaper engagement and problematization, biotechnology companies and food retailers claimed there had been a 'collapse' of confidence in the novel food (see evidence to House of Commons Science & Technology Committee, 1999). Elite responses need to be seen in this context as well as in terms of perceived risk to their agenda of 'effective competitiveness' of British biotechnology industry.

A critical analysis of crisis discourses

Elite responses analysed here come primarily from government announcements made in October about a shift in responsibility for biotechnology to the Cabinet Office and in December of a review of policy frameworks. As with the other detailed analysis of discursive patterns, extracts from these two primary texts have been included in Appendix 5 but the supplementary texts that support this have not been. These supplementary texts include parliamentary debates and ministerial evidence to select committees in 1999

necessary to understand elite problematizations and justifications better but they are retrospective and the focus here is on the contemporaneous. They are also too voluminous to offer anything other than supplementary data. This chapter argues that as newspaper contestation escalated, elites sought to address the argumentative fault-lines or rebut counter-claims against GM food policy. That is they sought to protect their policy agenda and defend their repertoire of entrepreneurial managerialism.

The application of the ‘competitiveness’ agenda to biotechnology

The manifesto (1997) and White Paper (1998) had briefly outlined in broad terms New Labour’s agenda in terms of science-enhanced competitiveness (global) and ‘effective competition’ (domestic). However it was not until the review announcement in December 1998 that it became clearer as to how this related to GM food. That is, the discourse of ‘effective competition’ was based on claims about biotechnology offering ‘enormous opportunities for improving the competitiveness of the economy *and* the quality of life in terms of health, agriculture, food and environmental protection’ (**Cunningham, 1998d, my italics; see Appendix 5 [3]**). As with the discourses of 1989, elites claim that the ‘protection of health’ is the ‘first priority’ of government (**Cunningham, 1998d, my italics; see Appendix 5 [2]**). However, for the Conservatives safety was a subordinate discourse located within an administrative rationale rather than ethical one. A decade of food scares and claims of actual loss of life had disrupted this and the new government not only articulated safety as crucial for ‘effective competition’ (consumer confidence) but also located it within a moral discourse that was expanded to include environmental protection and ethical considerations (**Cunningham, 1998d, my italics; see Appendix 5 [2, 3]**).

The problematization of an escalating row over GM food

This had a number of implications for elite problematization of GM food. Unlike the BSE/CJD row, the escalating problematization of GM food did not entail claims about *actual* harm (deaths). The newspapers had couched their problematization as an inadequate elite response to claims about possible harm shown in laboratory mice (see Chapter 6) while the elites inferred that it was due to inadequate collective government responses to escalating societal uncertainty over biotechnology. This located elite problematization of GM food within a wider problematization of biotechnology and within the ‘need to establish clear and firm policies in a number of complex areas which cut across departmental boundaries and which are also of great concern to the public’ (**Cabinet Office, 1998a; see Appendix 5 [1]**). This construction of elite failure to ensure

policy co-ordination was more clearly articulated in evidence to a select committee about 'fragmented' decision-making and the lack of 'joined up' communication of policy (Cunningham, 1999; *not in the Appendix*). The 'need to establish' policy also inferred that there was an absence of Labour Party policy on it. This can be deduced from the Cabinet Office remit of policy formulation, the absence of any formal policy statement or document by Labour while in opposition on GM food and the lack of any mention of biotechnology or GM food in the election manifesto. This lack-of-policy problematization was located within constructions of the perennial challenges of policymaking in post-modernity.

The 'solution': a multi-dimensional response

This problematization of the novel food of GM was much more complex and multi-faceted than elite problematization of irradiated food had been and as such the appropriate response was articulated in terms of multiple-pronged behavioural actions and argumentative strategy.

The first of these comprised behavioural action in the form of the centralization of decision making in the Cabinet Office and the setting up of a Cabinet Committee on biotechnology. This signified a major shift in the importance elites ascribed to biotechnology from silence on it in the election manifesto (the absence of a policy) to the formalization of collective ministerial input into the evolving of policy and the involvement of the prime minister. This shift in the locus of power closer to the prime minister⁴³ was based on claims about the need for co-ordinated 'clear' and 'coherent' policy formulation and communication (Cabinet Office, 1998) and thus articulated within a rationale of modernization. By December, the Cabinet Office had instigated a review of the 'strategic and regulatory framework' of biotechnology policy, the focus of which was the expert committees (Cunningham, 1998d) and whose purpose was to 'ensure what we have the right pattern of advice' from the experts to regulate biotechnology (Rooker, 1998: 1082). That is, the articulated intention was to strengthen existing technocratic mechanisms.

Second, communication of biotechnology policy was also centralized, with the Cabinet Office assuming its control. The dissemination of government policy was posted on the Cabinet Office website (Cunningham, 1999), thereby de-personalizing communication and attempting to create a distance between journalists and ministers. At the same times

⁴³ Other studies have highlighted how under Tony Blair the size of the Cabinet Office and its functions were expanded so much so that it became an adjunct to the prime minister's office (see Hennessy, 2005).

minutes of meetings and advice from scientific committees to ministers were similarly published on this site and justified within claims for New Labour's commitment to transparency (Rooker, 1998).

Third, the elites repeatedly claimed they facilitated consumer agency by legislating for mandatory labelling of GM foods (Cunningham, 1999; Meacher, 1999; Rooker, 1998). Newspaper counter-claims about elite reluctance to enforce existing laws were rebutted by the initiation of legal proceedings against companies that infringed regulations on GM crop cultivation in Britain (see Rooker, 1998). When the elites were unable to initiate legal proceedings against Monsanto because production was outside British jurisdiction they published a list of alternative suppliers of non-GM soya and claimed that this would enable retailers to ensure labelling and consumer choice (Rooker, 1998). Thus, the elites constructed a discourse – text and behavioural action - of enforcement and facilitation.

Fourth, the elites launched a consultation on public attitudes to the ethics of the biosciences (Cunningham, 1998, 21 October: 1135) with the intention of initiating a 'serious and inclusive' consultation over technologies that were venturing into 'uncharted territory ... with considerable social and consumer issues of democratic accountability' (Meacher, 1999: 722). The preoccupation in the announcement was with ethical issues surrounding cloning (Cunningham, 1998, 21 October) but none of the fundamental doubts articulated by Prince Charles (see Chapter 6) about the ethics of 'tinkering with nature' were raised. On the one hand the primary articulated purposes of this consultation was to address consumer concerns by attempting to ascertain whether the 'public has confidence' in the current system and to put in place mechanisms to deliver 'sound advice' and that were as 'simple and transparent' as possible (Cunningham, 1998, 21 October). On the other hand, the purpose of the review also echoed discourses from 1989 – that is, to evaluate whether the system was 'flexible enough' to cope with the 'rapid development of the technology' yet offer 'proportionate' regulation that avoided 'imposing unjustified burdens on the industry' (Cunningham 1998, 21 October). Thus, the framework review and public consultation were inter-related, with the 'public' defined within the consultation as including all the stakeholders including consumers, biotechnology industry and so on.

Fifth, elites needed to address the escalation of counter-claims in the newspapers and argumentative context about uncertain and contested science. The review of the regulatory framework was intended to strengthen the existing committee system in the assessment of risk. Ministers secretly commissioned a review of existing scientific evidence on the public health implications of consuming GM food but did not announce

this until the completion of the review in 1999 (Cunningham, 1999). They also delegated responsibility for replying to Pusztai's claims to the Rowett Institute, which employed him and the Royal Society, thus creating the sense of 'independent' scientific review of his claims.

Argumentative strategy and potential for contestation

At the same time, ministers adopted an argumentative strategy of silence about Pusztai and uncertain, contested evidence but this was to have quite significant implications for the escalation of the controversy in the newspapers in 1999. This multi-faceted argumentative strategy and behavioural actions were carefully framed by New Labour's notion of balance (see, for instance, the quotations above about the balance between 'sound' advice and proportionate regulation, etc.). The balance, it was argued, would be achieved by a system that 'commands the respect of users and the public' (Cunningham, 1998, 21 October; Rooker, 1998, 17 December: 1082). These behavioural actions and their accompanying argumentative strategy were constructed as consistent with the agenda of 'effective competition', couched within the elite repertoire of entrepreneurial managerialism and based on the pluralist premise of balancing interests. However, three elements contained the potential for contestation in 1999 and hence constituted argumentative fault-lines: the policy dilemma of claims to a commitment to comprehensive labelling and consumer agency versus the market power of Monsanto, elite admission of uncertain science (limited knowledge) versus their silence on contested science and the delay in setting up the FSA meant they needed to draw on existing institutional arrangements. While the locus of decision-making and communication shifted to the Cabinet Office, MAFF continued with day-to-day operational matters. The continued presence of MAFF served to remind the newspapers of BSE/CJD, E-coli and other food scares over the past decade.

Conclusion

The first major finding in this empirical chapter is that GM food policy – the agenda and problematizations of it – emerged out of entrenched and constantly renewed elite hegemonies based on neoliberal assumptions about the power of markets, economic growth and 'technological progress'. In the case of food this dominant ideology was manifest at a macro level in policies of scientific farming, industrialization of production and technological innovation as well as in a predisposition towards the arguments of minimalists on GM food (see Chapter 6). It also provided a continuous discursive thread between 1988 and 1998 despite a series of ever more serious food scares, and despite a

change of government. Thus, elite agendas were constructed around innovation-driven economic growth or market 'competitiveness' and problematization around hindrances and threats from institutional inadequacies and 'irrational' public anxiety. This neoliberal managerialist presumption also informed the propensity to seek institutional solutions whether in the form of ministerial control, liberalization of controls and technocratic processes (Conservative) or the proposed new FSA and the interim centralization of the locus of decision-making in the Cabinet Office as newspaper engagement and societal resistance to GM food escalated (Labour).

Second, this chapter found that the differences between Conservative and Labour discourses emerged *within* this hegemonic paradigm and were manifest in divergences in the relative degree of emphasis put on different neoliberal values rather in the substitution of one set for another. This was most clearly manifest in the shift in elite repertoires with the change of government. Such repertoires emerge out of elite responses to particular crises and can be distilled from constructions of their agenda, problematizations and the behavioural actions taken to address these, and hence set the presumptions on which further policy development would take place. Thus, the Conservatives' response to the irradiated food controversy in the argumentative context and their formalization of GM food policy was manifest in an elite repertoire of technocratic rationality, objective science and (administrative) safety.

However, there were a number of argumentative fault-lines in this elite repertoire that the escalation of controversy in the argumentative context over BSE/CJD exposed. These included the potential for conflict between elite safety assurances and their economic agenda, which translated into claims by critics of conflicts of interest. Elite discourse of silence on uncertain, contested science was challenged by 'evidence'-based counter-claims and by the reversal of elite claims of no evidence of harm. Attempts to close public debate through the use of technocratic processes and rationality about the 'best' advice were challenged as cover-ups for ministerial interference. In the absence of confidence in the elites' management of food risks, discourses of market and policy transparency gained greater prominence in the argumentative context and consumer agency or empowerment became key sites of contestation.

New Labour elites sought to neutralize the controversy, rebuild confidence in food safety controls and shore up the neo-liberal agenda on food policy by reconstituting some of the premises that underlay the critical claims circulating in the argumentative context into a new repertoire of entrepreneurial managerialism. Thus, these were constructed around

discourses of enhanced consumer agency, a balance of consumer-producer interests and a proposed de-politicized and de-centralized agency for the management of food safety. They also entailed a subordinate discourse that acknowledged scientific uncertainty but restricted this to limited knowledge and difficult predictions, and an 'old risk' style construction of uncertainty in which new 'evidence' could bring certainty.

However, this new repertoire was superimposed on rather than substituted for the old one, and New Labour's endeavours to rebuild public confidence in elites' management of food safety controls were exposed and interrupted by developments outlined in this chapter. That is, the interventions of Prince Charles and Pusztai as well as elite responses to increased newspaper engagement and diverging problematizations. The intervention of the Prince paved the way for Pusztai. It provided an outlet for moral doubts and expressed scepticism that could then be articulated and validated by the expert. This scepticism had been bubbling under the surface but had struggled to find expression in the face of an elite and Westminster consensus on GM food. Its articulation pitched the heir to the throne against the political establishment while Pusztai offered a counter-technocratic rationality against the argument of the elites. A parallel system of argumentation therefore emerged and galvanized critical newspaper engagement. The extent to which elites felt threatened by this escalation in counter-discourses was manifest in their relocating of the locus of biotechnology policymaking and communication within the Cabinet Office. Thus the shift from low to high politics with the intervention of Prince Charles was further accelerated with a shift of responsibility from peripheral departments and ministers to central offices close to Blair.

At an argumentative level elites found their 'old' and 'new' repertoires increasingly exposed and challenged by diverging newspaper problematization of GM food after mid-1998 (see Chapter 6). Newspaper problematizations, drawing on the counter-claims of GM opponents that were circulating in the argumentative context, blamed elites for the inadequate labelling of GM food; were critical of their silence on the counter-claims of uncertain, contested science that emerged with Pusztai intervention; and increasingly claimed conflicts of interests within secretive decision-making processes. That is, the newspapers revived some of the critical counter-claims that had been made about the elites' mismanagement of BSE/CJD and followed the similar argumentative fault-lines and similar sites of contestation opened around uncertain, contested science (see Chapter 6). The other major site of contestation new to GM food was linked directly to fault-lines in the New Labour repertoire – those of market transparency and consumer agency. In the absence of newspaper (and public) confidence in food safety controls, pressure grew for

individual rights, choice and empowerment. Chapters 6 and 8 argue that these sites of contestation expanded and intensified during the second half of 1998 despite elite attempts to neutralize this through a shift in the locus of decision-making, a framework review and a public consultation.

The major empirical contribution of this chapter here is an account of a how a specific policy 'discursive event' – escalating problematization and contestation over GM food – was a manifestation of historico-political processes that dialectically both define and are defined by it. This chapter has located the evolution of elite discourses on GM food within these processes that defined policy and created the potential for newspaper-elite contestation along certain argumentative fault-lines. While the particularities of these fault-lines change, broadly speaking they centred on consumer interests, scientific uncertainty and the elites' ability to protect the public. It was far from inevitable that at each stage newspapers would engage critically and expose these fault-lines. The next chapter argues that the fact they did so was due, first, to the particular conditions of uncertainty in the history of food scares, second, to the ability of journalists to make associations between GM food and elite mismanagement of these scares, third, to the contestation over knowledge itself, and fourth to the critical intervention of two 'independent voices'.

Chapter 6: Newspaper Engagement and Problematization – 1996 to 1998

Introduction

This research is concerned with exploring how policy elite–newspaper contestation emerged around GM food, was sustained and then negotiated. The previous chapter argued that the post-war hegemony manifest in a neo-liberal economic/market agenda and the dominant discourses of ‘scientific farming’ and the ‘industrialization of production’ remained largely intact despite a change of government in 1997 and despite a decade of food scares. The latter had given rise to a widespread consensus based on claims that perceived elite mismanagement food scares had resulted in a ‘crisis of public confidence’ and a ‘climate of mistrust’. The advent of a new government and its attempts to address this marked a shift in the elite repertoire and the emergence of New Labour’s entrepreneurial managerialism. This was based on an agenda of ‘effective competition’ and ‘international competitiveness’, which, it was claimed, could be facilitated through enhanced consumer agency, a consumer-producer balance and a radical re-organization of the institutions of food regulation.

This chapter explores how the emergence of increased newspaper engagement with GM food issues, their re-positioning in relation to the argumentative context and a problematization that increasingly diverged and conflicted with that of policy elites challenged New Labour’s repertoire of entrepreneurial managerialism. The chapter first explores developments in the argumentative context and argues that these facilitated the emergence of credible, alternative voices who offered counter-discourses to the elite hegemony of scientific farming, who were willing or able to challenge the latter’s certainty claims about food safety with counter-evidence and who had developed the means to attract the attention of journalists.

This more generalized polarization of debate in the argumentative context translated into a particular polarization of positions on GM food, in particular the definition of genetic modification, the implications of what and how much was labelled, and how much consumer agency was to be facilitated. Two broad ‘camps’ emerged in the argumentative context. On the one hand, the minimalists – who included policy elites and the

biotechnology industry - tended to be optimistic about the benefits of biotechnology, located it within an extension of natural processes and wanted to see its expansion. They therefore argued for the minimal assessment and labelling needed not only to reassure the public about adequate safety measures and choice but also to limit stigmatization of the technology, derailing its expansion as warned at Asilomar. On the other hand, the maximalists – who originally comprised the environmental, consumer and new genetic NGOs, who tended to focus on risks and so were more pessimistic – located it within a trajectory of adverse effects of scientific farming and the industrialization of production so wanted maximum assessment and labelling as justified within discourses of consumer rights and public interest. Their pessimism about the risks tended to be articulated in stigmatizing discourses about potentially catastrophic consequences.

It was initially unclear how newspapers would respond to the escalating debate in the argumentative context about highly technical, esoteric issues, a debate that tended to be limited to a relatively small group of people. Between 1996 and June 1998 the newspapers were largely unengaged with the debate on GM food: coverage was sporadic and fragmented, varying from the unproblematized, to the ambivalent, to the bemused at the lack of more controversy. Thus, it was far from inevitable that newspapers would engage or that if they did whose side of the debate they would take. However, this changed with two critical interventions by Prince Charles and Professor Pusztai. This chapter analyses two editorials relating to each of these interventions in terms of argument/counter-argument and claims/counter-claims about the certainties/uncertainties associated with new technology. It argues that both men offered alternative voices to elite hegemonies of 'scientific farming'.

The Prince was constructed by the newspapers as signifying the voice of moral authority, moderation and lay reason, questioning the wisdom of the 'rapid' expansion of GM food in conditions of public uncertainty. Pusztai was constructed as signifying the 'independent' expert-consumer, voicing professional-personal scepticism about the certainty claims of elites. The two interventions were formulated by the newspapers into two very powerful counter-discourses. The first was of public uncertainty constructed around claims of the denial of consumer information and choice; thus it explicitly challenged the entrepreneurial component in the elite repertoire and the minimalist agenda of restricting the range of foodstuffs labelled as GM. The second counter-discourse was of scientific uncertainty constructed around claims about the absence of evidence of safety and the absence of evidence of harm. Pusztai, symbolizing the expert-consumer, became the mechanism by which these two counter-discourses were brought together to link public and scientific

uncertainty. Newspapers questioned the 'prudence' of technocratic processes that facilitated an expansion in the availability of GM foodstuffs, while the 'evidence' of harm or safety remained inconclusive. In so doing they challenged the managerialism component of the elite repertoire concerned with the management of risk in conditions of uncertainty and limited knowledge.

By August 1998 the stage was set for escalating newspaper–elite contestation. This chapter thus analyses common discourses in eight editorials across four newspapers that capture this growing divergence in conflictual problematizations and argues that a key part of this was the explicit inclusion of elites within newspaper problematization, the directing of emotive discourses at them and direct challenges to the elite repertoire of entrepreneurial managerialism

Background: food scares and the launch of GM food

This section explores the context in which newspaper problematization and contestation of GM food emerged as a counter-discourse to the elite hegemony of 'scientific farming'. It argues that key developments in the argumentative context facilitated the opening up of spaces for alternative voices to elite hegemonies. By 1998, there were three broadly relevant sets of voices on GM food: the hegemony of elites constructed around discourses of 'scientific farming' and an economic-agenda; the counter-hegemony of the NGOs, in particular the environmental ones who increasingly used direct action to attract media attention and presented counter-'evidence' of a deluge' of GM ingredients in ordinary foodstuffs; and the 'floaters', a disparate group of non-affiliates including 'independent' scientists offering counter-evidence of possible harm as well as newspapers and food retailers who, between 1998 and 2000, were originally non-committal or ambivalent but then shifted to the maximalist camp, thus facilitating the ascendancy of their arguments. The concern in this chapter is primarily with the newspapers.

Chapter 3 argued that changes in the newspaper market meant editors were potentially more receptive to these alternative voices in the argumentative context not least because they had more pages to fill, because of a move towards more issue-based news and because of their (historical) construction of identity as campaigning newspapers. However, it was far from inevitable that newspapers would problematize GM food or that in doing so they would position themselves with the environmental NGOs. On the contrary, their early responses to the novel food were fragmented, contradictory and ambivalent.

The broader argumentative context: elite hegemony and the rise of alternative voices

Chapter 5 argued that a post-war elite hegemony constructed around a neoliberal economic/market agenda and discourses of 'scientific farming and 'industrialization of production', 'objective science' and technocratic processes remained largely intact despite a decade of food scares and a change of government in 1997. What changed, however, with New Labour was the replacing of the existing repertoire with a new one of entrepreneurial managerialism with its emphasis on enhanced consumer agency, consumer-business equilibrium and the management of scientific uncertainties (limited knowledge). Despite the elite hegemony and consensus as well as, attempts to reassure the public and press through a repertoire of entrepreneurial managerialism and the claimed loyalty of two newspapers – the *Mirror* and *Express* – failed. All four newspapers after June 1998 constructed divergent and conflictual problematizations of the conditions of uncertainty to those constructed by the government. This section argues that the roots of these newspaper divergences lay in two critical interventions by Prince Charles and Professor Pusztai. These provided powerful alternative discourses to those of the elites and opened a parallel system of counter-argumentation in which newspapers were able to challenge the elite consensus.

The receptivity of newspapers towards these interventions and to a counter-discourse to 'scientific farming' was facilitated by three significant developments in the argumentative context: the emergence of the environmental movement, a decade of food scares – and the associated loss of credibility of and trust in government scientists, and the greater profile in the argumentative context of 'independent' hence credible scientists. These three developments facilitated the emergence of alternative voices and the potential openness of newspapers to these.

The origins of the western environmental movements in the 1960s and the launch of NGOs such as Friends of the Earth and Greenpeace lay in challenges to discourses of 'progress' and concerns about the industrialization of farming, and the adverse consequences of these for environment and public health.⁴⁴ Almost from their inception

⁴⁴ One of the most significant critical interventions was the publication of Carson's *Silent Spring* in 1962, which explored the harmful effects of the widely used chemical DDT on birdlife and speculated about its potentially harmful effects on human health. Thereafter the environmental movement gained momentum and broadened to other environmental issues but its roots remained

these NGOs sought access to media through headline-grabbing forms of direct action and the commissioning of scientific research and opinion polls to support their arguments and offer counter-evidence that critiqued and challenged government claims of certainty.⁴⁵ By the late 1980s most news desks included an environmental and food beat that drew heavily on the voices of environmentalists in the sourcing of their news stories.⁴⁶

The second major development was a series of food scares⁴⁷ to which the environmental NGOs responded with claims of uncertain science and institutional failure (House of Commons Science & Technology Committee 1999; Penman, 1996; Watts, 1996).⁴⁸ They also responded with ethical discourses that linked adverse health effects to claims about the perversion of or ‘tampering with’ nature, and ‘nature’s vengeance’ for science overstepping the boundaries (Watts, 1996). The third development was the heightened profile of ‘independent’ scientists willing to provide counter-evidence to the claims of elites and government scientists about ‘no evidence of harm’ (House of Commons Science & Technology Committee 1999; *Independent on Sunday*, 1997; *Mirror*, 1997).

These discourses of ‘scientific independence’ were – as the subsequent analysis of the Pusztai intervention highlights – problematic; suffice to say here that ‘independence’ was broadly taken to mean scientists who did not work directly in government or advise ministers, and who were therefore assumed to be free from political interference in their work and thus able to comment ‘objectively’ on the certainty claims of policy elites (see evidence to House of Commons Science & Technology Committee 1999). In the context of BSE/CJD-related discourses about the ‘collapse of confidence’ in elite safety discourses, critical claims of institutional failures and political interference in supposedly objective technocratic processes, the voices of ‘independent’ scientists were afforded added credibility and prominence in the argumentative context. These three developments

in core concerns with the relationship between ‘scientific farming’ methods, environmental damage and health risks (Brookes, 1976; Caldwell, 1992; Yearley, 1999).

⁴⁵ For more on the rise of British environmental NGOs, see Brookes, 1976; Rawcliffe, 1998; Rootes, 1999; C.A.Rootes, 2000. For more on their use of tactics to gain media attention and the expansion of news beats to include the environment, see Allan, 2000; Anderson, 1997; Hansen, 2006; MacNaghten, 1998).

⁴⁶ Articulations of credibility – and a moral authority – by the environmental NGOs were based on claims of a dramatic increase in their size to the point where they had become Britain’s biggest single issue groups, with memberships outnumbering those of the three political parties combined (Lowe, 1983; Rawcliffe, 1998; Rootes, 1999, 2000).

⁴⁷ Between 1988 and 2000, there were eight significant food scares that not only received considerable newspaper coverage, but were claimed to have resulted in lost lives (*Observer*, 2004).

⁴⁸ For articulations of these from a diverse range of actors see evidence given to Select Committees on Agriculture and Health between 1990 and 1998 articulating these common themes. For more from the academic literature on this, see Hugh Pennington, 2003; Smith, 2000).

– the growth in the environmental movements, a series of food scares and the greater prominence of the ‘independent’ scientist – offered alternative voices of ‘independence’, credibility and authority to those of the elites as well as mechanisms to challenge the hegemony of ‘scientific farming’ and the existing elite repertoire.

However, it was far from inevitable that newspapers would draw on the discourses of environmentalists and other NGOs or ‘independent’ scientists to problematize GM food as a new risk (see Chapter 3 on the variable response of media to new risk debates). Newspapers could have looked to elites, biotechnology companies and pro-economic growth proponents to construct a divergent problematization of GM food to those offered by environmentalists, etc. This potential for challenge in a market ‘sensitized’ by food scares had been acknowledged by the developers of GM tomato paste who undertook a series of behavioural actions to negate this potential (see Chapter 5). The next section argues that this strategy initially appeared to work with the newspapers; however, before exploring this it is necessary to extend this more general discussion on the polarization of discourses in the argumentative context around scientific farming into the more particularized polarization around the labelling of GM food.

Polarization of labelling debates and increased direct action

One of the first behavioural actions of the New Labour government in May 1997 was the enactment of EU regulations requiring mandatory labelling of GM food (see Appendix 3) which they claimed ensured consumers had the information needed to choose whether or not to consume GM food. NGOs and food retailers counter-claimed that the measures did not include GM maize and soya so excluded 60% of the food on supermarket shelves and were therefore ineffective.⁴⁹ These divergences were part of a highly complex, technical and polarized debate on labelling laws that took place during 1997 and 1998 across the European argumentative context in which two broad positions on the most appropriate behavioural action emerged: the minimalists and the maximalists described above.

⁴⁹ Novartis’s GM maize and Monsanto’s GM soya had been licensed for sale at the same time as Zeneca’s GM tomato paste in a move that pre-dated the legislation on labelling, so there was not legal requirement to label. Zeneca had chosen to label as part of a strategy of building consumer support for the novel food; Monsanto had refused to label, saying it was not possible because GM and non-GM soya was not segregated at source in the USA.

On the one hand, the proponents of minimalist behavioural action – British policy elites, European Commission officials⁵⁰ and the biotechnology industry – argued for a relatively narrow definition of genetic modification constructed around claims of ‘substantial equivalence’ to existing foods and technocratic processes of evaluation based on the safety of the end product rather than on the method of production (MAFF, 1998, 1999). This would, it was claimed, minimize the range of products labelled and by focusing on the end product avoid stigmatization of the processes of manufacturing (House of Lords Select Committee on European Communities, 1998). Claims about expanding the technology could therefore be legitimized around claims about ‘no evidence of harm’ and consumer choice. The biotechnology industry argued that this narrower definition would provide consumer choice and enable them to recoup research and development costs through sales (see Genewatch, 1998). Policy elites drew on entrepreneurial discourses to claim that this definition, as well as the technocratic and labelling approaches that followed, would ensure safety and facilitate consumer choice and the expansion of the British biotechnology necessary for the creation of jobs and enhanced competitiveness. Both policy elites and the biotechnology industry viewed minimal, vague labelling as a mechanism for reconciling public uneasiness and competitiveness, so choice became a rhetorical device by which to persuade consumers and safety evaluations were based on a limited construction of risk of harm. Initial compulsory labelling of GM food was the manifestation of this in behavioural action. The primary agenda was to minimize the likelihood of Asilomar-forewarned resistance destabilizing the expansion of the new technology. Notwithstanding the economic/profit motive driving these arguments, minimalists also tended to adopt an optimistic view of the technology as ‘progress’.

The proponents of maximalist behavioural action – initially the European Parliament and consumer, environmental and genetic NGOs – argued for a broader definition based on the method of production of inserting spliced DNA from one organism into another. This, they claimed, would focus attention on precautionary approaches to the unknown effects of harm from of ‘tampering’ with the ‘building blocks of life’ (Greenpeace, 1998) and ensure the majority of foods containing GM ingredients or derivatives would be evaluated and labelled, including the GM maize and soya currently excluded (Genewatch, 1998).

⁵⁰ The EU had assumed overall responsibility for biotechnology policy in May 1997 with the agenda of harmonizing the market, but there were considerable variations in how nation-states interpreted this. There was also a major divide within Europe on GM food and crops between the European Parliament which tended towards maximalist arguments and the European Commission which tended towards minimalist arguments. There were also divides between those directorates responsible for food which tended to prefer lighter regulation and those responsible for crops which preferred the tougher precautionary principles that characterized environmental regulation (see Barling, 2000)

Precaution and choice was integral to the maximalist position. The consumer NGOs argued that the former was necessary for the protection of the public from a repeat of BSE/CJD, E-coli and so on, and the latter was a matter of consumer rights and efficient markets (see Consumer Association, 1999) The environmental NGOs justified their maximalist positions around claims about the ethical questionability of the processes of production ('tampering with nature') and the understandable lack of public confidence in food safety controls given past failures, the frequent upward revisions of risk in past (especially with BSE/CJD) and a history of elite secrecy about accidents where 'unquantifiable and irreversible' damage had been caused (see Friends of the Earth, 1999; Genewatch, 1998 and Greenpeace, 1999).

The main criticism levelled by maximalists was of a 'serious mismatch' between official attitudes to labelling and 'public demands' (Genewatch, 1998). The perception of some that elites were unresponsive to legitimate concerns formed the justification for early mobilization of resistance in the form of direct action on the part of 'eco-warriors', for instance a blockade and storming of ships carrying GM food and docked in Liverpool harbour (Lean, 1997). A new protest group, GenetiX Snowball, was formed comprising radical activists, many of whom had learnt militant tactics in earlier campaigns against nuclear warheads and road building. These tactics were applied in the summer of 1998 to the invitation to journalists to watch activists 'trashing' GM crop test sites while wearing the white all-in-one-suits with hoods and face masks more commonly associated with workers in the core reactors at Sellafield (O'Sullivan, 1998). Thus they secured media attention and symbolically conveyed their claims of GM food and crops as new risks akin to nuclear radiation.

The four unresolved issues prior to the interventions of Prince Charles and Professor Pusztai were claims about the imminent launch of 'massive' amounts of Monsanto's unlabelled GM soya and maize onto the market, differences on what should be stated on the label and how to define 'substantial difference' – and hence how extensive or comprehensive labelling should be. However, at this stage it was unclear which side in the dispute the newspapers would take.

Initial newspaper engagement with GM food: 1996 to mid-1998

A brief review of editorials written between 1988 and 1998 highlights how food and public health issues had moved up the newspaper and policy agenda: for instance, claims that 'since the BSE scare broke in March 1996, food issues have rarely been out of the

headlines' (Blythman, 1997), and the inclusion in all three manifestos of measures to address the 'collapse of confidence' in food safety controls was seen as signifying the 'impact' of food scares on policy (Blythman, 1997).

Despite this 'sensitizing' context, initial newspaper coverage of GM food was sporadic (see Appendix 7); there were no editorials before the intervention of Prince Charles (see below) and what limited news coverage there was varied between the unproblematized, the contradictory and the ambivalent. For instance, the *Daily Mail* treated the claims of GM food proponents about benefits unproblematically and ignored counter-claims of risk or links to other food scares that dominated the news agenda at the time (*Daily Mail*, 1996; Derbyshire, 1997; Poulter 1998b). The *Independent on Sunday* articulated bemusement at the lack of public debate in the UK on GM food and crops given the intense controversy in Germany (Karacs, 1996; Lean, 1997) but did not feel strongly enough to commit an editorial to the issue before December 1998. The *Express* and *Mirror* were ambivalent, including claims about benefits and risks sometimes in the same story (Harrison, 1997; *Mirror*, 1996; Wilson, 1997). Thus, newspapers were largely unengaged with GM food issues between 1996 and mid-1998, and what coverage they did give was fragmentary and contradictory. The critical juncture was the intervention in the debate by two 'independent' voices – Prince Charles and Professor Puzstai – that challenged elite claims about consumer choice and about scientific certainty. How newspapers came to engage more fully with GM food in ways that conflicted with problematizations of elites arose out of how they signified these interventions.

Two critical interventions and escalating contestation

This section argues that polarization of the debates in the argumentative context about scientific farming, the definition of GM food and the mechanism for delivering consumer agency are critical to understanding how newspapers made sense of Prince Charles's and Professor Puzstai's interventions and how contestation escalated thereafter. Both interventions attracted controversy in the argumentative context and the ensuing claims/counter-claims more or less followed the minimalist–maximalist divide identified earlier. However, what was unclear was how newspapers, hitherto unengaged and fragmented in their responses to GM food, would respond. The section argues that the newspapers, in constructing the Prince and Puzstai as signifying alternative voices of lay doubts and expert-consumer scepticism, re-aligned themselves into a collective positioning within the maximalist camp and hence against minimalists such as the biotechnology industry and policy elites. The discourses drawn on to make sense of both

interventions and GM food issues did not initially challenge elites directly but they did expose key fault-lines or dilemmas in the elite repertoire of entrepreneurial managerialism. The post-Pustzai editorials, however, increasingly constructed elites as part of the problem, emotive discourses were increasingly directed at them and newspaper argumentation explicitly challenged the elite repertoire. Thus, not only did newspaper-elite problematizations diverge, they conflicted with elite ones.

Contextualizing the interventions of Prince Charles and Professor Pusztai

The media intervention of Prince Charles needs to be located within context of the articulation of concern by maximalists at the direction of EU and British policy on GM food as well as within the polarized debate over the nature of genetic modification, the labelling of it and consumer choice. The article by the Prince in the *Telegraph* in June 1998 was not his first intervention. In February 1998 he had written an article for a newsletter of the organic farming NGO the Soil Association, in which he called for a 'widespread debate' on the potential for the harmful effects of 'tinkering with nature' and criticized scientists for focusing on the 'technically possible' rather than what was safe or morally acceptable (Sears, 1998). A month later, he publically supported calls by the frozen food retailer Iceland for a ban on GM food (Poulter, 1998). Thus, the Prince had from a relatively early stage in the debate on GM food positioned himself with the maximalists and drew on many of their arguments, claims and discourses for the expansion of these earlier views in his *Telegraph* article.⁵¹

The direct intervention in a policy debate by the heir to the throne was deeply controversial yet highlighted how divisive the debate had become in the argumentative context. On the one hand, Monsanto sought to discredit his argument, claiming he had a personal bias towards organic farming and was 'pandering to the green lobby'; his ideas were dismissed as 'out of touch' with the science and an 'over-reaction' to possible risks (Hopkins, 1998). Others claimed that his critical intervention signified an abuse of his 'hereditary position' by 'float[ing] controversial ideas' and seeking to initiate public debate (*Independent on Sunday*, 1998). On the other hand, his intervention was 'backed' by

⁵¹ No academic literature has been identified on the involvement of the Prince in major policy debates. A quick scan of NexisNews highlights his periodic engagement in more peripheral policy debates about architecture and homeopathy. This intervention on GM food was his most explicit engagement in a key government policy area. More research is needed but it is reasonable to suggest that the link between GM crops and the Prince's own experimentation in organic farming at Highgrove meant that this was an issue of particular personal concern to him. It is also interesting to note that Alastair Campbell's diaries comment on the growing concern of ministers and senior civil servants with increased lobbying by the Prince on a range of issues. What these are remains unknown.

environmental NGOs as a 'clarion call' to the 'millions' of members of the public who shared his view (Butler, 1998); the National Consumer Council claimed he was 'more in tune' with consumer concerns than policymakers and the Church of England reiterated his quasi-religious argument against scientists venturing into the 'realms of God' by 'tampering with nature' (Cairns, 1998).

A month after the Prince's *Telegraph* article a second critical intervention by Pusztai came via a World in Action documentary broadcast on 10 August 1998. The documentary drew on circulating discourses about the genetic 'tampering' and the 'vast array' of food containing unlabelled GM ingredients then added a new dimension with claims that 'independent' research by Pusztai 'raises doubts' about the long-term health effects on humans of consuming GM food (Berg, 1998). Pusztai claimed on the programme that laboratory rats fed GM potatoes had 'suffered from weakened immune systems' and added that given the choice he would not consume GM food (Berg, 1998).

Both of these claims were seized on by the maximalists as justifying their argument for a precautionary approach to the novel food risks and for maximum labelling, so ensuring that the individual consumer could choose how much they exposed themselves to risk (Ingham, 1998). Within days of the airing of the programme, and increased newspaper coverage of GM food risks retailers claimed sales of the novel tomato paste had plummeted and their hotlines were inundated with calls from concerned consumers (Austin, 1999). Pusztai's employers at the Rowett Institute suspended him claiming he had 'drastically' misled the public by releasing premature findings based on a flawed methodology and 'gagged' him from speaking about his research or suspension (Ingham, 1998). Policy elites maintained a public silence on the controversy, devolving responsibility for responding to scientific bodies such as the Rowett Institute and the Royal Society, both of which claimed they would review Pusztai's research (see Chapters 5 and 7). Over the next 18 months the deep divisions within the scientific community highlighted polarization over GM food and crops, the wider politicization and contestation of debates in this community and the problematic nature of 'independent' science.

On the one hand, the establishment scientific bodies – the Rowett Institute and the Royal Society – claimed premature publication and flawed methodology discredited Pusztai's findings (see Chapters 7 and 8); on the other hand, 20 'international' scientists wrote an open letter in support of Pusztai, claiming he had been victimized by his employers, that freedom of expression was being curbed and that significant counter-evidence to elite claims were being suppressed contrary to the public interest (Harrison, 1999). In support

of the public interest argument they claimed that the only other piece of scientific research into the health effects of GM food had been done by a scientist employed by Monsanto and concluded no adverse consequences (Lean, 1999). There were also claims that financial inducements in the form of research funding had been provided by Monsanto after the programme was aired and that within days of the airing of the programme the Prime Minister had been in contact with the head of the institute, Professor James, the man who was advising government on the FSA (Leake, 1999; Lean, 1999).

However, what was unclear in this increasingly acrimonious debate was how the newspapers would respond to the interventions of the Prince and Pusztai. This chapter argued earlier that until this point newspapers had been largely unengaged and what coverage they did give to GM food was fragmentary and contradictory or ambivalent. Critical to how the newspapers made sense of these two interventions was how they constructed the interventions' significance and the credibility of the men. The particularities of this meant that by August a more coherent collective discourse had emerged, the newspapers had aligned themselves with the maximalist position and their problematization was diverging and conflicting with that of the government. Post-Pusztai editorials located elites within their problematization as well as expanded constructions of uncertainty into discourses of escalating societal resistance and of GM crops.

Prince Charles: the voice of moral authority, moderation and lay reason

The methodology chapter justified the empirical focus on editorial columns in newspapers as articulating most clearly and explicitly the views of the particular newspaper. The discourse analysis here focuses, therefore, on the editorials in the two newspapers – the *Daily Mail* and the *Express* – that specifically dealt with the Prince's intervention into the GM food debate. In particular it analyses discourses in terms of argument/counter-argument deconstructed into claims/counter-claims about scientific uncertainties, the elite management of risk and public concerns about the technology. Thus the analysis is concerned with tracing broad patterns of argumentation in a 'grand narrative' rather than with a detailed focus on discourse. The sheer volume of texts analysed across a relatively long period of time and the data generated across all the detailed discourse analyses of these texts means that only short quotations could be included. In the interests of research transparency and accountability, the longer quotations and their locations within texts can be viewed in Appendix 6.

This section argues that the two interventions by Prince Charles and Pusztai signify critical shifts in newspapers from unengaged to semi-engaged with GM food issues that were manifest in editorial columns devoted to the issues, in the intensification of their concentration of argumentation and shifts in the content of engagement to a much more coherent collective positioning of the newspapers within new risk/maximalist positions. For the first time since the launch of GM food in 1996 two newspapers occupying the politically critical mid-market – the *Daily Mail* and *Express* – engaged sufficiently with the debate to commit scarce editorial column space to articulating their positions on GM food issues. Hereafter the concentration of argumentation intensified, as is captured through a descriptive mapping on a graph of the ebbs and flows in newspaper engagement (see Appendix 7). Furthermore, their positions in the debate and the content of their argument shifted.

Prior to the intervention of the Prince, coverage across the four titles had been fragmented and contradictory and ambivalent, varying between unproblematized acceptance of benefit claims, ambivalence about risk and benefit claims, and scepticism and concern. After the intervention of the Prince, a more coherent collective newspaper problematization of GM food and policy on it began to emerge: the position of newspapers started to shift more clearly and consistently towards the maximalists and their editorial agenda followed. However, as the analysis below finds, this was not an unqualified shift in that at this stage newspapers were reluctant openly to advocate policy change on consumer choice, but they did challenge elite entrepreneurial discourses based on claims about enhanced consumer agency and a consumer–producer balance (see Chapter 5). The two editorials are arguably two of the most critical newspaper texts analysed anywhere in this research because they signify shifts in the intensity of newspaper coverage of GM food from unengaged to semi-engaged.

The turning point, contrary to the claims in the Bauer and Gaskell research (2000, see Chapter 2) therefore, was the intervention of the Prince. Here the newspapers could have drawn on very different discourses in the argumentative context to make sense of it. Instead they constructed it as a moral discourse in which the Prince was ‘right to speak out’ (*Daily Mail*, 1998a; see Appendix 6 [1]) based partly on claims that he was articulating the ‘widely shared’ fears of the silent majority about GM food and their ‘deep anxiety’ about risks from existing manufactured foods (*Daily Mail*, 1998a; see Appendix 6 [1]). This moral discourse was also based on claims about the reasonableness of his intervention in that ‘All the Prince is arguing for is caution, more research and the possibility of informed consumer choice’ (*Daily Mail*, 1998a; see Appendix 6 [2]). Thus,

the Prince signified the voice of the public, moral authority, moderation and lay reason juxtaposed against the voice of 'commercial agri-business' pursuing profit with little thought of the consequences or of the history of food risks such as BSE/CJD (*Daily Mail*, 1998a; *Express*, 1998a; see Appendix 6 [2]). This construction of the intervention of Prince Charles is interesting because it subverts the more common newspaper associations of the heir to the throne with elitism in the sense of privilege. Here an unelected figurehead is seen as articulating the voice the 'silent majority' in opposition to the democratically elected government.

This construction of the Prince's credibility provided the argumentative basis from which problematization was built. While elite problematizations were articulations of what hindered or threatened their policy agenda (see Chapter 5), newspaper agendas were extensions of their problematization. Thus both newspapers problematized the 'rapid spread' of GM food (*Daily Mail*, 1998a; see Appendix 6 [1]) as questionable given claims about (historical) institutional failures and mismanagement of safety controls, previous and current scares resulting from this and from 'scientific' farming' (*Daily Mail*, 1998a; see Appendix 6 [2]), and conditions of escalating public uncertainty and distrust (*Express*, 1998a; see Appendix 6 [2]). The newspaper agenda that emerged out of this problematization was articulated in a call for 'caution, more research and the possibility of informed consumer choice' (*Daily Mail*, 1998a; see Appendix 6 [2]), and in an articulation of the need for an urgent instigation of an independent FSA constructed around claims about the need for consumers to have a voice 'we can trust' (*Express*, 1998a; see Appendix 6 [2]).

The extent to which this problematization and agenda signified a shift towards the maximalist position in the argumentative context only becomes clearer with a closer analysis of the dominant discourses and argumentative strategy that supported these. For the first time, the four newspapers located GM food within new risk discourses constructed, first, around claims about the 'history' of manufactured food and the adverse effects of industrialization of farming. For instance, it was claimed that foods were 'pumped' with, 'protected' and 'chemically drenched' with steroids, fertilizers and antibiotics (*Daily Mail*, 1998a; see Appendix 6 [1, 2]). Thus, a discourse of contamination by the artificial and altered was constructed both as a perversion of nature and as a threat that was past and present. This was further developed in referring to GM as 'altered food' that contaminated the natural through an avoidable 'mixing' of the two in storage (*Daily Mail*, 1998a; see Appendix 6 [1]).

The second claim was that past experiences of the 'history' of manufactured food, the adverse effects of these and institutional failure to manage them were seen as failing to 'inspire confidence' (*Daily Mail*, 1998a; see Appendix 6 [2]) in the ability or willingness of elites to protect the public. The discourse of potential adverse effects and elite failure to manage these was seen as most vividly manifest in the case of BSE/CJD, where institutional failure was manifest in 'ineffectual regulations' and 'panic measures' (*Express*, 1998a; see Appendix 6 [2]). Thus the newspapers combined claims about past experiences with BSE/CJD and other 'chemically' enhanced food with the present risk of GM food and with future, unknown consequences. In this context of the temporal convergence of risk and the institutional failure of elites to protect the public, issues of individual choice became crucial. The newspapers argued, however, that consumers were being denied choice by the supermarkets that sold GM foods 'without being adequately marked' and by agribusiness which 'mixed' the 'altered and natural foods ... in storage' (*Daily Mail*, 1998a; see Appendix 6 [1]). Thus the consumer was articulated as vulnerable because of elite failure and disempowered because of corporate interests and practices.

In summary, then, the dominant discourses in these two critical editorials were of new risks ('manufactured' food and the perversion of the natural) and public uncertainty (memories of past scares and consumer disempowerment). Scientific uncertainty remained a subordinate discourse constructed around claims of a lack of knowledge of what is safe, but linked to public uncertainty about who to trust when there are conflicting claims driven by competing agendas (*Daily Mail*, 1998a; *Express*, 1998a). The inference is that, in these conditions of escalating uncertainty and acute anxiety, public 'fear' and distrust appear reasonable rather than irrational.

At this stage there were few direct criticisms of policy elites apart from a sense of undue haste and the institutional failures of the previous government. However, the editorial arguments were beginning to expose some of the fault-lines in New Labour's repertoire of entrepreneurial managerialism, although these needed to be developed more fully for newspaper–elite contestation to arise. For instance, rather than elite constructions of GM food as old risks and limited knowledge, newspapers constructed it as new risks based on claims of 'manufactured' food and adverse health effects but had yet to make the links to the contested knowledge of new risks. Although the newspapers had yet to implicate policy elites directly, the claims about enhancing consumer agency and consumer–producer balance were exposed by counter-claims of the denial of consumer choice as a result of the profit-driven behavioural actions of agribusiness. So there was a potential for

newspaper–elite contestation but it had yet to realized; what was significant, though, was the shift in the content of argumentation from the earlier fragmented, ambivalent and contradictory discourses on GM food to a more coherent, collective scepticism of developments in novel foods and the policy agenda. It also signified a re-alignment of the newspapers towards the maximalist position. The mechanism for these shifts was the intervention of the Prince and his articulation of doubts. These doubts were given credibility through constructing the Prince as the voice of moral authority, moderation and lay reason that questioned the sense in expanding GM food in conditions of uncertainty, the lack of consumer choice and the power of agribusiness.

Professor Pusztai: the ‘independent’ expert-consumer

This section primarily analyses the discourses in two editorials in the *Daily Mail* and the *Express* that specifically dealt with the Pusztai intervention and supplements these where necessary with discourses in other newspaper articles. The previous section argued that Prince Charles was presented as articulating lay doubts, but these claims were given added potency in that he signified the voice of moral authority, moderation and reason. Thus, his claims about public uncertainty, this criticism of the denial of consumer choice and the moral questionability of proceeding in conditions of uncertainty exposed dilemmas or fault-lines in the entrepreneurial discourses of the elites. This section argues that Pusztai was constructed as signifying the expert-consumer, voicing professional-personal scepticism about the certainty claims about safety and the denial of choice.

Elite discourses of expertise-based credibility and legitimacy had been constructed around claims of ‘objective’ science and the ‘best possible advice’ delivered through technocratic processes (see Chapter 5). Newspaper constructions of Pusztai’s credibility and legitimacy in news stories, features and guest columns challenged and subverted that. The credibility of Pusztai was constructed around claims about an ‘independent scientist’ of international standing (*Express*, 1998h) who had the courage to raise ‘serious doubts’ about GM food (Harrison, 1998b) and ‘expose’ food risks despite considerable professional and personal cost (*Express*, 1998h). Newspapers also constructed Pusztai as making a moral argument in claiming that GM food should be tested on laboratory ‘guinea pigs’ not on the ‘general public’ (Ingham, 1998; *Mirror*, 1998; Wilson, 1998) and in claiming that he was denied the agency to act on his preference not to consume GM food. Thus Pusztai signified a powerful conjoining of expert-consumer and professional-personal discourses that both gave a legitimacy and credibility to his claims about possible risk and informed newspaper problematization.

Problematization in the Prince Charles editorials had primarily drawn on dominant discourses of new risks and public uncertainty about the pace of expansion given consumer disempowerment and past failures and scares. Problematization in the Pusztai editorials (see Appendix 6) gave prominence to what had been subordinate discourses of scientific uncertainty and 'entering the unknown', consumer disempowerment and the lack of logic in elites seeking a continued expansion of GM food (***Daily Mail*, 1998c; see Appendix 6 [2, 3]**). The newspaper agenda, given these conditions of uncertainty, was to urge elites to proceed prudently by which was meant 'halt' the expansion of GM food until more was known (***Daily Mail*, 1998c; see Appendix 6 [2]**) and to 'give top priority' to find out if 'these products are safe beyond reasonable doubt' about GM food by prioritizing new research (***Express*, 1998e; see Appendix 6 [3]**).

Arguments that supported this problematization and agenda constructed scientific uncertainty around two sets of claims. The editorials inferred that Pusztai's 'revelations about possible effects' gave reason to doubt the certainty claims of elites (***Express*, 1998e; see Appendix 6 [1]**). The findings of stunted growth and compromised immune systems of rats confirmed the 'dread inevitability' that GM food 'might pose a threat to our health' (***Daily Mail*, 1998c; see Appendix 6 [1]**). However, his research was constructed as inconclusive in that 'in itself [does not] ... prove that it could cause similar damage in people' (***Daily Mail*, 1998c; see Appendix 6 [2]**). Thus acute uncertainty was constructed by casting doubt on the 'evidence' used to support the certainty claims of minimalists that food was safe while acknowledging that neither was there 'evidence' to support certainty of harm. Hence, the discourse of 'entering the unknown' (***Daily Mail*, 1998c; see Appendix 6 [3]**), but this unknown was not constructed within an adventure discourse but as a new risk discourse of radical uncertainty. It provided the professional rationale behind Pusztai's personal preference for avoiding the consumption of GM food (***Daily Mail*, 1998c; see Appendix 6 [2]**). The expert-consumer discourse of Pusztai was thus used to link scientific uncertainty and public uncertainty in precisely the potentially volatile way that Asilomar had warned about (see Chapter 5).

The other strand in the argumentative strategy was the challenging of the technocratic rationality and rhetoric of elites through the use of lay logic and non-rational discourses about morality. A moral discourse was constructed partly through a reiteration of the discourses of Prince Charles about scientists 'tinkering in areas they did not fully understand' (***Daily Mail*, 1998c; see Appendix 6 [1]**) and partly through claims that 'it cannot be right' that consumers are not told they are eating GM food or warned about

possible risks (**Express, 1998e; see Appendix 6 [2]**). Thus, while elites located information and choice within market discourses of 'effective competition' (see Chapter 5); newspapers located them within a moral discourse of consumer rights and the responsibilities of elites to equip individual consumers sufficiently to decide for themselves.

The second dimension in the non-rational alternative offered by newspapers was that of lay logic based on claims that the Pusztai findings had validated the fatalistic ('dread inevitability') and 'commonsense suspicions' of the 'vast majority' about the possible risks of new developments (*Daily Mail, 1998c*). This combination of lay logic and counter-science was seen as supporting precaution when managing new technologies. Conversely, so called elite rationality was discredited for appearing to put the public at unnecessary risk. This was used to directly challenge elite claims that it would be 'inappropriate' to halt GM foods but 'more testing is necessary' to which the newspapers counter-claimed 'where is the logic in that' when it is 'this very ignorance that suggests the need for a halt' (**Daily Mail, 1998a; see Appendix 6 [3]**). What was emerging quite explicitly here were two very different approaches that mirrored the minimalist–maximalist divide on how to proceed in conditions of uncertainty and the absence of knowledge. Elites had argued that the expansion of GM food needed to proceed via a case-by-case accumulation of knowledge combined with new research to address the limits of knowledge (see Chapter 5). Newspapers argued that the expansion of GM food needed to be halted until new research could be conducted to 'end doubts on food safety' by 'discovering whether these products are safe beyond reasonable doubt' (**Express, 1998c; see Appendix 6 [3]**).

The perceived potential for catastrophe and elite dismissal of this freed newspaper editorials from any attempt to appear 'objective' so opened the way for more emotive discourses. This was most explicit in labels attached to GM such as 'frankenstein foods'⁵² and 'guinea pigs'. The *Mirror* had used both of these terms in news articles from the launch of GM tomato paste in 1996 in the context of claims made by environmentalists and in stories that mixed claims about the benefits of 'supernosh' with claims about the risks of 'frankenstein foods' (Harrison, 1997, 1998a; *Mirror, 1996*) thus creating a sense of ambivalence. However, Pusztai's claim that novel foods should be 'tested' on laboratory 'guinea pigs' and not on the general public (Ingham, 1998; *Mirror, 1998; Wilson, 1998*)

⁵² The discourse of 'Frankenstein foods' or 'frankenfoods' first appeared in a letter to the *New York Times* in 1992. However, it became a common refrain thereafter, with environmentalists conveying the sense that some monster or 'mutant' may be let out to terrorize the public.

gave the term a credibility, so rather than sensationalism or 'hysteria' the newspapers claimed that it encapsulated the 'prospect that scientists might be creating something truly dreadful' (*Express*, 1998c). Hereafter both discourses became much more commonly used by the newspapers.

At issue was what level of risk was socially acceptable when no 'evidence' of harm or safety was available. Elites argued that in conditions of uncertainty how to proceed was a matter of elite political judgement based on technocratic processes with the inference being that public was unable to make rational decisions (see Chapter 5). The discourses here highlight how newspapers did not trust political judgement and justified this with reference to past experience with the elite's failure to manage risks. They thereby challenged the validity of technocratic rationality and the repertoire of entrepreneurial managerialism through the expert-consumer claims of Pustzai and the discourses of non-rationality (morality, lay logic and emotion). These two divergent approaches on how to proceed in conditions of uncertainty were irreconcilable; however, this did not necessarily mean contestation would emerge. That it did was due in part to the escalation of emotive discourses to accompany claims of acute consumer anxiety and uncertainty, and to the societal context, in which there was an escalation in the behavioural actions of public resistance to GM food and crops, as well as to how elites responded to critical challenges.

Mounting momentum and escalating contestation

This section primarily analyses evolving dominant discourses in eight editorials across the four newspapers published between August 1998 and the end of January 1999. The editorials themselves are not analysed in detail because there are so many of them and because the objective is to capture at a general level mounting momentum in argumentation and the consolidation of collective, dominant discourses ahead of the launch of the newspaper campaigns in February 1999 (see Chapter 8). The shift from fragmented to collective argumentation had begun with newspaper signification of the interventions of Prince Charles and Pustzai wherein dominant discourses of scientific uncertainty, public uncertainty, consumer choice and the need for caution had emerged. Post-Pustzai there was no single news event or intervention to unify newspaper coverage, and the intensity of newspaper attention across all sections of the newspapers dipped (see Appendix 3). However, the key signifiers of escalating newspaper contestation with elites over GM food were increased commitment to editorial comment on GM food issues and in the shifts in the content and focus of argumentation.

Problematization in the Prince Charles and Pusztai editorials had centred on 'undue haste' in expanding GM food in conditions of public and scientific uncertainty, but this was largely de-personalized in the sense that the role of the elites in facilitating this was generally inferred rather than stated, and the primary focus was on discourses of uncertainty attached to the technology, the science and public responses. Thus the elites were only indirectly implicated in the problematization and were constructed as being part of the solution. That is, the newspaper agenda suggested – rather than advocated – less haste, more prudence and a possible halt to the expansion of GM food pending both more research and more effective labelling. Post-Pusztai problematization included a more explicit focus on elite (mis)management or failure to address or manage scientific uncertainty and escalating public uncertainty and anxiety. The agenda was also articulated as an ultimatum to the elites: persuade the public or facilitate comprehensive choice and halt the expansion of GM food until new research could deliver certainty of safety or harm. This section argues that this problematization and agenda was constructed partly around the expansion of existing discourse of uncertainty, morality and lay logic which diverged from those of government and partly around explicit and increasingly hostile challenges to the elite repertoire of entrepreneurial managerialism. It thus set up subsequent behavioural action in the form of campaigns (see Chapter 8).

The Prince Charles and Pusztai interventions had been constructed around discourses of public uncertainty and scientific uncertainty, respectively. The dominant discourse of escalating public uncertainty linked to elite failure to provide leadership and facilitate greater consumer agency. It was claimed that, 'in the absence of any official lead from politicians, people are voting with their wallets', which translated into a wide range of behavioural actions including the banning of such food in school and work canteens, the House of Commons and in supermarkets' own name brands (*Express*, 1998i). There was also a sense of escalating protest as the 'outcry against genetically modified food is spreading' (*Express*, 1998i). These became a form of resistant discourse and constructed a sense of escalating societal contestation against elite policy of expanding the new technologies and within which the newspapers were positioning themselves. The dominant discourse of scientific uncertainty was expanded to include GM crops. Earlier claims about the perversion and contamination of natural foods by 'altered' foods (*Daily Mail*, 1998c; *Express*, 1998d) escalated into discourses of 'super-weeds' and 'mutants'. For instance, the *Daily Mail* articulated 'fears' that GM would contaminate the environment and food chain if cross-breeding with 'wild' flora created 'super-weeds' that needed heavy doses of poison to destroy them (Arthur, 1998). The discourse of 'mutant' crops

converged with the discourse of 'Frankenstein foods' (see *Daily Mail*, 1999c, 1999d). The authority and credibility of these claims came, not from an 'independent' scientist as had been the case with Pusztai and GM food, but first by a scientist advising ministers (*Express*, 1998f) and then in January 1999 by the government's statutory advisor on the environment, English Nature (*Daily Mail*, 1999a).

The intervention of English Nature was seen as giving added weight to the argument of the newspapers against 'haste' in claiming that the statutory body had advised ministers that there should be a five-year moratorium on the commercial cultivation of GM crops to allow time for research to be done on the effects of the novel crops on biodiversity and other factors (Derbyshire, 1999). A proposed moratorium was also openly backed by the environmental NGOs and the food retailers (Derbyshire, 1999). Thus newspapers argued that a de facto alliance based on the voice of 'reason' and the conjoining of expert and lay logic had formed around a position of prudence and caution. The rejection by Blair of the call for a moratorium because there was 'no scientific justification for it' was thus constructed in terms of the government 'standing virtually alone last night against mounting calls for action' over GM food (Derbyshire, 1999) in a position of obstinacy that made little sense to the newspapers.

Constructions of the elite position as unreasonable or illogical also challenged and exposed argumentative fault-lines or dilemmas in the elite repertoire of entrepreneurial governance. Chapter 5 argued that the entrepreneurial component had been constructed around claims for enhanced consumer agency, a consumer-producer balance and 'effective competition'. The dominant discourse and constant refrain of a 'denial' of consumer choice reinforced by supermarket claims they were unable to 'guarantee' choice eroded the credibility of elite claims that they had provided choice through compulsory labelling (see *Daily Mail*, 1998a; *Express*, 1998b, 1998e, 1998j). Both newspapers and elites were claiming a commitment to consumer choice; however, for the newspapers this had become a non-negotiable discourse of rights and entitlement, whereas for elites the entrepreneurial repertoire had located consumer choice within a market imperative discourse of consumer-producer balance. However, post-Pusztai newspaper discourses claimed that the government had been uncritical and 'utterly supine in its attitude to the giants of the food industry' so that policy was being 'driven' by an industry 'intent on profit', pushing through 'mutant' crops in conditions of scientific uncertainty and against the preferences of the public (*Daily Mail*, 1999b). Thus, rather than intervening to facilitate a consumer-producer balance, elites were constructed as in thrall to multinational conglomerates (*Daily Mail*, 1999b) and determined to '[allow] them to

push mutant products at us, though nobody knows what the long-term threat to human health may be' (*Daily Mail*, 1999c). Rather than facilitating 'competitiveness', elites were seen as facilitating this monopolization or 'stranglehold on the global food production chain' (*Express*, 1998f).

However, these challenges to the entrepreneurial discourses of elites were an expansion of claims made at the time of the Prince and Pusztai's interventions; the new developments in the second half of the year were the inclusion of the elites in the problematization of GM food, increasingly critical claims about their management of GM food and challenges to their managerialism repertoire. The key components to this repertoire comprised claims about greater public participation, transparent decision-making and technocratic processes that were independent of ministerial interference (see Chapter 5). The stated objective was to restore public confidence in food safety controls and to this end elites had started to publish more information. However, the primary mechanism for the delivery of this was the FSA. Yet this was delayed until 2000 despite what newspapers claimed was an 'urgent need' for an 'independent', non-politicized voice of reason that consumers could trust (*Daily Mail*, 1998b; *Express*, 1998b). The delays created a policy hiatus in which elites had to manage claims of escalating public and scientific uncertainty, to which they responded by shifting the locus of decision-making and communication to the Cabinet Office – hence closer to the prime minister – and announcing a review of the policy framework on biotechnology (see Chapter 5). This meant they were unable to announce any new initiatives until the review had been completed in 1999. Rather than de-politicizing the debate, newspapers interpreted this as inaction and lack of leadership (*Daily Mail*, 1999a) with even the pro-Labour newspapers calling on elites to 'confront the problem' of uncertainty and try to convince the public GM food is safe or halt its expansion and ensure 'comprehensive' labelling (*Express*, 1998h)⁵³. However, the most explicit challenges to the managerialism repertoire came in new discourses about elite management of uncertainty and suspicion of elite motives which further developed the emotive dimensions of newspaper argumentation with new claims of 'trust' and 'progaganda' (*Daily Mail*, 1999b, 1999c).

The newspapers dismissed elite certainty claims that there was 'no evidence of harm' by counter-claiming that 'scientists don't know' (*Daily Mail*, 1999c) and that BSE/CJD had exposed the hollowness of certainty claims of 'no effect on humans' only to discover that

⁵³ By 1998 power struggles at the *Express* had been resolved with the Labour peer Lord Hollick assuming total control of the newspaper. He appointed the pro-Blair Rosie Boycott as new editor who re-positioned the title within a centre-left ideology between 1998 and 2000 (see Greenslade 2004: 664).

'what you ate years ago might kill you ... years from now' (Arthur, 1998). The discrediting of elite reassurances with the example of BSE/CJD meant that with GM food 'the public refuses to trust a word uttered by any politician or official on food safety' (*Daily Mail*, 1999b). 'Bland reassurances' and 'complacency' of elites managing scientific uncertainties of GM food had, it was claimed, reinforced public distrust (Arthur, 1998). Earlier emotive discourses of 'Frankenstein foods' and 'guinea pigs' had articulated the extent of the moral disturbance at the novel technologies and the way in which the biotechnology industry was expanding their usage through a massive societal 'experiment' (see above).

In the second half of the year, the growing depth of newspaper disturbance at elite management of the escalating uncertainty was articulated in dismissive, emotive discourses of 'spin', 'propaganda' and 'trust' (see *Daily Mail*, 1999b, 1999d). The conundrum for the minimalists, claimed the newspapers, was that 'nobody knows how to persuade the public to like something they do not trust' (*Daily Mail*, 1999b). Having failed to convince the public that GM foods were safe, it was claimed that the elites had resorted to 'state-funded propaganda' intended to 'persuade us that modified foods are perfectly all right' (*Daily Mail*, 1999b). The challenge for elites, though, was the weight of counter-claims about uncertain science, unknown effects and the history of previous scares. The newspapers claimed that in such conditions 'public unease will not be overcome by mere propaganda' (*Daily Mail*, 1999b). Newspapers argued that halting the production of GM food and ensuring comprehensive labelling - decisive and pre-emptive behavioural actions were needed (*Express*, 1998g). The stated determination of elites to press ahead with the expansion of GM food against growing public uncertainty and societal resistance first bemused newspapers but became increasingly viewed with suspicion.

Discourses of conflicts of interest that had dominated the debates on BSE/CJD and that New Labour had pledged to address by preventing ministerial interference in technocratic processes resurfaced in late 1998 and early 1999 in a slew of news stories and editorials (see, for instance, *Daily Mail*, 1999b; Eastham, P., Poulter, S. and Lean, G. 1999; Woolf 1998b). A moral discourse emerged around claims that there was 'something rotten and wrong' in a persuasion strategy when individual ministers had financial links to biotechnology companies and multinationals were making donations to the Labour Party. An escalation in claims of ministerial conflicts of interest thus discredited the elite's certainty claims and reassurance strategies and was increasingly constructed as part of reason for elite inaction and failure to manage acute conditions of uncertainty; what emerged was a strong inference that the 'public interest' and 'public preferences' were once again being subverted by the economic/market agenda of the government. The

stage was set for newspapers to construct themselves as champions of 'public interest' and 'public will' and to campaign actively for policy change.

Conclusion

This chapter has argued that a major shift in newspaper engagement with GM food had taken place by the end of 1998. It found that, contrary to the claims made in other research (see Bauer & Gaskell 2000, Chapter 2). prior to the interventions of Prince Charles and Pusztai newspapers had been largely unengaged with GM food issues: coverage had been sporadic, no explicit newspaper views had been articulated in editorial columns and the content was fragmented, varying between unproblematic acceptance of the benefit claims of the industry and ambivalence about the risks and benefits. At the same time developments in the argumentative context had seen the emergence of the voices of environmentalists and 'independent' scientists, which had the potential to offer an alternative system of counter-argumentation and problematizations to those offered by elites. In the case of GM food, this polarization translated into a controversy between minimalists (policy elites and biotechnology industry) and maximalists (environmentalists and food retailers) over the definition of GM, the nature of technocratic processes needed to manage its development, whether minimum or maximum consumer agency should be facilitated and whether such choice should be a market-imperative intended to reassure but not curb the expansion of technology, or whether it should be a moral right.

However, the sporadic and fragmented nature of newspaper engagement with the issues meant it was unclear whether they would position themselves with the minimalist economic/market-driven agenda or with the maximalist consumer agency/risk adverse agenda. Two critical interventions by Prince Charles and Pusztai marked a shift in newspapers to semi-engagement, with the commitment of editorials to an articulation of the newspapers' position. The concentration of coverage of GM food intensified and the content shifted towards a more coherent, collective locating of the newspapers within the maximalist camp. This shift was facilitated by the construction of Prince Charles's intervention as signifying the voice of moral authority, moderation and lay reason, articulating deep disquiet and public uncertainty about the 'rapid spread' of novel food and the latest developments in 'scientific farming'. It was also facilitated by the construction of Pusztai as signifying the voice of the 'independent' expert-consumer, of professional-personal scepticism challenging certainty claims of elites, exposing the scientific uncertainty of the novel food and questioning the morality of 'testing' the novel technology on society rather than on laboratory 'guinea pigs'. Both men articulated a preference for

avoiding the consumption of GM food but it was claimed they were denied complete information and hence agency by the strategies of the biotechnology producers and hence the agency to act on their preferences. The emergence of dominant discourses of public uncertainty and scientific uncertainty as well as the linkage of the two facilitated increasingly direct attacks by newspapers on the elite repertoire of entrepreneurial managerialism. This was manifest in the revival of BSE/CJD-related claims about the subordination of consumer interests to those of producers and conflicts of interest and public distrust of elite management of uncertainty, as well as in the dismissive constructions of elite preference for 'propaganda' over 'action'.

Elite shifts in the locus of policymaking to the Cabinet Office had set the stage for the entry of the Prime Minister into the debate (see Chapter 5 and 7); newspaper shifts in engagement, their alignment with maximalists against what they perceived to be the trajectory of policy development and their increasingly moral discourse about elite 'inaction' and subordination of public interest and public preference set the stage for the launch of newspaper campaigns (see Chapter 8). Thus direct contestation between Blair and the campaigning newspapers became more likely.

The major empirical contributions of this chapter are, first, the findings question aggregation methods of analysis that have concluded that newspaper engagement and coverage of GM food was homogeneous, unanimously risk averse and entailed a steady increase in engagement (see, for instance, Bauer 2002; Bauer and Gaskell 2001). On the contrary, the findings in this chapter have highlighted that neither the engagement of newspapers nor their positioning on the issues was inevitable. Initial coverage was more sporadic, fragmented and contradictory hence more unpredictable than these studies have acknowledged. The focus on how contestation emerged directs attention to those critical junctures where positions and arguments shift significantly, the interventions that facilitate these and the fundamental disturbances that rise to the surface of debates when these ruptures take place. The second major contribution is the finding that the critical interventions and the argumentative shifts that followed came from two individuals who came from neither elite policy circles nor establishment science but from contrarian positions so facilitated a system of newspaper counter-argumentation that emerged *despite elite consensus*. The receptivity of newspapers to Prince Charles and Pusztai, as well as the signifying constructions of the legitimacy and authority of their claims, needs to be understood within a wider context of debates in the argumentative context, a decade of food scares and the distrust of the certainty claims of policy elites and government scientists.

This context provided a wide range of competing discourses, arguments and claims that newspapers could draw on in their construction of GM food issues. That they chose the maximalist argument was as much due to their construction of Prince Charles and Pusztai as signifying credible, alternative voices on issues of new risk and food safety to those offered by the minimalists, in particular establishment scientists and policy elites. The third major finding challenges the polarization of the debate into risk versus benefit arguments, showing instead that acute anxiety arose out of a suspended certainty where there was no evidence that GM food was harmful or safe. In this context, elite determination to push ahead with the novel technology was constructed as illogical, irrational and imprudent. Conflicts of interest therefore provided a more logical explanation to the newspapers for the behaviour of policy elites. The fourth major finding is that these interventions opened ruptures or fissures out of which quite fundamental disturbances emerged about the neo-liberal agenda of 'progress' and innovation as manifest in ideologies of scientific farming and industrialization of productions. The newspapers therefore located GM food in a trajectory of exposure to unnecessary new risks and the elite mismanagement of these, and in conditions of uncertainty (past and present) individual agency became critical.

Chapter 7: Escalating Policy Elite Contestation – Blair Enters the Fray (1999–2000)

Introduction

Chapters 5 and 6 found that by the beginning of 1999 a parallel system of argumentation had emerged, policy elites and campaigning newspapers had entrenched themselves on opposing sides of the minimalist–maximalist divide on GM food and had constructed divergent, conflicting problematizations. There had also been a shift from low politics to high politics with the interventions of Prince Charles and the shift in decision-making to the Cabinet Office. Furthermore, a steady intensification of newspaper engagement and criticism of policy in the second of 1998 had altered the discursive balance in the argumentative context. Newspaper-disseminated maximalist discourses – such as scientific uncertainty, public uncertainty – were ascendant and accompanied by multi-faceted societal resistance including a de facto consumer boycott and a retailer one (see Chapters 6 and 8). Thus, as policy elite-newspaper contestation escalated the stage was set by early 1999 for the prime minister to enter the fray and for the launch of newspaper campaigns. The latter called for a moratorium and comprehensive labelling. They thereby concretized and mass disseminated otherwise abstract arguments about uncertainties into objectives and ‘measures’ against which government ‘responsiveness’ to public preferences might be assessed.

The purpose of this chapter is to account for how policy elite responses to this escalation in newspaper contestation and societal resistance shifted between early 1999 and 2000. It does this by examining Blair’s counter-attack on the campaigning newspapers. Escalating policy elite-newspaper contestation at this point resembled a typical a new risk-type intractable controversy in which negotiation becomes unlikely because fundamental disagreements centre on the nature of the knowledge/evidence and on how to proceed in conditions of uncertainty. The intervention by the prime minister failed to discredit the newspapers. Instead, a de facto retailer boycott emerged that elites perceived as further threatening their neo-liberal innovation-based agenda. The outcome of the biotechnology reviews signified a shift towards more accommodation of concerns by policy elites. A

more coherent discourse of (functional) participatory and strategic governance emerged, based not on claims of democratic accountability, but on managing innovation and preempting public anxieties. The new Food Standards Agency was one attempt to translate this into practice. One of the key findings outlined in this chapter is the significant, yet indirect role the campaigning newspapers played in this shift to participatory and strategic governance.

Despite this shift in tone and approach and despite a de facto boycott and voluntary moratorium, the newspaper campaigns continued. The shift to an uneasy truce did not emerge until a second article by Blair in early 2000. The outstanding, unresolved issue for them had moved beyond disputes over uncertain, contested science. It centred on what they deemed was appropriate elite responsiveness to newspaper – and public – concerns. Such a responsiveness was, they claimed, manifest in Blair's apology and belated acknowledgement that the 'jury on GM food was still out'. It was only then that newspaper contestation subsided.

Escalating uncertainty and challenges in the argumentative context

Sites of contestation: scientific uncertainty

During 1998, discourses of scientific uncertainty expanded in the argumentative context to include claims about conflict between scientists, the intimidation of experts holding alternative, the suppression of freedom of expression, and the ignoring of the recommendations of the government's own advisors. This expansion of conflict was manifest in disputes in the scientific community between 'independent' scientists and 'establishment' scientists (see Chapter 5) and centred on the credibility or otherwise of Pusztai's methodology, findings and publicity (Rowett Institute, 1999; Royal Society, 1999). There were also claims of threats against 'independent' scientists who articulated and disseminate alternative evidence (see for example, the dispute over *The Lancet's* publication of the Pusztai evidence, *Guardian*, 1999).⁵⁴ The environmental NGOs questioned policy elite claims about the impartiality of technocratic processes by counter-claiming this had been compromised by the appointment of members who were

⁵⁴ The intervention of independent scientists was as much an expression of outrage at what they claimed was an infringement of academic freedom of expression, the 'politics of science' and conflicts of interest which sought to suppress alternative views as it was in support of Pusztai's scientific evidence (*Daily Mail* 1999a; *Independent on Sunday* 1999b).

predominantly pro-technology and that there was 'evidence' of 'clear links' between them and the biotechnology industry (Friends of the Earth, 1999; Genewatch, 1999; Iceland, 1999).

Ministers and senior MPs counter-claimed that only two members were directly employed by the industry; all the members had acted 'properly and with integrity'; and they rejected the inference that industry-links necessarily introduced bias into the processes (Meacher, 1999). Newspapers and NGOs drew parallels with BSE/CJD with its association of the suppression of alternative voices and avoidable deaths (see Chapter 8; see also Friends of the Earth, 1999; Genewatch, 2000; Greenpeace, 1999). However, the most damaging implication for policy elites' counter-argument on scientific impartiality and independence emerged with the recommendation of English Nature, the government's statutory advisor on the environment. They advised a five-year moratorium on the cultivation of certain types of GM crops to allow time for new research commissioned by government to be collected and for 'proper regulation and safeguards to be put in place' (English Nature, 1999b). Initially policy elites denied this but then retracted the denial after English Nature publically refuted ministerial claims about the nature of their advice (*Daily Mail*, 1999f; Eastham, 1999; English Nature, 1999a).

Newspapers and NGOs constructed this dispute between ministers and their advisors as emblematic of the suppression of 'independent' advice in furtherance of a government agenda to press ahead with GM food with 'undue haste' (see Chapter 8). This hardening problematization by maximalists of policy elite (mis)management of scientific evidence and their unresponsiveness to public uncertainty provided key justifications for the launch of the newspaper campaign – and the 'Five Year Freeze' campaign organized by a number of maximalist organizations (see Genewatch, 2000). Thus, the question of scientific 'independence' became a point of contention within an expanded discourse of scientific uncertainty. Claims of scientific contestation, intimidation and the suppression of alternative views and advice became a powerful explicit counter-discourse to the policy elite repertoire of managerialism. Maximalists argued that the policy elites' agenda to promote technology, and their interference in ensuring this, were undermining the impartiality, robustness and objectivity of the technocratic processes. Thus there was, they argued, 'reason' to doubt policy elite certainty claims and reassurances about safety (see Chapter 8).

Sites of contestation: arguments over public uncertainty

Not only did arguments about scientific uncertainty become a site of contestation so too did arguments about public uncertainty. At the same time as the government was collecting its own data on public attitudes to biotechnology (see Chapter 5), so too were the maximalists. NGOs commissioned and newspapers published a steady stream of 'opinion polls', which they claimed signified that the overwhelming majority of the public did not want to eat GM food, wanted a ban until more research had been done and were morally opposed to the novel food (for a summary of these opinion polls see Genewatch, 1999).

The biotechnology industry counter-claimed that this opposition to the technology was based on 'ignorance' and 'sensationalist' newspaper claims (Monsanto, 1999, 2000). The NGO response – widely disseminated by newspapers (see Chapter 8) – cited other data, which they claimed signified a correlation between increased public knowledge about biotechnology and a lack of confidence in the ability of current regulations to 'protect people from risk' (see Chapter 8). They also claimed that it provided 'evidence' that public concerns were based on the 'fears' typically associated with the radical uncertainty of new risks and 'serious moral concerns about the process itself' (Genewatch, 1999, 2000; see also Friends of the Earth, 1999; Greenpeace, 1999; Grove-White, MacNaghten & Wynne, 2000). The maximalists took this 'evidence' to mean that 'people want to know *how* their food is produced so they can make informed decisions' and that the policy elites' failure to deliver this meant a 'new technology was being imposed for which there is little support' (Genewatch, 2000; see also Chapter 8). The common refrain of the maximalists – echoed in the newspaper campaigns – was that policy elites were being undemocratic by largely disregarding the 'weight of public concern', actively supporting the biotechnology industry through research funding and by failing to deliver comprehensive market transparency and consumer choice. By early 1999, a dominant claim had emerged among the maximalists that 'the depth and extent of public concern can no longer be ignored. A moratorium is vital to give the public an opportunity to influence future developments' (Genewatch, 1999; see also Friends of the Earth, 1999; Greenpeace, 1999).

Sites of contestation: time for the public intervention of the prime minister

Policy elites were under growing pressure to respond decisively as the discursive balance of the argumentative context shifted in favour of the maximalists. That is, discourses of escalating scientific and public uncertainty, and consumer disempowerment became ascendant, challenging elite repertoires and threatening the hegemony of their neoliberal,

innovation-based agenda. The shift in the locus of the policy decision-making to the Cabinet Office had already highlighted how threatened elites perceived the mounting resistance to be; the launch of the newspaper campaigns further intensified this sense of threat. The stage was set for the direct intervention of Blair. This could have taken a number of different forms: the form it did take escalated policy elite-newspaper contestation.

Escalating contestation: Blair enters the fray

Within days of the launch of the fourth newspaper campaign (see Chapter 8), an article entitled 'We Stand Firm' by Tony Blair appeared in the *Daily Telegraph* (for detailed extracts, see Blair, 1999; see Appendix 5). The article signifies a critical intervention because it was not only an explicit justification for policy elite rejection of campaign calls, but also a direct counter-attack by the prime minister on the campaigning newspapers that further escalated media–elite contestation over GM food and crop policies (see Chapter 8).⁵⁵ Blair acknowledged the role of the pressure groups in mounting societal resistance but the primary focus was 'parts of the media' (**Blair, 1999; see Appendix 5 [2]**), which he problematized as contributing to the escalation in societal resistance. He constructed this around two dominant discourses: the 'scaremongering' of the campaigning titles (**Blair, 1999; see Appendix 5 [7]**) and the 'risk' or threat this posed to the international competitiveness of British biotechnology (**Blair, 1999; see Appendix 5 [5]**). Blair also constructed his defence of the policy elite repertoire of entrepreneurial managerialism around these dominant discourses and a discourse of silence on the debate over uncertain, contested science.

⁵⁵ The decision by Blair to intervene in this way is very interesting because it left him exposed and made him a magnet for newspaper attacks on government policy. There are two possible explanations for this. The first lies in the decision at the end of 1998 to centralize policy formulation and communication in the Cabinet Office. The latter is particularly interesting because the need to coordinate communication suggests that by this stage the policy consensus may have been fracturing possibly involving historic rivalries between environment and food departments (see Foreman 1991, Carmichael 2008). The second suggests that Blair perceived that the newspaper campaigns posed a serious threat to a core policy. Although the original row had centred on Monsanto, the collapse of sales of GM tomato paste – developed by a British biotechnology company – highlighted a contagion of fear that went beyond anti-American corporation sentiments. Biotechnology had been seen as a strategic technology alongside IT and nuclear power, but the Blair government made it a key component in its strategy for developing an internationally competitive British industry, the Treasury had committed funding for its further development and there was considerable concern at how much attention other European countries were putting into the promotion of their industries in what was seen as a 'catch-up-with-Britain' endeavour (see for instance Blair, 2002).

Recasting the minimalist argument as a ‘national interest’ discourse

The article located the new technology within New Labour’s variant on the post-war policy elite hegemony of scientific farming and discourses of ‘progress’ constructed around an agenda of science-driven international competitiveness and the assumptions of the minimalists (see Chapter 5). This was manifest in Blair’s unproblematic reiteration of the claims of the minimalists, which paralleled newspapers’ unproblematic reiteration of the claims of the maximalists (see Chapters 6 and 8). Thus, Blair stressed the societal benefits of better cheaper food; medicinal benefits such as insulin and environmentally friendly farming (**Blair, 1999; see Appendix 5 [8]**). He also repeated the hyperbole of the minimalists in claiming a ‘compelling case that biotech will be the revolutionary science of the 21st century’ (**Blair, 1999; see Appendix 5 [5]**). Blair merged this minimalist dominant discourse of ‘progress’ with New Labour’s dominant discourse of ‘international competitiveness’ to add a public interest argument that Britain ‘has been at the leading edge of this new science’ (**Blair, 1999; see Appendix 5 [5]**) and warned that ‘other countries are putting billions into research’ (**Blair, 1999; see Appendix 5 [2]**). The inference, therefore, was that Britain’s competitive edge – and hence national interest and pride – would be at risk if policy elites slowed or halted the pace of development when others were accelerating.

Rejection of a ban, counter-attack on campaigning newspapers

Blair constructed this argument for protecting national interests (that is, the British biotechnology industry) as a justification for his rejection of calls for a ‘ban’ on GM. That is, in conditions where ‘there is no evidence to justify it’ and where such a move ‘would send a negative message to the biotech industry – that its future will be governed by media scares’ (**Blair, 1999; see Appendix 5 [3, 5]**). This was a misrepresentation of newspaper discourses: the campaign editorials did not advocate a ban but a moratorium based on the advice of *English Nature*. Thus, just as Blair was accusing the newspapers of exaggerating the risks he was exaggerating their advocacy claims.

This was entirely consistent with Blair’s expansion of elite problematization of escalating public anxiety to include ‘parts of the media’ (**Blair, 1999; see Appendix 5 [2]**). He claimed that the newspaper campaigns signified a sudden and frenzied collective flight from rationality (a ‘stampede’); presented an exaggerated, long-running narrative that was more fact than fiction (‘great GM food saga’); and that an ‘extraordinary campaign of distortion’ by newspapers was preventing the public from accessing the facts so fuelling public uncertainty (**Blair, 1999; see Appendix 5 [2]**). The inference was that irrational,

fictionalized, biased and obfuscating campaigns signified a departure from the normative notions of rational, factually accurate and impartial journalism that contributes to reasonable debate and an informed citizenry. Thus, a discourse of unprofessionalism was central in Blair's problematization of the social reaction against GM food and the threat this posed to the elite neoliberal agenda.

A response to the problematization of media 'scaremongering': an action discourse

Blair's response to the perceived threat posed by newspaper campaigns was constructed around a reassertion of key minimalist arguments, a discourse of 'action' and a defence of the repertoire of entrepreneurial managerialism.

Thus, in response to newspaper claims about an imprudent rush into the unknown, Blair counter-claimed that processes of genetic modification were natural, little more than an extension of the 'cross-breeding within one species of crop [that] has been going on for years' (Blair, 1999; see Appendix 5 [7]). In response to their argument that policy elites had failed to act on public anxieties, Blair counter-argued with a discourse of action constructed around claims about the government's record of action and that these were sufficient to satisfy 'reasonable anxieties' (Blair, 1999; see Appendix 5 [6]). Contrary to claims of privileging the interests of producers, Blair counter-claimed that 'this government is fully committed to ensuring the safety of food' and the 'evidence' was their commitment to an independent Food Standards Agency that would 'put the consumer first' (Blair, 1999; see Appendix 5 [2]). In answer to claims that ineffective policies were obstructing consumer and retailer choice, he counter-claimed that 'we are committed to consumer choice. That is why this Government is insisting on labelling that works', contrary to the Conservatives who had blocked this (Blair, 1999; see Appendix 5 [4]). He added that 'if consumers don't want to buy GM that is fine by me. If suppliers don't want to use GM produce, they can use the list that this Government produced to get non-GM ingredients' (Blair, 1999; see Appendix 5 [2]). Contrary to claims that policy elites were exposing an unwitting public and the environment to the risk of unknown effects, he counter-claimed that robust, 'elaborate' and technocratic processes ensured no GM products would be released for sale or cultivation unless they had been tested and verified by 'independent' scientists (Blair, 1999; see Appendix 5 [9, 10]). This collection of counter-claims constructed a discourse of action that implied that policy elites had not only talked about but also acted in response to public uncertainties and preferences. The belief that these actions were adequate and effective was conveyed by the silence on any new behavioural

actions and the rejection of calls for new behavioural action in the form of a moratorium and for comprehensive market transparency.

In defence of entrepreneurial managerialism

Some of these 'action' elements were more fully developed in Blair's defence of the policy elite repertoire of entrepreneurial managerialism. New Labour's entrepreneurial component was rooted in discourses of market transparency (labelling), consumer empowerment (choice) and a balancing of consumer-producer interests (see Chapter 5). Blair, faced with claims that the existing regulations were ineffective and did not offer consumer choice, counter-claimed with a discourse of deliverability (labelling 'that worked') that positioned the government between the 'unworkable' (calls for 'comprehensive' labelling) and the non-existent (the Conservative government's block on any mandatory labelling) (**Blair, 1999; see Appendix 5 [4]**). In this way, Blair constructed the government position as moderate, pragmatic and responsive to consumer preferences. This was very much consistent with the entrepreneurial argument for enhanced consumer agency, based not on claims about moral rights but on claims for market effectiveness and hence needing to be balanced by producer agency. Hence, Blair sought to argue that one set of 'vested interests', including that of consumers, should not be allowed to predominate over other 'vested interests' or to compromise the overarching requirement to 'govern in the country's interest' (**Blair, 1999; see Appendix 5 [5, 2]**).

The construction of the 'country's interest' was central to Blair's defence against claims that his government was biased in favour of the biotechnology industry.⁵⁶ This defence was constructed within a discourse of the intensification of international competition over 'revolutionary science' in which other countries were investing billions and in which Britain's 'leading edge' in the field needed to be protected from 'media scares' (**Blair, 1999; see Appendix 5 [5]**). It was in this context, Blair claimed, that an ill-considered 'yielding' to the irrationality of media scares and banning products that 'independent scientists' considered safe would jeopardize the ability of British expertise to continue to 'lead the field' in a 'revolutionary' new technology. This, he claimed, would signify an industry governed by 'media scares' and damage British national interest which was equated to the promotion of the biotechnology industry (**Blair, 1999; see Appendix 5 [7]**).

⁵⁶ This article was one of the first occasions in which Blair linked discourses of the 'country's interest' with discourses about ensuring the competitiveness of British biotechnology industry in this way, but it became a much more prevalent discourse in his subsequent speeches and parliamentary debates (see Blair 1999c, 1999e, 2000b).

This was essentially an argument for the minimalist position, where limited market transparency was a functionalist mechanism that sought to balance the reassurance of the public, deliver sufficient agency necessary for effective competition yet avoid too much agency (or ‘over-regulation’) that might undermine a critical industry. Blair therefore constructed the role of government in typical neoliberal terms as that of neutral arbiter – intervening where the market had failed to deliver balance and upholding of the ‘interests of people, not of vested interests’, that is, of disaggregated individuals rather than the collective public (**Blair, 1999; see Appendix 5 [6]**).

Blair’s defence of the managerialism component of the elite repertoire also comprised a number of interrelated arguments. First, it included a reiteration of the government’s determination to set up the FSA as an institutional signifier of the policy elites’ commitment to prioritizing consumer interests and public health (see above). Second, it sought to address the debate on scientific uncertainty through reductionist arguments about ‘no evidence’ and ‘no facts’ as well as through silent discourses on the escalating debates in the argumentative context on uncertain, contested and partial science. For instance, Blair claimed that it would be risky to ban GM ‘without any proper evidence to support such a decision’, that ‘neither here nor elsewhere [was there] any actual evidence that there are such harmful consequences for food safety’ and that there was a ‘need to be guided by good science, not scaremongering’ (**Blair, 1999; see Appendix 5 [8, 5, 12]**). This argument was reductionist in its assumption that absence of evidence of harm equated to assurance of safety and ignored the new risk claims of suspended certainty made by newspapers after the Pusztai’s intervention about a lack of incontrovertible evidence of harm or safety. Blair was not only silent on these new risk claims about uncertain science, he was also silent on the escalation in scientific contestation that the newspapers claimed rendered any certainty claims problematic (see Chapters 6 and 8). He was also silent on the earlier acknowledgment by the policy elite that uncertainty and limited knowledge posed difficulties for their predictions of risk (see Chapter 5).

The management of expert advice: the case of English Nature

This omission of any discourse on either the conflict over or the limits to knowledge was critical given the argument of English Nature – reiterated by the newspapers – that it was precisely the unknown effects on the environment and the need for new research that warranted a moratorium on the commercial cultivation of certain types of GM crops.⁵⁷

⁵⁷ This is another instance of divisions in the policy elite ‘collective’.

Blair counter-claimed that newspaper accounts of the advice from English Nature amounted to ‘two weeks of misinformation’ and then sought to rebut them **(Blair, 1999; see Appendix 5 [11])**. He said that they had claimed ‘that English Nature demanded a moratorium on GM food. Wrong. It asked, on environmental grounds, for a three-year moratorium on the widespread commercial growth of GM crops that are tolerant to herbicide, until the trials are finished’ **(Blair, 1999; see Appendix 5 [11])**. Blair did not directly address the issue, preferring to rely on ambiguous claims that ‘each crop is being tested on an individual basis’ and ‘that the trials should last as long as they take’ **(Blair, 1999; see Appendix 5 [11])**. Therefore, it was unclear whether there was de facto moratorium in place. He was silent on contestation in the scientific community about the methodologies of risk assessment and critical claims in the argumentative context about the conflict between English Nature and ACRE, the government’s expert committee on GM crops, about the partiality of the policy elite expert committees and about the credibility of committee recommendations given compromised technocratic processes. Instead, Blair asserted the ‘independence’ of government advisors and the credibility of technocratic processes that tested and verified each product before approving it **(Blair, 1999; see Appendix 5 [10])**. This discourse of no evidence of harm, along with the silent discourse on uncertain, contested science, comprised the central elements in Blair’s argument against the so-called irrational, fictionalized scaremongering of the campaigning newspapers.

The third component in Blair’s defence of the repertoire of managerialism was his treatment of discourses of public uncertainty. These had become more prominent in policy elite problematization at the end of 1998 (see Chapter 5) but became marginalized and particularized in Blair’s article. There were no direct references to escalating public uncertainties in it, but a distinction was inferred between, on the one hand, the wider media-induced (irrational) scares and, on the other hand, the (‘reasonable’) public anxieties about possible adverse (health and environment) effects and the public’s desire to be ‘sure’ or certain about safety **(Blair, 1999; see Appendix 5 [6, 8])**. Blair’s response to these was to discredit the newspaper campaigns as scaremongering; to assert the minimalist claim about genetic modification being an extension of the natural processes of ‘cross-breeding’; and to claim that the technocratic processes were independent, rigorous and complex. This discourse about ‘reasonable anxieties’ echoes earlier policy elite claims about the public’s tendency to have unrealistic expectations of certainty and the need in such cases for technocratic processes and political judgement (see discussion on White Paper, 1998 in Chapter 5). However, this argument ignores those discourses discussed in Chapter 5 regarding the ‘climate of mistrust’ in government science and

technocratic processes that had emerged with BSE/CJD and the delays in the setting up of the FSA that meant that policy elite 'solution' to this had yet to be put into action.

Summary

The prime minister's direct entry into the controversy with his *Daily Telegraph* article signified a critical intervention in response to elite fear about the consequences of the campaigns and an escalation in contestation with newspapers. It also marked two shifts in policy elite discourses: first, from claims of economic benefits to claims of societal benefits in the agenda of international competitiveness and, second, from claims of institutional inadequacies to claims of media scaremongering in policy elite problematization of a food controversy. It is reasonable to suppose this intervention by Blair was an attempt by policy elites to seize control of a debate that was spiralling out of control and in which the maximalists and the media were setting the agenda. However, a number of features of Blair's argument were highly provocative and likely to increase contestation.

First, there was the direct, highly critical attack on the newspaper campaigns as irrational, fictionalized, biased and obfuscating scares. Second, there was the construction of dominant discourses around minimalist claims such as 'revolutionary science', societal benefits and an extension of natural processes of cross-breeding, and the use of these to justify the policy elite agenda of promoting Britain's 'international competitiveness'. The third component was the use of reductionist discourses on safety and the silent discourses on uncertain, contested and partial science as well as limitations to knowledge and questionable technocratic processes. This dismissal of new risk discourses of uncertainty and old risk discourses of knowledge limitations, and the implications of this for the management of risk, was to prove highly controversial for the newspapers (see Chapter 8). The fourth provocative component was the marginalization of public uncertainties and their inferred dismissal as irrational scares. Not only did these counter-discourses by Blair serve as a justification of the policy elite agenda and a defence of their repertoire of entrepreneurial managerialism, they also provided legitimacy and a rationale for dismissing calls for a moratorium and comprehensive labelling.

Reviews: a new discourse of participatory governance

The campaigning newspapers were infuriated by Blair's article and media-elite contestation escalated (see Chapter 8); so too did societal resistance over the next three

months. Forms of direct action and protests continued. Retailers Sainsbury's and Safeway withdrew GM tomato paste – the first genetically modified product to have been launched – from their shelves and a steady stream of food retailers announced GM-free policies (for a summary of the list, see Genewatch, 2000). However, by May 1999 the tone of policy elite engagement with the issues had shifted from resistance against irrational fiction to accommodation of 'understandable' public concerns, and from confrontation of newspaper scaremongering to conciliation of media highlighting public concerns.

These shifts were most clearly articulated in the *Advisory and Regulatory Framework for Biotechnology: Report from Government's Review* (Cabinet Office, 1999), a consolidated document published in May that combined the outcomes of the regulatory review and public consultation and included references to the health review. These are very extensive documents so the primary focus here is on the Foreword, Introduction and Executive Summary of this document, extracts from which have been included in Appendix 5. While the FSA receives limited consideration in these extracts, the body of the document – as did the detail of the Food Standards Bill (1999) that was going through parliament at the time – makes it clear that it is to be considered alongside the two other strategic advisory bodies. In order to offer a more nuanced account the analysis below has been supplemented with oral evidence by ministers to select committees and debates on the Food Standards Bill going through parliament in 1999 (see Donaldson & May, 1999). These texts are supplementary so have not been included in the Appendices.

Moving towards accommodation

A caveat needs adding first, however. Whereas the announcement of the reviews (see Chapter 5) and Blair's article explicitly addressed issues surrounding GM food and crops, the policy elite announcements in May discussed below do not mention these, nor do they address newspaper calls for a moratorium and comprehensive labelling. Instead, they were concerned with a wider perspective on biotechnology as a whole and so addressed a wider audience and a wider range of stakeholders than simply those connected with GM food and crops. It would therefore be misleading to focus only on differences in tone and conclude a shift in policy elite attitudes to GM food, even though GM food is an aspect of biotechnology. More critical support for shifts in the position and argument of policy elites can be found in attempts to accommodate rather than refute some of the critical newspapers' claims about conflicts of interests, the suppression of competing views of

science and the crucial claim that policy elites were unresponsive to and hence undemocratic in their management of legitimate public concerns.

Changes were also discernible in shifts in policy elite discourses on the media. On the one hand, policy elites claimed that the public consultation had revealed ‘widespread demand for as much as information as possible ... But the media, retailers and industry were not trusted’ to provide it (**Cabinet Office, 1999: 36; see Appendix 5 [23]**). On the other hand, ‘recent media coverage and the biosciences consultation also indicate a high level of concern about the safety of GM foods ... and about the environmental impacts of GM crops’ (**Cabinet Office, 1999: 2; see Appendix 5 [24, 5]**). The implication, therefore, is that the power of the media to influence opinion adversely was limited by the public’s mistrust of them but at the same time media were co-opted by policy elites as legitimate signifiers – along with public attitudes surveys and focus groups – of levels of concern. The third and most compelling signifier of a shift was the emergence of a new discourse of strategic decision-making and participatory governance as a mechanism for incorporating public concerns into the decision-making processes at an early stage.

From problematization to principles of a regulatory framework

Policy elite problematization of biotechnology controversies reverted to the usual pattern of identifying institutional failure as a causal factor in the escalation of – or failure to address – public uncertainty. What emerged in the review document was primarily a synthesis of previous problematizations (see above and Chapter 5) within New Labour managerialist claims about the existing framework as fragmented, opaque, inaccessible and lacking in transparency, excluded ‘all potential stakeholders and broader ethical and environmental considerations’, and was ‘insufficiently flexible to respond to the fast-moving nature of biotechnology developments.’ (**Cabinet Office, 1999: 37; see Appendix 5 [5, 24]**; see also Chapter 5 on irradiated food, BSE/CJD and the emerging problematization of GM food). However, there were two new additions to policy elite problematization. The first was that this time problematization was supported by ‘evidence’ from the public consultation, so suggested a more inclusive process of problematization consistent with New Labour attempts to move towards more participatory forms of governance. The second was the expansion of the claim of systemic inflexibility from the more reactionary meaning ascribed by the Conservatives to a more pro-active or pre-emptive meaning in which future developments or issues could be anticipated and ‘direction’ could be changed when necessary (see below for more detail).

The health review had concluded that existing technocratic processes were sufficiently robust to control the technology (Donaldson & May, 1999: 1), that the chief medical officer was 'satisfied' that the current system of evaluating health risks was adequate and that there was 'no evidence' that GM foods was 'inherently harmful' (Donaldson & May, 1999: 4). Policy elites, satisfied that their obligation to protect the public and environment was adequately addressed and that 'proper controls were in place' (**see Cabinet Office, 1999: Foreword; see Appendix 5 [4]**), turned their attention to other consequences of the institutional inadequacies and public uncertainty identified in their problematization. Here the review report reiterated earlier discourses most notably on irradiated food (see Chapter 5). For instance, it claimed that the system would 'safeguard the public interest and secure the maximum benefits from developments in the biosciences' (**Cabinet Office, 1999: Foreword; see Appendix 5 [4]**). It added that genetic modification was 'making possible widespread advances in a number of areas, such as health care, the environment and agriculture'; however, to deliver this, policy elites needed to address adequately public concerns that the novel technology was 'properly monitored and controlled' (**Cabinet Office, 1999: Foreword; see Appendix 5 [4]**).

However, before proposing 'solutions' to this policy elites sought to distil the key principles embedded in New Labour's entrepreneurial managerialism that would inform biotechnology regulation. The review concludes that the government's 'first concern in regulating biotechnology is to ensure the protection of human health and the environment' (**Cabinet Office, 1999: Foreword; see Appendix 5 [17]**). However, for the first time policy elites sought to expand considerations to include other factors such as that 'the regulatory and advisory systems must allow ethical and social concerns to be properly debated' (**Cabinet Office, 1999: 32; see Appendix 5 [14]**). At the same time, policy elites argued that, given 'the economic potential of this new sector, in which the UK is a world leader, it is important that the regulatory system should not place unnecessary burdens on the industry or barriers to its development' (**Cabinet Office, 1999: 32; see Appendix 5 [14]**). The new strategic bodies – of which the FSA was to be one – were to deliver this balance. This was a significant development in that policy elites recognized the need for a more expansive notion of regulation that was not limited to technocratic processes but facilitated the inclusion of other value-based considerations and that these could not be a simple matter of 'political judgement' imposed by policy elites. A consultative or participatory approach to these types of decisions of public opposition was needed (see warnings from Asilomar in Chapter 5).

From secrecy to transparency

The CSA's briefing note and the White Paper (1998) had highlighted the need for transparency in the communicating uncertain science (see Chapter 5) and the review documents claimed New Labour had made progress on this. However, newspapers had continued to claim decision-making was dominated by secrecy and suspicion, a view reiterated in the public consultation. Policy elite concern with how these secretive processes were being viewed can be inferred from the dominant discourse about stakeholder concern for more 'openness' and 'transparency' (see Cabinet Office, 1999: 19, 30, 33, 51, etc.). However, an additional rationale for greater openness was that transparency of information was necessary for increased public participation in decision-making.

The policy elite response to this 'feedback' was to claim that 'all of the committees involved in overseeing developments in biotechnology and genetic modification will adopt new guidelines on transparency and timeliness' (**Cabinet Office, 1999: Foreword; see Appendix 5 [8]**). The public, it was claimed, would also be given access to the 'facts and analysis that underlie regulatory decisions, the advice given to Government by its independent advisory bodies and the opportunity (where appropriate) to comment' (**Cabinet Office, 1999: Foreword; see Appendix 5 [9]**). What is interesting here is that the requirement on the biotechnology committees to make available 'advice' to ministers meant that in this area they went further than the Freedom of Information Bill (1999) proposed. Furthermore, New Labour's stated commitment to expand market transparency (see Chapter 5) had been extended to include policy transparency. The former was necessary for market effectiveness and competition, the latter for policy credibility.

Strategic and participatory governance

Policy elite problematization of exclusionary processes, the emphasis on transparency of information and the inference that the latter may be necessary for increased public participation inferred an elite problematization of a non-participatory system. However, the documents do not construct this as flawed in moral or democratic terms - only in the functional terms. That is, of presenting an obstacle to government securing public support for and hence delivering on its agenda. The 'solution' therefore articulated was the creation of a more (functional) participatory system sensitive to and inclusive of public concerns so better equipped for strategically planning the adoption of innovations. This was an inversion of the Conservatives' problematization of systemic inflexibility and novel

food technologies (see irradiated food and GM food in Chapter 5) based on public concerns as threat to novel technologies so needing to be neutralized through exclusion and the shutting down of debate. Thus, for the first time since Asilomar in the late 1970s (see Chapter 5), British policy elites publically acknowledged the link between public debate, public anxiety and the future of the technology. Their solution was participatory governance of controversial biotechnologies.

This required a series of behavioural actions and institutional reforms. First, New Labour elites proposed the creation of new strategic advisory commissions on the environment and human genetics to work alongside the FSA on GM food. Members of the new strategic bodies would 'act in a personal capacity but will be drawn from a wide-range of interests and expert disciplines'; they would 'consult the public and stakeholders in carrying out their work' and 'stay in close touch with public concerns'; and 'be an invaluable source of advice to Ministers in the future' (**Cabinet Office, 1999: Foreword; see Appendix 5 [2]**). The document adds that these bodies would 'look ahead to consider likely developments in the technology and will also address broader issues regarding the use and acceptability of genetic modification in the context of the Government's overriding responsibilities' of protection of health and environment as well promotion of international competitiveness (**Cabinet Office, 1999: Foreword; see Appendix 5 [2]**). Thus, policy elites articulated a vision of participatory governance constructed around the direct participation of *individuals* in decision-making and consultation with groups. These individual would act as a bridge between the public and ministers; anticipate likely future controversies over new innovations (Cabinet Office, 1999: 42) so serve a 'strategic' - proactive 'early warning system' – mechanisms to alert policy elites to where futures sites of controversy may emerge, especially on ethical issues. Finally, these advisory functions were to sit alongside but not dilute technocratic processes. In the case of the FSA, this meant the strategic component was co-ordinated by the executive to whom the technocratic committees reported.

Thus a discourse of participatory governance emerged out of New Labour's agenda, problematization and more clearly articulated their 'managerialist' agenda for biotechnology than had hitherto been the case. Their concern with balancing competing interests was most clearly articulated in claims about the objectives of the proposed new regulatory system as sound, 'proper' advice (expertise) *and* simple, transparent regulation (accessible to the public); flexible to development (progress) *and* public concerns (responsiveness); respectful of users *and* the public (credible, trusted and effective). The technical components were safeguarded by keeping the technocratic processes intact and

by avoiding any dilution by locating other considerations – such as ethics – in different committees. The public components were to be delivered through strengthening the strategic, advisory components and can be seen as an attempt to refute newspaper allegations that policy elites were unresponsive to ‘legitimate’ public concerns and undemocratic in imposing an unwanted technology on the public (see Chapter 8). Thus, the entrepreneurial component of the policy elite repertoire articulated a balance between expertise and accessibility, and progress and responsiveness, as well as credible, trusted and effective safety processes and controls.

Participatory governance and the management of scientific and public uncertainties

The participatory components were more clearly articulated within the repertoire of managerialism in the review texts and draft bill. These were primarily concerned with how to manage scientific and public uncertainties about biotechnology given the dominant discourse of ‘public concerns’. Policy elites claimed that these concerns were ‘understandable’ given that biotechnology signified ‘unknown’ and previously unimaginable developments, and that the primary public concern was that ‘all advances are monitored and controlled’ (**Cabinet Office, 1999: Foreword; see Appendix 5 [4]**) and those alternative scientific voices be allowed expression without censure and be considered by expert committees (Donaldson & May, 1999: 2). This more conciliatory tone and acknowledgment of the legitimacy of public concerns did not extend to an acknowledgement of newspaper claims – and public perceptions – that the technology was ‘out of control’, thus posing risks to health and environment (see Chapter 8). However, the government’s scientific and medical advisors did recommend the setting up of a system of surveillance and monitoring so that ‘early signs’ of any problems could be detected (Donaldson & May, 1999: 4).

The health review document also revived an earlier recommendation by the chief scientific advisor (see Chapter 5) that technocratic processes include those that ‘challenge established wisdom’ (Donaldson & May, 1999: 4) so include a ‘wide’ range of best expertise. It thereby addressed the accusation of the campaigning newspapers that counter-evidence of scientists was suppressed because it was inconvenient for the elite agenda. These recommendations, having already claimed there was ‘no evidence’ of harm, were not giving credence to the Pusztai findings but were arguing that alternative voices needed to be heard and that conflicting scientific claims be seen to be heard. Thus, the policy elite argument was not about managing scientific uncertainty (existing

systems and processes were claimed to be adequate) but about managing public and media perceptions of policy elites' handling of it.

The new discourse of (functional) participatory governance was seen as the mechanism for delivering this, that is, it was argued that increased public participation, more inclusive consideration of counter-science and greater policy transparency were critical for building public confidence in the system and delivering the elite agenda. For instance, policy elites claimed that the new advisory structures would explore the early implications of 'first of a kind' applications by commissioning new research on possible adverse effects, taking soundings of public opinion and stimulating public discussion. Participants were to include the public, consumers, environmentalists, ethicists, doctors and others – that is, those who had been important alternative sources in newspapers counter-argumentation. Furthermore, it was claimed that public discussion could be facilitated by greater transparency in policy deliberations and that the information on individual applications, the advice of expert committees on these and the advice of the strategic commissions to ministers should be made public. This inclusion of policy advice was a critical exception in the government's development of freedom of information legislation. Biotechnology was to be the only area of policymaking where policy advice was to be made public (see Campaign for Freedom of Information, 2000 and Krebs, 2000). Furthermore, the meetings of the advisory committees and executive boards were to be open to the media and public (Krebs, 2000).

Summary

These discourses and claims signified a reversal of previous approaches to the public reaction to novel technology, which had drawn on silent discourses of scientific or ethical uncertainties and had sought to shut down debate with secretive processes or – in the case of transgenic applications – to restrict the parameters of the debate and so control it. The expansion of contestation by the campaigning newspapers and the mounting opposition to GM food and crops thus signified the failure of this argumentative strategy. The review documents signified recognition by policy elites both of the wide range of issues to which the new technologies were giving rise and that imposing secrecy could be counter-productive when it fuelled suspicion of conflicts of interests. Crucially, this discourse of participatory governance was not justified in the usual language of democratic legitimacy but within a functionalist discourse of restoring public confidence and within the repertoire of entrepreneurial managerialism.

Negotiation: the unresolved issue of uncertain, contested science

The extent of the political fall-out from the escalation in newspaper hostility, public uncertainty and societal resistance to GM food and crops became more apparent in the second half of 1999. Policy had reached a stalemate in which British and EU policy elites continued to claim to be committed to further development of the technology but also felt unable to grant any new licenses for fear of provoking further opposition. The first part of this section is concerned primarily with the behavioural actions that highlight the nature of this stalemate and the measures taken to address it. It draws on a compilation of a wide range of policy documents. It is not possible to perform a detailed discourse analysis of all of them so the following discussion draws on a summary of the behavioural actions and arguments. This section argues that by early 2000 policy elites had moved towards a compromise, the first stages of which had been the discursive shifts articulated in the review texts (see above) and the emergence of a new discourse of participatory governance. The actions discussed in this section highlight how these were explorations in what might be meant practically with regard to resolving contestation over GM food and crops while not abandoning the policy elite agenda of science-enhanced competitiveness. A voluntary moratorium had emerged and attempts at new forms of 'dialogue' and new forms of relating to the media were articulated. However, the remaining point of conflict between campaigning newspapers and policy elites was the issue of uncertain, contested science and what editors perceived was insufficient elite responsiveness to public concerns. It was not until this emerged that media–elite contestation subsided.

The argumentative context: towards a moratorium and 'stakeholder dialogue'

By 1999 sales of GM food had collapsed and food retailers increasingly joined the maximalist 'camp' with highly publicized announcements about their adoption of GM-free policies for own brand foods (see Appendix 3). Policy elites and biotechnology industry figures sought a number of behavioural actions to neutralize contestation. At EU level a 'virtual moratorium' had emerged when parliamentarians claimed that existing regulations on GM crops were inadequate for dealing with the environmental impact of GM crops on biodiversity and had put them under review (see Genewatch, 2000). An informal alliance of some member states had argued for a statutory moratorium pending new research and blocked on new applications within the EU so no new licenses for GM food or crops were granted for 18 months (Genewatch, 2000). British policy elites disagreed with those member states, claiming that a government-initiated moratorium would be illegal under international trade law (see Rooker, 1999), but ministers conceded that there were a number of applications that had been stalled because of what they claimed were the

likelihood of an adverse public reaction to the particularities of the application (Rooker, 1999). They also negotiated with the biotechnology industry for a voluntary moratorium until the 'evidence' from farm-scale trials had been completed in 2003 (Meacher, 1999).

NGOs counter-claimed that a voluntary moratorium was inadequate because the biotechnology industry was not trusted to 'police' the trials properly so it needed to be a state-controlled or statutory moratorium (Genewatch, 2000). However, the newspapers ignored the technicalities and claimed that the government had 'effectively met one of the campaign's two main objectives' with a de facto moratorium even if, having effectively ruled one out, they were reluctant to call it such (Lean, 1999a; see also Chapter 8).

Biotechnology industry moves towards truce talks

This shift towards a voluntary moratorium needs to be seen within the context of another unusual development in 1999. Executives in the US-based agribusiness conglomerate, Monsanto, had approached environmental and consumer NGOs in Britain with a view to 'opening a dialogue' and finding some form of compromise on the way forward (Lean, 1999b). Monsanto had used a third party mediator, the Environment Council, a charity specializing in 'stakeholder dialogues' or mediation, to request 'peace talks' with environmental and consumer groups (Lean, 1999b). In a separate development, the Cabinet Office sought to do likewise. However, the premise on which the mediator operated was unfamiliar to policy elites in that it was about consensus building rather than imposition of a solution. The Environment Council claimed that 'the new dialogue is designed to find common ground' for a different approach to decision-making 'in which opposing parties define the problem, reach agreement, and then implement the solution' rather than the 'Government making a decision, announcing it, and then having to defend it' (Lean, 1999c). What is unclear is whether these meetings pre- or post-dated the announcement of the reviews (see above); what is clear is that policy elites had recognized that on GM food and crops a stalemate between maximalists and minimalists had been reached and that a different way of resolving policy contestation was needed. These dialogues were therefore an early form of participatory governance that was more formally constituted with the launch of the FSA in 2000.

The new FSA

The 'core values' of the new regulatory and advisory FSA were constructed around claims about 'putting the consumer first' in terms of safety, interests and so on (see Krebs, 2000).

The agency was intended to de-politicize food safety issues by being operationally independent of Whitehall, an independence that was constructed around claims of the removal of ministerial interference in decision-making (see Chapter 5). The structure of the agency followed the principles in the review (see above) and so comprised an overarching executive directly responsible for strategic overviews, for public consultation and for enhanced participation. Technocratic committees operated underneath these and were answerable to the executive. Not only were documents to be made public but – in an exception to the new freedom of information law – the advice to ministers was to be published (Krebs, 2000).

The new management at the FSA also claimed that they would take a very different approach to media relationships once the new agency was operational after 2000. Whereas Conservative policy elites had sought to suppress media debate of novel foods their New Labour counterparts had sought to control the terms of the debate, the new management at FSA drew on interactionist – independent yet interdependent – discourses to construct a proposed new relationship with the media. For instance, they claimed that on the one hand ‘the media have their own agenda’, which might not always be the same as the FSA’s, but on the other hand the media ‘are our principle channel of communication’ in that the agency ‘cannot stand up in public and address the nation whereas through the media we can’ (Krebs, 2000: 29). They also inferred that the elite–media relationship on food policy needed to be rebuilt after the recent series of food scares that included GM. The new chief executive Sir John Krebs proposed to do this by giving the media access to Board and review meetings so that they could ‘listen to us actually in action’ by ‘making ourselves accessible, providing information at the right time and right forms’ (Krebs, 2000). This less confrontational, policy-transparent approach was juxtaposed against the problematization of previous approaches by the FSA’s predecessors as ‘less balanced coverage’ that had resulted from policy elites failing to ‘provide a good information service to journalists’ and failing to construct themselves in the minds of journalists ‘as reputable source of unbiased information’ (Podger, 2000: 30). The inference was that if the FSA provided this, newspapers would have no need to seek it elsewhere in parallel systems of argumentation.

Thus by early 2000 the entrenched positions of the policy elites – and other minimalists – had started to fracture under the pressure exerted by newspaper campaigns, the widening of societal resistance, and the public’s acute anxiety and opposition to the new technology being ‘foisted’ on it. Policy elites had claimed the government-sponsored moratoria would be open to legal challenge but sought to unleash market forces, which enabled retailers to

adopt GM-free policies and the biotechnology companies to agree to a voluntary moratorium. Thus, their 'solutions' were entirely compatible with a neoliberal paradigm of market forces. Newspaper criticism of political interference in technocratic processes, accusations of elite unresponsiveness to public concerns and the lack of public debate on the ethical issues had been addressed with the emergence of a new policy elite discourse of participatory governance and an expanded discourse of policy transparency in the review texts. This translated first into new 'stakeholder dialogues' initiated by the industry and policy elites with key maximalist organizations and experimentation in new ways for policy elites to consult. It also translated into new institutional arrangements, policies and processes with the new FSA, which also sought to rebuild policy elite-newspaper relationship through mechanisms for policy transparency.

However, the changes in 'managerialism' that came with the new discourse of participatory governance did not obliterate but sought to reinforce the policy elite agenda of science-enhanced competitiveness. The other issue that remained unresolved was the position of policy elites on uncertain, contested science. Blair's *Daily Telegraph* article had dismissed claims of uncertain science by reasserting that there was 'no evidence' of harm and the review documents had articulated mixed claims. On the one hand, they acknowledged that 'alternative' views that challenged conventional wisdom needed to be taken into account by policy elites; on the other, the health review concluded that there was 'no evidence' that GM food was 'inherently harmful'. This infuriated the newspapers, which claimed that policy elites were still ignoring or suppressing uncertain science. Both of these remaining points of newspaper–elite conflict were addressed in a second article by Blair published on the eve of an international conference organized by the new FSA in one of the campaigning newspapers, the *Independent on Sunday*.

Blair intervenes again: an admission of uncertain, contested science

In this article Blair reiterated most of his earlier discourses, including the policy elite agenda of science-enhanced international competitiveness articulated in his *Daily Telegraph* article a year earlier. However, there were shifts. The first was to subordinate the 'internationally competitive' discourse to the over-arching policy elite 'concern' with health and environment, emphasising that 'protection' of these 'is, and will remain, the Government's over-riding priority'. The second more significant shift, at least for the newspapers, regarded the policy elite discourse on science. The one previous occasion when policy elites had used a discourse of uncertain science was in the 1998 White Paper

(primarily about BSE/CJD). In this it was constructed around claims about knowledge limitations, the implications of these for policy elite predictions on health, the unrealistic expectations of the public about absolute certainty and the responsibility of governments to exercise 'political judgement' in these instances.

'The jury is out': an acknowledgement of uncertainty

In relation to GM food and crops, policy elites had resisted newspaper pressure to acknowledge the wider debates about uncertain, contested science, asserting instead that GM food and crops were safe because there was 'no evidence' of harm. This second article by Blair signifies the first time that ministers – as opposed to the Chief Scientific Advisor - not only acknowledged but also problematized the science of GM food and crops as uncertain and contested. Blair argued that this was the reason why the government was proceeding cautiously and why they were facilitating a more inclusive approach to alternative voices including those of scientists such as Pusztai's and the environmental and consumer groups.

Blair reiterated his earlier economic discourse about Britain's 'world leading' biotechnology industry and its accompanying jobs and prosperity but added that these 'will never be more important' than health and environmental considerations (**Blair, 2000; see Appendix 5 [10]**). He thus hence created a hierarchy of policy elite priorities in which 'protection' formed the dominant discourse. The more important shift, however, was from his earlier claim of 'no evidence' of harm to a new claim that the 'jury is still out' on the implications for GM food and crops and that there was 'potential for harm, both in terms of human safety and in the diversity of our environment' (**Blair, 2000; see Appendix 5 [2]**). This uncertainty in the sense of unknowing was seen as 'cause for legitimate public concern', a discourse which replaced his earlier claims about irrational, fictionalized scaremongering by the campaigning media. The policy elite response to this, constructed in a discourse of managerialism, was to 'continue to act with caution on the basis of the best available science' while acknowledging that the 'best' may well be inadequate (**Blair, 2000; see Appendix 2 [10]**).

Conclusion

The first key finding in this chapter is that argumentation over GM food emerged from entrenched policy elite positions within minimalist assumptions. Policy elite discourses on GM food broadly followed patterns developed through earlier food scares. This was partly a reflection of post-war neoliberal hegemonies that informed policy elite agendas, a

tendency to problematize food scares in terms of institutional inadequacies and a preference for institutional 'solutions' or behavioural actions. It was also partly the outcome of superimposing a new repertoire (entrepreneurial managerialism) on top of an old one (technocratic rationality, objective science and (administrative) safety). This meant that policy elites were able to draw on old and new patterns of counter-argument and counter-claim to refute the arguments of the newspapers. It also meant that escalating newspaper problematization was able to expose the new argumentative fault-lines in policy elite repertoires (market transparency, consumer agency and disempowerment) and revive old ones that had emerged with BSE/CJD (scientific and public uncertainties). However, there was a notable silence from policy elites on newspaper attempts to draw parallels between GM food and BSE/CJD so construct both as emblematic of policy elite mismanagement of food scares. Sites of contestation with newspapers emerged along these fault-lines.

Crucially, the continuities in policy elite argumentation meant that newspapers were able to draw parallels with earlier food scares (such as BSE/CJD) to rationalize a self-conscious and deliberate departure from usual media norms of 'impartial reporting' by claiming a higher public interest imperative (see Chapter 8). The challenge for the newspapers was that these sites of contestation – consumer empowerment and scientific and public uncertainties – took place over relatively abstract notions. The significance of the campaigns was that they concretized the abstract into clear and 'measurable' objectives: a moratorium on commercial cultivation of GM crops and comprehensive labelling (maximum consumer choice on whether or not to consume GM food, see Chapter 8). They also ensured the mass dissemination of these maximalist arguments across the spectrum of mainstream political journalism from the left-inclined *Mirror* to the right-inclined *Daily Mail*.

Policy elites' 'rational' defence of their repertoire, rejection of the campaign calls and refusal to acknowledge counter-claims of uncertain, contested science reiterated earlier elite discourses that equated *no 'credible evidence of harm'* with the presumption of safety and certainty derived from '*robust technocratic assessments*' (Blair, 1999, my italics). Their response to critical discourses about the lack of consumer choice was to counter-claim that – unlike the Conservatives who had resisted calls for labelling – New Labour had introduced mandatory labelling, empowered retailers by providing them with a list of alternative sources and offered the pragmatic discourse that what mattered was 'deliverable' choice.

By the end of February 1999 (Blair's *Daily Telegraph* article), these were entrenched policy elite arguments. However, they need to be understood within a wider context. Neither newspapers nor policy elites were an isolated set of actors; both drew on existing discourses and claims circulating in the argumentative context to construct their arguments thereby positioning themselves in a highly polarized minimalist-maximalist debate and in turn contributing to it. Central to this dialectic was the emergence of apparently irreconcilable differences over the acceptability or otherwise of the risks of 'progress', the nature of (scientific) knowledge and evidence, and the principles and values on which to proceed in conditions of uncertainty. In following these divisions, escalating policy elite-newspaper contestation took on the hallmarks of a typical new risk-type 'intractable controversy'.

The second finding, and a significant contribution, is the account of how what appeared to be an intractable controversy between newspapers and policy elites shifted to negotiation, then subsided into an uneasy truce. This did not emerge from policy elite concessions to newspaper demands but from ministerial actions intended to unfetter market forces in ways that were consistent with their entrepreneurial managerialism. Following the launch of the newspaper campaigns, a string of food retailers utilized the list of alternative suppliers of non-GM food and withdrew genetically modified ingredients from their own-name brands, creating a highly publicized de facto retailer boycott. Policy elites also negotiated a voluntary moratorium on the commercial cultivation of GM crops (see also Chapter 8). They could claim that they had facilitated these – that market forces had delivered what consumers wanted – without being seen to have conceded to newspaper concerns.

However, the remaining point of contestation – policy elite acknowledgement of uncertain, contested science – was not negotiated until February 2000, when Blair's second newspaper article claimed that while the 'jury was out' on the benefits or risks of GM food and crops there was 'legitimate' reason for public concern given uncertain evidence. There had been earlier hints or nudges in this direction (see Cabinet Office, 1999; May, 1997; White Paper, 1998) but this was the most explicit and direct concession yet by the head of government. For the newspapers, it signified a policy 'u-turn' (see Chapter 8). While GM food remained an intractable controversy for some of the other maximalists (for example, those environmentalists who had moral objections to the processes of genetic modification), it was no longer the case for elite-policy engagements, although the *Daily Mail* continued a downgraded campaign on GM food and the *Independent on Sunday* one on GM crops.

The third major finding is that the media, including the campaigning newspapers, played a critical role in the expansion of societal conflict and the ascendancy of maximalist claims in the argumentative context. The first sign of policy elite concern had been the centralizing and de-personalizing of communication of biotechnology in the Cabinet Office during 1998 (see Chapter 5). The analysis in this chapter highlights how an extraordinary counter-attack on the newspapers by the prime minister – and its timing immediately after the launch of the fourth campaign – signified the importance of the agenda to the Blair ‘project’, the perceived role of the newspapers in the escalation of societal resistance and the extent to which elites felt threatened by it. In it, Blair accused the ‘parts of the media’ of ‘scaremongering’ and ‘campaigns of distortion’, implying that this was a causal factor within the problematization of escalating public anxiety.

Developments after Blair’s first intervention highlight the continued concern that policy elites had with newspaper coverage. The review documents articulated media coverage as one of the signifiers of ‘high levels of concern’ about biotechnology. No ‘blaming’ discourse linked escalating concern to media coverage but the documents do infer that part of the shift to participatory governance and increased policy transparency was in response to some of the criticisms of newspapers and others about the undemocratic imposition of novel foods contrary to public preferences and about secretive advisory processes that may cover conflicts of interest. It is also reasonable to infer that the new ‘strategic advisory’ bodies – including the FSA, set up in 2000 – was an attempt to set up an ‘early warning system’ for possible points of public sensitivity and so to manage them. Furthermore the management of the FSA openly acknowledged that media-elite relationships had been problematic under the old system; that the new agency would need to construct a different, less antagonistic more facilitative approach to dealing with the media; and that a more transparent, accessible and facilitative approach would have to be taken to the media. This signified more than an attempt at spin. It was tantamount to an elite acknowledgement of a symbiotic relationship in which the FSA needed the media to disseminate critical health/safety messages and that the media needed information seen to be unbiased. It was also a tacit admission of the potential damage of confrontational approach to the media as adopted, for instance, by Blair.

The wider media, however, paid relatively little attention to the review reports other than to the claim that there was no evidence of ‘inherent harm’ from consuming GM food, which the campaigning newspapers interpreted as a continuing policy elite refusal to acknowledge uncertain, contested science. They continued their campaigns. Then, in

February 2000, Blair sought the final component in an uneasy truce with the campaigning newspapers with a second article in which he conceded the 'jury is still out' on GM food and crops. The newspapers repeated this phrase, conceding the uncertain and contested nature of the science, verbatim as 'evidence' of a government 'u-turn'. The statement was effectively an apology by Blair. It also signified a crucial shift in policy elite discourse and open, explicit acknowledgement that claims of certainty were no longer believable or credible with newspapers or the public.

The next chapter explores the other side of the argument – that of newspapers both in terms of the campaigns that served as a trigger for Blair's openly confrontational article. It examines their responses to the retailer boycott and voluntary moratorium, and the subsiding of contestation that came with the second article by the prime minister.

Chapter 8: Newspaper Campaigns (1999-2000)

Introduction

Chapters 5 and 6 argued that as elite–newspaper engagement over GM food increased, their problematizations of the issues diverged between a threat to the elite agenda of innovation-driven growth/competition (policy elites) and a potential threat posed by this agenda to public health and the environment (newspapers). While policy elites problematized escalating public uncertainty in claims about institutional inadequacies, newspapers problematized it in claims about the ‘undue haste’ of elites to expand the technology despite conditions of escalating public and scientific uncertainties and despite the costly experience of previous scares. While policy elites claimed that the solutions lay in institutional reforms, newspapers counter-claimed these lay in slowing the pace of development to allow for new research. While policy elites claimed that they had introduced mandatory labelling and market transparency – and hence consumer choice – newspapers counter-claimed that the regulations were ineffective, excluding ‘vast’ quantities of GM ingredients. While policy elites claimed that there was no evidence of harm so GM food and crops could be assumed to be safe, newspapers counter-claimed that there was no evidence they were safe and reason to believe they may not be.

This set of newspaper counter-claims constituted an explicit challenge to policy elite agenda, discourses on certainty and repertoires. This chapter and the previous one found that contestation emerged out of the entrenchment of these divergences into non-negotiable polarities and demands. It was only once government-facilitated or negotiated ‘market’ alternatives on key objectives – consumer agency and a moratorium – had evolved that some movement towards an uneasy truce was possible. However as Chapters 2 and 3 argued, it was far from inevitable that newspapers would engage with risk issues and that when they did it was far from inevitable that this would take the form of newspaper-elite contestation. This chapter first explores how newspaper engagement evolved and how their divergent problematizations increasingly challenged elite repertoires in ways that set the parameters for contestation. Crucial to how this contestation evolved was the launch of campaigns that concretized otherwise abstract arguments and counter-arguments about scientific uncertainties into clear objectives for

policy change in the form of comprehensive consumer choice and a moratorium on the commercial cultivation of GM food crops. Newspaper contestation did not subside into an uneasy truce until they could claim these objectives had been realized, Blair had acknowledged uncertain, contested science and effectively apologized.

Chapter 5 highlighted how the shift in the locus of decision-making to the Cabinet Office in response to critical newspaper engagement with and societal resistance to biotechnology (see Chapter 6) foreshadowed the direct intervention of the prime minister into the debate. Chapter 7 developed this further, arguing that the catalyst for Blair's counter-attack on newspaper 'scaremongering' was the launch of the newspaper campaigns in February 1999. Thus from mid-1998 the newspapers increasingly set the agenda on GM food, and with the launch of their campaigns they set the dominant content and tone of the debate so much so that by mid-1999 the maximalist arguments, which they reiterated and disseminated, were ascendant. The responses of policy elites thereafter were attempts to wrest back that control, to neutralize public opposition to the novel technology and to restore public confidence in food safety controls in ways that were compatible with the parameters of their existing repertoire and neoliberal agenda. This chapter specifically analyses the processes of contestation in terms of how the newspapers campaigned, how they legitimized this departure from their normal practices and how they responded to these counter-moves by policy elites. It argues that the campaigns were deliberate, self-labelled and hence self-conscious interventions intended to mobilize reader (public) resistance through an informative – that is 'revelatory' and 'educative' – agenda and influence policy change through an 'advocacy' agenda. The latter agenda was extracted from the argumentative context and concretized in two clearly articulated objectives: comprehensive labelling and a moratorium on commercial cultivation of GM food crops. This signified a self-conscious shift in newspapers' view of their own roles from the liberal democratic norms of 'impartial reporting' to the participatory principles of legitimate attempts to influence policy. Newspapers legitimized this shift by conjuring up the spectre of the potential for a repeat of the adverse consequences of past food scares, policy elite mismanagement of risks and a new emphasis on individual agency as the only 'trustworthy' protection from this mismanagement. Thus, newspapers justified this departure from usual practice within an overarching public interest discourse.

Policy elites counter-argued that the comprehensive labelling was unworkable and a moratorium would be illegal. Thus the escalation in contestation between the two was concretized around these two objectives but, as this chapter argues, these signified much deeper conflicts over the nature of scientific knowledge about new risks, how to proceed

in conditions of uncertainty and the role of consumer agency in conditions of public mistrust of elites. This chapter argues that this newspaper contestation with policy elites did not subside into an uneasy truce until alternative 'market' mechanisms – a de facto retailer boycott and an industry-based voluntary moratorium – had emerged and until Blair had conceded uncertain, contested science.

Argumentative context

This section explores the processes by which newspaper contestation escalated in late 1998 and early 1999 as the four titles entrenched their positions; bolstered maximalist arguments with 'evidence' of public opposition and elite conflicts of interest; the justified these arguments with reference to English Nature's call for a moratorium. The ability of the newspapers to set the agenda and the terms of the debate, as well as the struggles of policy elites to wrest control of this away from them, was largely facilitated by wider developments in the argumentative context and in particular the ascendancy of the arguments of the maximalists.

This ascendancy of the maximalist discourses of scientific uncertainty, public resistance, consumer disempowerment and elite unresponsiveness was given added impetus by the newspaper campaigns. Maximalists concretized these abstract discourses in demands for specific policy change articulated within seemingly clear objectives, that is, 'comprehensive' – or maximum – labelling and a five-year moratorium, which newspapers mass disseminated through campaigns. This ascendancy was also manifest in the expansion of the maximalist 'camp' to include new actors such as newspapers (see Chapter 6), public service actors such as schools, and – after the launch of the media campaigns - increasing numbers of food retailers and wholesalers. The newspapers, this thesis argues, played a critical role in the ascendancy and expansion of maximalist arguments first with their increased engagement after June 1998 then most significantly with the launch of their campaigns in February 1999.

Over the next three months, newspaper–elite contestation peaked with direct attacks on each other and this did not subside until policy elites had 'enabled' market forces to deliver the objectives that they were unable or unwilling to deliver directly themselves. That is, the retailer boycott of GM ingredients facilitated by the government-compiled source list and the voluntary moratorium announced by the biotechnology industry and negotiated by policy elites.

The process of escalation: entrenching newspaper positions

The broad maximalist–minimalist patterns of argumentation developed between 1996 and the end of 1998 became further entrenched and polarized during the first half of 1999. Chapter 5 argued that by the end of 1998 New Labour elites had clearly positioned themselves in the minimalist ‘camp’ with its adoption of a limited definition of genetic modification that restricted risk assessment to the end product, advocacy of minimal labelling and justification of this within discourses of what was ‘deliverable’. Chapter 6 argued that conversely, a parallel system of counter-argumentation had emerged in which initial ad hoc, fragmented and ambivalent newspaper engagement had been replaced by a coherent, collective articulation of the maximalist arguments. These drew on an expanded definition of genetic modification, concerns about unknown effects, and the advocacy of a moratorium and maximum or ‘comprehensive’ labelling. The latter were justified in discourses of uncertainty (uncertain, contested science) and individual consumerism (consumer rights and empowerment). Between mid-1998 and early 1999 all four newspapers entrenched their positions within the maximalist camp.

Bolstering maximalist arguments with ‘evidence’ and legitimacy

This chapter found that newspapers bolstered maximalists’ moral discourses with ‘evidence’ of public opposition to having GM ‘foisted’ on them as manifest in ‘opinion polls’ (see Genewatch, 1999; *Daily Mirror*, 1999c). Furthermore, maximalists’ ‘apocalyptic’ claims about potentially huge adverse consequences provided the newspapers with a powerful public interest justification for departing from their usual norms of ‘impartial reporting’ to launch campaigns with a stated intention to mobilize readers (revelatory and educative agenda) and influence policy change (advocacy agenda). The relationship between newspaper campaigns and maximalist arguments was dialectical. On the one hand, editors drew on the latter to construct their claims. On the other hand, the campaigns provided a platform for the mass dissemination of these arguments, the intensification of societal resistance to GM food, the sustaining highly publicized pressure on policy elites for change and for the inclusion of new ‘recruits’ as maximalists.

During late 1998 and early 1999, new claims emerged. Maximalist discourses increasingly focused less on the technology and more on the actors behind it, that is, the biotechnology companies ‘driving’ its expansion and the policy elites facilitating this (see Friends of the Earth, 1999; Greenpeace, 1998, 1999; Soil Association, 1999). Thus, the

potential for a public health and environmental 'catastrophe' was constructed not as a potential accident but as a potentially avoidable disaster (Parr, 1999) for which the biotechnology industry and policy elites would be culpable. These avoidable and culpability discourses informed further critical questioning from maximalists as to why policy elites were, they claimed, not acting in the public interest and were unresponsive to the democratic wishes of the public (see Genewatch, 2000; Greenpeace, 1999).

The environmental NGOs and the newspapers in particular sought 'evidence' of conflicts of interest as reasons why policy elites had rejected demands for comprehensive labelling and a moratorium. The outcome of these 'investigations' were a series of damaging claims about personal and party financial benefits from close relations with biotechnology companies (see *Daily Mail*, 1999b); the partiality of members of expert committees whose own research was funded by the industry (see Friends of the Earth, 1999); and favourable access afforded to biotechnology executives by Whitehall mandarins (see *Daily Mail*, 1999e). The 'investigations' also sought to provide counter-evidence to policy elite claims that they were being responsive to public preferences through mandatory labelling. NGOs commissioned their own research that found, they claimed, vast quantities of unlabelled food, which had been 'contaminated' by GM ingredients (see Genewatch, 1999, 2000). They accused policy elites of duplicity in claiming to introduce mandatory labelling but drawing up a minimalist regime in which only a limited range of products were labelled (see Genewatch, 2000; Greenpeace, 1999; Parr, 1999).

However, the most deeply contested issue in the argumentative context centred on the status of scientific knowledge, evidence and methodology as well as on claims about elite partiality, ignorance and the suppression of evidence that was 'inconvenient' for the policy elite agenda. Policy elites and 'establishment science' continued to claim that there was no 'credible' scientific evidence of harm (see Chapters 5 and 7), so while not mentioning Pusztai by name they implicitly dismissed his findings as non-credible. However, a growing list of 'independent' scientists publically denounced Pusztai's treatment and claimed that policy elites and 'establishment science' were suppressing alternative, independent scientific voices (see *Daily Mail* 1999e; *Express*, 1999b; *Independent on Sunday*, 1999a).⁵⁸ NGOs and other maximalists drew parallels with BSE/CJD (see Greenpeace, 1999; Parr 1999), thus raising the spectre of a repeat of the adverse consequences of pushing ahead with a policy agenda in conditions of uncertain science

⁵⁸ The two broad lines of argument can be discerned from the news articles. There was some challenging of the findings of the Royal Society, counter-claiming that Pusztai's methodology and findings were valid. There was also a very strong statement defending freedom of expression, inferring conflicts of interest at the Royal Society and criticizing political interference in science.

and unknown effects. It was within this context that Friends of the Earth claimed there was 'evidence' of partiality and hence a compromising of elite technocratic processes.

English Nature and the launch of newspaper campaigns

The critical development, however, in the argumentative context was the recommendation by the English Nature of a five-year moratorium on the commercial cultivation of certain crops to allow time, it claimed, to collect government-commissioned 'evidence' from farm-scale trials on the effects of GM on biodiversity (see Chapter 7). Policy elites initially denied that English Nature had called for a moratorium, then publically retracted this and then rejected the call by counter-claiming that there was no 'evidence' of harm to support a moratorium (see Chapter 7; *Express*, 1999a; Young, 1999). Maximalists claimed this provided 'evidence' of the suppression of contrary scientific views about uncertainties that ran counter to the policy elite agenda (see Consumer Association, 1999; Genewatch, 2000; Greenpeace, 1999). It was within this context of escalating scientific uncertainty, mounting public resistance and 'evidence' of a lack of market transparency and consequent consumer disempowerment, that two maximalist claims – comprehensive labelling and a moratorium – hardened into a prominent discourse on how to proceed with GM technology in conditions of uncertainty. These resonated deeply with newspapers, so much so that they formed the objectives of their advocacy campaigns. The newspapers, by making these the centrepiece of their mass media campaigns, ensured the ascendancy and dominance of these maximalist arguments in the argumentative context.

By the end of February, escalating contestation in the argumentative context had all the hallmarks of a new risk-type 'intractable controversy' (see Chapter 3) in which the usual forms of negotiation become unworkable because both parties to the dispute disagreed on two fundamental issues. First, they disagreed over methodology, the status of evidence and the credibility of knowledge and second on the principle and procedures on how to proceed. Neither of these points of disagreement, as already argued, originated from newspapers or policy elites but within the respective maximalist and minimalist camps from which they drew claims to construct their respective arguments. The newspapers' contribution, though, was to raise awareness of the debate, draw attention to some of the key points of conflict, build public support for maximalist arguments and hence escalate societal contestation over GM food. The perceived centrality of campaigning newspapers to this was manifest in Blair's counter-attack on 'parts of the media' that had waged 'a campaign of disinformation' (see Chapter 7).

Consolidation of resistance in behavioural actions

The ascendancy of the maximalist arguments after the launch of the campaigns was manifest in the dramatic and high profile expansion of the number of societal actors taking precautionary measures. For instance, between March and June 1999 more organizations – including unions, schools, local authorities – announced bans on GM food; but the most critical intervention came from food retailers and wholesalers (see Appendix 3). Originally, the position of food retailers on GM food had been as fragmentary and contradictory as that of the newspapers. The support of some had been critical to the launch of the first GM food product in 1996 and the management of consumer concerns about this (see Chapter 5); others had opposed GM food from the outset (see Iceland entries in Appendix 3). The pattern of their behavioural actions had started to change from mid-1998 as newspaper engagement with GM food intensified, a shift that was manifest in the announcement that they had formed a consortium to find alternative sources to GM soya and maize. However, after the launch of newspaper campaigns in February 1999, there was a steady stream of claims by food retailers, wholesalers and restaurant chains that they had adopted GM-free policies (see Appendix 3). Thus, a de facto retailer boycott of GM food had emerged after the launch of the newspaper campaigns much as a consumer boycott had emerged after newspaper coverage of the Prince Charles and Pusztai interventions described in Chapter 6).

Food retailers argued that this shift in company policy on GM food was based on a business rationale informed by what they claimed was evidence of a direct link between newspaper coverage, the consumer boycott and the financial unfeasibility of retaining products that did not sell (see Austin & Lo, 1999). Policy elites had been working with the food industry to find alternative sources so could claim some role in the facilitation of consumer choice and in meeting consumer demand for comprehensive labelling so enabled this evolution of 'market' forces (see Chapter 7). The retailer boycott was limited to own-name brands but news stories claimed this was 'evidence' of retailer responsiveness to consumer concerns and a willingness to deliver what policy elites had failed or refused to deliver – greater consumer choice – and 'evidence' that their campaigns had been partly successful (Blythman, 1999; *Express*, 1998; Poulter, 1999c, 1999d).

Maximalist campaign objectives

The maximalists could claim that the de facto retailer boycott had delivered the first of the newspaper and Five-Year Freeze campaign objectives, but there were still two

outstanding points of contestation: calls for a moratorium and issues of scientific uncertainty. Maximalists linked the two, claiming that a moratorium was a pragmatic and prudent way of managing risk in conditions of scientific uncertainty (see Genewatch, 2000; Young 1999). Chapter 7 highlighted how during 1999 a policy stalemate had emerged primarily at the EU level over the licensing of new GM products because of a split between MEPs and officials over what some parliamentarians claimed were inadequate environmental protections for dealing with scientific uncertainty (see Chapter 6 footnotes for more on this split). The consequence of this stalemate, as well as the intensification of public resistance and the ascendancy of the maximalist argument, was that for about three years EU and British policy elites granted no new licenses for GM food or crops (see Genewatch, 1999, 2000, 2001). British policy elites continued to argue that a state-sponsored moratorium would be illegal under international law unless there was incontrovertible evidence of harm (see Chapter 7).

While NGOs debated the significance of the EU stalemate (see Genewatch, 2000) the four newspapers examined here made no mention of it. Instead, they focused on the position taken by the British policy elites and claimed that the rejection of a moratorium was further evidence of their partiality towards the biotechnology industry and their privileging of its interests at the expense of those of the consumer, contrary to the preferences of the 'vast majority' of the British public. As with the labelling dispute and the retailer boycott, policy elites sought a 'market' solution to the impasse and negotiated a 'voluntary moratorium' in which the industry agreed not to proceed with commercial cultivation until the evidence of the farm-scale trials had been collected (see Meacher & Rooker, 1999c). The newspapers heralded this as another campaign success (see *Daily Mail*, 1999h); while the NGOs remained deeply suspicious of the industry and unconvinced that a voluntary moratorium was workable (see Genewatch, 2000).

The third outstanding point of minimalist–maximalist and policy elite–newspaper contestation was the issue of uncertain, contested science. Policy elites continued to assert that there was no evidence of harm from GM food and crops (see Blair's counter-attack on 'parts of the media' in chapter 7), despite the escalation in counter-claims about uncertain, contested science as well as unknown effects and unpredictable consequences from a range of 'independent' scientists and mass circulated by the newspapers. Policy elite certainty claims were premised on discourses that constructed public expectations of certainty as unrealistically high, limitations in scientific knowledge as inevitable and therefore naturalized and 'robust' technocratic processes as adequate to deal with this type of uncertainty (see Chapters 5 and 7).

This was an old risk construction of uncertainty whereby the incremental accumulation of evidence based on existing technocratic processes and methodologies would be adequate to deal with uncertainty, but it was ill-equipped to respond to counter-arguments about contested science and where increased knowledge – such as was presented by the Pusztai claims – added to ambiguity, ambivalence and hence uncertainty. This pattern of argumentation was reiterated in the outcome of the health review on GM food that concluded that there was ‘no evidence’ that consuming GM foods was ‘inherently harmful’ (see Chapter 7). Maximalists – including newspapers – interpreted these claims as ‘evidence’ of policy elites’ continued denial or suppression of counter-evidence (see below). Newspaper–elite contestation did not subside until 2000 when Blair effectively apologized, conceding that the ‘jury was out’ and the science was uncertain on the harm or benefit of GM (see Chapter 7) and when food safety controls were depoliticized and decentralized with the setting up of the new FSA.

The newspaper campaigns: a detailed analysis

The previous section provided an overview of shifts in the argumentative context resulting from the intensification of newspaper engagement in the debate and their articulation of maximalist arguments. It argued that during 1999 maximalist claims were ascendant in the argumentative context, a momentum driven in large part by the increased engagement of the newspapers in the debate on GM food in the second half of 1998 and the launch of their campaigns against existing policy in early 1999. Thereafter, a de facto boycott by food retailers and wholesalers evolved in similar fashion to the consumer one that had emerged after the interventions of Prince Charles and Pusztai the previous year (see Chapter 6). Thus, the campaigns signified a step-change not only in newspapers’ engagement but also in their critical interventions and in the escalation of wider societal resistance to GM food and crops.

This section explores how newspapers justified these campaigns within a problematization of policy elite determination to expand GM food and crops despite conditions of acute and escalating uncertainty as well as in contravention of the recommendations of the government’s statutory advisor on the environment. The policy elite agenda of innovation-driven growth or competitiveness was constructed as allowing a potential threat to public health and environment, as contrary to official advice and dismissive of broad-based public anxiety and resistance to the novel technology.

Newspaper campaigns were also justified in terms of policy elite inability or unwillingness to act on public preferences for market transparency ('comprehensive labelling') and consumer agency ('choice'). This was an implicit public interest discourse and the campaign agenda articulated intentions to mobilize readers and influence policy change.

The campaign imperative and dynamics

The campaigns signified a deliberate and self-conscious shift on the part of editors from the normative assumptions in classic liberal democracy about 'impartial reporting' to the normative assumptions of participatory politics about legitimate attempts to seek greater elite responsiveness to public concerns (see Chapter 3). The primary vehicle for the articulation of this explicit positioning was the editorials that accompanied the launch of the campaigns and the defence of them against Blair's counter-attack. The analysis in this section therefore focuses on the discursive patterns across fourteen editorials published during February 1999 surrounding the launches of the newspaper campaigns and the response to Blair's counter-attack as well as the three editorials published in the *Express* in 1998 associated with the launch of their campaign then. The *Express* had been the first to launch its campaign in June 1998, reviving it in February 1999 when the other three newspapers launched their campaigns. Even with this divergence in the timing of the campaign launches, the editorials articulated a coherent and collective problematization, agenda and argument, so they have been analysed together. The sheer volume of data means it has only been possible to include short supporting quotations here. The detailed extracts supporting the findings have been included in Appendix 6.

The following analysis argues that the editorials justified the campaigns within a problematization of favourable access of biotechnology executives to policy elites, policy failure and elite mismanagement in conditions of escalating uncertainty and a moral imperative to avoid a repeat of BSE/CJD. This signifies a shift in emphasis from their 1998 problematizations. Claims made in 1998 about 'undue haste' and the 'rapid rate' of development (see Chapter 6) were echoed in 1999 with claims of policy elites enthusiastically 'intent on ushering in' a new food science (see **Appendix 6, *Independent on Sunday, 1999b, [2, 3]***) and facilitating an 'explosive' development of GM products contrary to public concerns (see **Appendix 6, *Daily Mail, 1999e [5]***). However, these were superseded by a more dominant concern to provide an account of why policy elites had failed to respond adequately to escalating uncertainty and public resistance; that is, why they persisted with an agenda of promoting GM food and crops that, the newspapers claimed, posed a potential threat to the public. The pro-Labour titles were

bemused, claiming it was 'hard to understand' why policy elites 'stubbornly' defended something which 'might be harmful' (see **Appendix 6, *Daily Mirror*, 1999c [1]**). The other newspapers were more openly cynical, drawing on an 'access and influence' discourse in which they inferred that the integrity and public interest obligations of policy had been compromised by the undue access to and influence of the biotechnology companies on policy elites, and their agenda was seen as a manifestation of this.

Discourses of undue access, policy failure and past experience

This discourse of access and influence also drew on earlier claims of conflicts of interest over BSE/CJD (see Chapter 6) to argue that a 'disturbing ... political culture' had emerged in Whitehall (see **Appendix 6, *Daily Mail*, 1999e [5]**). This was a culture in which, it was claimed, 'senior executives from the biotech industry are in the habit of visiting the Ministry of Agriculture on "an almost daily basis" to lobby civil servants for favourable treatment' (see **Appendix 6, *Daily Mail*, 1999e [4]**) and that ministers had been 'beguiled' (see **Appendix 6 *Daily Mail*, 1999e [5]**). Furthermore, there were claims that the industry had employed former Labour officials, implying that this gave them preferential access at the highest levels of government (see **Appendix 6, *Independent on Sunday*, 1999c [2]**). Policy elite response to the 'giants of the food industry' was described as being 'supine' rather than taking a stand against unknown effects (**Appendix 6, *Daily Mail*, 1999g [2]**). Thus, the discourse of access and influence had sinister undertones of an orchestrated infiltration of 'commercial pressures' into policy processes in which policy elites allowed public interest impartiality imperatives to be once again subverted to an industry-driven agenda. The drawing of parallels between the behaviour of policy elites towards GM food and towards BSE/CJD meant that newspapers did not need to claim GM food risked harm. They could infer it through association with a previous scare that had 'plunged' the country into a 'crisis' widely attributed to a convergence of similar 'commercial pressures' and similar relaxation of safety controls (see Chapter 5 and **Appendix 6, *Daily Mail*, 1999e [4]; *Independent on Sunday* 1999c [1]**).

Newspapers based their policy failure argument partly on discourses of commercial access/influence and partly on discourses of elite mismanagement of labelling and scientific uncertainty (see **Appendix 6. *Express*, 1998i [1, 2 and 3]; and *Daily Mail* 1999e [2]**). This mismanagement discourse was constructed through critical claims of 'shambolic, naive and blithely indifferent to the genuine concerns of millions of British consumers (**Appendix 6, *Daily Mail*, 1999e [1]**) resulting in 'far more GM food in the system than we were encouraged to think' (**Appendix 6, *Independent on Sunday*,**

1999b [3]), so implying that licensing controls were ineffective. The consensus across the ideological and partisan spectrum of the newspapers was that policy elites had ‘not come well out of the row’ over GM food (**Appendix 6, *Mirror*, 1999c [1]**). Rather than providing decisive action that would deliver consumer choice and leadership in conditions of uncertainty, it was claimed that policy elites were relying on ‘propaganda’, ‘persuasion’ or ‘spin’ to reassure the public that GM food was safe to eat (**Appendix 6, *Daily Mail*, 1999e [1]; *Independent on Sunday*, 1999e [1, 5]**). Even the pro-Labour *Mirror* was sceptical about the ‘dismissive politicians’ who are ‘too quick to allay’ fears and ‘often have to backtrack in the wake of new evidence’ (**Appendix 6, *Mirror*, 1999d [1]**).

Claims about the mismanagement of labelling policy would be unlikely on their own to offer credible justifications for newspaper campaigns. There needed to be a greater public interest argument than the denial of choice and there needed to be the construction of a serious potential threat posed to the public by policy or by the inaction of policy elites. Newspapers constructed this by linking claims about the inept handling of labelling with claims about the mismanagement of scientific uncertainty and a failure to learn from past food scares. Thus, editorials claimed that policy elites had not learnt from BSE/CJD where scientific evidence had ‘failed to disclose the exact nature of any risk’ (**Appendix 6, *Independent on Sunday*, 1999b [1]**). Instead, they were intent on pressing ahead with GM food ‘where relatively little research has disclosed widespread possible risks’ (**Appendix 6, *Independent on Sunday*, 1999b [2]; see also *Daily Mail*, 1999d; *Independent on Sunday*, 1999b, 1999c**). One newspaper also reiterated the accusations of ‘leading international scientists’ that policy elites were “‘massively uninformed” about the threat to public health’ posed by GM food (**Appendix 6, *Express*, 1999a [1]**). Newspapers also claimed that policy elite handling of scientific counter-evidence and the dismissal of public concerns was arrogant (see **Appendix 6, *Daily Mail*, 1999f, *Daily Mail*, 1999m, *Daily Mail*, 1999p; [1, 3, 3]**).

This ignorance, arrogance and dismissal were claimed to have been manifest in the policy elites’ determination to expand GM crops before the completion of government-commissioned research. By then, they argued, it would be ‘rather late to discover that there are malign effects on our health, on our indigenous crop species and on our animal and bird populations’ (**Appendix 6, *Independent on Sunday*, 1999b [3]**). However, the most disturbing development according to the newspapers was the continued pattern that had started with Pusztai in 1998 of policy elites denying (**Appendix 6, *Express*, 1998i [2]**), suppressing or facilitating the suppression of counter-evidence (**Appendix 6, *Express*, 1999a [1]**). Elite ‘misleading parliament’ over English Nature’s advice on a

moratorium was seen as further 'evidence' of this trend (**Appendix 6, Daily Mail, 1999g [3]; Independent on Sunday, 1999c [2]**).

Thus, the editorials constructed the discourse of the mismanagement of scientific uncertainty around claims of policy elite arrogance, ignorance and the wilful denial or suppression of evidence that ran contrary to their agenda even where this identified possible harm. Newspaper campaigns were therefore seen as a legitimate 'public interest' response to policy elite mismanagement and unresponsiveness to public concerns. Newspapers most clearly articulated this in their rebuttal of Blair's counter-attack on the campaigning newspapers. The *Independent on Sunday*, for instance, justified the campaigns in the context of the 'series of inconsistencies in safety provisions, evidence of scientific disquiet, anomalies in labelling and increasing concern among consumers' (**Appendix 6, 1999d [1]**). Additional justification came from the parallels newspapers drew between policy elite mismanagement of GM food and BSE/CJD, the spectre of a similar exposure to unnecessary risk and the reasonableness of public distrust and anxiety (see **Appendix 6, Daily Mail, 1999c, 1999d, 1999g; Independent on Sunday, 1999e**). Thus, the dominant discourse in campaign problematizations was of an undemocratic elite agenda and a mismanaged of uncertainty based on claims that they were ignoring public concerns, ignoring counter-science and opening society to potentially devastating threats to health and the environment.

Editorials argued that these policy failures were manifest in inadequate labelling policy as well as a disregard of counter-evidence about uncertain science. This combination was, newspapers argued, exposing the public to unnecessary risk and from which they were unable to take evasive action because of elite ineptitude in implementing labelling policy. The suspicion was this pattern of elite behaviour was partly the result of the undue access and influence of the biotechnology industry in decision-making so that mismanagement combined with elite intransigence intended to protect the interests of the industry. Parallels with BSE/CJD served to concretize the potential for adverse effects from GM food and facilitated the construction of public distrust and anxieties as was reasonable, legitimate responses to elite mismanagement and policy failure. In the case of GM food and crops, though, the spectre was potentially even more 'dreadful' (**Appendix 6, Express, 1998j [1]**), 'devastating' (**Appendix 6, Daily Mail, 1999e [6]**) and monstrous (see increased use of discourses of 'frankenstein' and 'mutant' for instance, **Appendix 6, Express 1998e [1]; Mirror 1999b; Daily Mail 1999g [1]**).

The campaign agenda

Newspapers used this problematization of an escalating uncertainty – potentially apocalyptic consequences, the mismanagement of uncertainty and the disempowerment of the consumer – to justify participatory campaign agendas aimed at mobilizing their readers and influencing policy so ensuring government that is more responsive to public concerns. The campaign agendas were articulated within a tripartite discourse – revelatory, educative and advocacy. The revelatory discourse claimed to ‘bring out the facts’ about the ‘hidden dangers’ in food (**Appendix 6, *Express*, 1998b [1]**) and to ‘alert the public’ to the dangers of ‘frankenstein food’ (**Appendix 6, *Daily Mail*, 1999e [1]**). The educative discourse claimed to address the lack of public awareness about the lack of choice that consumers assumed they had a right to and about the extent to which GM had permeated the food chain (**Appendix 6, *Daily Mail*, 1999e; *Express*, 1998b**). All the newspapers constructed their advocacy discourses around calls for comprehensive labelling and a moratorium on the commercial cultivation of GM crops so constituted an intention to influence policy and bring about change (see **Appendix 6, *Daily Mail*, 1999e [1]; *Express*, 1998b [1]; *Independent on Sunday*, 1999c [1]; *Mirror*, 1999b [1]**).

These three agenda discourses interwove in mutually reinforcing ways. For instance, the first two articulated informative claims based on the inference that information facilitates participation, agency and power. They therefore contained the potential to escalate and mobilize mass resistance further against policy elites’ (mis)management of labelling policy and scientific uncertainty. This potential for the mobilization of readers was considerable given that the four campaigning newspapers articulated and represented a wide spectrum of mainstream political ideology (from centre right to traditional working class left) and across party loyalties (pro-and anti-Blair/New Labour). Arguably, this potential mobilization of broad-based opposition could add to the power and credibility of the newspapers’ advocacy agenda and its seemingly clear objectives of ‘comprehensive’ labelling and moratorium. These constituted a direct attack by the newspapers on the policy elite policy agenda and repertoire of entrepreneurial managerialism.

The emotive edge to the campaign discourses came from constructions of the monstrous nature of risk (‘frankenstein foods’) and past failures (BSE/CJD), the sense of ‘hidden dangers’ lurking in everyday, life-sustaining foodstuffs (see **Appendix 6, *Express* 1998b [1]; *Daily Mail*, 1999c [1]**) and in policy elite mismanagement of scientific uncertainty and conflicts of interest. This emotive dimension also increasingly centred on Blair, whose style of leadership the newspapers claimed was responsible for the mismanagement of

uncertainty, the inept labelling policy and the unnecessary exposure of the public to risk. So for instance, the newspapers claimed that arrogance and ignorance characterized policy elite handling of GM crisis and Blair's leadership style (see *Daily Mail*, 1999d, 1999g, 1999r; *Express*, 1999b; *Independent on Sunday*, 1999e; *Mirror*, 1999g). This personalization of conflict – which Blair reciprocated in his counter-attack on the newspaper 'campaigns of misinformation' – meant that a resolution of the contestation was likely to require more than a perceived satisfaction of newspaper campaign objectives; it would require some statement from Blair that the newspapers could interpret as a concession or apology.

Newspaper responses to retailer boycotts and a moratorium

The previous section argued that the newspapers had launched campaigns in response to their problematization of policy failure – in particular policy elites' mismanagement of scientific uncertainty. Their preferred 'solutions' to the management of risk in conditions of uncertainty were a moratorium on commercial cultivation pending further research and 'comprehensive' labelling so that consumers could choose for themselves whether or not they wanted to expose themselves to risk. The newspapers were not the first to lobby policy elites on these points but, having run out of patience with what they perceived to be elite intransigence on the first and ineptitude on the second, they elected to campaign. The first articulated purpose of the campaigns was to mobilize opposition to the policy by revealing the 'hidden' facts about GM food and by educating readers about the risks of the novel technology, policy elites' failure to implement adequate protective measures and consumer disempowerment, which prevented them from taking evasive action should they so choose. The second component to the agenda was to advocate policy changes, in particular a moratorium and more effective labelling. This section explores evolving newspaper–elite arguments over labelling and a moratorium and the trajectory of developments on these.

Labelling and retailer boycotts

The new Labour government had introduced mandatory labelling in 1997 (see Chapter 5) so the issue was not whether it was needed but rather how extensive it should or could be. This was one of the critical sites of conflict between minimalists and maximalists (see above). The government had instigated some labelling – and added minor incremental changes through the years – but this was widely seen by both sides as limited and was justified by policy elites through discourses of deliverable or workable labelling (see

Chapter 7). The newspapers counter-argued that the existing measures were ineffective, inadequate in scope and ineptly implemented, so resulting in limited market transparency, consumer disempowerment and the denial of consumer agency. The campaign objective, therefore, of 'proper' labelling was defined as clear, unambiguous, precise and comprehensive. (**Appendix 6, *Express*, 1998c, 1999e [1, 3]; *Daily Mail*, 1999e [2]; *Independent on Sunday*, 1999c [3]**) and thus capable of delivering the market information to which consumers had a 'basic right' (**Appendix 6, *Express*, 1998j [1]; *Mirror*, 1999d [2]**). Without this market information, the public was 'left powerless to make its own choices' (**Appendix 6, *Daily Mail*, 1999j [2]**).

The campaigns positioned this discourse of the disempowered consumer and the objective of 'comprehensive' labelling at centre stage in the argumentative context, directly challenging the policy elite entrepreneurial repertoire's emphasis on enhanced consumer rights and a consumer–producer balance of power. Policy elites counter-claimed that they had introduced compulsory labelling (see Blair's counter-attack on the newspapers in Chapter 7) to which newspapers responded by citing NGO 'evidence' of the volume of foods containing unlabelled GM ingredients (see argumentative context, above). The newspapers also derided Blair's claims that he ate GM food and had no problem with it by counter-claiming that genetically modified ingredients were so pervasive, mainly unlabelled and therefore invisible. So 'like the rest of us he has very little choice [to eat GM] ... whether we like it or not' (**Appendix 6, *Daily Mail*, 1999f [1]; see also 1999e; *Independent on Sunday*, 1999b, 1999c, 1999d; *Mirror*, 1999d**).

By spring 1999 the newspaper–elite conflict over labelling had reached a stand-off in which the former continued to call for more comprehensive labelling regulations and the latter, while willing to introduce small and incremental changes that facilitated more effective markets, remained largely opposed to what it claimed would be 'unworkable' regulations (see Chapter 7). Thus, the argument centred on competing discourses of rights versus pragmatism. What shifted, however, was the emergence after the campaign launches of a de facto food retailer/wholesaler boycott constructed around claims about GM-free policies (see Appendix 3). Newspaper response to this development was deeply ambivalent. As early as June 1998 they had expressed cynicism about the motives of supermarket chains and about retailer claims that they could not 'guarantee' keeping GM ingredients 'out of the food we buy' (**Appendix 6, *Express*, 1998a [2]**). However by September 1998 editorials in the *Express* – the first newspaper to launch a campaign – were welcoming a 'victory for the consumer' with claims that some supermarkets were trying to eliminate GM soya from own-label products and to 'identify more of their own-

label products' which contain the ingredients (**Appendix 6, 1998j, 1999e [1, 1]**). The 'victory' claims were premature in that relatively few retailers had announced GM-free policies by the time all four newspapers had launched their campaigns (see Appendix 3).

However, the campaigns alarmed the retailers and during February 1999 newspaper editorials claimed that the supermarkets were re-aligning themselves with the maximalists and had 'added their voices to the growing chorus of discontent with the Government's do-nothing approach to GM food' (**Appendix 6, Express, 1999a [2]**). The newspapers remained cynical about the sincerity of supermarket claims to be 'standing up for the consumer' but welcomed 'their leap on to the bandwagon' (**Appendix 6, Express, 1999a; [2]**) and their 'waking up in alarm to the fears of their customers' (**Appendix 6, Independent on Sunday, 1999c [1]**). Thus, the newspapers constructed the food retailers as useful but not-to-be-trusted allies for their campaign and the latter's re-positioning within maximalist camp as signifying that 'the supermarkets are beginning to listen on labelling' and that policy elites, already 'shaken by the depth of opposition', should take heed (**Appendix 6, Independent on Sunday, 1999c [3]**).

Thus newspapers remained sceptical about the motives of the supermarkets but welcomed the potential power they could exert in helping to realize a key campaign objective. Within three months of the launch of their campaigns, the newspapers were claiming that the supermarket chains had gone further than labelling GM food – they had 'spent millions of pounds clearing their shelves' of it in what was a de facto retailer boycott of GM food in response to the collapse of sales. (**Appendix 6, Daily Mail, 1999p [2]**; see Chapter 7). Editorials contrasted this receptivity of retailers to public concerns and preferences with the 'arrogance' of the biotechnology industry and policy elites who were dismissive of consumer anxieties and had 'forgotten' the ability of consumers to 'exercise power through free markets' (**Appendix 6, Daily Mail, 1999p [1, 2]**). This power, the newspapers claimed, was 'beginning to show itself' not only in retailer response to consumer concerns but also in legal action against crop trials and warnings from investment advisors that 'public fears are making GM technology a bad bet' (**Appendix 6, Daily Mail, 1999q [2]**).

Significantly, these claims about the refusal of the biotechnology companies and policy elites to respect and facilitate consumer preferences on whether or not to eat GM food had been a major driver of the argument for greater consumer power and the emergence of a de facto retailer boycott in response to what limited choice was available. Thus, paradoxically, the unleashing of 'market forces' that policy elites had envisaged as a

solution to consumer-producer conflicts in their repertoire of entrepreneurial managerialism (see Chapters 5 and 7) had become a threat to their agenda of promoting the international competitiveness of Britain's biotechnology industry. Newspaper engagement was crucial to this. Their response to the de facto retailer boycott highlights how the real issue for the newspapers was consumer choice and agency hence power; labelling and market transparency were only mechanisms to deliver this that could be quietly dropped if another mechanism were similarly to empower consumers.

A 'voluntary' moratorium

This chapter argued earlier that policy elite rejection of the call by English Nature for a moratorium on commercial cultivation of GM crops formed a key part of newspaper justification for campaigns and one of the mechanisms by which the newspapers concretized abstract conflicts over uncertain, contested science into a realizable objective. This section argues that newspaper response to the voluntary moratorium was based partly on how incremental 'news' of policy shifts emerged and partly on the timing of significant concessions that came in the midst of the campaign launches and conflicting policy elite responses to these.

Initial newspaper discourses about a possible shift in policy elite intransigence on a moratorium emerged in the midst of the campaign launches but the picture was contradictory. First, there was some early speculation that commercial cultivation would be postponed for a year (*Daily Mail*, 1999h). Second, during 'a week of extraordinary public outcry' (**Appendix 6, Lean, 1999b [1]**), Blair issued his 'we stand firm' counter-attack against the 'campaign of misinformation' and rejected calls for a moratorium, claiming there was no evidence of harm to support it (see Chapter 7). Third, by the end of that week, the *Independent on Sunday* counter-claimed that the Environment Minister, Michael Meacher, had 'conceded the principle of an indefinite moratorium' on commercial plantings of GM crops with a 'categorical assurance' that no commercial cultivation of GM crops would take place 'until the Government was satisfied that there was no danger' (**Appendix 6, Lean, 1999b [1]**), Meacher had not used the term moratorium, 'because the Prime Minister had explicitly ruled this out' but the assurance was seen as signifying 'an indefinite halt, meeting one of our campaign's demands' (**Appendix 6, Lean, 1999b [3, 4]**). Thus, the newspaper inferred that internal dissent was emerging within government on how to proceed and that Meacher was more sympathetic than Blair was to public concerns and issues of scientific uncertainty (see Eastham & Poulter, 1998). Subsequent shifts in Blair's attitude were inferred, for instance, in claims that Lord Sainsbury – a

'champion of GM technology' and a 'close ally' of the prime minister – supported a three-year moratorium' (see **Appendix 6, *Daily Mail*, 1999k; [1,3]**). It was not until November 1999 that policy elites concluded 12 months of negotiation with an agreement on a voluntary moratorium until the completion of farm scale trials (see Appendix 3).

The newspapers responded to this incremental shift on the part of policy elites towards support of a moratorium with a military metaphor consistent with their 'campaign' discourse. Editorials constructed the early accounts of these shifts as signifying a 'welcome' weakening of government confidence in "'Frankenstein" foods' (see **Appendix 6, *Daily Mail*, 1999g [1]**), 'a softening in the official line' and a 'further retreat from the almost truculently entrenched positions adopted ... when a moratorium was first suggested (see **Appendix 6, *Daily Mail*, 1999k [1, 3, 4]**). The inference was that the unreasonable intransigence of policy elites was ultimately unsustainable in the face of a sustained newspaper campaigns and that, given the scale of mobilization of societal resistance to the technology, their position was beginning to weaken. The *Independent on Sunday* developed this discourse further through claims that Meacher's acceptance of the principle of a moratorium signified 'first blood' and that the government had 'effectively met one of the campaign's two main objectives', so inferring some movement towards a compromise or truce between the factions (see **Appendix 6, *Lean*, 1999b [1]**). These hints of a shift to some form of negotiation were seen as being in response to newspaper mobilization of resistance - the 'extraordinary public outcry' - and to the way in which the campaign had ensured the issue had 'dominated the news', 'throw[ing] the Government into disarray' (see **Appendix 6, *Lean*, 1999b [1]**). This campaign success was juxtaposed against the 'failure' of policy elites to 'reassure the public that the Government is in control of the development of GM crops' and the failure of Blair to 'quieten the story' despite 'put[ting] his own authority at stake' (see **Appendix 6, *Lean*, 1999b [2]**).

Newspapers continued to press policy elites to 'declare' a government-imposed moratorium (see *Daily Mail*, 1999m; *Independent on Sunday*, 1999e) but ministers continued to resist reiterating their earlier claims about the possible illegality of state-instigated restrictions on international trade (see Chapter 7). Notwithstanding this, by the end of 1999 a de facto EU-instigated moratorium had been joined by a voluntary moratorium in the UK negotiated between policy elites and the industry, and a de facto consumer boycott of GM food had been supplemented with a de facto retailer boycott. These did not match precisely the campaigns' objectives but they did address the underlying issues that had disturbed the newspapers so profoundly. Thus, the newspapers could argue that their campaigns had been successful in that the pace of GM

adoption had slowed. They had secured a voluntary moratorium on commercial cultivation until further 'evidence' had time to be collected. Furthermore, consumers' power had been exercised in such a way that retail and biotechnology industries were forced to take into account their concerns and preferences (see *Express*, 1999a; *Independent on Sunday*, 1999c). Despite these 'successes' the newspapers did not suspend their campaigns. They remained distrustful of policy elite agendas and intentions, a distrust that they articulated in their annoyance at the continued refusal of elites – and Blair in particular – to acknowledge publically and address adequately counter-claims of uncertain, contested science.

Towards an uneasy truce on scientific uncertainty

The newspapers, despite claiming to have secured some successes with their objectives early in the year, continued to campaign throughout 1999, albeit with less intensity (see Appendices 6 and 9). In the absence of definitive statements from policy elites, especially on a moratorium, what successes newspapers had claimed to have had appeared inconclusive and editorials continued to advocate for such statements (see *Independent on Sunday*, 1999e). A key component in their argument was the need to delay the commercial cultivation of GM crops until new evidence of the 'effects' on the environment and health had been collected. Newspapers, in support of this argument, claimed that public anxieties over GM food and crops showed 'no sign of going away' (*Daily Mail*, 1999f), retained the centrality of scientific uncertainty in their problematizations and ran a steady stream of news stories about contested science. However, within this central theme there were a number of interesting argumentative developments.

The policy elite shift from secretive technocratic processes to policy transparency – the publication of the advice of expert committees, minutes of meetings and so on (see Chapter 7) – meant that details of their deliberations and the reasons for their recommendations were available for external scrutiny. This provided a new source of stories on uncertain science and introduced a new dimension into the convergence of discourses of environmental and health risks and the divergent, conflictual advice of the respective committees dealing with these. This was most clearly articulated by newspapers in debates about new antibiotic-resistant applications. The environment committee recommended the approval of these because they claimed no risk was posed to the environment; conversely, the health committee recommended rejection and, newspapers claimed, issued a 'grim warning ... of ... potentially catastrophic' effects on health in the form of 'new strains of meningitis and other fatal diseases' (see **Appendix 6**,

Daily Mail, 1999i [3]). Their 'fear' was that the genes 'may have already contaminated the food chain' (see **Appendix 6, Daily Mail, 1999i, [2]**). In this way, newspapers constructed certainty/uncertainty debates between elite advisors as vindication of their campaign for a moratorium (see *Express*, 1999d).

One of the dominant discourses in the editorials accompanying these 'scare' stories was of uncertain, contested science, unknown effects and unpredictable consequences (see, among others, *Daily Mail*, 1999b, 1999c, 1999d, 1999e, 1999g; *Express*, 1998b; *Independent on Sunday*, 1999b; *Mirror*, 1999c, 1999d, 1999h). In contrast, one of the dominant policy elite discourses was of certainty constructed around claims of 'no evidence of harm' (see Chapters 5 and 7). The polarization of these dominant discourses would suggest a typical new risk-type 'intractable controversy' in which neither side could agree on the nature of evidence and knowledge or how to proceed in conditions of scientific uncertainty.

However, a subordinate discourse of deep ambivalence suggested that the polarization in the controversy was less 'intractable' than might have first appeared. This discourse of ambivalence, which had first emerged with the Pustzai findings which newspapers constructed in terms of suspended certainty with no evidence of harm or benefit, risk or safety (see Chapter 6). These subordinate discourses of ambivalence continued to run throughout the 1999 editorials supported a supplementary argument for suspended judgement in the absence of certainty. That is, on the one hand, newspapers articulated a reluctance to reject GM altogether because of its potential for 'immense benefits' and on the other hand, they articulated a conviction that the 'risks cannot just be shrugged aside' as policy elites sought to do (*Daily Mail*, 1999o; see also 1999d, 1999e; *Independent on Sunday*, 1999d, 1999e). This argument for suspended judgement supported the call for a moratorium in that newspapers claimed that they 'wait to be persuaded there is merit' in GM food and crops and for this they 'require objective evidence before, rather than after, its wider use is set in train' (see **Appendix 6, Express, 1999b [2]; Independent on Sunday, 1999c [3]**).

The newspapers' criticism of policy elites' position on science was that they had decided a priori about the safety of GM food and they objected deeply to elite response or (lack thereof) to conflicting claims of scientists about the risks and benefits of GM food and crops. Editorials described policy elite 'refusal' to acknowledge the possibility of health risks as 'unacceptable' (see **Appendix 6, Daily Mail, 1999k [3]**). The elite discourse of 'silence' on the 'dangers highlighted by a steady stream of experts' was seen as 'worrying'

and their pre-occupation with spin (presentation) over substance (action) and perception as 'woefully short-sighted' (see **Appendix 6, Daily Mail, 1999I [4]**). The conclusion of the government's health review on the impact of GM food did little to reassure the newspapers that policy elites were willing to acknowledge uncertainties and unknowns (see *Express*, 1999d; *Independent on Sunday*, 1999e).

Newspaper contestation with policy elites over GM food, albeit less intense in the second half of 1999, did not subside into an uneasy truce until an acknowledgement by Blair of the uncertain, contested science, effectively an apology for his earlier attack on scaremongering media (see Chapter 7). There had been signs of some limited acknowledgement of uncertain, contested science within policy elite circles (see, for instance, the chief scientific advisor's guidelines on science in policymaking and the outcome of the biotechnology review discussed in Chapters 5 and 7). However, these were relatively limited and subsumed within dominant discourses of certainty that were particularly articulated by ministers and constructed around claims of 'no evidence of harm'. The newspapers did detect from mid-1999 signs of some wavering on this in the concession by Michael Meacher that there are 'some very great uncertainties' in this area, acknowledging that 'on this issue, [Meacher] seems far more in tune with the national mood than does the Prime Minister' (*Daily Mail*, 1999o). The critical intervention, however, was a second article by Blair in which he claimed that the 'jury is out' on GM food and crops (Blair, 2000a; see Chapter 7) and so reiterated the newspapers' argument for suspended judgement until new evidence had been collected.

All of the newspapers 'welcomed' the prime minister's 'u-turn'. Some, like the pro-Labour *Mirror*, did so unreservedly (2000) and others with scepticism about his sincerity or cynical questioning of whether this constituted a 'real GM conversion' (see **Appendix 6, Daily Mail, 2000a [2]**; see also *Independent on Sunday*, 2000). The newspapers also narrated this as a shift in the discourse of Blair from a 'contemptuous' dismissal of legitimate concerns as "hysteria" ... roused' by campaigns (see **Appendix 6, Daily Mail, 2000a [1]**), through claims about the need for Britain to be at the 'forefront of this new science' (see **Appendix 6, Mirror, 2000 [2]**) to his latest acknowledge that GM food and crops 'might be' dangerous (*Mirror*, 2000). Thus the editorials interpreted Blair's 'u-turn' as a shift in discourse from certainty claims of 'no evidence' of harm to ambivalent claims more consistent with their own ambivalence (see *Daily Mail*, 2000a; *Independent on Sunday*, 2000a).

Postscript

After Blair's acknowledgement of scientific uncertainty, the *Mirror* dropped its campaign and eventually so too did the *Express* following a change of ownership and a new editor. The *Daily Mail* and the *Independent on Sunday* continued to campaign, albeit more sporadically and more specifically on GM crops. Four years after Blair's concession a string of biotechnology companies announced that they would 'discontinue' attempts for the commercial cultivation of GM crops in the UK and would withdraw from Europe. Policy elites were quoted as claiming that no such crops would be grown in the country for the 'foreseeable future' (*Independent on Sunday*, 2004; *Daily Mail*, 2004). Both newspapers traced the trajectory of their 'five-year' campaigns from a 'lost cause' through their 1999 'successes' on a moratorium and labelling policy, Blair's concession on the potential for harm from GM food and crops and their subsequent investigations into the 'evidence' of the adverse effects on GM crops (*Daily Mail*, 2004; *Independent on Sunday*, 2004). Thus the pattern for sustaining the campaigns beyond 2000 was laid down in the editorials and behavioural actions of the newspapers analysed in this chapter.

Conclusion

This chapter argued that the dynamics of conflict emerged out of divergent and entrenched problematizations of public anxiety and claims/counter-claims about how to manage GM food and crops in conditions of uncertainty. The peaking and sustaining of this conflict through newspaper campaigns ensured that discursive intersections – shifting claims and counter-claims – were quite marked.

A dominant newspaper discourse based on claims that elites were refusing to acknowledge uncertain, contested science and act accordingly hardened with the launch of the campaigns. The catalyst was the policy elite's rejection of the recommendations of English Nature for a moratorium on the commercial cultivation of GM crops. Newspapers drew on maximalist discourses to argue that this signified continued elite failure to learn from past mistakes, a refusal to acknowledge science that ran counter to their agenda, the mismanagement of uncertainties and neglect of public concerns. This, they claimed, legitimized a shift in the role of newspapers from 'impartial reporters' to active participants using their power through campaigns to mobilize readers against policy, influence policy change and so secure elite responsiveness. Newspaper discourses about the revelatory, 'educative' and 'advocacy' agenda of the campaigns concretized abstract debates about uncertainties into policy objectives – 'comprehensive' labelling and a moratorium – which

newspapers could articulate in ways that were directly relevant to the everyday lives of ordinary readers and that could provide a 'measurable' yardstick of success.

These campaigns not only served to sustain newspaper contestation beyond typically short news cycles, they facilitated the ascendancy of maximalist claims in the argumentative context and so deepened the challenge to New Labour's repertoire of entrepreneurial managerialism. Policy elites were equally determined to ensure the resilience of their neo-liberal economic hegemonies and discourses of 'markets' and 'competitiveness'. On the one hand this was manifest in their counter-argument that 'comprehensive' labelling was not workable and that a government-enforced moratorium would be illegal. On the other hand, key behavioural actions facilitated the 'market forces' delivery of these in that they provided food retailers with a list of alternative, non-GM suppliers and they negotiated with the biotechnology industry a three-year 'voluntary' moratorium on commercial cultivation.

What evolved from this was a complex mix of compromises. By June a de facto retailer boycott of GM food had emerged. This form of behavioural action did not deliver 'comprehensive' labelling newspapers had called for but it signified an important compromise. On the one hand, it was compatible with New Labour entrepreneurial discourses of a consumer-producer balance of rights and interests. On the other hand, newspapers claimed it signified the willingness of retailers to 'listen' to consumer concerns when government was unwilling to. The discourses surrounding the moratorium were even hazier but by the end of the year a voluntary agreement was in place and newspapers were claiming the success of their campaigns. Newspapers labelled both as 'victories' but continued to campaign thus revealing a more fundamental, non-negotiable disturbance based on claims about elite refusal to acknowledge the uncertain, contested nature of science and elite mismanagement of this.

On the face of it, contestation over this was a typical instance of an 'intractable controversy' in which both sides disagree on the status of knowledge and how to proceed with it. However, this obscures a more nuanced underlying newspaper discourse of ambivalence that had first emerged with the Pusztai findings, ran all the way through the 1999 editorials and only reached a point of accommodation with Blair's concession that the 'jury was out' on GM food and crops. The editorials constructed this discourse of ambivalence around claims that the evidence on safety or harm, benefit or risk, certainty or uncertainty was inconclusive. The newspapers argued that in such conditions of suspended certainty, the management of risks in conditions of uncertainty required the

suspension of judgement until the collection of new evidence and hence certainty arrived at. A significant subsiding of contestation – more an uneasy truce – did not take place until Blair conceded this point and apologized, demonstrating what newspapers deemed to be appropriate responsiveness to public concerns. At which point newspaper discourses and elite discourses on certainty/uncertainty not only intersected but finally overlapped.

The findings on newspaper problematization (Chapter 6) and contestation (Chapter 8) challenge a number of key assumptions in the existing literature. The first assumption is that newspapers necessarily engage on new risk issues or that they cannot where the debates are highly abstract.⁵⁹ The exploration of how newspaper contestation emerged highlighted a number of operational obstacles to newspaper engagement which ensured meant it included an element of unpredictability that has not been captured in other studies. The second assumption is that critical media coverage is dependent on elite dissent (see Robinson 2001). The findings here have highlighted how a parallel system of argumentation can emerge despite elite consensus. This consensus contributed to initial newspaper coverage that was fragmentary, contradictory and sporadic. However, critical newspaper engagement was possible because of two critical interventions by unexpected actors, a climate of deep distrust of elites and a history of scares, which spoke of a deep disturbance about the direction of policy. The third assumption is that short news cycles limit media potential to influence long policy cycles.

While this is typically the case, newspapers have the capacity to launch campaigns that sustain coverage and shorten this gap. Such campaigns can also serve to concretize otherwise abstract debates within clearly articulated objectives capable of ‘measuring’ elite responsiveness. Such campaigns can be seen within classic liberal assumptions as deficient journalism in which newspapers fall short of the professional ideal of impartiality and rational debate. Or they can be seen as a reconfiguring by newspapers of their role within participatory terms in which endeavours to mobilize readers and influence policy are legitimate in the struggle to ensure governments are more responsive to public concerns. Fourth, the peak of contestation – the launch of the campaigns and Blair’s counter-attack – included many of the features of an intractable controversy. These are characterized by irreconcilable differences over knowledge, values and how to proceed given conditions of uncertainty (Pellizzoni, 2004). However, it was atypical in that subordinate newspaper discourses of ambivalence about risk or benefit, harm or safety. Thus, if an appropriate way of managing these and being responsive to public concerns

⁵⁹ This is a point that Kitzinger (1999) has also made but a decade after she made relatively few studies on media engagement with risk seem to have explored the implications of it.

could be found the seemingly intractable could be negotiated. The ability of elites ultimately to do this meant the intractable was negotiated and the controversy subsided. The next chapter will attempt to synthesize these findings into a wider theoretical and analytical account of interactional dynamics in the political-media complex.

Chapter 9: Conclusion

Introduction

This thesis explores the under-researched terrain of policy elite–newspaper engagements and, in the process, makes a substantive contribution in formulating a conceptual framework for understanding how the interactional dynamics of the political–media complex work. The framework – that of discursive intersections – is concerned with shifts in claims and counter-claims that take place during engagement and argumentation in the political–media complex. The need for a new framework emerged out of a critique of other risk interaction approaches as asymmetrical, rigid or ill-equipped to capture the dynamic, dialogical and persuasive nature of engagements. The alternative formulated here was based on the premises that there is a need to capture the independence-interdependence of the relationship (see Swanson, 1997); that the form of engagement cannot be theoretically predetermined but is likely to vary depending on a wide range of conditions, including policy and risk domain (see Hood, James & Scott, 2000; Koch-Baumgartner & Voltmer, 2010); and recognize that how media and government construct their roles changes depending on context and over time

What emerged was:

- (4) A tripartite theoretical framework based on the political–media complex (Swanson, 1997), new risks (Beck, 1992) and participatory politics (Teorell, 2006).
- (5) A hybrid discourse theory that combined the persuasive dimensions of Billig (1987) and the critical struggles of Fairclough (1992).
- (6) A research question as to how policy elite–newspaper contestation over the new risks of GM food emerged, was sustained and was then negotiated.

The framework used to address this question drew attention to how elite hegemonies were highly resilient despite changes in government and escalating conflict over GM food. The continuities in these hegemonies were most clearly articulated in dominant discourses about an innovation-driven agenda; technocratic rationality and authoritative science; and patterns of problematization and behavioural actions centred on institutions. The discursive shifts between Conservative and New Labour governments and the three scares – irradiated food, BSE/CJD and GM food – lay in the relative emphasis that was placed on certain neo-liberal values. For instance, with the advent of the Blair government

the previous relative silence on consumer needs was replaced by an entrepreneurial discourse that afforded them – at least in theory – equal billing with producers, and silence on scientific uncertainty was replaced by an acknowledgement of knowledge limitations but a deep reluctance to admit to uncertain, contested science for fear this might undermine existing hegemonies. The negotiation of the competing demands of consumer–producer, certainty–uncertainty was subsumed within a managerialist discourse of technocratic processes that was able to reconcile contradictions.

The newspaper interface emerged out of historical and emotive discourses of elite (mis)management of past scares, a distrust of elite management of food controls and scepticism about government food science. However, the potential for newspaper contestation was rendered latent by (initial) absence of elite dissent and the lack of any systematic linkage by journalists of BSE/CJD and GM food. A series of discursive events activated this latency and facilitated the emergence of a parallel system of argumentation with counter-discourses that directly challenged hegemonic elite discourses of authoritative science, robust technocratic processes and ‘mandatory’ labelling. They also challenged the entrepreneurial managerialism and the democratic responsiveness of New Labour.

Fundamental to discursive intersections in the political–media complex is a paradoxical relationship of independence-interdependence. This was most clearly manifest in the way they constructed their roles. On the one hand, New Labour elites constructed this within a resilient neo-liberal paradigm of the management of competing demands, state intervention where it facilitated the market, the promotion of innovation-driven competition as well as a ‘veiling’ or under-stating of new risk uncertainties. On the other hand, newspapers increasingly constructed their role within both a new risk paradigm of spotlighting uncertainties and within a participatory paradigm, seeking to mobilize readers and influence policy so as to ensure a government that was sufficiently responsive to what they perceived were public preferences.

The tracing of the dynamic interactions between these interfaces found:

- (1) Newspaper contestation can emerge despite elite consensus given particular conditions (distrust of elites), critical interventions (by alternative, credible sources) and newspaper perceptions of public interest (the phenomenon as emblematic of a deeper disturbance).
- (2) One of the key sites of struggle to be the sustaining of contestation for long enough that the differences between short news cycles and long policy cycles can

be narrowed. Newspapers may use campaigns to do so when they perceive the phenomenon to be emblematic of past and present 'evidence' of elite mismanagement of uncertainty, while elites attempt to block such constructions and defuse, disrupt or discredit this for fear it may mobilize public resistance against their policies.

- (3) Intense contestation may evolve into what appears to be an intractable controversy with fundamental differences over knowledge, values and how to proceed in conditions of uncertainty. However, there is potential for negotiation in that: (a) newspapers subscribe to a wider neo-liberal hegemony shared with elites, (b) their campaigns aim for reform of the existing system rather than its destabilization and (c) divergent, conflictual problematizations also include paradoxes in which lies the potential for compromise and assimilation of resistance to new technologies.
- (4) Policy elite–newspaper engagement does not happen in isolation but is defined by and defines the wider argumentative context.

This approach, framework and findings offers an alternative to the other risk interaction frameworks reviewed in Chapter 2 with their asymmetrical privileging of media or government; out-dated or reductionist understandings of interactions as linear, hierarchical or non-persuasive; too narrow focus on the moral dimensions of extreme reactions, obscuring fears about material consequences, or too broad a focus on coalitions, obstructing a privileging of media–government engagements; and positivist methodologies with rigid compare–contrast research designs that obstruct the capturing of interactional dynamics. The substantive, unique contributions of this framework include:

- (1) The recognition of the need a framework by which to capture some of the unpredictability in the emergence, nature and trajectory of discursive intersections in the political–media complex.
- (2) A questioning of other studies that argue the post-modern fragmentation of society undermines collective contestation, thus weakening the potential mobilization of extreme reactions (Garland, 2003, 2008; McRobbie & Thornton, 1995).
- (3) The use of participatory approaches as an alternative to out-dated classic liberal assumptions about the media (see Scammell & Semetko, 2000), and in so doing an addressing of the missing media connection in studies of participatory governance (see Newman & Clarke, 2009).
- (4) An alternative to conclusions about 'convergent' media–government representations (Bauer & Gaskell, 2000) by capturing interactional dynamics in the

dialectics in responsive–resilient struggles between them and between contestation and the argumentative context.

- (5) A paradoxical assimilation of resistance into neo-liberal forms of capitalism, while leaving emblematic traces of former contestation in new discourses and institutional arrangements.

This chapter first reviews the theoretical framework outlined in chapter 3 for the analysis of policy elite–newspaper engagements in conditions of uncertainty, then conceptualizes the interactional dynamics of discursive intersections, outlines the main findings and the implications of these for future research, briefly explores the contributions bulleted here in more details and concludes with some reflections on the limitations of the research.

Theorizing engagements in conditions of uncertainty

The substantive contribution of this thesis is its development of an original conceptual framework of discursive intersections for understanding how interactional dynamics in the political–media complex work (see Chapter 3). Discursive intersections are shifting claims and counter-claims that emerge during engagement. This thesis housed their application to new risk debates over GM food within a macro-institutional framework which comprised the political–media complex, risk society and participatory politics/governance. A hybrid rhetorical–critical discourse analysis provided a methodological framework to capture claims and counter-claims. The result is a theoretical and conceptual alternative to the risk interactionist approaches critiqued in Chapter 2. The alternative developed here was based on the premise that equal attention needs to be paid to both and to the institutional characteristics that inform engagement, the recognition that how and whether engagement evolves depends on how risk is constructed, an allowance for changing constructions of their roles, and an understanding of interactions as dialogical, dialectical, critical, persuasive and dynamic.

The political–media complex

Chapter 3 argued that the political–media complex privileges the relationship, the (historical) institutional context and engagement over the public agenda, the content of public policy and the problematization of it. Such engagement is located at the evolving interface of ‘different institutional cultures, agendas and needs’; that are paradoxically independent and interdependent; and from which emerges the potential for consensus, negotiation and conflict (Swanson, 1997; Voltmer, 2006). The thesis also argued that in not presuming what form engagement takes, the framework is empirically open to a range

of possibilities so reinforced an understanding of discursive intersections as dynamic, dialectical and (relatively) unpredictable. How contestation emerged in the political–media complex thus became the critical empirical question posed in this research.

The political–media framework has been applied elsewhere to the changing nature of elections (Swanson, 1997), institutionally-rooted engagements in transition democracies (Voltmer, 2006) and conflicting representations of poll tax protests in Britain (Deacon & Golding, 1994). What makes this research distinctive is that, first, prior to it the political-media complex framework had not been applied to risk domains or discursive intersections. Second, the term discursive intersections was preferred to interactions to refer to shifting claims and counter-claims that emerge during engagement in the political-media complex and to dissociate it from other studies of risk interactions. What distinguished it from these studies was its: (1) understanding of interactions as dynamic, discursive, persuasive and critical rather than linear, hierarchical or non-persuasive engagements (2) rejection of asymmetrical approaches and its privileging of newspaper–elite engagement within a wider argumentative context (3) conceptualization of the relationship as arising out of an independent–interdependent paradox rather than between ‘relatively autonomous’ actors (see Chapters 2 and 3).

The empirical analysis of discursive intersections over GM food found that they emerged, on the one hand, out of an elite interface characterized by historically-rooted, highly resilient technocratic hegemonies and a general absence of elite – and Westminster – dissent over the novel food (see Chapters 5 and 7). On the other hand, the newspaper interface was characterized by counter-claims about a decade of food scares, distrust of government science and of elite management of safety scares but initial coverage did not systematically link these to GM food and engagement was sporadic, fragmentary and ambivalent. An explanation for this can be found in existing studies which argue that critical media coverage tends to follow elite dissent (see Kingdon, 2003; Robinson, 2001, 2002) and that media generally do not engage in abstract debates about knowledge (see Kitzinger & Reilly, 1997) or uncertainties (Schudson, 2001) because these do not readily fit news values. Chapters 6 and 8 identified these as key institutional–operational obstacles to newspaper engagement over GM food and identified how these were negotiated in ways that facilitated the emergence of a parallel system of argumentation that challenged and threatened elite hegemonies.

By avoiding prior assumptions of conflict or consensus, the political–media complex framework used here enabled these interactional dynamics to be explored for the first time

in studies of risk. However, there is a caveat: discursive intersections in the political–media complex take different forms with different socio-political contexts, policy domains and risk constructions (see Baumgartner & Voltmer, 2010; Hood, James & Scott, 2000).

New risks and radical uncertainty

Sensationalist-deficit approaches argue the GM food controversy was a fictionalized panic emerging from scaremongering newspapers and a misperception of risk (see Blair, 1999; Ten Eyck, Gaskell & Jackson, 2004). Conversely, Risk Society approaches were used here to argue that the constructed nature of new risks does render the acute anxieties associated with them less valid. Chapter 3 argued new risk constructions are typically defined as manufactured, existing only in knowledge so contested in discourse and generate radical uncertainty (Beck, 1992, 1995, 1999). The acute anxiety associated with these uncertainties arises from a deep disturbance about the direction of industrial production, distrust of the governance of uncertainty and elite ‘veiling’ of these inadequacies. It also argued that the role of the media in such conditions of uncertainty is to ‘spotlight’ elite mismanagement of these and individual powerlessness to take evasive action; the role of government is to manage risks but inadequate knowledge prevents them doing so and media exposure of this prompted elites to ‘veil’ uncertainties (Beck, 1992, 1995). These conflicting roles, it was argued, have the potential to translate into definitional struggles (see Miller, 1999) over the nature of uncertainties and intractable controversies when old strategies for managing conflict fail because knowledge, values and how to proceed are contested, leaving no common ground for negotiation (see Pellizzoni, 2003, 2004). A new reflexivity emerges in which the institutions of late modernity are exposed to intense scrutiny with the potential for new forms of governance and transformation to Risk Society (see Cantelli, Kodate & Krieger, 2010: 1).

New risk frameworks have been used to analyse media coverage of climate change, nuclear power, chemical/oil spills and GM food (see Allan, Adam & Carter, 2000; Grove-White, 1998; MacNaghten & Urry, 1998) as well as environmental policy studies and risk governance (see Lofstedt, 2009; O’Malley, 2004). However, they have not been used to examine media–government engagements in a systematic symmetrical way that affords equal importance to both. In doing so two issues needed to be empirically explored that had not been previously (see Bauer & Gaskell, 2000; Ten Eyck, Gaskell & Jackson, 2004):

- (1) Institutional–professional obstacles - elite consensus, abstract debates and short news cycles - obstruct media engagement with new risks because they do not

readily fit with news values (see Kitzinger & Reilly, 1997; Robinson, 2001; Schudson, 2001). The value of the research question and framework used here was to draw attention to how journalists negotiated these obstacles, how they constructed GM food as emblematic of deeper disturbances about scientific, technological and industrial production (see Cantelli, Kodate & Krieger, 2010) and so suggests why they did so in this case but not with other risks such as nanotechnology (Kousis, 2010).

- (2) The emergence of an intractable controversy and scientific reflexivity are crucial to the transformation of the governance of uncertainty in Risk Society (see Cantelli, Kodate & Krieger 2010; Pellizzoni, 2003, 2004). Chapter 3 argued that key questions therefore were how contestation was sustained for long enough to challenge existing hegemonies and how elites responded. The significance of the findings, Chapter 4 argued, does not lie in their generalizability but in discerning of emblematic residues in new forms of governance, discourses and practices left once the controversy had subsided.

Participatory politics: campaigns and participatory governance

However, Chapter 3 also argued that the political–media complex and new risk frameworks were insufficient to theorize how media justified a shift in their roles to active participants in policy debates or how elites responded in particular ways hence the turn to participatory approaches.

The normative assumptions in participatory approaches centre on increased public participation and enhanced elite responsiveness to public concerns. The concept of public participation, however, is elusive in theory and in practice. Proponents point to new, more inclusive, transparent forms of governance while detractors counter that these are an extension of neo-liberalism that co-opts or assimilates people into ‘new regimes of power’ (see Newman & Clarke, 2009: 134–137). The practice is elusive, arising from a ‘diversity of political imperatives ... and concerns’ and referring to different forms (see Newman & Clarke, 2009: 134–137). The focus here was restricted to two forms: newspaper campaigns and the (functional) participatory governance that emerged out of the GM food row, sought to assimilate opposition and safeguard elite neo-liberal, technocratic hegemonies (see findings below).

This negotiation of the difficulties with participatory approaches meant this research is able to offer an alternative to other studies:

- (1) Rather than reducing campaigns to political economy assumptions about commercial imperatives (see Bauer, 2005; Birks, 2009), the participatory approach adopted here draws attention to how newspapers construct their campaigning roles (see Birks, 2009; Howarth, 2012a; Milne, 2007). Rather than presuming campaigns were deficient when measured against classic liberal ideals of rational and impartial debate, this research questioned the relevance of these when disputes centre on knowledge, the 'facts' are unknown and rationality is contested (see Chapter 3; Howarth, 2011). Participatory approaches enable campaigns to be viewed in terms of newspaper constructs of legitimate mechanisms for enhancing public participation and elite responsiveness to the public.
- (2) It also draws attention to the particularities of the new forms of governance that emerged partly in response to these campaigns. The empirical chapters argued that these new forms included participatory and strategic functions that appeared to democratize decision-making but the discourses and institutional arrangements highlighted an underlying intention to 'stabilize' technological–scientific 'progress' through mechanisms of inclusion, involvement and mobilization (see Braun, 2010: 510). That is to assimilate resistance to what elites constructed as strategic technologies and so safeguard existing hegemonies.

This inclusion of participatory media *and* governance approaches within a framework of discursive intersections is innovative. First, although participatory approaches have been used to study new media (see Rheingold, 2008), alternative media (see Huesca, 1995) and community media (Howley, 2005) they have not been applied systematically to traditional mainstream media in mature democracies. This research in doing so has offered an alternative to out-dated classic approaches to the role of media in democracy; facilitated an empirically-driven theorization of an under-researched form of media engagement (see Birks, 2009; Milne, 2005); provided the conceptual tools with which to capture changing editorial constructions of their role; and identified how newspaper engagement was sustained so narrowed the gap between news and policy attention cycles thus enabled significant discursive intersections to emerge. A distinction needs to be added, however. Media activism seeks radical systemic and structural change, usually from outside the 'establishment' (see Huesca, 1995). Media campaigns use alternative sources to challenge existing policy but without destabilizing the capitalist – and in this case, neo-liberal – paradigm to which they also subscribe (see also Hallin, 2008). Thus there is an inbuilt limit to the challenge newspapers are willing to pose.

Second, greater use of participatory theory has been made in policy studies (see Newman & Clarke, 2009) and in the governance of risk uncertainties (see Pellizzoni, 2003, 2004). What these have not explored – prior to this project - is how new forms of decentralized, de-politicized governance emerged out of the participatory dynamics of contestation in the political–media complex and how mechanisms of assimilation were intended to neutralize future challenges by newspapers and so insulate ‘economic growth and political, technological and scientific production’ (see Cantelli, Kodate & Krieger, 2010: 1) from a repeat of the irradiated food, BSE/CJD and GM food scares.

From theoretical to analytical framework and empirical agenda

The unique tripartite framework devised in this project offers a very different understanding of interactional dynamics to the approaches reviewed in Chapter 2, which do not address:

- (1) How or why newspapers overcame institutional-operational obstructions – the lack of elite dissent, debates about abstract uncertainties and relatively short news cycles – to sustain engagement with GM food for long enough for significant discursive intersection to be discernible;
- (2) How elite responses were shaped by the threat they perceived sustained newspaper contestation to pose to their neo-liberal and technocratic hegemonies; and
- (3) How contestation was finally negotiated as manifest in the subsiding of contestation and the particular institutional character of the new Food Standards Agency.

Thus the critical unaddressed question prior to this research was how did policy elite–newspaper contestation over GM food emerge, be sustained then negotiated. The positivist–quantitative approaches to risk interactions reviewed in Chapter 2 are ill-equipped to explore the dynamic, dialectical and dialogical dimensions implicit in such a question. At best they offer a relatively rigid and linear, hierarchical or non-persuasive notion of argument or controversy that supports compare-contrast-converge analyses. The turn to discursive intersections in this research offers an original alternative.

Discursive intersections: the interactional dynamics of the political–media complex

The concept of discursive intersections was derived from post-colonial studies, where it refers to discursive changes emerging from ‘constant negotiation and conflict’ at the interface of different knowledges, agendas and cultures (Nakata, 2004). Its adaptation in this research to the political-media complex drew on discursive policy studies (see Chapter 2), definitional struggles over risk and action theory (see Chapter 3). Discursive intersection therefore used in this research is distinguishable from the post-colonial version in that: (1) it is concerned with struggles in the political–media complex over control of the public agenda, problematization of uncertainty and what preferred solutions – or behavioural actions – are needed, and (2) it includes a degree of unpredictability in that engagements on policy specifics are episodic and elective, with the potential for conflict, negotiation and consensus.

These distinctions were further developed into the following analytical categories (see Chapter 3 and Appendix 1 for more detailed accounts):

- (1) Engagement cannot be assumed. Institutional-operational obstacles have to be negotiated and when they were with GM food, engagement became a struggle between sustained newspaper engagement and elite determination to neutralize the perceived threat this posed to their hegemonies.
- (2) Problematization entails the discursive re-definition of issues into problems capable of being addressed (Hajer, 1995; Majone, 1989; Fischer, 2003b). How a problem is defined circumscribes what solutions – or behavioural actions – are considered. In the case of GM food, contestation centred over the problematization of uncertainty.
- (3) Contestation does not always arise from divergent problematizations because differences can be ignored. It emerged with GM food when problematizations were expanded to include the other as part of the problem, disagreements over how to proceed and counter-claims that directly challenged the other.
- (4) Negotiation may emerge where contestation is sustained, elites perceive their hegemonies to be threatened and old strategies to defuse conflict have failed. The capturing of the shifts in claims and counter-claims that resulted from contestation over GM food enabled this research to also view discursive intersections as a metaphor for intersecting discourses of negotiation. Four discursive categories emerged from the empirical analysis: (a) paradigmatic consensus rooted in neo-liberalism, (b) pragmatic negotiation of concessions peripheral to the core agenda,

- (c) reluctant negotiation of belated compromises intended to defuse conflict and safeguard the agenda and (d) non-negotiable core values.
- (5) Behavioural actions are non-routinized, deliberate and discrete forms of agency, which, in this project, comprised: (a) shifts in the locus of decision-making, (b) forms of resistance and (c) policy amendments that prescribe certain subsequent actions, such as a moratorium. Chapter 4 argued that the distinction between discursive and behavioural actions is blurred but important because the latter can signify important shifts in argumentation.

This analytical framework of discursive intersections devised here offers an alternative to positivist-informed approaches to risk interactions with their linear view of argument, quantitative methodologies and rigid compare-contrast-converge research designs (see Chapter 2). Instead argument is seen as dynamic, dialogical, dialectical and persuasive. This was supported methodologically with a hybrid rhetorical–critical discourse analysis approach to capture discursive intersections (see Chapter 4).

Key findings

Newspaper contestation was dependent on the prior negotiation of obstacles to engagement and the emergence of a parallel system of argumentation to that of the elites. The opportunity, ability and willingness of editors to negotiate these facilitated the emergence of a new risk-type problematization that diverged and conflicted with the institutionally-based one of the elites. However newspaper contestation was paradoxical from the outset. On the one hand it contained a deep distrust of elite technocratic hegemonies and management of uncertainties, as well as a demand for appropriate elite responsiveness to public anxiety. On the other hand the potential for co-option by elites lay in its uncertainty–ambivalence discourses and in its neo-liberalism manifest in dominant individual–consumerist discourses in newspapers. Elites initially failed to recognize or capitalize on this potential for assimilation. Instead, deeply threatened by the direct challenge by newspapers on their technocratic hegemonies, elites responded by trying to shore up their resilience and safeguard their agenda of innovation-driven economic growth through old strategies. Faced with the perceived dilemma that acknowledgement of uncertain science would appear to contradict and so weaken these hegemonies, and that too much consumer agency would undermine market efficiency, they sought to silence, defuse or control debate. When these failed, newspaper demands for responsiveness to public concerns hardened into campaigns that were intended to sustain pressure, mobilize readers, influence policy and elicit what editors perceived to be

appropriate elite responsiveness. The dynamic tension in divergent, conflictual problematization lay in a dialectic of responsive–resilient which shaped policy elite–newspaper contestation its relationship to the argumentative context. The following sections discuss three aspects of this dialectic: parallel systems of argumentation, the role of campaigns and the negotiation-assimilation of resistance.

Parallel systems of argumentation

This research found that in a climate of deep distrust of elites and unease about the direction of policy, newspaper contestation can emerge despite elite consensus when critical interventions by credible alternative sources open a parallel system of argumentation that challenges elite hegemonies. The determination of newspapers to navigate obstacles to engagement is rooted in claims that the phenomenon is emblematic of a deeper disturbance and in a new risk-type problematization that diverges from and conflicts with that of elites. However, elites trivialize these articulations by dismissing press claims as sensationalist while at the same time act to defuse the conflict and institutionally shore up the resilience of their hegemonies. These strategies reveal the extent to which elites see their hegemonies as threatened. At the heart of newspaper–elite contestation therefore is a responsive–resilient dialectic.

The engagement with and problematization of GM food was historically and institutionally situated. On the one hand, a decade of food scares had fostered newspaper distrust of elites, scepticism of government science and unease about the industrialization of food production. However the ability to link GM food to these via the BSE/CJD row was operationally constrained by elite consensus and abstract debates that did not fit easily with the values of news media. The consequence was sporadic, fragmented and ambivalent coverage of GM food between 1996 and mid-1998. On the other hand, the resilience of elite hegemonies was manifest in discursive continuities across time, governments and different food scares. The most explicit articulations of this was: (1) a neo-liberal agenda of innovation-driven economic growth/competitiveness, (2) a belief that technocratic processes could reconcile conflicts between an elite economic agenda and the public's need for reassurance over safety and (3) institutional-type problematizations and solution generation. The encapsulation of these in a Conservative repertoire of technocratic rationality, authoritative science and (administrative) safety survived BSE/CJD and a change of government. New Labour's repertoire of entrepreneurial managerialism was superimposed on rather than replaced that of their predecessors. Newspaper

contestation opened a parallel system of argumentation that exposed argumentative fault-lines in both repertoires.

This parallel system of argumentation was facilitated by the interventions of Prince Charles and Pusztai in mid-1998. These provided credible alternative sources and so enabled newspapers to bypass the Westminster consensus on GM food, signified a shift from low politics to high politics that effectively pitched the Prince against the government and enabled the emergence of a counter-science to challenge the certainty claims of elites and legitimize the public fears articulated by the Prince. Newspapers concretized abstract debates by locating the pervasive proximity of new risks in claims about the impending 'deluge' of GM in supermarkets and invisible risks in ineffective labelling policies which obstructed individual consumer agency, and familiarizing obscure production processes and effects through cultural associations ('Frankenstein' foods) and historical associations of the industrialization of production (chemical pesticides, steroids in food and BSE/CJD). What emerged was a wedge between newspapers and minimalist (pro-GM) arguments and a bridge with maximalist (anti-GM) ones, thereby facilitating a parallel system of argumentation with a wide repertoire of alternative sources and rationales, capable of sustaining coverage beyond the two original interventions.

Discourses and counter-discourses emerged along the main argumentative fault-lines of elite repertoires:

- (1) Elite certainty discourses claimed that GM food was safe in the absence of evidence of harm, and naturalized knowledge limitations as inevitable yet susceptible to technocratic management. Newspaper counter-discourses of radical uncertainty/ambivalence were based on claims of suspended certainty in the absence of evidence of risk or benefit, harm or safety.
- (2) Elite managerialist discourses claimed that technocratic processes could deliver safety and the elite agenda, policy transparency would prevent conflicts of interest, and new decentralized, de-politicized governance would rebuild public confidence. Newspaper anti-managerialist discourses counter-claimed that there was reason to distrust these because of uncertainty and elite mismanagement of past scares.
- (3) New Labour's neo-liberal entrepreneurial discourses claimed that the balancing of consumer-producer interests could ensure effective markets, that pragmatism dictated labelling should be workable and that government intervention should be minimal, needed only to ensure such markets. Newspaper neo-liberal individual-consumerist discourses counter-claimed that in the absence of confidence in elite

management of uncertainty, comprehensive consumer agency should be facilitated by government.

- (4) Elites' problematization ascribed public anxiety to institutional failures to reassure consumers. They therefore sought institutional solutions. Conversely, newspapers' problematization ascribed public anxiety to radical uncertainty/ambivalence and past elite mismanagement of food safety.

The behavioural actions taken to discredit, disrupt and defuse mounting newspaper contestation illustrate the extent to which elites perceived their hegemonies to be threatened. Elites, unable to challenge Prince Charles directly, sought to damage the credibility of Pusztai's counter-science through his employer and professional scientific bodies. They centralized decision-making and communication in a bid to take control of the debate, and announced reviews, thereby minimizing publicity from government in the hope that this would defuse the controversy. Instead, newspapers had other sources to draw on and the continued refusal of elites to acknowledge radical uncertainty/ambivalence fuelled newspaper ire. Such an acknowledgement threatened to undermine the logic of elite technocratic hegemonies premised on the belief that authoritative science and robust processes were able to deliver certainty. However, newspapers interpreted the lack of an acknowledgement as emblematic of the arrogant dismissal by elites of counter-science that was inconvenient for their agenda, a refusal to learn from past mistakes and an undemocratic disregard for public disturbance at the implications of 'political, technological and scientific production' (see Cantelli, Kodate & Krieger, 2010: 1). The more resilient elites were determined to be on the technocratic hegemonies, the more determined newspapers became to secure what they deemed to be an appropriate response. This responsive-resilient dialectic shaped the evolution of contestation.

Campaigns and the emergence of an intractable controversy

A key dimension of this dialectic is over the sustaining of contestation over any length of time. Existing studies have highlighted how potential newspaper influence on policy is undermined by discrepancies between short news cycles and long policy ones, which mean that elites can usually wait for newspaper paroxysms to subside before resuming policy business as usual (see Reese, Gandy & Grant, 2001; Stromberg, 2001). One of the key findings here is that newspaper campaigns may provide a mechanism to break this pattern and narrow the attention gap by sustaining coverage and redefining their role as active 'participants'. Even though elites saw these as direct threats to their hegemonies

and counter-attacked, attempting to discredit the campaigns as unprofessional sensationalism the hardening of these two positions signified the emergence of an intractable controversy which included paradoxes that held the potential for future negotiated compromise.

In this context, deliberate, self-labelled newspaper campaigns – hitherto under-researched in journalism and media studies (Howarth, 2012a) – redefine newspaper roles as active participants, legitimately marshalling their power to press for elite responsiveness to public concerns. This self-constructed participatory role sought to mobilize readers and influence policy – intentions explicitly articulated in the campaign agenda based on revelatory, educative and advocacy claims. This shift in role was legitimized in public interest discourses that were based on claims about elite failure to learn from the past mistakes, their dismissal of counter-science and potentially catastrophic consequences for consumers rendered powerless by ineffective labelling policies. Campaigns support a number of functions in a participatory media: (1) they sustain coverage beyond short news cycles, (2) they direct limited resources to strategic content priorities and (3) their objectives – in this case, a moratorium and ‘comprehensive’ labelling – provide ‘yardsticks’ against which to measure elite responsiveness. The symbolic power unleashed depends on how many newspapers campaign, for how long and with what societal resonance. What makes GM food a critical case is that four newspapers, reflecting the full political, ideological, demographic and formatting spectrum of the British newspaper industry, campaigned for a year. The potential for mass mobilization was therefore considerable.

Such a deliberate mobilization of resources and exercise of power with the intention of disrupting policy is unlikely to go unchallenged. It is possible to deduce from robust elite counter-claims what if, any threats they perceived how serious they considered these to be. The prime minister’s counter-attack against ‘campaigns of misinformation’ about risks and government intentions highlighted a serious threat to elite hegemonies and the central importance of the innovation-based agenda of Blair’s ‘modernization’ project. It linked sensationalist-deficient discourses and entrepreneurial managerialism, claiming that irresponsible, fictionalized scaremongering, a deficient understanding of the technology and an unprofessional departure from norms of impartiality were putting Britain’s internationally competitive biotechnology industry at risk. Newspaper calls for a moratorium were rejected in old risk-type discourses about a lack of evidence. While newspapers’ individual-consumerist discourses focused on comprehensive labelling,

Blair's pragmatic–consumerist discourses inferred that this was idealistic and stressed instead what was 'workable'.

Blair's intervention was seen by newspapers as 'evidence' of elite intransigence and it gave momentum to their campaigns. The parallel system of argumentation had hardened into an apparent intractable controversy based on irreconcilable differences over knowledge, values and how to proceed in conditions of uncertainty (see Pellizzoni, 2003, 2004). However, the discourses of contestation also included subtle paradoxes that held the potential for negotiation in that:

- (1) For newspapers, (a) they were not unilaterally opposed to GM food. Their uncertainty/ambivalence discourses were based on claims of suspended uncertainty – that is, on an absence of evidence of harm *or* benefit, risk *or* safety – and there contradictions between journalistic use of new risk-type discourses of uncertain science yet arguing for a moratorium to allow time for new evidence to provide certainty; (b) their dominant individualist–consumerist discourses differed from elites in the degree of agency called for but still fell within a broad neoliberal paradigm; and (c) campaign discourses continued to 'spotlight' the hidden dangers in GM food, but with Blair's intervention the dominant discourse became the elite's responsiveness to public concerns.
- (2) For policy elites, (a) counter-claims of uncertain science continued to be resisted by ministers although some voices – such as the Chief Scientific Advisor – argued that in sensitive areas such as health and environment continued denial was more damaging; (b) they rejected newspaper calls for government interventions that they claimed were bound to fail (comprehensive labelling) or illegal (moratorium), but remained open to market-led 'solutions'; and (c) they were deeply fearful that continued newspaper contestation could result in the loss of GM food to Britain forever – as had happened with irradiated food (see Chapter 5).

As it is evident above, what on the face of it appeared to be a typical new-risk intractable controversy included paradoxes that held the potential for negotiation between newspapers and policy elites.

Negotiation, subsiding contestation and assimilation

The analytical advantage of a methodology designed to capture discursive intersections is its ability also to capture the commonalities and shifts that facilitated first a negotiation, then a subsidence of an apparently intractable controversy into an uneasy truce and assimilation within new forms of governance. This took place in a discursive space

between a paradigmatic consensus (neo-liberal) and the non-negotiable (innovation driven growth and elite responsiveness). What facilitated it was elites' application of neo-liberal principles that empowered retailers to respond to consumer preferences, a voluntary moratorium negotiated by the government and Blair's apologetic acknowledgement of uncertain science.

In this process, four areas of compromise and non-compromise emerged. Discursive intersections can thus be seen as a metaphor of intersecting circles of negotiation. Data derived from the empirical analysis in Chapters 7 and 8 distilled four such categories:

- (1) Broad paradigmatic consensus was based on neoliberal assumptions about the importance of the market and the importance of the consumer;⁶⁰
- (2) Pragmatic negotiation took the form of elite-facilitated retailer empowerment and negotiated voluntary moratorium. This met newspaper opposition to 'undue haste' in expanding GM food and consumer opposition in having GM imposed on them. It also met elite neo-liberal opposition to government intervention but openness to market-led solutions that did not upset the producer-consumer equilibrium;
- (3) Reluctant negotiation took the form of an apologetic concession by Blair as to uncertain science but a determination that this could be addressed through robust technocratic processes and 'dialogue'; and
- (4) The non-negotiable comprised newspaper resolve to see appropriate elite responsiveness, which was satisfied with Blair's apology and elite determination to ensure the resilience of their technocratic agenda and hegemonies.

Thus negotiation arose out of elite interpretation of neo-liberal principles in the form of retailer empowerment and a voluntary moratorium on biotechnology. However, the newspaper campaigns did not subside until Blair's apology. Thus, in the ultimate analysis what mattered most to newspapers, on the one hand, was not the avoidance of uncertainty, but what they deemed to be the appropriate responsiveness of Blair to widespread public anxiety and the prudent management of new risks. Thereafter, the campaigns were dropped and a previously 'intractable controversy' subsided into an uneasy truce. What mattered most to elites was the safeguarding of their neo-liberal agenda and technocratic hegemony. Any loss of face through Blair's apology was a small price to pay for this.

⁶⁰ For an account of the shift towards a neo-liberal 'ethos' in British newspapers, see Thomas 2005 and Freedman (2008).

The significance of newspaper contestation over GM food was that it was emblematic. Even after it had subsided, the traces of it and its assimilation can be found in the discourses and institutional arrangements for the new Food Standards Agency. Accusations of elite dismissal of public preferences were assimilated into arrangements for greater participation by individual members of the public and a requirement for more public consultation. Assimilation was manifest in justifying discourses that stressed the strategic importance of early warnings about possible future controversies so that elites could take pre-emptive action. Technocratic processes remained separate from these strategic deliberations, and so relatively insulated from public debate. Greater access to the media was provided within discourses that recognized the interdependence–independence of the relationship with a view to creating a less adversarial relationship. What this amounted to was the institutional assimilation of resistance in new structures that were intended to safeguard the future of novel food technologies.

Argumentative context

One other factor in the escalating contestation and its negotiation needs to be considered. The dialectics of newspaper–elite discursive intersections means that these are defined by and define the wider argumentative context. That is, newspapers and elites draw from these wider circulating discourses in constructing their own arguments; intensifying contestation between them altered the discursive balance of the argumentative context. With GM food, this meant on the one hand that polarized positions in the argumentative context helped structure the trajectory of newspaper and elites' engagement. On the other hand, newspaper-backed maximalist (anti-GM) arguments were legitimized by expanding societal resistance, and thus became ascendant in the argumentative context. Conversely, elite-backed (pro-GM) minimalist arguments lost credibility with the persuasiveness of editorial accusations of insufficient sensitivity and responsiveness to 'legitimate' public concerns and newspaper problematizations of uncertainty. GM food campaigns illustrate how such interventions can change the climate of the debate and in so doing foreclose certain policy options.

Contributions, implications and future research

The substantive contribution of this research is its formulation of a conceptual framework of discursive intersections for understanding how the interactional dynamics of the political–media complex works. The framework captures shifts in claims and counter-claims that emerge from (1) increased engagement in changing conditions, (2) processes

of argumentation over problematizations, (3) the dialectics between policy elite–newspaper engagement and the argumentative context and (4) a metaphor of negotiated compromises. This framework was then applied to a particular form of engagement – new risk-type engagement over GM food – drawing on two key concepts of problematization and contestation. These two have been explored in the literature on public understanding of science and the sociology of scientific knowledge. What is distinctive here is their application to discursive intersections in the political–media complex and what this says about interactional dynamics generally and the new risk domain in particular. The following contributions, implications and areas for future research in our understanding of media–government engagements emerged:

- (1) An alternative to the studies of risk interactions that were reviewed in Chapter 2 with their asymmetrical approaches that privilege media or elites; out-dated, reductionist understandings of interactions as linear, hierarchical or non-persuasive; and too narrow a focus on moral dimensions or too broad a focus on coalitions. The thesis draws critical attention to a seriously under-researched dimension of risk interactions in the political-media complex.
- (2) This alternative draws attention to the degree of unpredictability in the emergence, nature and trajectory of discursive intersections in the political–media complex. Asking how rather than why contestation or consensus emerged and evolved allows hitherto unnoticed processes of argumentation to be explored. The conceptualization of discursive intersections as episodic, elective, historically located and open to conflict, consensus or negotiation reinforces this sense of unpredictability. Furthermore, the identification of institutional–operational obstacles to engagement on a particular issue is crucial to understanding how and why it takes the particular form it does. However, the application of this framework to an extreme case of contestation tells only part of the story. Future research is needed on discursive intersections in instances of relative non-engagement on new risks (such as nanotechnology) or selective engagement (for instance, on mobile phones and base masts). It is also needed in less extreme cases or in instances where engagement was sustained using different mechanisms or not sustained at all. It is needed in instances of consensus over risk (such as probiotics or medical biotechnology). Such a body of knowledge about the political–media complex would inform a rich tapestry of how different types of engagement emerge, and support an analysis of why certain forms rather than others emerge and under which conditions.

- (3) A questioning of relevant assumptions which argue that: (a) that the post-modern fragmentation of society undermines the capacity for collective media contestation and weakens the mobilization of public resistance (see Chapter 2; McRobbie & Thornton, 1995) by showing how it was possible over GM food. (b) Media contestation is not restricted to elite dissent (see Althaus, 2003; Robinson, 2001). A parallel system of argumentation can emerge and challenge elite consensus in conditions of uncertainty and distrust of elites; when critical interventions by alternative sources present counter-discourses and counter-evidence; when media construct a phenomenon as emblematic of a deeper disturbance so they see a 'public interest' imperative to negotiate the operational obstacles. However, more research is needed on whether all of these are needed for intense contestation to emerge. How did the newspapers that did not campaign on GM food respond to or resist the agenda set by those that did, and why? Where else has media contestation emerged despite broad elite consensus, and what factors facilitated it? What other operational mechanisms do media use to negotiate particular obstacles to sustained engagement and how do elites use to disrupt, defuse or discredit this? What are the implications of more recent developments in online–offline dialectics for such types of engagement?
- (4) A novel conceptualization of the dynamic nature of media-policy interactions are attributable in part to two tensions: (a) a responsive–resilient dialectic between newspaper determination to secure elite responsiveness and elite resolve to shore up the resilience of their existing hegemonies, and (b) a dialectic in which policy elite–newspaper contestation is defined by and defines the argumentative context, that is, both draw on circulating discourses to construct their problematizations and escalating contestation between them alters the discursive balance of the argumentative context. Future research could explore instances where newspaper contestation did not secure elite responsiveness and petered out instead, or where elite resilience weakened, or where contestation/consensus did not appear to alter the discursive balance of the argumentative context possibly because media failed to construct an issue in ways that resonated with the public. This would deepen our understanding of the power dynamics in engagement.
- (5) The introduction of literature on participatory approaches to theorizing the political-media complex has enabled: (a) the under-researched area of newspaper campaigns to be empirically explored and conceptualized as forms of participatory

politics without destabilizing the polity, (b) a highlighting of the implications of this for the expansion of public opposition and the emergence of new forms of resistance, and (c) a drawing of attention to the role sustained media contestation can play in the particular forms of governance. Future research could usefully compare and contrast how the new food arrangements differed from those for GM crops and medical biotechnology to elucidate how different types of newspaper controversy may have influenced the particular nature of participatory mechanisms that emerged in the two domains. Further work is also needed on the triangulated dialectic identified here between participatory media, public participation and participatory governance.⁶¹ More work on this in other areas of participatory governance such as urban regeneration, hospital governance and financial risks could highlight differences in the roles of the media. For instance, when they choose to operate in the mode of a classic liberal watchdog and when in a participatory one, as well as how elites respond and the implications for the type of institutional arrangements that emerge.

- (6) The unique participatory approach here has facilitated an understanding of the paradoxical assimilation of resistance into neo-liberal forms of capitalism while leaving emblematic traces of former contestation in new discourses and institutional arrangements. Future research could explore how this developed in subsequent years – for example with the Great Debate on the future of GM crops – and whether this amounted to a deliberate bypassing of the media as a proxy for public opinion (See Bauer, 2005a). It could explore the emblematic traces in the new discourse of ‘Science in Society’ that emerged from a plethora of parliamentary documents and government-funded research concerned with how the public (and media) respond to uncertain science, the differences between individual agency and the imposition of decisions for how people engage with uncertainty and how elites could best communicate uncertain science (House of Lords, 2000). The *Independent on Sunday* dropped its campaign on GM food (although it continued to campaign against GM crops) and in 2003 Monsanto announced it was withdrawing from Europe because of public opposition. Further research could usefully explore in more detail the traces of the GM food controversy within these as well as how the new regulator manages the media during future food controversies.

⁶¹ The Bauer and Gaskell studies (2000) centre on representations not on participatory roles.

Limitations and reflexivity

This research has outlined a number of contributions to our understanding of the interactional dynamics of the political–media complex in the new domain of GM food. However, the methodology and the parameters necessary to ensure that the project was feasible also present a number of limitations.

The biggest of these can be inferred from the ideas detailed above for further research. The lack of other work, the focus on a critical case study and the potential for a wide range of other types of engagement prevents a fuller exploration of the interactional dynamics in the political–media complex. There is a rich vein of research here that, once mined, could inform meaningful questions not only on how contestation, consensus and negotiation emerge but also why, in what form and in what circumstances. This research is not able to explore these beyond the parameters of this case study.

A second limitation is the generalizability of the findings. Chapter 2 highlighted the difficulties of generalizing from critical case studies and discourse analysis. Hajer's response (2005a) to this is useful in arguing that the question of significance need not lie in generalizability of the findings but in the extent to which a controversy was emblematic, a metaphor for a deeper disturbance, and that when it subsided it left traces in new institutions, discourses and practices. The contributions outlined above highlight this. However, the study is limited by ending in 2000. It would be useful to explore how far and how deep these traces went as well as what form they took during the early years of the Food Standards Agency.

A third limitation is the somewhat artificial division between GM food and crops. While the formal, intense campaigns against GM food subsided after February 2000, newspapers retained an uneasy and suspicious watch on policy and the *Independent on Sunday* continued to campaign against GM crops. There were further peaks and troughs in engagement but these never reached the intensity of pre-2000. The parameters of the research prevent the exploration of how earlier acrimony shaped what came after. They also distinguish GM food from GM crops – as do formal policy instruments – but both constitute agri-biotechnology. With its emphasis on monitoring the complete food chain, the post-2000 policy environment blurs these distinctions, as did newspaper contestation between mid-1998 and February 2000. It has not been possible to explore how debates about GM food and GM crops came to mutually reinforce one another, or how, as

newspaper contestation escalated, elite consensus was imposed by Blair and the Cabinet Office despite splits emerging between relatively junior elites responsible for food, environment and industry (see Barling, 1995, 2000). To do so would have required a bigger project involving more departments.

One of the common critiques of interpretative methods is researcher subjectivity. Flick (2002) has argued that it is precisely this subjectivity that delivers some of the rich findings in qualitative studies. This is most clearly manifest in the self-selection of the campaigning newspapers, which delivered a broader understanding of the nature of newspaper contestation than was possible through using social representation frameworks (see Chapter 2). However, some comment is needed on the researcher's own position in relation to the debates. This has shifted markedly during the course of the research from a sympathy for elites struggling with what at first seemed to be a pack mentality in the newspapers; to a respect for the nuances in newspaper arguments, a genuine concern from the latter about the direction of policy and a determination to secure what they deemed was responsiveness of elites when all too often public preferences are ignored; to a disappointment that editors should have been taken in by Blair's apology and retailer empowerment when their original agenda was consumer agency. There is a sense that for one brief moment at the peak of an intractable controversy a different way of thinking and dealing with public concerns about risks might have been possible. With the negotiation of contestation and assimilation of resistance, that passed. It seems a rare opportunity was lost.

Appendix 1: Glossary of key terms

Action (discursive and behavioural)

Discourse includes both text/utterance and action or what this research calls discursive and behavioural action. The distinction is problematic because the boundaries between action and text are blurred, the relationship is dialectical and there is an unresolved tension between the construction of agency in discursive speech and its interpretation as behavioural actions evolve (see Norris & Jones, 2005: 171). Thus, any analytical distinctions made are a matter of emphasis, not exclusivity. Despite these difficulties it is important to include behavioural actions in the analysis because behavioural action – or the lack of it – can also become a point of conflict and such actions can serve as critical interventions, provide supporting ‘evidence’ of an argument or signify a bid to neutralize conflict. Thus, behavioural actions can signify important shifts in argumentation that need to be captured empirically. This can be facilitated by differentiating between arguments based solely on claims (discursive action), those expanded to include a claim *plus* action (behavioural action). It is also important to distinguish between: (1) processes and practices in which decision-making or professional activities are routinized in particular actions such as deliberations of expert committees; and (2) behavioural actions that are non-routinized, deliberate and often discrete forms of agency including: (a) a shift in the actors involved or in the locus of decision-making, (b) forms of resistance, for instance a consumer/retailer boycott, destroying crop fields, and (c) amendments to policy that prescribe certain subsequent actions, for example, compulsory labelling, a voluntary moratorium.

Agenda-setting

Agenda-setting is concerned with the relative importance afforded an issue and the extent to which it secures the attention of the media, public or policy elites. Intensification of engagement signifies shifts in the agenda; that is, in the relative importance ascribed to a particular issue. Struggles in the political–media complex take place over control of the agenda, but the fragmented nature of media and government means different actors have different agenda-setting capacities. On the one hand, national newspapers in Britain play the primary agenda-setting role in the medium- to long-term. That is, they set the ‘dominant interpretative frameworks’ and – unfettered by the regulatory curbs on broadcasters and the immediacy demands of the televisual – are free to launch campaigns ‘on the back of which major agenda-setting interventions can be mounted’ (McNair, 2000a: 30). On the other hand, any shift in the locus of policy decision-making between a peripheral and a central department or between more or less senior ministers are important signifiers of shifts in the perceived importance of an issue to the government.

Argument and counter-argument

Argumentation is dialogical, dialectical and persuasive. It entails a negotiation or contest over competing positions and meanings with the purpose of persuading the other and the public about the veracity of an argument. The analysis of argument and counter-argument requires an exploration of positions and counter-positions, claims and counter-claims supported by ‘evidence’. These co-exist and are socially situated (Billig, 1996: 117), and so argumentative discourse is therefore not a compare and contrast but a ‘contest’, the analysis of which requires consideration of positions and counter-positions (Billig, 1996: 121) as well as the shifts in claims that take place during argumentation.

Argumentative context

The argumentative context is the macro-social context comprising all the circulating discourses on and possible associations with a topic. These become organized into broad positions during societal processes of argumentation. The relationship between the argumentative context and the discursive engagement of newspapers or policy elites on a specific topic is dialectical and dynamic. On the one hand, both extract 'discourses' from the argumentative context when constructing their own argument, which in turn feeds back into the wider context. On the other hand, increased – or non – engagement by either has implications for which arguments ascend at the expense of others, which discourses displace others as dominant, which that were previously silent or marginalized acquire greater profile, and how these shifts persuade other actors to shift their position. Thus, the argumentative context is highly dynamic.

Biotechnology and genetic modification/genetic engineering

At a literal level, genetic modification is a branch of biotechnology that involves changing specific characteristics of an organism by inserting genes with the desired characteristics from another organism (Berkhout, 2002). However, there are deep divides over whether it signifies a radical intervention or merely an acceleration of what happens naturally in cross-fertilization.

Campaigns (newspaper)

Campaigns entail a self-labelled and intentional shift in the role of newspapers from impartial purveyors of facts and views of others to active participation in policy debates explicitly formulating and articulating the title's own views with the intention of influencing a particular policy (advocacy agenda) and/or mobilizing their readership (revelatory and educative agendas) to a particular cause. Shifts towards this type of engagement are legitimized within discourses of an overarching public interest. Classic liberal assumptions dismiss such discourses as covering a departure from professionalism (see Blair, 2007); political economy approaches assume this is a cover for commercial imperatives (see Bauer, 2005; Birks, 2007). The historical-participatory approach used here dismisses these as reductionist. While the British newspaper industry is highly competitive, campaigns are resource intensive: any increase in sales is unlikely to recoup costs and there is the danger that advertisers and readers might be alienated. Notwithstanding this, all Britain's national newspapers have a long history of campaigns, at times despite adverse commercial consequences; of constructing their identities as campaigning titles; and of justifying such engagements within discourses of a greater public interest. The advantage of a participatory understanding is that it does not start from the assumption that campaigns are a deficient form of journalism but views them as legitimate forms of participation that widen public discussion and participation as well as put pressure on elites to be responsive to public concerns and preferences. Within the news organization, campaigns focus limited resources across all sections of the newspaper on the agenda, facilitate the sustaining of coverage despite other major news events and across the relatively short news cycle, and, where objectives are clearly articulated, provide yardsticks against which to measure government responsiveness and focus resources on certain types of stories while rejecting others. Campaigns can therefore be crucial tools in newspaper attempts to influence the content of policy.

Constructionist

There is a subtle but clear distinction between constructivist and constructionist despite their frequently interchangeable usage (Crotty, 1998). 'Constructivism' is concerned with 'the meaning-making activity of the individual mind' while 'constructionism' is concerned with 'the collective generation of meaning as shaped by the conventions of language and other social processes' (Schwandt, 1994: 127). Crotty adds that constructivism 'taken in this sense points up the unique experience of each of us. It suggests that each one's way of making sense of the world is as valid and worthy of respect as any other'. Social

constructionism, however, 'emphasizes the hold our culture has on us: it shapes the way in which we see things ... and gives us a quite definite view of the world' (Crotty 1998: 58).

Contestation/conflict

The political-media complex starts from the assumption that consensus, conflict or negotiation is possible (Blumler & Gurevitch, 1995; Swanson, 1992, 1997; Voltmer, 2006). Consensus is where media and government agree on the importance of an issue, its problematization and the preferred solutions (see Problematization, below). Divergent problematizations are a necessary but not sufficient condition for contestation because differences can be ignored, accommodated or deemed insufficiently important to sustain any serious engagement in the debate (see Engagement, below). Furthermore, where the differences are deemed important discursive struggles may emerge over whose definition of the problem should predominate, but they may lack the particular acrimonious edge that characterizes conflict. For contestation to emerge there also needs to be an intensification of engagement with the issues and a conflictual dimension needs to be added to divergent problematizations. Conflictual problematizations may arise out of (1) strong claims that certain values should predominate over others (for example, prudence over progress); (2) strong claims that the other is a contributing factor in problematization; and (3) counter-claims that directly challenge or rebut the claims of the other.

Critical junctures

Critical junctures take place at both a macro and a micro level. An macro analysis would centre, on the one hand, on the realignment of the newspaper industry by the late-1990s in terms of a shift in perception which saw the mid-market as the most politically significant readership, a further weakening of party allegiance, an expansion of content to include more opinion pieces, a widening of the boundaries of what was considered political and the increased use of issue- and event-driven news (such as GM food). On the other hand, policy elites faced their own critical juncture with the realignment of the Labour Party in the centre-left and its forming of a government in 1997, a widespread consensus of a collapse of public confidence and a climate of mistrust in food safety controls following a decade of food scares and a shift from governance to participatory governance in an attempt to de-politicize and de-centralize food policy. At the micro level, critical junctures are those significant moments when a major shift in discourses and the level of political engagement, and hence in a debate, is discernible. These may result from unexpected events or the critical intervention by another actor deemed to be credible by one or other parties or by a change in actors. Such junctures are characterized by significant shifts in: (1) the intensity of engagement, (2) the argumentative position adopted by different parties and (3) the content of an argument and problematization.

Discourse

The concept of discourse used here draws on Billig (1996) and Fairclough (1992) to refer to: (1) discourse as 'texts' and actions (see Action, above); (2) discursive groupings – or categorizations (Billig, 1996) – around: (a) specific regimes of meaning associated with a particular type, for example, political discourses, scientific discourses (Foucault, 1970) and (b) the discourses associated with particular sets of actors – media discourses, elite discourses, expert discourses; and (3) discursive practices or processes: (a) the selection of meanings from existing texts during the 'processes of production and interpretation' (Fairclough, 1992: 4) and (b) the organization of these into arguments (see above) and into processual forms such as problematization. The use of both Billig and Fairclough facilitates a theorization of discourse as persuasive (see Argumentation, above) and as hegemonic/counter-hegemonic (see Discourse (orders of), below).

Discourse (orders of)

These are the 'total configuration of discursive practices' at societal and institutional levels (Fairclough, 1992: 4). This concept overlaps with and mutually reinforces the

argumentative context (see above) but is distinguished from it in that the latter refers to persuasive dimensions organized into argumentative positions and the processes of argumentation that emerge around these. The order of discourse is concerned with the hegemonic structuring into dominant, marginalized or silent discourses within these arguments. The practices through which this happens that are far from arbitrary. Instead they are controlled through implicit or explicit regulative principles that prohibit certain topics, valorise certain concepts or legitimize certain forms of knowledge (Rabinow & Rose, 2004). They thus follow the norms and values, principles and practices of a wider society or of particular institutional actors, and so are de-limiting at a particular moment in time. However, these regulative principles are not static or closed but open to change as a consequence of actual interactions; negotiation over competing meanings, ideas and values; challenges from others; or the emergence of new circumstances (Fairclough, 1992: 9). Such interactions or re-negotiations may lead to a re-contextualization of discourses (Fairclough, 1989, 1992) and the marginalization of previously dominant discourses or the prioritizing of previously marginal or silent ones. The methodological analysis of orders of discourse within processes of argumentation therefore centres on: (a) how the selection of discourses from the argumentative context reflects prevailing norms, values and beliefs; (b) the identification of which discourses are dominant, marginal and silent as well as the processes by which this structuring takes place; and (c) discursive shifts by which previously dominant discourses are relatively marginalized and vice versa, or by which silent discourses become more prominent through processes of argumentation.

Discursive intersections

Discursive intersections are concerned to capture shifts in claims and counter-claims that emerge during engagement at the interface of different sets of knowledge, cultures and agendas. Thus, there is potential for conflict, negotiation and consensus. Discursive intersections on a particular policy are episodic, elective and difficult to sustain. Historical contexts are crucial to how and in what form engagement takes place but do not define it. Thus there is a degree of unpredictability about the possibility and trajectory of discursive intersections and they need to be explored empirically rather than predetermined theoretically. When they do emerge and take the form of contestation this centres on divergent, conflicting problematizations and the behavioural actions that follow. Methodologically there are two levels of analysis: (1) the capturing of discursive intersections in shifting claims and orders of discourse, and (2) discursive intersections as a metaphor for intersecting discourses of negotiated compromise including: (a) paradigmatic consensus or conflict, (b) pragmatic negotiation of concessions peripheral to the core agenda, (c) reluctant negotiation of belated compromises made begrudgingly to neutralize conflict and safeguard the agenda and (d) non-negotiable core values. The latter is particularly significant because it sheds light on the deepest concerns, which may have been obscured in the sound and fury of conflict.

Engagement

The theoretical and analytical value of analysing engagement is not limited to building a foundation from which the subsequent analysis of contestation can build. Given the competing demands for the attention of newspapers and policy, engagement or disengagement on a particular issue can signify the relative prioritizing or de-prioritizing of an issue by media or policy elites (see Agenda setting, above). Furthermore, engagement is a prerequisite for and an important signifier of an emerging and escalating problematization. When intensity of engagement peaks, problematization – and contestation – is likely to be at its most intense. When engagement subsides, problematization may be resolved or media/elites may have decided that it cannot be resolved. It therefore becomes important to trace shifts between unengaged/sporadic engagement, semi-engagement, full/intense engagement and disengagement. Furthermore, engagement itself can become a site of contestation between newspaper

determination to sustain it and elite determination to neutralize it and so facilitate its subsidence.

Intractable controversy

This is a particular type of contestation that emerges around new risk debates and the radical uncertainty associated with these (see Rein & Schon, 1977; Schon & Rein, 1994). Intractable controversies are those that cannot be readily resolved or managed by policy elites using conventional attempts to control the terms of the debate and neutralize hostility (Pellizzoni, 2003: 196). Nor can they be negotiated by appealing to shared knowledge based on unitary scientific research, witnesses, past experiences and so on. Such appeals are powerless because the knowledge itself is contested; there is a 'lack of consensus on the principles at stake' (Pellizzoni, 2003: 203) and the values that inform how to proceed. Competing positions therefore become increasingly entrenched and contestation becomes non-negotiable.

Minimalist–maximalist debates

These terms specific to this research are used to differentiate and encapsulate the arguments made by the pro-GM food and anti-GM food factions about the novel technology. (1) Minimalists comprised the biotechnology industry, British policy elites, most MPs in Westminster and EU officials. For them, GM signified a revolutionary technology and acceleration of natural processes that promised considerable benefits to health, environment and economic growth. Possible threats were de-emphasized and when this argument failed to be persuasive old risk assumptions were drawn on to argue that authoritative science, sufficiently robust technocratic processes and case-by-case knowledge accumulation were sufficient to deal with any potential risk posed by GM food. Public anxiety was seen as having the potential to obstruct the future development of technology so these groups advocated minimal regulation – not with the intention of preventing harm to health or environment but to prevent the stigmatization of the technology by an irrational public. Minimal technocratic risk assessments and labelling based on a definition of genetic modification that was limited to the end product were seen as necessary for consumer/public reassurance but not so oppressive as to slow the expansion of the technology. (2) Maximalists initially comprised MEPs and (environmental and consumer) NGOs but they were later joined by newspapers and food retailers. For them, GM technology signified the latest development in the industrialization of farming, manufactured food and the scientific manipulation of the sacred. Thus, they de-emphasized benefits, emphasized risks and stigmatized the technology. Constructions of the latter were based on new risk assumptions and the radical uncertainty these generated; that is, uncertain science, unknown effects as well as unpredictable and uncontrollable consequences. They argued for maximum regulation based on an expansive definition of genetic modification that encompassed the technological processes rather than the end product. Thus they looked for the assessment and labelling of any product that included GM ingredients or derivatives. Public anxiety was seen as reasonable given a decade of food scares and the uncertain science that underpinned the technology and the assessment of its risks. The crucial difference between the two positions, however, was that the minimalists argued for evidence of harm before slowing or halting development whereas the maximalists argued that development should be halted pending the search for evidence.

New risks

New risks are constructed as qualitatively different from natural disasters or controllable man-made risks in that they are manufactured, emerge out of the technological advances of late modernity and have novel and unpredictable potential impacts (Beck, 1992 (1986), 1999; Giddens, 1998). However, they 'initially exist only in knowledge' so that struggles over them are epistemological and discursive, involving the contestation and negotiation of uncertain knowledge claims (see Beck, 1992 (1986)). These struggles are also

'definitional' in that they are constituted around conflicts over the nature of the risk, the implications of managing them in conditions of uncertainty and whose problematization should predominate (Beck, 1992 (1986); Miller, 1999). With new risks, definitional struggles are likely to centre on radical uncertainty.

(Functional) Participatory governance

Between the 1970s and early 1990s there was a radical restructuring of the state from centralized to regulatory and from government to governance based decision-making processes (Hood et al., 2000; Majone, 1997; Moran, 2001; Scott, 2003). However, counter-claims questioned the democratic legitimacy of decisions derived through expert and non-participatory processes, especially in areas of controversial risk regulation (Fung, 2001; Laird, 1993; Lengwiler, 2007; Pellizzoni, 2003). Policy elites responded by creating more inclusive, participatory and transparent governance structures and processes so that since the late-1990s there has been an added shift from governance to participatory governance (Pellizzoni, 2003). The term (functional) participatory governance is used here to encapsulate a relatively coherent discourse that combined participatory and strategic elements, justified not in discourses of democratization but discourses of managing innovation and pre-empting public anxieties. The institutional arrangement for the new Food Standards Agency was one institutional manifestation of translating this into practice. Most of the existing literature on participatory governance has ignored the role of the media in this transition. However, the acknowledgement of the media as key signifiers of public anxiety, the inclusion of pre-emptive mechanisms for anticipating future controversies before they developed into a GM food-style row and the conscious adoption of a more co-operative, accessible approach to the media point to their important but indirect role in the shift to participatory governance.

Participatory media (as an alternative to liberal media)

A participatory approach to the media offers an alternative to the classic liberal one in which a free press serves as a watchdog on political abuse, the provision of accurate information and as a forum for critical rational debate. This is predicated on normative assumptions about professional standards of objectivity, impartiality and factual accuracy. However, classic liberal approaches have been critiqued as out-dated (see Scammell & Semetko, 2000) and here are seen as being limited relevance when dealing with new risk-type debate where disputes are over knowledge, facts and evidence (see Howarth, 2012A). Participatory media refers to the deliberate, self-labelled redefinition of media roles from dispassionate 'observers' to active participants seeking to influence policy change in their own right and to mobilize wider political participation. Rather than a pre-occupation with great affairs of the state such as political corruption, the media see their primary role as exposing the impact of policies on everyday activities and, contrary to the claims of political elites, highlighting the disempowerment of ordinary citizens to make choices over their own lives. Rather than holding governments to account in the sense of a watchdog on corruption, participatory media hold them to be responsive to public concerns. Within such a framework, information is crucial – not as objective facts, but as contested knowledge and inconvenient details that those in power, both government and corporations, would rather pretend were certain or remained secret. Participatory activities include influencing attempts such as campaigns and broadening the nature of public discussion to include discourse otherwise marginalized and forms of knowledge otherwise silenced. When media do this in conditions of uncertainty and when technocratic legitimacy of expert-based decision making processes are challenged they can facilitate conditions in which a move towards forms of participatory governance are seen by elites as one way of appeasing demands for responsiveness.

Political-media complex

This conceptualizes government and media as paradoxically independent and interdependent, rooted in ways in which 'different institutional cultures, agendas and

needs' provide 'incentives for co-operation as well as conflict' (Swanson, 1996: 1266). This gives rise to a 'complex web of interactions and negotiations over aims, proceedings and ultimately control of the public agenda' (Voltmer, 2006: 61) in which neither side is dominant or dominated (Blumler & Gurevitch, 1996; Deacon & Golding, 1994; Swanson, 1997; Voltmer, 2006). So how they engage, what form – consensus or conflict – this takes and the outcome of it cannot be theoretically pre-determined but needs to be empirically investigated. Such an investigation needs to be historically situated because both government and media are constantly evolving, along with the social, economic and political context in which they operate and therefore the relationship between them.

Problematization

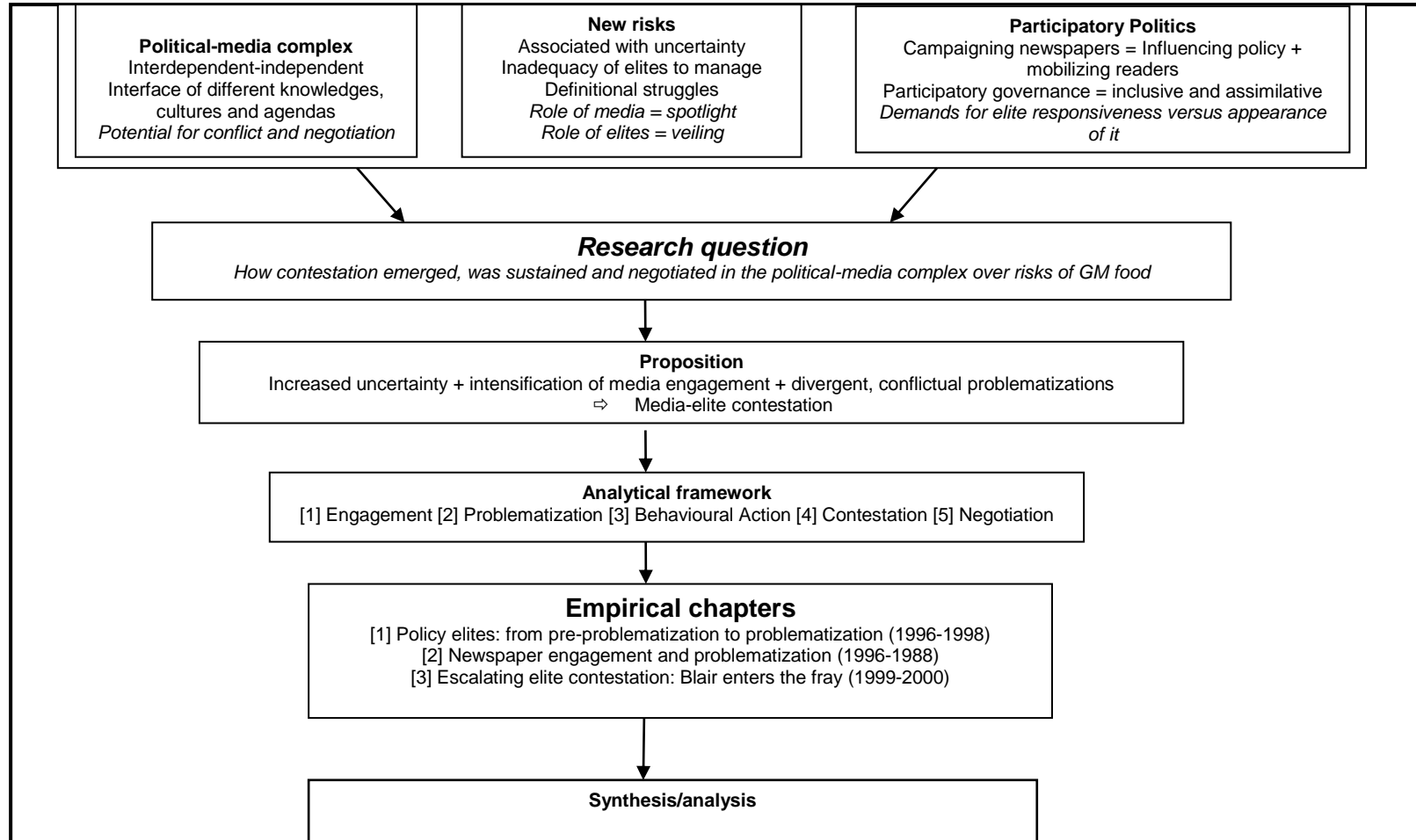
Constructionist problematization is concerned with the argumentative processes by which: (1) issues are discursively re-categorized and defined as problems in need and capable of being addressed (Hajer, 1995; Majone, 1989), (2) media and newspapers articulate what they each believe to be the nature, consequences, parameters and significance of a problem (Fischer, 2003; Majone, 1989) and (3) participants struggle to persuade others that their problematization is most credible. This emphasis on discourse and process distinguishes problematization from the pre-occupation on 'technocratic problem-posing', objective indicators that track the emergence of problems and mechanisms for finding solutions (see Fischer, 2003) found in realist/post-positivist approaches to problem definition. The methodological analysis of problematization directs attention to: (1) the processes by which actors position themselves within a debate in the argumentative context, select discourses from that and interact with this wider social context and others; (2) how problem definitions are constructed in terms of: (a) claims and counter-claims about the nature and parameters, causes and consequences as well as significance of the problem, (b) persuasive elements including justifications and criticisms, evidence' and 'legitimacy' claims in support of the particular problematization, and (c) preferred solutions or alternatives that arise from these and emotive discourses about the consequences of non-adoption or preferring an alternative solution.

Repertoire

A repertoire is a discursive configuration available to a group of actors working in particular institutional contexts to discuss a topic. These configurations provide meanings the group draws on to 'characterize and evaluate actions and events' (Potter, 1987: 187) and highlight which discourses are dominant. Such repertoires emerge out of past and present problematizations and behavioural actions, agendas, and existing decision-making processes.

Appendix 2: Research framework

Chart 1: Schematic of the conceptual, analytical and methodological frameworks



Appendix 3: Chronology of Events

Table 1: Event timeline on GM food

Date	Event
1973	First gene successfully spliced.
1974 and 1975	Peter Berg article and Asilomar conference recommends: (1) 'partial postponement of some experiments' and (2) need to build public consensus.
1975	Report of the Working Party on the Experimental Manipulation of the Genetic Composition of Micro-organisms, January 1975 (Cmmd. 5880) under the Chairmanship of Lord Ashby. The focus is only on laboratory work and it concludes that the technology would provide 'substantial (though unpredictable) benefits'.
1976	Genetic Modification Advisory Committee (GMAC) is set up to examine proposals for genetic manipulation.
1978	The Health and Safety (Genetic Manipulation) Regulations require any activity involving genetic modification to be notified to GMAG and Health & Safety Executive (HSE).
1984	GMAG was replaced by the Advisory Committee on Genetic Modification with a remit to advise HSE on the contained use of genetically modified organisms. Formally its remit did not extend to ethical or social issues. But formal guidelines issued by ACGM included a requirement to provide the HSE with an environmental assessment of the consequences of an intentional release of a GMO into the environment.
1988	Advisory Committee on Novel Food & Processes is set up to advise Food Minister and Health Secretary on the safety implications of applications for consent for GM food.
1990	Food Safety Act requires all GM foods to be approved for sale by ACNFP.
1990	First GM food product – modified yeast – licensed in the UK.
1992	Genetically Modified Organisms (Deliberate Release) Regulations is amended to include food and specify that a license is needed to sell GM food in the EU.
1993	MAFF publishes 'Report of the Committee on the Ethics of Genetic Modification and Food Use' (Polkinghorne Committee).
1993	Food Advisory Committee issues guidelines on voluntary labelling of GM food.
1995	Zeneca decides to launch Europe's first GM product in UK because of existing regulations.
1995 and 1996	ANCFP licenses for sale in the UK Monsanto's GM maize and soya and Zeneca's GM tomato paste.
1995	Discussions in EU over draft regulation on novel food and ingredients which would introduce compulsory labelling.
1996	First GM food product – tomato paste – goes on sale in UK.
1997 (March)	Chief Scientific Advisor, Sir Robert May, publishes report, 'The Use of Scientific Advice in Policy Making'.
1997 (May)	Election campaign and Labour wins election.
1997 (May)	Office of Prime Minister publishes Green Paper: 'A Food Standards Agency: An interim proposal' (James Report).
1997 (May)	MAFF and Department of Health announce the setting up a Joint Food Safety and Standards Group.
1997 (May)	EC Novel Foods Regulation comes into effect. The new regulations subsume existing national regulations into a European framework that requires mandatory licensing and qualified majority vote on any change in policy.
1997 (June)	Jeff Rooker announces a policy change from voluntary labelling to mandatory labelling of GM food.
1998 (January)	Cross-departmental publication of the White Paper on Food Standards Agency which outlines the remit and responsibilities of proposed independent food regulator.
1998 (January)	DETR and MAFF statement announces its intention to make more information available; to ensure the advisory committees include a

	wider range of opinion; and to establish procedures for post-marketing monitoring of GM.
1998 (March)	Food Minister Jeff Rooker and Health Secretary Tessa Jowell announce an extension of the role of ACNFP to consider post-market monitoring of novel foods.
1998 (March)	Iceland Frozen Foods becomes the first food retailer to announce it would ban GM products and derivatives from own-brand products.
1998 (May)	Food Minister Jeff Rooker uses a speech at the Agra-Europe Conference to reiterate government commitment on protection, openness, transparency and accountability.
1998 (June)	Monsanto launches £1m, 3 month advertising campaign to 'encourage a positive understanding of food biotechnology'.
1998 (June)	An article by Prince Charles on GM food and crops is published in the Daily Telegraph; Daily Mail runs first editorial on GM food.
1998 (June)	Express runs its first editorial on GM food.
1998 (June)	Sainsbury's sets up dedicated GM helpline. In its first 30 hours of being set up, the GM helpline took 2,500 calls from customers expressing concern. Concerns also shifted from focus on labelling and choice to no-GM food.
1998 (June)	Genewatch/MORI poll claims 77% of public want a ban on growing GM crops until their impact has been more fully assessed; 61% do not want eat GMF – a 6% increase on MORI poll in 1996; and 58% oppose the use of GM in food.
1998 (June)	<i>Guardian</i> /ICM poll claims 50% do not want GM food introduced and 96% think GM food should be clearly labelled.
1998 (June)	<i>Express</i> launches food campaign.
1998 (June)	Monsanto launches a £1m advertising campaign to 'encourage a positive understanding of food biotechnology'.
1998 (August)	Granada World in Action programme. Dr Pusztai alleges scientific evidence of a link between GM potatoes and mutations in mice. After the programme the Sainsbury's GM Helpline took over 900 calls a week over one month compared to 300 a week on the general helpline.
1998 (September)	The Royal Society issued a preliminary statement on 'Genetically modified plants for food use'.
1998 (September)	EC regulations on labelling come into force. They stipulate mandatory labelling but do not cover GM derivatives.
1998 (September)	Tesco announces it will label all own-brand products which contain GM soybean derivatives.
1998 (October)	Food minister Jeff Rooker makes a parliamentary statement acknowledging public concerns about 'long term safety' of GM food and announcing that government: (1) would set up a Cabinet Committee to co-ordinate government policy on GM food, (2) was considering a stakeholders forum to advise government on environmental risks and (3) would develop a mechanism to monitor effects of GMF on health.
1998 (October)	Friends of the Earth/NOP poll claims 58% of supermarket customers believe supermarkets should stop selling GMF.
1998 (November)	Leaked Monsanto public opinion research claims there is 'an on-going collapse of public support for biotechnology and GM foods' and that 'The Monsanto advertising campaign ... was, for the most part, overwhelmed by the society-wide collapse of support for genetic engineering in foods'.
1998 (November)	Asda announces it will ban GM ingredients from own brand products and asked suppliers to find alternatives.
1998 (November)	Speech by the Food Minister Jeff Rooker to the Women's Farmers Union in which he stressed government recognition of consumer concerns.
1998 (December)	The report by the House of Lords Select Committee on European Scrutiny, <i>EC Regulation of Genetic Modification in Agriculture</i> , is published. It concludes that while GM offers 'great potential benefits' there are 'serious hazards and risks'.
1998 (December)	Cabinet Office Minister Jack Cunningham announces three reviews: (1) regulatory and advisory framework for biotechnology, (2) public attitudes – awareness, understanding and priorities – on the biosciences and (3) health implications of consuming GM food.
1998 (December)	English Nature calls for a moratorium on commercial cultivation of some GM crops for three years pending further research.
1998 (December)	Safeway announces it will label all own-brand products that contain any ingredient from a GM source including GEM additives and ingredients such as oils and lethicin; non-GM soy and other ingredients are used 'where practicable'.
1999 (January)	Environment Secretary Michael Meacher announces in parliament the government response to National Biotechnology Conference and promises more openness on biotechnology decisions and announces intention to expand remit of advisory committees to include consideration of views of ethicists, consumers, environmentalists and industry.
1999 (January)	The government publishes the draft Food Standards Bill for further consultation, announces that it will be subject to detail scrutiny by a standing committee and makes clear the new FSA will have responsibility for labelling and licensing GM food.

1999 (February)	Tony Blair faces questions from William Hague about the government's policy on GM food.
1999 (February)	<i>Daily Mail</i> , <i>Independent on Sunday</i> and <i>Mirror</i> launch campaigns.
1999 (February)	A group of international scientists writing in the <i>Guardian</i> back findings of Dr Pusztai
1999 (February)	Blair article counter-attacking the campaigning newspapers is published in the <i>Daily Telegraph</i>
1999 (February)	Lord Sainsbury issues a press release in response to allegations of a conflict of interest; claims that the GM patent and shares in the retailer are held in a blind interest, these interests were declared in the register and so not perceived by the Standards Committee as representing a conflict of interest.
1999 (February)	Sir Robert May, Chief Scientific Officer, publishes a note on the 'scientific facts' about safety of GM food and the policy processes used to assess it.
1999 (February)	Food Advisory Committee issues a statement of support, endorsing the independence of ACNFP and the robustness of the safety assessment of GM food.
1999 (March)	Standing Committee on Food Standards reports on its scrutiny of the Bill.
1999 (March)	New EC Regulations on the labelling of GM soya and maize are published.
1999 (March)	Marks & Spencer and Sainsbury's announce separately they are to remove GM ingredients from own-brand products.
1999 (March)	Food retailers including M&S, Sainsbury's, Carrefour (France) and Superquinn (Ireland) announce they are forming a consortium to source non-GM products.
1999 (April)	Tesco claims it has no plans to ban GM food but two weeks later it announces will do so, as does Unilever, Nestlé and Cadbury's.
1999 (April)	ACNFP issues a statement in response to press reports on antibiotic marker genes; it acknowledged widespread resistance to antibiotics but stressed this was taken into account when licensing.
1999 (May)	ACNFP and Royal Society publish separate reviews of Dr Pusztai's research on GM potatoes, raise 'serious doubts' about the research design and advise they should not have released before peer review.
1999 (May)	Statement by Jeff Rooker, Michael Meacher, Jack Cunningham, Tessa Jowell and John Battle on outcome of review of biotechnology, report by CMO and CSO on safety of GM food and public consultation. (1) Confidence in regulatory framework but extended to include HGC and AEBC. (2) No evidence of inherent harm in GMF but need for greater scrutiny of processes and need for surveillance of health implications.
1999 (May)	Science and Technology Committee Report: <i>Scientific Advice to the Government: Genetically Modified Foods</i> .
1999 (May)	Department of Health; Joint Food Safety and Standards Group; MAFF: <i>Draft Guidance Notes for Labelling of Food Containing Genetically Modified Soya or Maize and Novel Foods and Novel Food Ingredients Legislation</i> . Consultation Paper concerning guidance intended to provide clarification for enforcement bodies and industry on the requirements of legislation for the approval of novel foods and the labelling of GM soya and maize. Comments are required by 16 June 1999.
1999 (June)	Food Standards Bill was introduced to the House of Commons.
1999 (June)	MAFF and Department of Health: Guidance notes: labelling of food containing genetically modified soya or maize. Provides non-statutory guidance to be used in conjunction with appropriate legislation and EC guidelines.
1999 (June)	Northern Foods – chairman Lord Haskins is advisor to the PM – bans GM ingredients.
1999 (June)	McDonalds announces it is going GM free; joins Pizza Express and Domino Pizza. A Range of other fast food chains announce similar intentions.
1999 (July)	Jeff Rooker issues guidance notes to industry on labelling of GM food that extends the requirement to label GM maize and soya to catering companies.
1999 (July)	Government announces a review of food labelling. The purpose is to decide the amount of foreign DNA or protein which is permitted to be in a product before it must be labelled as containing GM ingredients. Figure suggested is 1% but already consortium of European supermarkets was setting up schemes to ensure GM-free ingredients and working towards a limit of 0.1% – 10 times lower than standard proposed by the Commission.
1999 (August)	Opinion poll by National Consumers Association claims 85% of people are worried about being denied access to the full facts on GMF and other goods. Greenpeace/MORI poll claims 62% tend to be/are strongly opposed to having a GM trial in their local area; 59% believe GMC testing on farmland should be stopped but is acceptable in laboratories; 74% would be concerned if the definition of organic crops was changed to

	include those that had cross-pollinated with GMC.
1999 (September)	Brake Brothers, UK's largest frozen food distributor, bans GM ingredients.
1999 (September)	<i>Guardian</i> claims public opinion in UK continues to harden against GMF and has reached the point where GMF 'have overtaken BSE as the public's biggest food safety concern'.
1999 (September)	Export market declined sharply in year Sept 1998-9 and attributed to growing opposition to GMF. In 1997-9, EU accounted for 27% of US soybean exports but had dropped to 7% in 1998-1999. A fall from 81 million bushels of soybeans to 19 million in 1998-9.
1999 (September)	Novartis is reported to be considering selling of its agribusiness because of concerns about GMF.
1999 (October)	Peer review of Dr Pusztai's study in the <i>Lancet</i> . Majority of review panel recommended publication. Reports that Richard Horton, editor of the <i>Lancet</i> , was threatened by a senior member of the Royal Society that would try to have him sacked.
1999 (October)	MAFF and Department of Health publishes a consultation paper on increasing the openness of the ACNFP.
1999 (November)	The Food Standards Act receives Royal Assent.
1999 (November)	Government concludes year-long negotiations with the biotechnology industry on a three-year voluntary moratorium until crop trials had been completed.
1999 (December)	Iceland becomes the first retailer to ban GM feed for its poultry.
1999 (December)	Tesco announces it is to phase out the use of GM ingredients in animal feed.
1999	Biotechnology industry announced it would have a moratorium on the commercial cultivation of some crops until farm scale trials were completed in 2003.
2000 (January)	FSA set up.
2000 (February)	Blair article conceding scientific uncertainty is published in the <i>Independent on Sunday</i> .
2000 (February)	Baroness Hayman announces publication of survey on behalf of MAFF of consumers views of GM food. Key finding was that most consumers want more information on food labelling.
2000 (April)	Food Standards Agency comes into being.
2000 (April)	FSA announces that foods and food ingredients using additives and flavourings which contain GM additives and flavourings will have to be labelled.
2000 (May)	Sir John Krebs, FSA, issues a statement in response to reports of unidentified/unlabelled GMOs in oilseed rape. It adds that oilseed rape that contains low levels of GMOs poses no health risks.
2000 (June)	FSA posts its first novel food application onto the Internet for public comment and ACNFP moves to increase transparency of processes.

Appendix 4: Policy Corpus (1989–2000)

Table 2: Policy documents – critical texts and supporting texts

Date	Critical Text	Supporting Text	Type of document	Title
1989		✓	News reports	White paper on food safety
August 1989			White Paper	Food Safety – Protecting the Consumer 1989
07 June 1990		✓	Parliamentary debate	Parliamentary debate on amendment to include GMF
1990		✓	Statutory amendment	Amendment to Food Safety Bill to include statutory controls on GMF
1990		✓	News reports	News reports on the amendments
1990	✓		Legislation	Food Safety Act 1990
1991		✓	Press release	Food Advisory Committee: Voluntary labelling of GMF
1993		✓	Committee report	Polkinghorne Committee on the Ethics of Genetic Modification in Food Use
1993		✓	Annual report	ACNFP Annual Report
1994		✓	Press release	ACNFP clears GM soya for use
1996		✓	Press release	ACNFP clears GM maize for use
30 January 1997		✓	Parliamentary debate	Food Safety
February 1997		✓	Research paper	HoC Research Paper Genetically Modified Food
March 1997		✓	Policy brief	CSA, Sir Robert May: The use of scientific advice in policy making
30 April 1997			Policy brief	Food Standards Agency – An Interim Proposal by Professor Philip James
May 1997	✓		Labour Party election manifesto	New Labour because Britain deserves better
8 May 1997		✓	Press release	Tony Blair: Statement on release of James Report on a new FSA
14 May 1997		✓	Queens Speech	Statement on food safety
May 1997		✓	EC regulatory notice	Novel foods regulations come into force
May 1997		✓	Press release	Sets up Joint Food Safety and Standards Group (MAFF and DoH officials)
4 June 1997		✓	Ministerial speech	Trade Secretary Margaret Beckett on 'Competitiveness'
7 July 1997		✓	Press release	Jeff Rooker announces government successfully persuades EC to change policy from voluntary to mandatory labelling
23 July 1997		✓	Ministerial speech	Trade Secretary Margaret Beckett on 'Competitiveness'
30 July 1997	✓		Green paper	James Report published as a Green Paper
1 September 1997		✓	Press release	Health Minister and Food Ministers announce new chair of ACNFP
10 November 1997		✓	Press release	Food minister warns food manufacturers face prosecution if they deliberately mislabel
November 1997		✓	Evidence to select committee	Memos from Department of Health and MAFF in evidence to Food Safety Committee
25 February		✓	Ministerial Speech	Trade Minister John Battle on British competitiveness
9 February 1998		✓	WPA	Parliamentary answer in response to a question about English Nature's recommendation for a 3-year freeze
March 1998		✓	Press release	Health Minister and Food Minister Announce

				extension to role of ACNFP
17 March 1998		✓	Evidence to Select Committee	Prof Bainbridge, Written Evidence to Science and Technology Committee
April 1998		✓	Press release	ACNFP considers Greenpeace report on GMF
April 1998		✓	Select Committee Report	Agriculture Committee of House of Commons: Report on Food Safety
28 April 1998		✓	Evidence to Select Committee	Jeff Rooker and Michael Meacher, Oral Evidence to Science and Technology Committee
28 April 1998		✓	Evidence to Select Committee	Jack Cunningham, Oral Evidence to Science and Technology Committee
May 1998	✓		White Paper	White Paper on Food Standards
14 May 1998		✓	Speech by minister	Food Minister on government priorities on consumer protection, openness, transparency and accountability
May 1998		✓	Government report	Parliamentary Office of Science the Technology Report on Genetically Modified Foods: benefits and risks, regulation and public acceptance
26 June 1998		✓	Memo	Government response to Agriculture Select Committee's report on Food Safety
29 July 1998		✓	Press release	Announcement of EC agreement on labelling of GM maize and soya
4 August 1998		✓	News reports	House of Commons Catering Committee bans GM food from the house restaurants
7 September 1998		✓	Speech by Minister	Science Minister Lord Sainsbury-Advancement of science
17 September 1998		✓	Speech by Minister	Peter Mandelson to the TUC
21 October 1998		✓	Press release	Jack Cunningham to chair new committee on biotechnology
4 November 1998		✓	Evidence to Standing Committee	Jeff Rooker and Michael Meacher evidence to Standing Committee on European Communities, House of Lords
4 November 1998		✓	Evidence to Standing Committee	Beryl Bainbridge, Chair of ACNPF
15 December 1998		✓	Press release	Lord Sainsbury announces public consultation on biosciences
17 December 1998		✓	Parliamentary reply	Cunningham announces government review of the framework for overseeing developments in biotechnology
21 January 1999		✓	Speech by Minister	Trade Secretary Stephen Byers speech to Biotechnology Industry Association
2 February 1999		✓	Speech by Minister	Trade Secretary Stephen Byers – Mansion House
22 February	✓		Article in Daily Telegraph	Tony Blair
24 February 1999		✓	Evidence to Standing Committee	Jeff Rooker (MAFF) and Tessa Jowell (DoH), oral evidence to Standing Committee on Food Standards
16 March 1999		✓	Speech by Minister	Sainsbury – Socially responsible science
24 March 1999		✓	Evidence to Standing Committee	Sir Philip James, oral evidence to Standing Committee on Food Standards
15 April 1999		✓	Evidence to Select Committee	Jack Cunningham Oral evidence to Select Committee on Environmental Audit
15 April 1999		✓	Evidence to Select Committee	Jeff Rooker and Michael Meacher Oral evidence to Select Committee on Environmental Audit
15 April 1999		✓	Evidence to Select Committee	Sir Robert May, Chief Scientific Adviser and Head of the Office of Science and Technology, Mrs Helen Fleming and Mr Tony Coles, Policy Executive, Office of Science and Technology, Oral evidence to Select Committee on Environmental Audit
5 May 1999		✓	Evidence to Select Committee on Agriculture	Jeff Rooker and Michael Meacher Oral evidence to Agriculture Select Committee on GMOs
17 May 1999		✓	Scientific peer review	Review of data on possible toxicity of GM potatoes. Royal Society
21 May	✓		Report	Report on Biotechnology review

1999				
19 July 1999		✓	Select Committee Evidence	Oral evidence by Lord Sainsbury to Parliamentary Science Committee
14 September 1999		✓	Speech by Minister	Trade Secretary Stephen Byers to the Festival of Science
4 October 1999		✓	Speech by Minister	Science Minister Lord Sainsbury to the Festival of Science
4 November 1999		✓	Speech by Minister	Science Minister Lord Sainsbury at Oxford
27 February 2000	✓		Opinion piece by in Independent on Sunday	Tony Blair
28 February 2000		✓	Press conference	Prime ministers official spokesman
07 March 2000		✓	Speech by minister	Tony Blair at Knowledge 2000 Conference
07 March 2000		✓	Speech by minister	Trade Secretary Stephen Byers at Knowledge 2000 Conference
16 March 2000		✓	Evidence to Select Committee	Prof John Krebs and Geoffrey Podger, FSA, oral evidence to Select Committee on Agriculture & Health
30 March 2000		✓	Speech by minister	Science Minister Lord Sainsbury on Green Engineering
March 2000		✓	Report by Independent Commission	Report by Lord Phillips into BSE, HC 887, Session 1999–2000
March 2000		✓	Committee Report	House of Lords Science and Technology Committee published a Report on Science and Society. 1999–2000, Science and Society, HL 38
14 March 2000		✓	Committee Report	Science and Technology Committee Report: 'Scientific Advisory System'
10 April 2000		✓	Speech by minister	Science Minister Lord Sainsbury to Biomedical Association
27 June 2000		✓	Evidence to Select Committee	Prof Malcolm Grant, AEBC, oral evidence to Select Committee on Agriculture & Health
30 June 2000		✓	Speech by minister	Blair on global ethics
June 2000		✓	Review Report	Review of risk procedures used by the Government's advisory committees dealing with food safety
10 July 2000		✓	Written evidence to select committee	House of Commons Agriculture Committee: Enquiry into genetically modified organisms and seed segregation. Memo by MAFF and DETR
20 July 2000		✓	Policy Guidelines	'Guidelines 2000 – Scientific Advice and Policy Making'.
20 July		✓	Consultation paper	Code of Practice for Scientific Advisory Committees
11 September 2000		✓	Speech by minister	Science Minister Lord Sainsbury at British Academy Festival
5 October 2000		✓	Speech by minister	Trade Secretary Stephen Byers on the Green Revolution
9 November 2000		✓	Speech by minister	Sainsbury-Economic Success
17 November 2000		✓	Speech by minister	Tony Blair on investment in Britain
29 November 2000		✓	Evidence to Select Committee	Prof John Krebs and Geoffrey Podger, FSA, oral evidence to Select Committee on Agriculture & Health

Appendix 5: Policy Extracts used in Chapters 5 and 7

[Note: the numbers in block brackets corresponds with the numbering in the empirical chapters]

MAFF. (1989). 'Food Safety – Protecting the Consumer'

The variety and quality of our food have never been better ... New techniques of processing, packaging and storage are providing the consumer with wider choice than ever before. Whilst encouraging this freedom of choice, the Government gives the highest priority to the safety of the consumer. The Government shares this responsibility with farmers, food manufacturers and consumers, since all of them must prepare and store food properly (p.1).

Safety throughout the food chain

The food chain has many links, stretching from the field to the home ... Ensuring food safety requires cooperation and protective action at every point in this chain. The Government's food strategy is designed to do just that (p.1).

The Government ... Assesses novel foods and processes to ensure their safety (p.1).

The law also:

- Sets controls and standards on the basis of independent scientific advice
 - Protects consumers from fraudulent and misleading claims about the nature, content and safety of food
 - Requires clear information to be provided on the content and composition of food
- (p.1)

[1] ... The Government has already done much to use existing, wide-ranging laws to protect the consumer. European Community law, too, is being developed continually to improve food safety standards. Against a background of ever greater consumer choice, and rapid technological changes in food processes and food products, the Government is determined to anticipate future needs. We will therefore develop these laws to increase our ability to take swift and effective action. The Government was well ahead with plans for this new legislation before the recent focus of attention on food safety (p.1).

All these food safety measures are:

- Based upon the best available expertise and scientific advice
- Backed up by extensive programmes of research, monitoring and surveillance
- Enforced at both central and local government level (p.1).

A large number of leading scientists, doctors and academics are members of numerous specialist committees which provide continuing independent, objective advice on a wide range of food safety issues ... (p.1)

New legislation for tomorrow's needs

[2] The rapid rate of technological change places increasing demands on the flexibility of the system. Now is the time to ensure that the law on food safety meets the nation's future as well as present needs (p.1).

... Therefore, the Government proposes to introduce new legislation as soon as Parliamentary time permits. The aims of this legislation will be to:

- Ensure that modern food technology and distribution methods are safe
- Ensure that food is not misleadingly labelled or presented
- Reinforce present powers and penalties against law breakers
- Ensure that new European Community directives on food can be implemented
- Streamline the legislation, by combining the Acts ... (p.1)

[3] ... Innovation and development offer new products, the potential for growth in the economy and greater convenience for consumers. As part of the comprehensive approach to food policy, the Government intends to ensure that food safety and consumer protection continue to be given top priority by adapting the present food laws to meet tomorrow's needs (p.1).

Expert advice

[4] The relevance and effectiveness of controls rely on the best possible medical, scientific and technical advice. Beyond the professional advice available within Government departments, expertise is provided by several committees. Leading scientists and other experts provide objective advice on a wide range of issues including ... The development of novel foods and processes.

Introduction of new legislation

[5] The rapid rate of technological change in the food chain places increasing demands on the flexibility of the system ... We have concluded that new legislation should be introduced as soon as Parliamentary time permits... (p.6)

Adaptation of the law to technological developments

[6] The government will also take extended powers to adapt the law to technological developments (p.6).

Genetic manipulation

[7] Genetic manipulation is a rapidly changing science and there are many potential applications in food production and processing. In agriculture, genetic manipulation experiments are being carried out to improve the resistance of crops, such as maize and potatoes, to insect attack. Yeasts are being genetically manipulated to improve the efficiency of baking and brewing processes. Improved bacterial starter cultures for cheese and yoghurt manufacture are being developed ... (p.6)

[8] Products from many such techniques may soon be on sale. Although they offer the prospect of improved and more efficient food production, consumers require assurances that the products of such processes are safe. The Advisory Committee on Novel Foods and Processes already screens the use of these techniques. The new food legislation will support the work of the Committee and provide additional safeguards (p.6).

May, R. (1997) The Use of Scientific Advice in Policy Making.

[1] Science is playing an increasingly influential role in contributing to formulation of ... policy and regulatory decision, particularly on sensitive issues involving people's health and safety ... and the environment (p.1)

[2] This note sets out some key principles applying to the use and presentation of science in policymaking ... typically relevant to cases where:

There is significant scientific uncertainty;

There is a range of scientific opinion;

There are potentially significant implications for sensitive areas of public policy such as those listed above

Identifying issues

Individual departments and agencies should ensure that their procedures can anticipate as early as possible those issues for which scientific advice and research will be needed... (p.2)

No single approach is likely to be adequate. Instead, information should be drawn from a variety of sources and monitored by the departments(p.2)

Sources may include:

Departments' own programmes of research ...

Research from non-departmental sources, international bodies ...

Departments' own existing expert committees, whose members may be specifically asked to draw attention to new areas of research. Membership should be kept under review to ensure an appropriate range of views...

Discussions with those in the Research Councils, academia, industry...

Issues drawn to the attention of Government by the interests directly concerned (eg individuals, companies, scientists, lobbyists) or by reports in the media (p.3).

[3] Nonetheless, some issues will inevitably arise with little or no prior warning. Departments should ensure that they have the capacity to recognize the implications and react quickly and efficiently to such crises ...

[4] Scientific advice will often involve an aggregation of a range of scientific opinion and judgments as distinct from statements of assured certainty. Departments should ensure that the process leading to a balanced view is transparent and consistent across different policy areas ... (p.6)

Presenting Policy

[5] ... There should be a presumption towards openness in explaining the interpretation of policy advice. Departments should aim to publish all the scientific evidence and advice underlying policy decisions on the sensitive issues covered in these guidelines and show how the analysis has been taken into account in policy formulation ... (p.6)

[6] Openness will stimulate greater critical discussion of the scientific proposals and bring to bear any conflicting evidence which may have been overlooked. There are good reasons for releasing information, an action which could in the long run avoid greater controversy (p.6). [7] It is important that sufficient early thought be given to presenting the issues, uncertainties and policy options to the public so that departments are perceived as open, well-prepared and consistent with one another and with scientific advice. The difficulties of presenting uncertain, conflicting evidence should not be under-estimated (p.6–7).

Labour Party (1997). 'New Labour because Britain Deserves Better'

... 'In each area of policy a new and distinctive approach has been mapped out, one that differs from the old left and the Conservative right. This is why new Labour is new'

'New Labour is a party of ideas and ideals but not of outdated ideology. What counts is what works. The objectives are radical. The means will be modern'

'This is our contract with the people'

...

[1] Strengthen our capability in science, technology and design

The UK must be positively committed to the global pursuit of new knowledge, with a strong science base in our universities and centres of excellence leading the world. The Dearing Committee represents a significant opportunity to promote high-quality standards in science teaching and research throughout UK higher education. We support a collaborative approach between researchers and business, spreading the use of new technology and good design, and exploiting our own inventions to boost business in the UK.

...

Protecting the environment

... No responsible government can afford to take risks with the future: the cost is too high. So it is our duty to act now. ...

[2] Throughout this manifesto, there are policies designed to combine environmental sustainability with economic and social progress. They extend from commitments at local level to give communities enhanced control over their environments, to initiatives at international level to ensure that all countries are contributing to the protection of the environment.

...

A reformed and tougher competition law

[3] Competitiveness abroad must begin with competition at home. Effective competition can bring value and quality to consumers. As an early priority we will reform Britain's competition law. We will adopt a tough 'prohibitive' approach to deter anti-competitive practices and abuses of market power.

[4]... we will pursue tough, efficient regulation in the interests of customers, and ... in the interests of the environment as well. We recognise the need for open and predictable regulation which is fair both to consumers and to shareholders and at the same time provides incentives for managers to innovate and improve efficiency.

... Good health

[5]... Labour will establish an independent food standards agency. The £3.5 billion BSE crisis and the E. coli outbreak which resulted in serious loss of life, have made unanswerable the case for the independent agency we have proposed.

Downing Street, MAFF, Health Department (1998) 'Food Standards'

Preface by Tony Blair

[1] This Government took office committed to setting up an independent Food Standards Agency, which would be powerful, open and dedicated to the interests of consumers ... James' report ... provided an excellent foundation on which to build this long-overdue reform. Since then the Government has consulted widely, finding widespread support for change. This White Paper sets out proposals that will transform the way food standards issues are handled in this country. For too long, consumers in the United Kingdom have suffered from uncertainty and confusion about the

quality and safety of the food they buy. Our food and farming industries have been damaged as a result. The Government is determined to do away with the old climate of secrecy and suspicion and replace it with modern, open arrangements which will deliver real improvements in standards. This fresh approach will help to command the confidence of consumers, industry and our partners in the EU and beyond.

Why the Agency is needed

[2] The Government believes that creation of the Food Standards Agency will put an end to the climate of confusion and suspicion which has resulted from the way food safety and standards issues have been handled in the past. This radical new approach will ensure that all future Government activity relating to food will be subject to public scrutiny, and that the public's voice will be fully heard in the decision-taking process (p1).

[3] ... The Government's proposals have been drawn up in the light of Professor Philip James's report and the responses to the consultation exercise carried out in May and June 1997 (described in Annex 1 of this White Paper). They are designed to address the key factors which Professor James identified as contributing to the erosion of public and producer confidence in the current system of food controls:

- the potential for conflicts of interest within MAFF arising from its dual responsibility for protecting public health and for sponsoring the agriculture and food industries
- fragmentation and lack of co-ordination between the various government bodies involved in food safety ...

[4] The Government agrees that a clear separation is needed between promoting safe food and wider consumer interests on the one hand and promoting the interests of business on the other (p.1).

[5] ... Consultation shows that people find the present division of responsibilities between different departments of Government to be confusing. The Government agrees that greater clarity is needed. It believes that a better co-ordinated and more rational approach to food safety policy is essential. By giving central responsibility to a single body, whose essential aim is the protection of public health and which has the right to make its advice to Ministers public, the Government will ensure that the effectiveness of controls on food is not undermined by overlaps, conflicting objectives or incoherence. Where institutional barriers are found in the food chain, responsibilities will be clearly defined and better communication will be encouraged, both by building on the well-established networks that already exist – in particular at local level – and by fostering new links between those working in related fields (p.1).

[6] ... Organisational change alone will not be sufficient to restore public confidence. Cultural change must also be achieved by demonstrating that protection of the public is the top priority, and by conducting business more openly and transparently, with greater public involvement in policy making and better, clearer information reaching consumers (p.1).

[7] ... These organisational and cultural changes can best be delivered by creating a new and powerful body, at arms' length from Government and independent of the food industry, whose essential task is to protect the interests of the public, which operates in accordance with clearly defined and well understood guiding principles, and which is free to make public its advice to Ministers (p.1).

[8] ... The Government is determined to ensure that the Agency has a firm and reliable foundation and that it can operate effectively in practice. This White Paper therefore invites detailed comments on the proposed arrangements (p.1).

...

The Agency's Guiding Principles

[9] ... The Government's aim in setting up the Agency is to strengthen food safety and standards policies and procedures so as to rebuild the public's trust in the machinery for handling food safety issues. This aim will only be achieved if the Agency's policies and procedures are consistent and transparent and it is clear to the public that, where costs and benefits have to be weighed, the Agency will do this in the context that its essential aim is to protect public health... (p.2).

[10] The Agency is being established at a time when food safety policies are coming under increasing scrutiny nationally and internationally. The use of science in policy making more generally is developing fast at a global level. The Agency will need to draw up and communicate an overall approach to risk analysis and decision making which will enable it to maintain a coherent and consistent policy while participating in and responding to these wider developments (p.2).

[11] ... The guiding principles within which the Agency will operate will be an important element in securing public confidence. These principles will be set out in the legislation establishing the

Agency and in its Management Statement. The legislation will provide Ministers with powers to issue directions to the Agency to prevent it from acting in a manner which contravenes its guiding principles. These powers of direction will not be able to be used to prevent the Agency from making and publishing recommendations which may simply be unpopular with the Government. Rather the intention is to provide a measure of democratic accountability should the Agency seek to act in a manner which is inconsistent with its legislative framework (p.2).

[12] ... The proposed guiding principles for the Agency are set out below. They are designed to recognise the need, in the food safety area as in other areas of public policy, to assess, manage and communicate risk effectively and in a transparent manner. The Government would welcome comments on these proposed principles (p.2).

[13] ... Food safety policies are designed to ensure that food production, processing and distribution systems deliver food which is safe and wholesome. However, complete freedom from risk is an unattainable goal, and safety and wholesomeness are related to the level of risk that society regards as reasonable in the context of, and in comparison with, other risks in everyday life. In assessing and managing risks, the Agency will need to take very careful account of the expectations of the consumer, recognising that in many circumstances the public is unlikely to be willing to pay the cost of achieving the maximum theoretical level of safety (whether that cost is manifested in higher food prices or in restrictions on freedom of choice) (p.2).

[14] Risk assessment needs to be based on the best available methodology, drawing on expert scientific advice and making appropriate allowances for the inevitable uncertainties involved. The available scientific data may be incomplete and difficult to interpret, thus making it very difficult to establish with certainty the nature and degree of risk. Where there are uncertainties about the scientific evidence, an element of political judgement is inevitably involved in reaching decisions on the best course of action. Where there is a risk of serious damage to public health, lack of full scientific certainty should not be used as a reason for postponing cost effective measures to reduce the health risks... (p.2).

[15] ... The Agency will :

become the UK competent authority for assessing novel food applications in accordance with the requirements of the EC Novel Foods Regulation, drawing on advice from ACNFP and other UK and European Advisory Committees as necessary ...

- be responsible for licensing and inspecting food irradiation facilities under the 1990 Regulations
- take over the Agriculture Ministers' responsibilities for issuing consents under the Deliberate Release Regulations for GMOs intended for food and animal feed
- develop and implement future policy on the control of novel foods and processes and play a proactive role in the development of EC controls
- play an active role in moves towards international harmonisation of safety assessment procedures for novel foods
- commission research to underpin safety assessment of novel foods
- provide information and advice to consumers, enforcement authorities, Government Departments and industry.

Public response to the report

[16] ... There was general agreement that food safety issues (including microbiological, chemical and radiological safety, genetically modified foods and novel foods and processes) should be at the core of the Agency's responsibilities. There was overall agreement with the principle that the Agency should promote food safety throughout the entire food chain (p.7)

Cabinet Office. (1998a, 21 October). 'Jack Cunningham to Chair New Committee on Biotechnology and Genetic Modification'. CAB 220/98.

[1] The Minister for the Cabinet Office, Dr Jack Cunningham, has been asked by the Prime Minister to chair a new Ministerial Group on Biotechnology and Genetic Modification it was announced today. Dr Cunningham, delivering the Soil Association's Lady Eve Balfour Memorial Lecture, highlighted this new role. The terms of reference of the Ministerial Group are 'to consider issues relating to biotechnology, in particular those arising from genetic modification.' It has been formed because the Government needs to establish clear and firm policies in a number of complex areas which cut across departmental boundaries and which are also of great concern to the public ...

Cunningham, J. (1998d, 18 November). 'Genetically Modified Organisms'. Written Parliamentary Answer. Column 599

[1] To ask the Minister for the Cabinet Office to set out how the Government proposes to oversee developments in biotechnology and genetic modification, following the establishment of the Ministerial group on this subject.

[2] Jack Cunningham, Cabinet Minister: The government is initiating a thorough review of the framework for overseeing developments in biotechnology, focusing particularly on the range of committees that have been established to provide the government with expert advice and to regulate in this area. The government is already engaged in a public consultation on developments in the biosciences which is due to report in Spring 1999. The review of the framework for overseeing developments in biotechnology, to be carried out by officials, will take place on the same timescale. The Government believes that the protection of human health must be our first priority in regulating biotechnology. The impact on the environment and on biodiversity must also be thoroughly assessed and the ethical issues raised by biotechnology taken fully into account.

[3] At the same time, the Government believes the technology has the potential to offer enormous opportunities for improving the competitiveness of the economy and quality of life in terms of health, agriculture, food and environmental protection, and the regulation should facilitate technological development by not imposing unjustified burdens on the biotechnology industry. The government seeks to have in place a system that provides sound advice and proportionate regulation and is at the same time simple and transparent as possible; that has the flexibility to respond to developments in the technology and to public concerns; and that commands the respect of users and the public. The review will assess the current system in the light of these criteria. The review will consider the following questions:

What gaps exist in coverage by the existing committees and how might these be remedied?

What overlaps exist and are they justified? If not, how might they be remedied?

Could the current system be structured in a more simple way?

How could the system for providing advice for ministers be made more transparent?

Are ethical and other wider issues addressed fully and properly within the current system?

Are stakeholders given appropriate opportunities to make their views known? For example, would an environmental stakeholder forum be a valuable addition to the current framework?

Is the framework flexible enough to deal with the rapid development of the technology which is likely in the future?

Does the public have confidence in the system currently in place?

The views will be sought of the existing regulatory and advisory bodies themselves, and of outside bodies with an interest in this area. The government would also welcome the views of the public.

The Cabinet Office and the Office of Science and Technology will jointly co-ordinate the review.

The government will announce the outcome of the review.

[1] Blair, T. (1999a, 20 February). 'GM Foods – We Stand Firm'. The Telegraph. p.21

[2] Standing in front of a stampede is never a nice business ... Parts of the media, and the Conservatives, have conducted such an extraordinary campaign of distortion about the great GM food saga that it's hard to know where to begin... Let's get one thing straight ... in terms of its own interests as a government, or my interests as Prime Minister, there is nothing in this for us, other than a desire to get it right. This Government is fully committed to ensuring the safety of food. That is why we will set up an independent Food Standards Agency, and why we put the consumer first.

[3] What is at stake is important. If we were to allow unsafe food into Britain, the consequences of that are obvious; and no responsible government should ever ignore any genuine risks to health. If, on the other hand, we were to ban GM foods or crops, without any proper evidence to support such a decision, people should start understanding the risks of that course, too.

[4] We are committed to consumer choice. That is why this Government is insisting on labelling that works. Before May 1997, the Tories blocked moves to have clear labelling of GM food. If consumers don't want to buy GM, that is fine by me. If suppliers don't want to use GM produce, they can use the list that this Government produced to get non-GM ingredients.

[5] Genetically modified food is just one branch of bio-technology. I am no scientist, but those who are make what seems to me a compelling case that biotech will be the revolutionary science of the 21st century. Britain has been at the leading edge of this new science. Other countries are putting billions into research. An area one-and-a-half-times the size of Britain is already under commercial cultivation. There is no scientific evidence on which to justify a ban on GM foods and crops. If we were to ban products that our independent scientific advisers tell us are safe, we would send a

negative message to the whole biotech industry in Britain - that its future will be governed by media scares. And we would stop British expertise in farming and science from leading the way.

[6] None of this means that we go ahead regardless. These are very reasonable anxieties and we have a huge responsibility to act only in the interests of people, not of vested interests of any kind. But all this is a reason to proceed with great caution, evaluating each product before it can be planted, tested or put on the market.

[7] It is not a reason for yielding to scaremongering.

For those who retain an interest in the facts, here they are as they seem to me. Genetic modification of food by cross-breeding within one species of crop has been going on for years ... These genes are used, for example, to make plants tolerant to pesticides that will allow the plant to survive, but the pest to fail; or to improve the quality or longevity of certain fruits or vegetables. The potential of such science is obvious. It could revolutionise food production, making it cheaper and better, and bring environmental benefits.

[8] Currently, farmers pour tons and tons of pesticides over their crops. Some types of GM will mean that farmers need to use much less.

But – and it is a big but - what effect does all this have on the environment, in particular bio-diversity? Crossing genes within a species is one thing; across different species is another. Already such genetic modification is used in medicine – insulin, the drug for diabetics, is GM – but does it have unforeseen consequences for food? There is, neither here nor elsewhere, any actual evidence that there are such harmful consequences for food safety. But, rightly, people want to be sure.

[9] For these reasons, no GM food is sold in Britain without going through an elaborate regulatory procedure. Three such GM foods have been licensed, all before the last election.

[10] Since the election, we have also insisted on labelling for GM food, reversing the previous government's position. There are no commercially exploited GM crops in Britain at the moment. There are, however, limited farm-scale trials to test them. This is primarily to check the effects on bio-diversity. All the tests will be verified, then assessed, again by wholly independent scientific experts.

[11] Let me now correct the past two weeks of misinformation, which can't have done the media's credibility any good at all. It is said that English Nature demanded a moratorium on GM food. Wrong. It asked, on environmental grounds, for a three-year moratorium on the widespread commercial growth of GM crops that are tolerant to herbicide, until the trials are finished. Our response is to point out that each crop is being tested on an individual basis and that the trials should last as long as they take ... The Conservatives have waged war on Lord Sainsbury, continuing their peculiarly unpleasant personal attack on ministers as a substitute for serious opposition. There is no conflict of interest in David Sainsbury's position: he has nothing to do with the licensing of GM foods.

[12] Two broader issues occur to me. The first is the importance of the Government not yielding to an orchestrated barrage on an issue of long-term importance. On matters that emerge from advances in our understanding of the natural world, we need to be guided by good science, not scaremongering. It is the only way, in the end, to govern in the country's interest. The second is that we should resist the tyranny of pressure groups. Just because an organisation calls itself 'green' doesn't mean to say that we all have to do what it says or that we are destroying the environment.

[13] But I promise to listen to those with real concerns, with evidence and facts.

Rational and informed debate is what this whole matter should be about. Despite the past two weeks, I believe, in the end, that reason will prevail.

Cabinet Office. (1999). Advisory and Regulatory Framework for Biotechnology: Report from the Government's Review.

Foreword

[1] Modern biotechnology is an important area of scientific advance which offers enormous opportunities for improving our quality of life. But there is also understandable public concern about a technology which allows scientific advances which we would have hardly have imagined possible only a few years ago.

The Government's overriding responsibilities are to protect the health of the public and to protect the environment. We must use and not deny the potential benefits of this technology for the British people. In discharging these responsibilities as Ministers, we receive advice from a comprehensive set of independent, expert regulatory and advisory committees, each with specific duties.

[2] We decided last December to carry out a public review of the regulatory system. We have consulted widely and have thoroughly examined proposals for change. There are persuasive arguments for strengthening the system.

We are therefore establishing two new strategic commissions, composed of people from a wide range of interests and disciplines. Together with the Food Standards Agency, they will all stay in close touch with public concerns - and will be an invaluable source of advice to Ministers in the future. The new advisory commissions will look ahead to consider likely developments in the technology and will also address broader issues regarding the use and acceptability of genetic modification in the context of the Government's overriding responsibilities as set out above.

[3] We are also putting in place new guidelines which will ensure that our regulatory system is as open and transparent as possible - ensuring the public can engage with the work of the advisory committees.

The Government is confident that with these changes, we shall have a system for regulating biotechnology which is rigorous, open and which will effectively safeguard the public interest.

Executive Summary

[4] The Government's overriding priorities in biotechnology and genetic modification are to protect the health of the public and to protect the environment. It is essential that proper controls are in place. In that way we can safeguard the public interest and secure the maximum benefits from developments in the biosciences.

Biotechnology and genetic modification are making possible widespread advances in a number of areas, such as health care, the environment and agriculture. There is an understandable public concern that all advances in the science - particularly in the areas of genetically modified crops and foods - must be properly monitored and controlled.

...

[5] The Government has consulted widely with interested parties. The review also takes into account the findings of the wider public consultation on the biosciences carried out for the Government by MORI and involving members of the People's Panel.

The main concerns to emerge are that:

current regulatory and advisory arrangements are of necessity complex and are difficult for the public to understand;

they do not properly reflect the questions and views of potential stakeholders; and they are not sufficiently forward-looking for so rapidly developing a technology.

[6] The Government believes that the regulatory and advisory framework has two distinct functions: to consider whether to grant approvals for individual products or processes; to set a strategic framework for development of the technology in the UK.

The second function requires a new approach.

The Government has decided, therefore, that it should establish a strategic advisory structure.

There will be two new biotechnology-specific bodies to work alongside the Food Standards Agency, which will take responsibility for all aspects of the safety of GM foods. ...

[7] The new advisory commissions will have wide-ranging remits including strategic analysis of biotechnological developments, addressing broader issues including ethical considerations regarding the acceptability of genetic modification, identifying gaps in the regulatory and advisory framework and building up a wider picture from the lessons learned from individual regulatory areas. The new commissions will keep in close touch with the work of the regulatory system, but will not control the work of individual committees.

[8] The members of the new Commissions will act in a personal capacity, but will be drawn from a wide-range of interests and expert disciplines. They will consult the public and stakeholders in carrying out their work...

All of the committees involved in overseeing developments in biotechnology and genetic modification will adopt new guidelines on transparency and timeliness. In future, the public will have access to the facts and analysis that underlie regulatory decisions, the advice given to Government by its independent advisory bodies and the opportunity (where appropriate) to comment.

[9] This new system of advisory commissions will ensure that we have the best available advice about all future developments in biotechnology and genetic modification; that both scientific and non-scientific views can be brought to bear; and that the system will be as open and transparent as possible.

Introduction

[10]... Their review was to be carried out jointly by officials of the Cabinet Office and the Office of Science and Technology and would focus particularly on the committees established to advise the Government on regulation in this area.... Government was already engaged in a public consultation on developments in the biosciences which was due to report in Spring 1999 and that the review of the framework for overseeing developments in biotechnology would take place on the same timescale...

[11] 4. In the health field, genetic modification has aided the production of life-saving agents such as insulin, and some vaccines. The process of GM is used extensively in research and development to develop new drugs to fight diseases such as cancer, AIDS, and rheumatoid arthritis, and to help scientists gain a better understanding of disease.

5. On food and agriculture, GM technology has enabled researchers to insert a bacterial gene into a maize plant, to give it resistance to certain insect pests. Genetic modification has also made it possible to remove or switch off a gene already present in particular varieties of plants or to modify the metabolism of plants to improve the quality of the food or product (eg GM tomatoes which remain fresh for longer periods).

...

[12] 7. The Government's first concern in regulating biotechnology is to ensure the protection of human health and the environment. The regulatory and advisory systems must allow ethical and social concerns to be properly debated. At the same time, recognising the economic potential of this new sector, in which the UK is a world leader, it is important that the regulatory system should not place unnecessary burdens on the industry or barriers to its development.

[13] 8. The Government seeks to have in place a system that provides sound advice and proportionate regulation and is at the same time as simple and transparent as possible; has the flexibility to respond to the fast moving developments in the technology and to public concerns; and commands the respect of users and the public.

9. This report considers the current framework in the light of these criteria.

Committee Framework

...

[14-16] 13. Second, it sets a strategic framework for the development of the technology in this country: this needs to draw on the views of the public, environmentalists, ethicists, the industry, medical practitioners, patients and consumers.

...

17. The committees comprise independent experts and lay members. Expert members are selected on the basis of their professional knowledge. They are expected to keep closely in touch with new developments in their field so that they can identify novel concerns which may require their committee's attention. ... Any previous connections with industry must be declared under these rules. In addition any members of a committee who have a financial interest in a company whose application is being considered by that committee must declare this fact and absent themselves from the discussion.

...

Conduct of the review

[18] 25. To inform the review, the Government has used the results of two separate consultation exercises.

... consulted over 350 organisations with an interest or involvement in biotechnology ...

Government sought views from a wide range of members of the general public not currently engaged in the debate about the biological sciences. MORI conducted a series of focus groups and interviewed 1109 members of the People's Panel to find out about their attitudes towards developments in the biosciences. We have also drawn on information from this public consultation in finalising the conclusions and recommendations of this report.

[19] ... strong perception that committees like ACRE and the ACNFP, which deal primarily with the scientific assessment of the safety of releases to the environment and novel foodstuffs, were forced by statutory requirements to operate too much on a case by case basis.... preventing the committees from examining and commenting on the wider implications of generic types of biotechnological development.... They argued for better and more structured co-ordination between the regulatory and advisory committees to ensure that the implications of new developments were assessed at an early stage, strategic planning could take place, new work could be foreseen and appropriate research commissioned...

...

[20] 33. There was general support, mentioned in 53 responses, for the idea that stakeholder views should be taken more into account in the advisory/regulatory process, but disagreement about how this might best be done and about how the term stakeholder should be defined - 14 respondents argued that public views were the important ones... most of the regulatory/advisory bodies were confident that the current system had sufficient flexibility to respond to new developments, other respondents were less certain. Industry felt there was a need for fewer advisory bodies with wider remits and capable of providing more strategic direction. A wide range of groups thought that there was a need for greater foresight and greater capacity to change quickly when needed....

[21] 35. Greater transparency, better information and more public involvement in the advisory/regulatory process were seen as key to building up public confidence. Many respondents thought that the public needed to be involved at an earlier stage in the decision-making process. Others, however, counselled against prejudging the results of the public consultation exercise. Several respondents saw restructuring of the framework - in particular the establishment of higher-level bodies - as a key step in improving public confidence.

Findings of the Biosciences Consultation involving the People's Panel

[22] 36. A key message from the biosciences consultation is that the provision of information is of paramount importance in underpinning the regulatory structure. The main findings were that: People generally have a low awareness of scientific and technological advances, but do understand the basic principles, and have a reasonable understanding of what is meant by biology and genetics.

Medical advances are seen as being of most benefit. Where people were not aware of applications which were of direct benefit to humans, they were not convinced that the developments in the science were positive.

Regulation is extremely important because of the safety implications of new developments. Many people are not confident that they know enough about existing regulations.

A robust regulatory system that is transparent, regularly reviewed and incorporates random checks is seen as crucial to winning public confidence in the oversight of the biological sciences.

Government advisory groups are a trusted mechanism for decision making, but membership should be broadly based. Scientists and healthcare professionals are seen as particularly important contributors to decision making.

[23] There is a widespread demand for as much information as possible and again Government Advisory groups, scientists, healthcare professionals and consumer and environmental groups would be trusted to provide this information. But the media, retailers and industry were not trusted.

Proposals for change

[24] 37. The primary concerns to emerge from the two consultation exercises are that the current arrangements:

are too fragmented (particularly on the health side);

are difficult for the outsider to understand;

lack transparency;

do not clearly take on board the views of all potential stakeholders and broader ethical and environmental considerations; and

are insufficiently flexible to respond to the fast-moving nature of biotechnology developments.

Recent media coverage and the biosciences consultation also indicate a high level of concern about the safety of GM foods, with criticism that the Government has not moved fast enough to establish an independent Food Standards Agency (FSA), and about the environmental impacts of GM crops: 'superweeds' and biodiversity.

Strategic Advisory Bodies

[25] 38. As discussed in paragraphs 12-13 of this report, the current system has two distinct functions. First, it considers approvals for individual products or processes; second, it sets a strategic framework for the development of the technology in this country. In the light of the concerns expressed the Government has concluded that the second, strategic, function requires a new approach. In particular, greater account needs to be taken of the views of the public, environmentalists, ethicists, the industry, medical practitioners, patients and consumers.

[26] 39. To achieve this the Government has therefore decided that it should establish a comprehensive strategic advisory structure for biotechnology. The Government will establish two new strategic advisory commissions for human health and for agriculture and the environment. These two new Non-Departmental Public Bodies (NDPBs) will sit alongside the FSA.

40. In view of the importance of the proposed FSA's role on food safety, the Government has decided that this body should also act as the strategic advisory body for GM foods. The FSA's remit will require it to adhere to the principles of openness and wide consultation which we set out below for the two new advisory commissions. The Statement of General Objectives & Practices which FSA is required to agree with Department of Health Ministers will include a remit to consider, consult on and advise Ministers on wider strategic issues including ethics relating to the development of GM foods. The Board of the FSA will be drawn from a wide spread of relevant interests.

Blair, T. (2000a, 27 February). 'The Key to GM is its Potential, Both for Harm and Good'. *Independent on Sunday*. p. 28.

[1] ...The conference underlines this government's determination to have as informed and balanced a debate as possible on GM food and crops. Any casual glance at the guest list would kill off fears that this event is intended to rubber-stamp the safety of GM foods. Scientists with a wide variety of views on GM foods will be attending and speaking. They include Dr Arpad Pusztai whose research helped fuel the controversy over GM foods in this country. But although it is vital that science remains at the heart of this debate, we also recognise that consumers and environmental groups have an important role to play in ensuring we reach the right answers.

[2] So organisations such as the Consumers' Association, Greenpeace, Friends of the Earth and Oxfam have also been invited.,, The conference will debate the whole area of GM food safety and human health, examining current scientific understanding and areas of continuing uncertainty, future prospects for the technology and the potential benefits and risks. It recognises the jury is still out on the application of this new technology to food and crops and that there is cause for legitimate public concern - concern that has been reflected in the *Independent on Sunday*. I, and this government, understand such anxieties.

[3] There is no doubt that there is potential for harm, both in terms of human safety and in the diversity of our environment, from GM foods and crops. It's why the protection of the public and the environment is, and will remain, the Government's over-riding priority.

[4] But there is no doubt, either, that this new technology could bring benefits for mankind. Some of the benefits from biotechnology are already being seen in related areas such as the production of life-saving medicines. GM technology has, for instance, helped diabetics by the production of insulin. GM crops, too, have the potential for good - helping feed the hungry by increasing yields, enabling new strains of crops to be grown in hostile conditions, or which are resistant to pests and disease.

[5] The key word here is potential, both in terms of harm and benefit. The potential for good highlights why we are right not to slam the door on GM food or crops without further research. The potential for harm shows why we are right to proceed very cautiously indeed. And that is exactly what we are doing.

You get used in politics to having your views misrepresented. But nothing has puzzled me more than claims that this government is an unquestioning supporter of GM food. We are not pro or anti-GM food. We are pro-safety, pro-environment and pro-consumer choice.

... Testing has been tightened by this government even further. I can promise that no GM food will be put on the market here without going through the most rigorous safety assessments in the world.

[6] We also recognise the genuine fears over the impact of GM crops on our environment and wildlife. That is why no GM crops will be grown commercially in this country until we are satisfied there will be no unacceptable impact on the environment. Rigorous tests have already taken place in laboratories and greenhouses on GM crops but they cannot possibly give us a clear indication of their impact on the countryside itself.

[7] So we have licensed, with the backing of groups such as the Royal Society for the Protection of Birds and English Nature, a four-year programme of farm-scale trials to monitor independently the effect on wildlife and the environment. Only then will any decision be taken on the commercial growing of GM crops. Compare that with the position in the United States, where an area the size of Wales is already under commercial GM crops.

[8] We have demonstrated we are pro-choice and pro-consumer by leading the way in Europe over the labelling of GM foods. We know there are people who do not want their families to eat GM foods - and that is their right. But it is not much of a right unless they know what they are eating, which was not the position when this government came to power. So we have insisted that products containing GM foods on shop shelves have to be labelled. And anyone eating in a

restaurant has a legal right now to ask whether the food they serve contains GM ingredients. And we are leading the fight to have labelling extended in Europe.

[9] We have also radically overhauled the regulatory and advisory processes so that consumers have a real say on GM foods. We are setting up two new commissions, with strong consumer representation, to provide government with advice on a whole range of biotech issues.

...

[10] It is right that this conference should be held here in Britain and under a British chairman. Our scientists are among the world leaders in the whole area of biotechnology. It is exactly the kind of knowledge-based industry which could help provide more jobs and more prosperity in the future. But jobs and profit will never be more important for a responsible government than concern over human health and our environment. I can promise this government will continue to act with caution on the basis of the best available science. But increasingly the industry itself is recognising the importance of these issues, because without tackling them it can have no long-term future....

Appendix 6: Newspaper extracts used in Chapters 6 and 8

Daily Mail

[1] Daily Mail (1998a, 8 June). 'Why Prince Charles is Right to Speak Out'. p. 10.

The fears expressed by Prince Charles about the rapid spread of genetically engineered foods are widely shared.

Many people already find foods pumped full of steroids, boosted by artificial fertilisers and 'protected' by heavy doses of antibiotics a source of deep anxiety.

But now we learn that genetically altered foods are sometimes sold without being adequately marked and that altered and natural foods are mixed in storage, so denying people choice.

[2] The Prince can expect a broadside from commercial agribusiness. He will be accused of scientific ignorance and of going beyond his constitutional role by making highly contentious statements.

He should not be deterred.

Perhaps genetic engineering is as safe as its apologists claim, though the history of chemical-drenched 'scientific' farming does not inspire confidence.

All the Prince is arguing for is caution, more research and the possibility of informed consumer choice.

[1] Daily Mail (1998c, 11 August). 'Dangerous Food'. p. 10.

There was a dread inevitability about the discovery that genetically altered food might pose a threat to our health. For the vast majority of us had already reached that conclusion, based on no greater expertise than the commonsense suspicion that scientists were busily tinkering in areas they did not fully understand. And so it now appears.

[2] Professor Arpad Pusztai, whose work was featured in Granada TV's World in Action last night, has discovered that genetically altered food made rats more prone to infection and stunted their growth. This does not, in itself, prove that it could cause similar damage in people. But Prof Pusztai is taking no chances. He will not be eating it.

At least, not if he can avoid doing so.

[3] For we cannot be sure that we are not getting such food. Tomatoes and soya have been produced by this treatment and may be used in other products – all without the consumer being any the wiser.

Yet clearly, this has happened without any of the intensive prior research of the kind that Prof Pusztai has carried out. We are entering into the unknown. And when you do that, it is prudent to go carefully.

Especially when the impact could be felt by hundreds of millions.

[4] Food Minister Jeff Rooker has responded to this alarm with extraordinary, indeed, alarming, sangfroid. He says that a ban on genetically produced food is 'inappropriate' though he graciously agrees that more testing is necessary. Where's the logic in that?

We need the testing because we do not know what the dangers are. And it is this very ignorance that suggests the need for a halt. If he can't work that out, why is he in the job?

[1] Daily Mail (1999b, 22 January). 'Propaganda, Food and Public Trust'. p. 10.

There is a whiff of something rotten and wrong in the Government's apparent eagerness to encourage us all to eat genetically modified food.

Ministers have even commissioned a report which recommends that videos are played at supermarket checkouts to give shoppers 'careful persuasion' ... outrageous proposal for state-

funded propaganda is Science Minister Lord Sainsbury, who has financial interests in genetically modified crops.

[2] But then, conflicts of interest – real or apparent – seem to bedevil New Labour ... In the wake of the BSE scandal, the public refuses to trust a word uttered by any politician or official on food safety.

The complacency of this Government can only reinforce that judgment.

Ministers are full of bland reassurance.

[3] But what happens if a new gene moves from modified to wild plants? Nobody knows. Nor does anybody know the impact on the environment from a more lavish use of weedkillers – which could happen, ironically, with the development of pesticide-resistant plants.

... But this is an area which requires more thought and more research. That doesn't mean that modified foods should be rejected out of hand. But the Government should understand why public unease will not be overcome by mere propaganda.

[1] Daily Mail (1999c, 28 January). 'Public Trust and the Safety of Food'. p. 12.

On the surface, there seems much to welcome in the Government's Bill for a Food Standards Agency. With scares over salmonella, E.coli and BSE still fresh in the memory and food poisoning increasing, it sometimes appears that danger lurks on every plate.

One thing is sure. There is more concern today than ever before over food safety ... Yet there must be considerable doubts over the detail of what is proposed ... The Ministry of Agriculture will continue to wield power down on the farm, even though its record on protecting the consumer is lamentable.

[2] Then there is the ever more insidious threat of genetically modified foods. This Government has proved utterly supine in its attitude to the giants of the food industry. It seems intent on allowing them to push mutant products at us, though nobody knows what the long-term threat to human health may be. It is even considering ways to 'persuade' us that there is no risk...Yes, the new Agency will have powers to intervene. The question is whether it will dare use them to challenge a Government which already appears to have made up its mind. In the light of such fiascos as the BSE scandal, the outlook hardly seems hopeful.

[1] Daily Mail (1999d, 4 February). 'Food in the Shadow of Dr Frankenstein'. p. 10.

Despite deepening public anxiety, the Government refuses to order a moratorium over the increasing number of genetically modified 'Frankenstein' foods in our supermarkets.

It apparently doesn't matter that its official advisers in English Nature have called for such a moratorium. Nor does it seem to matter that MPs on all sides are worried. Modified foods appear to have the official stamp of approval, even though it is claimed that they have been implicated in deaths and disease in America.

[2] Labour's attitude is lamentable. It uncritically swallows advice in favour of mutant crops from a Lords Committee dominated by farmers, the very people who stand to profit. It engages in State-funded propaganda to persuade us that modified foods are perfectly all right. A key Minister in the exercise is Lord Sainsbury, who has financial interests in GM crops.

Defending all this, Tony Blair declares: 'We do have to proceed on the best scientific evidence'. But his words will do nothing to dispel the doubts.

[3] Modified crops haven't been around long enough for the risks to be fully evaluated. What happens if a new gene crosses from modified crops to neighbouring wild plants? What long-term impact will GM foods have on human health? The scientists don't know. Neither does Mr Blair.

This isn't a Luddite approach.

Genetically modified crops promise substantial benefits and should not be rejected out of hand. But when the pace of 'improvement' is so frantic, driven by a biotech industry intent on profit, the need for caution should be obvious. The public learned a bitter lesson from the BSE crisis. It is a pity the Government cannot do the same.

[1] Daily Mail (1999e, 6 February). 'An Issue of Concern to Every Reader'. p. 12.

Today the Mail launches a campaign to alert the public to the dangers of genetically modified 'Frankenstein' foods.

New Labour's handling of this most sensitive issue of food safety has so far been shambolic, naive and blithely indifferent to the genuine concerns of millions of British consumers.

[2] Take our report on the chaos over labelling. Shoppers should in theory be able to tell whether products contain GM material or not. Yet too many labels are uninformative or misleading, mainly because the biotech industry and the big stores have an interest in foisting such foods on us. There have been accusations that some of them are actually lying about what they are selling.

What makes it even worse is the evidence that Labour is cosily in bed with the giant biotech producers. The party has accepted money from the Swiss-based company Novartis, for example. Once again, conflicts of interest, real or apparent, bedevil Ministers.

[3] Consider the Government's behaviour.

When its own environmental experts call for a moratorium on GM products, the advice is ignored. Public money is spent on propaganda to persuade us that modified foods are perfectly all right. A key Minister dealing with the issue is Lord Sainsbury, whose family firm is a major retailer of GM foods.

... There was an almost surreal development this week when the Government insisted on keeping its beef-on-the-bone ban - where the minuscule risks are universally understood - while at the same time refusing to do anything about modified foods, where the risks are unknown and unquantifiable.

[4] Double standards indeed. Perhaps the explanation can be found in reports that senior executives from the biotech industry are in the habit of visiting the Ministry of Agriculture on 'an almost daily basis' to lobby civil servants for favourable treatment.

That has to be cause for concern, given the Department's scandalous record on food safety and the bungling that plunged Britain into the BSE crisis ...

[5] This issue has exposed something deeply disturbing in the political culture of Whitehall. Labour is openly encouraging genetically modified products, though there is no obvious benefit to shoppers. Suspicions that Ministers have been beguiled by lobbyists are becoming hard to avoid. While it may be true that GM crops promise immense benefits, the explosive rate at which they are being developed makes it impossible to be sure that there is no long-term threat to human health.

[6] Or to be certain of what would happen to the environment if modified genes cross over to wild plants.

This issue is too important to be determined by commercial pressures.

The consequences of a mistake could be devastating. The time has come for a long, hard, independent assessment of the potential risks. Tony Blair should ignore the lobbyists and order a moratorium forthwith on GM foods.

[1] Daily Mail (1999f, 16 February). 'PM's GM Diet'. p.12

The Prime Minister hardly needed to tell us that he eats genetically-modified food. *Like the rest of us* he has very little choice, since GM ingredients are present in so much of what we eat, whether we like it or not.

What is surprising in one so politically astute is that he appears to have forgotten the salutary lesson from John Gummer's notorious attempt to reassure us over BSE. As to the complaint that he feels 'frustration' at the debate on whether GM food should be banned, this is nothing to the frustration felt by a public which sees a Government so arrogantly – and inexplicably – unresponsive to its growing alarm.

[1] Daily Mail (1999g, 17 February). 'Politics, Trust and the Safety of Food'. p. 10.

Suddenly, the Government doesn't seem quite so confident over genetically modified 'Frankenstein' foods. At the end of a long, bruising Commons debate last night, Agriculture Minister Jeff Rooker let it be known that the first commercial planting of GM crops is to be postponed. Yet however welcome the concession, it has to be said that it leaves New Labour's food policy in an even greater shambles.

[2] After all, Tony Blair has been at great pains this week to let the nation know that he eats GM foods at home and considers them perfectly safe. It seems decidedly odd that he has now adopted something of a moratorium on their production.

... When public doubts over GM foods are so widespread, even the appearance of a conflict of interests must be damaging to New Labour's reputation.

[3] Quite apart from the increasingly untenable position of Lord Sainsbury, this Government still appears far too cosily allied with the biotech industry.

Labour has accepted money from one major company. Ministers and officials have had dozens of high-level meetings with executives promoting GM foods, who seem to enjoy remarkable access to the corridors of power.

Meanwhile, Cabinet enforcer Jack Cunningham inaccurately claims that environmental watchdogs in English Nature have not recommended a ban on certain GM foods, when they most certainly have. To cap it all, Downing Street tries to persuade newspapers to publish an article supposedly written spontaneously by a leading food scientist, though it was in fact commissioned by Labour's spin doctors.

[4] What is so baffling in all this special pleading is that there is no immediately obvious benefit to the consumer in GM foods. Nor is there the slightest public demand for such products.

Why then should the Government have appeared so keen to promote the interests of the big biotech companies?

Is it because Tony Blair's friend Bill Clinton has been lobbying on their behalf? Or are Ministers reluctant to control GM products for fear of offending Brussels?

Perhaps last night's concession reflects a change of heart, but it would be unwise to bet on it. A modest retreat in the face of growing public pressure hardly counts as a conversion. Ministers will need to go much further in order to assuage the growing public disquiet over genetically modified food.

[1] Daily Mail (1999i, 18 February). 'Ignoring Warnings on Food Safety'. p. 10.

There seems no end to the turns and twists in the deepening crisis over genetically modified foods. Today the Mail reveals that a report highly critical of Government standards on safety and environmental protection has simply been ignored by Ministers.

... This Government has only itself to blame if cynicism is mounting. The crisis over BSE badly undermined public faith in official reassurances. And sadly, the shambolic, complacent and naive performance of New Labour in every aspect of GM technology has made matters even worse.

[1] Daily Mail (1999j, 27 February). 'The Widening Chasm in British Politics'. p. 10.

Something worrying is happening in British politics. A gaping chasm is opening up between what most people instinctively feel and the agenda which the Government insists on pursuing.

The most glaring example can be seen in our relations with Europe ...

[2] On the vexed question of genetically modified foods too, the Prime Minister seems blithely dismissive of public opinion, which again favours a more cautious approach. He insists that such products are perfectly safe, says that he eats them himself and appears impatient at all the fuss. Yet the issue won't go away. Today the Mail reports on laboratory tests which show that GM soya is found in a whole range of products which don't mention the fact on their labels. Once again, the public is left powerless to make its own choices.

[1] Daily Mail (1999k, 15 March). 'Welcome retreat on modified crops'. p. 10.

Lord Sainsbury's backing for a three-year moratorium on the growing of genetically-modified (GM) crops is an encouraging sign that the Government is at last responding to public concern about 'Frankenstein Foods'.

Given the Science Minister's reputation as a champion of GM technology – and his closeness to the Prime Minister – his comments clearly reflect a softening in the official line.

[2] Last month, it was announced that the first commercial planting of GM crops, due to begin this autumn, would be postponed for a year. Now it seems the halt will last until 2002.

The Daily Mail, which has spearheaded the campaign for a moratorium, welcomes this development.

Following the fiasco over BSE, we have repeatedly argued that insufficient is known about GM foods to rush into production.

[3] Even a three-year ban might be too short. But official backing for it at least signals a further retreat from the almost truculently entrenched positions adopted – from Tony Blair down to his contemptibly pompous Chief Scientific Adviser – when a moratorium was first suggested.

That being so, Agriculture Minister Nick Brown's refusal to acknowledge that there are health risks is unacceptable. So too is his belief that consumers already get enough information to make informed choices about the food they buy.

[4] We have drawn attention to a succession of products whose labels do not mention their GM ingredients. And this week Whitehall is expected to announce measures for stricter enforcement. These may help. But we fear that, unless Ministers have a surprise up their sleeves, the new measures will fail to close all the many loopholes.

Despite this latest apparent climbdown, we remain convinced that there is an urgent need for a 'super regulator', to take overall charge of developments in food technology. Anything less is just tinkering.

[1] Daily Mail (1999I, 26 April). 'Too Little Appetite to Curb GM Fears', p. 10.

Though temporarily overshadowed by events in the Balkans, concern about genetically modified (GM) food and crops shows no sign of going away.

Not surprisingly, for as government scientists are warning, the risks to health are potentially catastrophic.

[2] Members of the Advisory Committee on Novel Foods and Processes believe that GM crops grown in parts Europe and America could trigger new strains of meningitis and other fatal diseases. They also fear that such crops, containing a gene resistant to antibiotics, may have already contaminated the food chain in Britain.

[3] The scientists' grim warning comes only a week after it was announced that the first mutated superweed had been discovered in this country. The plant, a cross between GM oilseed rape and a near relative, has inherited a gene that makes it resistant to weedkiller.

If these developments were not alarming enough, the silence with which the Government has greeted them makes the situation more worrying still.

Ministers seem determined, as with past warnings, to do the absolute minimum necessary by way of response.

[4] ... In February, Ministers did agree to postpone plans for the first commercial planting of GM crops, due to begin this autumn. But as the discovery of the superweed indicates, this is simply slamming the gate after the gene has bolted.

Leaked notes of a meeting in January between Agriculture Minister Nick Brown and his American counterpart confirm the Government's refusal to acknowledge the dangers highlighted by a steady stream of experts. On the evidence of these leaks, what most concerns Ministers is the way the issue is perceived rather than the possible risks to health and the environment. This is woefully shortsighted.

The Government has vowed to protect our food. By responding to consumer fears about GM foods and crops with greater vigour and sincerity, Ministers could at least start to prove that they are taking this commitment seriously.

[1] Daily Mail (1999m, 22 May). 'The Safety of Food'. p. 10.

If the Government hoped that its propaganda offensive yesterday would soothe public fears over GM foods and crops, then it is sadly mistaken. The pompous bluster of Cabinet enforcer Jack Cunningham served only as a reminder of the official smugness which landed us with mad cow disease.

The truth is that the supposedly tough new approach to genetic modification ducks the real issues. There will be no legally binding code on GM crops and no moratorium on their planting.

[2] After months of confusion and conflicting evidence, the public is entitled to some straight answers. Are GM foods guaranteed safe? If not, why is the Government so keen to promote them? Why are we fobbed off with the bland assurance that there is no scientific evidence that they are harmful?

... Yes, there may be immense advantages in modified crops. But the issue has to be approached with huge caution.

[3] Yesterday's performance will do little to dispel the impression that Ministers are concerned more with the interests of the GM industry than with the environment or consumer safety. This is New Labour at its arrogant worst.

[1] Daily Mail (1999o, 7 June). 'GM Uncertainties'. p. 10.

For the first time, Tony Blair answers the conundrum of why such a populist Prime Minister should risk public disapproval by so openly supporting GM foods. In the end, it seems, it all comes down to money.

Yesterday he revealed that Britain is engaged in a frantic race with Germany over the genetic technology which could prove the 'big thing' of the new Millennium.

[2] 'Germany is pouring literally hundreds of millions of pounds into biotech at the moment to try and catch up with us,' he said, insisting that Britain had to maintain its lead.

His remarks will do little to assuage the growing unease. Indeed, by so candidly acknowledging the intense commercial pressures he is under, the Prime Minister may have succeeded only in adding to public suspicions over the power of the GM industry.

Yes, it is possible that gene technology may provide immense benefits, but the risks cannot just be shrugged aside. We are told that there is no evidence that eating GM food is unsafe, but how can anyone guarantee that side-effects will not appear in the long term?

[3] ... Environment Minister Michael Meacher yesterday conceded that there are 'some very great uncertainties' in this area. Indeed. On this issue, he seems far more in tune with the national mood than does the Prime Minister.

[1] Daily Mail (1999p, 17 August). 'GM Fears Ignored'. p. 10.

GM fears ignored. This newspaper, which has done more than any other to raise the alarm about genetically modified food and crops, holds no brief for those who have taken direct action against them.

Last month's destruction of a field of modified maize, and veiled threats of similar demos at the four test sites identified by the Government yesterday, are wholly misguided and unwarranted.

[2] Yet the anger that drives anti-GM campaigners beyond the pale is easy to understand. For the decision to press ahead with large-scale field trials shows that Ministers, despite their claims to the contrary, still refuse to take the public's fears about GM food and crops seriously.

Consumers mistrust GM products, see no reason for them, and reject them.

Nor do they want open-air trials, which risk the contamination of surrounding farmland and plants.

Responding to public concern, the major High Street food chains have spent millions of pounds clearing their shelves of GM foods. Are Ministers incapable of seeing the message from this?

[3] Why do they arrogantly assume that they need not respond similarly, by calling a halt to trials until it has been conclusively proved ... Government's stubbornness must remember that protest in a democracy must be kept within the law.

But at the same time, Ministers would do well to remember that any democratic government that ignores the feeling of the majority of the electorate does so only at its peril.

[1] Daily Mail (1999q, 30 August). 'GM Giants Feel the Consumer Backlash'. p. 10.

How arrogantly the developers of genetically modified foods and their political allies have dismissed the anxieties of consumers. But they seem to have forgotten one thing – the consumers' ability to exercise power through free markets. Now that power is beginning to show itself.

[2] In Britain, some of the leading supermarket chains have cleared their shelves of GM products, legal action has delayed Government-backed crop trials, and a leading investment bank has warned investors that public fears are making GM technology a bad bet ... Full and honest answers are what the public is demanding, in this country as elsewhere. Without them, the consumer backlash will continue.

And Ministers here should be warned.

To ignore the feelings of the vast majority, is to invite a voter backlash too.

[1] Daily Mail (1999r, 30 October). 'The Arrogance that Weakens Tony Blair'. p. 10.

In a week dominated by the beef crisis, the fascinating import of the latest poll verdict on Tony Blair has been largely overshadowed. But it is significant. For the first time, there are signs that his personal rating is in marked decline.

Though he is still popular with 52 per cent of the public a figure that would delight most other politicians in midterm it is not so long ago that the figure was 80 per cent. Moreover, the evidence is that one in three voters now see Mr Blair as increasingly arrogant.

[2] When he seeks always to be in tune with the national mood, this is a development the premier would be unwise to ignore.

And he would do well to analyse why he is being perceived in this way ... autocratic approach is becoming something of a habit ... Certainly this is a Prime Minister who seems to have little regard for normal conventions and traditions ... But it is in his patronising attitude to the wider public that Mr Blair's arrogance is seen at its worst.

Throughout the GM food furor, for example, he was openly contemptuous of public concern, scoffing at the 'hysteria' supposedly roused by papers like the Mail. Until this week, when he performed a U-turn on the issue, without so much as a blush or apology.

[1] Daily Mail (2000a, 29 February). 'A Real GM Conversion?'. p. 10.

Throughout the GM food furor, the Prime Minister was openly contemptuous of public concern and scoffed at the 'hysteria' supposedly roused by papers like the Mail. Now he says there is no doubting the potential for harm from GM foods and crops.

These second thoughts are welcome, but they must be matched by changes in policy. And in ministerial attitudes.

[2] Only a month ago, Food Safety Minister Baroness Hayman told organic farmers that they would just have to put up with contamination caused by pollen from genetically modified crops.

Presumably, we have heard the last of such arrogance.

Meanwhile, Mr Blair must surely see that leaving responsibility for the Government's approach to biotechnology in the hands of Science Minister Lord Sainsbury, New Labour's most enthusiastic booster of GM foods, will do little to convince those who doubt that yesterday's words herald a U-turn.

The Government's actions now have to reflect Mr Blair's new-found caution lest it be thought that his apparent conversion owes more to polls and focus groups than to any genuine change of heart.

Daily Mirror

[1] Daily Mirror (1999b, 15 February). 'Label Frankenstein Food: Mirror's Label it all Plea'. p. 4.

Mirror today launches a campaign to have all food products labelled if they contain genetically modified organisms.

The move urging the Government to give consumers more information was welcomed by anti-GM groups.

Experts estimate that 95 per cent of food containing GM organisms is not identified because the industry does not have to label such ingredients...

[1] Daily Mirror (1999c, 15 February). 'Voice of the Mirror; Just Unpalatable'. p. 4.

The Government does not come well out of the row over genetically-modified food.

It is hard to understand why it so stubbornly defends something which might be harmful.

It certainly does not help that two high-ranking former Labour officials are now advising the main company involved.

The Government is probably totally innocent of charges of special favours.

[2] But can't it see how bad this looks for it? There is widespread and genuine concern about GM food.

And the Government's defence of its position has not eased that.

When it comes to public health, the motto must be: Better safe than sorry. We have learnt that to our cost.

[1] Daily Mirror (1999d, 16 February). 'Mirror Comment: We Must Have Facts on Food'. p. 4.

Always beware the expert who is too quick to allay the fears of consumers.

Dismissive politicians and professors often have to backtrack in the wake of new evidence.

As engineered crops creep, mostly unnoticed, into foodstuffs, the consumer is right to be afraid and right to ask questions.

[2] They have no evidence to back up their suspicions at the moment and all fears may prove in future to be groundless.

To err on the side of caution is by far the better option when our health is at stake.

While investigations and trial and tests continue, the consumer should be afforded one very basic right - the right to make up our own minds.

[3] We ought to be able to choose whether or not we eat genetically modified foods.

For that we need clear, unambiguous labelling. The government force manufacturers to mark products that contain genetically modified ingredients.

Then, as environmentalists and scientists battle it out about safety, we can make an informed choice about what we eat.

[1] Daily Mirror (1999h, 17 February). 'GM Food: We Need Expertise'. p. 6.

For years, people have moaned that politicians know nothing about anything.

Now we have a Government which has brought in top businessmen to help run the country. And what do we get?

One after another, they are attacked because of their connections with business. The latest is Lord Sainsbury, who spent almost 40 years working for the supermarket group.

... The attacks on Lord Sainsbury are a red herring in the storm over GM foods. For it all comes down to the public's lack of confidence in their safety.

[2] Tony Blair, usually so in touch with public opinion, is for once out of step.

He must understand that his opinions on these controversial new products cannot be rammed down people's throats - any more than GM foods can be.

[1] Daily Mirror (2000a, 29 February). 'Blair Listens to Nation's Food Fears'. p. 10.

There can be no doubting that Tony Blair believes in genetically modified food.

He is convinced that it is the future – the chance to create more and better foods. But there is no doubt, either, that the public is scared of the risks from GM crops.

At first the Prime Minister seemed to dismiss these fears. Then he argued that Britain needed to be at the forefront of this new science.

[2] But Mr Blair is a realist. He has accepted that people are genuinely worried and soothing words have not persuaded them to change their minds.

So the Prime Minister has done a U-turn. Not that he says GM foods are dangerous, just that they might be.

That is good enough. All that has ever been asked is that Mr Blair accepted people's worries over the safety of GM crops.

[3] There is now time for years of tests to determine whether or not the fears are justified. If they are not, then genetically modified food can be introduced for those who want it.

But if they are, it will have saved a terrible health scare - one to at least rival that over mad cow disease.

It is a good quality in Tony Blair that he looks to the future and backs developments which could improve life.

But it is even better that he listens to the people's fears.

Express

The Express (1998a, 9 June). 'Food Safety's Hard to Swallow', p. 12

[1] The problem with genetically modified food is that we simply do not know whether it is safe or not. Much genetic engineering has positive results, offering hopes to sufferers from diseases such as cystic fibrosis. But in the case of food, the benefit has so far been to the producers who can produce food with a longer shelf life or crops which can withstand weedkillers. And in theory it benefits consumers by lowering prices.

[2] The trouble is, we as consumers do not know whose claims to trust. Government scientists and the Ministry of Agriculture, Fisheries and Food have lost public confidence because of a deadly combination of ineffectual regulation followed by panic measures, most notably in relation to BSE. Supermarkets and the food producers are operating for profit. Green campaigners have their own agenda. Labour has promised to introduce an independent food safety agency, reporting to health ministers. We need it now more than ever, and the public must be convinced of its independence. For while ideally we would all eat organic food, it is expensive and slow to produce. Supermarkets are telling us they cannot guarantee to keep genetically modified products out of the food we buy. Where is the body we can trust to tell us whether it is safe?

[1] The Express (1998b, 29 June). 'The Hidden Dangers of "Frankenstein Food"'. p. 10.

Today the Express brings a campaign to bring out the facts behind the food we eat. Our revelations will concern those of us who assume that consumer law means we are entitled to know just how our food is grown and what it contains. We are all now aware of the role of additives and chemicals but few of us have any idea of the extent to which supposedly natural food is in fact genetically altered – 'Frankenstein food', as consumer groups call it ... the fact is that we do not really know the possible harm such food might do. New European rules ... supposed to identify [GM] food ... are toothless ...

[2] We are therefore in complete ignorance not just about the effects of such food, but even whether or not we are eating it. Many of us would choose to avoid any genetically altered produce but without proper labeling we cannot make the choice. Few things are more important and basic

than what we eat. The Government should press for proper EU-wide labeling to be introduced as soon as possible.

[1] The Express (1998e, 10 August). 'End Doubts on Food Safety'. p. 10.

Genetically modified food has been dubbed 'Frankenstein food'. In a time of all-too frequent scares, the more sober-headed might regard this as hysteria. But the latest revelation about the possible effects of this experimental food raises the prospect that scientists might be creating something truly dreadful.

Tonight's Granada TV's World in Action has discovered that genetically-modified potatoes can damage the immune system of rats and stunt their growth. Prof Arpad Pusztai, who carried out the research, has said that if he had the choice, despite all the assurances from food producers and the authorities, he would choose not to eat such foods.

[2] However, there are no legal requirements for consumers to be warned on the labeling of the presence of GM elements. This cannot be right. The Government must ensure that their scientists give top priority to discovering whether these products are safe beyond reasonable doubt for human consumption.

[1] The Express (1998f, 12 August). 'Food Agency Cannot be Delayed Further'. p. 10.

Here we go again. As if the scare over genetically modified food was not enough, now comes news that the very milk we drink may be ridden with bacteria. Early tests suggest – the Government will put it no stronger than that – that one-fifth of all supplies of pasteurized milk could contain mycobacterium paratuberculosis, which causes Johne's disease in cattle – thought to be linked to the human Crohn's disease, a chronic inflammation of the intestines ... The Government must set up its widely touted Food Standards Agency. So far it has been long in rhetoric and short on action. Until there is a genuinely independent body to oversee these matters then such scares will remain all too costly and too common

[1] The Express (1998i, 9 September). 'Time the Government Fed us Some Information'. p. 10.

In the absence of any official lead from politicians, people are voting with their wallets. The outcry against genetically modified food is spreading. As The Express reports exclusively today, schools are banning GM food. In doing so, they are simply following MPs, who have banned it from the House of Commons, and supermarkets, including Sainsbury, Tesco and Safeway, which are trying to eliminate GM soya from own-label products. According to Professor Alan Gray, a scientist advising the government, it is too soon to say whether GM crops are completely safe.

[2] Yet the Government continues to insist that they are ... while backing EU moves to force manufacturers to label food containing genetically-modified ingredients. Even with these new laws. Many products containing ingredients derived from GM crops, will escape labeling.

[3] We have argued before that growing concerns about food safety mean the introduction of a Food Standards Agency is becoming increasingly urgent. Yet the Government has shelved plans to introduce the agency for at least a year.

With growing numbers of consumers expressing fears, ministers must take a more open stand... At some point, the Government will have to confront the problem and either try to convince the public of the safety of GM food, which might have been easier had it introduced an independent Food Standards Agency, or push for more effective labeling laws.

[1] The Express (1998j, 8 October). 'Our Campaign Bears Fruit'. p. 10.

... Tesco and Asda's decision to identify more of their own-label products which contain ingredients derived from genetically modified plants represents a victory for the consumer and for The Express. We have long campaigned for better labeling of genetically modified food, believing people are entitled to know what they are eating. And if Tesco and Asda can do it, other supermarkets should follow suit.

[2] But the supermarkets are unable to guarantee that food bought from other producers is completely GM food. It is therefore up to the manufacturers of those foods to introduce their own labeling systems. For now at least, a proper choice seems to be emerging for the consumer

[1] The Express (1999a, 13 February). 'We Must Give a Lead over GM Foods'. p. 10.

The Government is in serious trouble over genetically-modified food. The Cabinet minister in charge of GM food, Jack Cunningham, has been accused by English Nature of misleading Parliament over its call for a moratorium on the production of herbicide tolerant crops, and

condemned by 20 leading international scientists for being 'massively uninformed' about the threat to public health. The 20 scientists have backed the stifled findings of British scientist Dr Arpad Pusztai that rats which ate genetically-modified potatoes had suffered damage to their immune systems. Dr Pusztai rubbished and then gagged by the publicly-funded Rowett Research Institute headed by the Government's favoured professor, Philip James, and the scientists are demanding his reinstatement.

[2] ... And, from a surprising quarter, the supermarkets have added their voices to the growing chorus of discontent with the Government's do-nothing approach to GM food. The British Retail Consortium, which represents 90% of the High Street, including all the major supermarkets, has called on Agriculture Secretary Nick Brown to clarify the Government's position. The Federation of Small Businesses fears people are going to be forced out of business.

[3] We have little sympathy for the supermarkets. The Express has led the way in questioning the safety of genetically-modified food – indeed we broke the story of Dr Pusztai's findings six months ago – and in uncovering the ways GM products are slipping into the food chain without the consumer's consent. The supermarkets have shown little interest in standing up for the consumer, being more interested in profits. If, however, they are genuinely concerned about safety, we welcome their leap on to the bandwagon and only wish they had done it earlier and for the right reasons.

[4] Ministers are going to have their work cut out if they are to retain any credibility on the subject in the eyes of the public. For too long, the Government has acted on the assumption that the debate over the safety of GM food would simply go away. It is not going to, and even the supermarkets have realized that now. The Government refused to tackle the issue earlier, and it has blown up in its face.

... We need a full and honest debate on the public health and environmental issues surrounding GM food. And the Government is going to have to lead it.

[1] The Express (1999b, 16 February). 'GM Food Needs a Debate'. p. 10.

The Government is finally beginning to move over genetically modified food, with the Prime minister's spokesman insisting that Mr Blair believes it safe and eats it himself. But where is the evidence upon which Mr Blair bases his certainty?

If the PM is 'frustrated' by what he sees as an ill-informed media debate, he should open up the government's own scientific evidence to public scrutiny instead of trying to railroad public opinion? One of the enduring images of the BSE fiasco is that of John Gummer force-feeding his daughter a beef-burger while dismissing public concerns.

[2] The Express has led the way in creating a public debate over GM food and it is not good enough for ministers to dismiss genuine concern by simply denying any danger.

And, as long as new Labour retains its close links with genetic engineering firms, few are likely to be reassured.

Until people are persuaded of the safety of GM food, and if, it really is impossible to say precisely which products definitely contain GM ingredients, surely the Government could press shops to label any food which they know to be GM-free? At least then we would have a choice.

[1] The Express (1999c, 19 March). 'GM-free? Then Tell Us'. p. 10.

The Government has admitted that the EU's labelling laws for genetically modified food are ineffective. Restaurants and cafes, as well as supermarkets, are now going to have to inform their customers when their food contains GM products.

But the regulations apply only to GM soya and maize, not to food that is made with ingredients derived from GM products. It will be left to the waiters and waitresses to try and explain this to the suspicious and confused customers.

[2] This clearly is not going to work. So why doesn't the catering industry come at this from a different angle and voluntarily mark any food it knows to be GM-free? This would give customers the information they need – and the choice that they want.

[1] The Express (1999d, 17 May). 'GM Food: Act Now to Avoid a Bitter Harvest'. p. 10.

For months, the *Express* has warned of the possible dangers of genetically modified food and called for better research into the risk it represents to health and the environment. Tomorrow, a report by Britain's doctors will tell the Government that until we know more about GM crops and the long-term effects of eating them, they should be banned.

[2] The British Medical Association, which represents more than 100,000 doctors, also calls for more independent testing, freely available results and better labelling of products. The report, which is the first official opinion on the subject by the British medical body, echoes the demands of The Express – for more detailed researched into the risks of cancer, new allergies and antibiotic resistance. The common practice of using antibiotic genes in GM plants could, says the BMA, lead to increased vulnerability to potentially fatal diseases such as meningitis. And the threat to the environment is far greater here than in the US, where GM crops are already grown, because the country is much smaller on the threat of cross-pollination is much higher.

[3] The BMA's warning is supported by an admission in tonight's Panorama programme by the Government body in charge of GM safety trials that too few farmers are willing to participate for them to be effective. That is simply not good enough.

Last Monday, the *Express* called for a moratorium on the commercial growing of GM crops. Now Britain's doctors have done the same. The Government should act now.

[1] The Express (1999e, 24 December). 'Shoppers' Victory as GM Foods are off the Menu'. p. 10.

Not long ago The Express reported with satisfaction fears by the biotech industry that it would not be able to establish commercially grown genetically modified crops in Britain for many years. We welcomed that as recognition of the power of the consumer to influence GM policy.

Now we can claim another victory as we learn that the GM foods industry has gone into 'negative momentum', as the banking group the Credit Suisse First Boston Corporation describes it. This is another sign that consumers are continuing to veto these foods with their shopping baskets.

[2] Today's consumers are not latter-day Luddites afraid of new technology for the sake of it. We have valid concerns about production methods which are tampering with the very building blocks of life. The potential dangers to the environment or to our health are still not fully understood. It is irresponsible for any company to promote GM foods until the long-term effects of this technology are known.

We have long called for all GM foods to be removed from shops. While it remains on the shelves it must, at the very least, be properly labelled. Only then will we know exactly what we are buying. And only then will a boycott show exactly how little we want it there.

Independent on Sunday

[1] Independent on Sunday (1999b, 7 February). 'Act Now on GM'. p. 24.

Today we urge the Government to take two important actions on genetically modified food: the first is to declare a three-year freeze on developing modified crops; the second is to insist that all products containing modified food are clearly labelled. The Government appears to have learned nothing from the beef debacle, where much scientific research has failed to disclose the exact nature of any risk.

[2] Instead, it is intent on ushering in a food science where relatively little research has disclosed widespread possible risks; a food science, moreover, for which there is no consumer enthusiasm and which is of dubious value to anyone save those multinational companies that promote it. We urge a freeze rather than a ban because we are happy to listen to the arguments in favour of GM. It will, we are told, bring cheaper food. But it is difficult to debate a subject without any facts, and it will take three years for the scientific studies set up by this government to report.

[3] By then, if the Ministry of Agriculture continues to show its enthusiasm for GM crops, it will be rather late to discover that there are malign effects on our health, on our indigenous crop species and on our animal and bird populations. Already, of course, there is far more GM food in the system than we were encouraged to think. At the very least, we must insist now on proper labelling and we will hear no more nonsense about lack of space. The products in question should carry a prominent GM label rather than a tiny acknowledgement in a list of ingredients. Then at least consumers can genuinely make their choice.

[1] Independent on Sunday (1999c, 14 February). 'Second Helping'. p. 28.

Our invitation to the Government to introduce a delay in the development of genetically modified crops, and to insist on clear and precise labelling of affected foods, encouraged more than 400

readers to write last week.... We agree that treatment of the subject has threatened to slide into hysteria, with scientists digging themselves into opposing and entrenched positions; supermarkets waking up in alarm to the fears of their customers; and politicians - notably Jack Cunningham on the Today programme - demonstrating that they have learnt nothing from the BSE debacle.

[2] It has not helped that this government, which encouraged voters to believe in a new way of doing things, appears to have embraced the cause of the American multinationals with the unquestioning fervour shown by its Conservative predecessors. It is worrying, as Baroness Young, chairman of English Nature, writes on page 30, that recommendations by her organisation and by a House of Lords committee can be so misleadingly presented by the Government and GM food publicity men. And it is not reassuring to discover, working behind the scenes on the Monsanto account, the former Labour Party press supremo David Hill, now in the pay of the PR firm Bell Pottinger.

[3] It is not enough for supporters of GM to claim that the scientific experiments of the last decade are merely an extension of the selective breeding of livestock and the cross-fertilisation of crops. So we reiterate this paper's position, that we wait to be persuaded that there is merit in genetic modification, and we require objective evidence before, rather than after, its wider use is set in train. That is why we call for a three-year moratorium on the commercial release of new crops. This is a campaign in which the consumers must continue to make their voices heard: the supermarkets are beginning to listen on labelling; the Government is shaken by the depth of opposition.

[1] Independent on Sunday (1999d, 21 February). 'Just Two Things...' p. 28.

'Standing in front of a stampede is never a nice business,' explained the Prime Minister to readers of the Daily Telegraph yesterday. 'But occasionally it has to be done.' Tony Blair went on to accuse 'parts of the media' of conducting 'an extraordinary campaign of distortion' on genetically modified food. As the paper that has done more than any other to expose worrying aspects of GM food technology, we must respond. What this paper has revealed over the last six months is a series of inconsistencies in safety provisions, evidence of scientific disquiet, anomalies in labelling and increasing concern among consumers...

[2] ... despite Mr Blair's claim in yesterday's Telegraph that his government has 'insisted on labelling for GM food', large amounts of it receive no such labelling. Those who raise doubts about genetically modified food are accused of adopting a Luddite position, but the truth is that scientists themselves are divided on the dangers and benefits, as the molecular biologist Dr Michael Antoniou makes clear in the paper today. Far from taking an approach that is against science, we have sought just two concessions: a three-year moratorium on commercial crop development until the results of the Government's own research are available, and clear, consistent and compulsory labelling - labelling that should be supported by the biotech industries themselves. If we are to be condemned for seeking those two things, we shall take comfort in the fact that the Government, for all its bluster, may be beginning to see the merit in both.

[1] Lean, G. (1999, 21 February). 'GM Foods: Government Shifts Ground'. Independent on Sunday p. 8*.

First blood went last week to the Independent on Sunday's campaign on genetically modified food, when the Government effectively met one of the campaign's two main objectives.

On Thursday – after a week of extraordinary public outcry – the Environment minister, Michael Meacher, conceded the principle of an indefinite moratorium on commercial plantings of GM crops ... Since we launched our campaign two weeks ago – calling for a freeze on developing GM crops, and clear labelling of all foods with GM ingredients – the issue has dominated the news and thrown the Government into disarray.

[2] ... Cunningham, has tried repeatedly – and unsuccessfully – to reassure the public that the Government is in control of the development of GM crops. The Prime Minister put his own authority at stake by declaring that he ate GM foods, only to fail to quieten the storm.

... a five-page letter to every Labour MP to protest that, despite increasing accusations of bowing to big business, 'the Government's first responsibility is to protect consumers and the environment'.

[3] Increasing evidence emerged of Labour's links with the GM food industry, and the Tories ... Details of several reports emerged too. The biotechnology unit of the Department of the Environment warned that GM crops could wipe out birds, plants and animals; the Government's advisory committee on foods predicted that antibiotic-resistant genes in the crops could escape into

the environment; and the Royal Society urged a closer look at regulations covering weedkiller-resistant GM crops, to avoid the spawning of superweeds.

... Meacher – one of the few ministers sceptical about the crops, and perhaps the only one to see the crisis coming – managed to steer his part of the Government into relatively secure waters.

[4] He has long wanted – as English Nature, the Government's official wildlife watchdog, has advised – to halt the commercial planting of GM crops until the risks of their genes contaminating other plants had been fully studied. On Thursday he gave a categorical assurance that the crops would not be grown commercially until the Government was satisfied that there was no danger. He could not officially call this a moratorium, nor put a number of years on it, because the Prime Minister had explicitly ruled this out. But his announcement amounts to an indefinite halt, meeting one of our campaign's demands.

*This feature written by the newspaper's Environment Editor who also wrote the editorials on GM food and crops has been included because of its extensive comment on shifts in the government's position on a moratorium.

[1] Independent on Sunday (1999e, 23 May). 'Less Spin, More Science'. p. 10.

When this newspaper called for a moratorium on the introduction of genetically modified crops last February, more than 400 readers immediately wrote to us in support. Hundreds more letters followed. To date at least 2,000 readers have backed our campaign. Their concern is reflected throughout the country. According to the polls, the vast majority are uneasy about GM foods and crops. And, as we report on page one today, the Government's own research suggests that only 35 per cent feel they can trust the Government. Our campaign for a moratorium on GM crops – and for the clear labelling of all foods that contain modified material – has been dismissed as Luddite, even hysterical. We deny the charge. But given the dereliction in matters of food safety by previous governments – and the clumsy spin put on the matter of modified foods by this Government – it is not surprising that there has been confusion.

[2] Consider the events of last week. First Royal Society scientists dismissed the work of Dr Arpad Pusztai with its claim that rats were grievously harmed when fed GM potatoes. Then the British Medical Association warned that such food and crops might have a cumulative and irreversible effect on the environment and the food chain. That was followed by the disclosure that the Government's Chief Scientific Adviser, Sir Robert May, agreed with those lobby groups which have demanded that the GM crops now being tested should not be approved for commercial use until at least 2003.

[3] Next there was the first clear evidence that these crops pose a threat to wildlife: researchers at Cornell University had discovered that one of the world's most beautiful butterflies died when it came into contact with pollen from maize with a pest-resistant toxin engineered into it. Finally, on Friday, the Government issued its own review of the subject which declared that there was 'no current evidence' that such technologies were 'inherently harmful'. It announced a 'tough' new voluntary code on GM plantings. Critics, like the BMA, said that the moves were not robust enough, while countryside lobbyists said that previous voluntary codes have proved ineffectual.

[4] Vested interests lurk behind so much here ... The Government relies on 'independent' experts, many of whom gained their expertise in the pay – direct or indirect – of the same multinationals; it then adds to the impression of its partiality with secret meetings in which ministers try to spin the issue, even down to trying to fix which 'independent' scientist appeared on the Today programme to support the Government line.

[5] Ambiguities lie behind the claims and counterclaims. It is true that GM technology offers plants with new resistance to pests, so fewer chemicals will be needed. But in the case of GM soya, US farmers now use increased volumes of even more toxic chemicals than before, because the crop is resistant to them and everything else is not, boosting yields enormously... The key question is: will the benefits outweigh the disadvantages? To answer that we need more information and less spin. That is why, today, we again urge the Government to declare a three-year moratorium on modified crops, and insist that all products containing modified organisms are clearly labelled. That is not hysteria. It is common sense. It is also good science.

[1] Independent on Sunday (2000a, 28 February). 'Mr Blair's Politically Modified Line on GM food is a Welcome U-turn'. p. 24.

Students of u-turns will have enjoyed Tony Blair's article on genetically modified food in yesterday's Independent on Sunday. The gist of it was that the Prime Minister has always said how worried he

was about mad scientists meddling with the stuff of life, playing God and creating giant tasteless mutant vegetables. When he saw himself portrayed on the front page of a tabloid newspaper as Frankenstein's creation, over the headline 'The Prime Monster', he was 'puzzled'. How could it be suggested that 'this government is an unquestioning supporter of GM food'?

[2] Still, more in bafflement than in anger, he has to get on with the dreary task of explaining to the electorate that, when he said last year this whole GM hysteria was the product of the 'tyranny of pressure groups', what he meant was that Greenpeace and Friends of the Earth 'have an important role to play in ensuring we reach the right answers'.

In some ways, the 'Prime Monster' deserves sympathy as much as mockery. There is an element of hysteria in popular attitudes to genetic science. Unfortunately for him, unlike popular credulity about astrology or unidentified flying objects, this hysteria does have some scientific basis. Indeed, some of the doubts about GM foods are good examples of proper scientific scepticism. It is good science, not voodoo, to adopt a precautionary attitude to risk. The idea that humankind should try to reduce the burning of fossil fuels which causes global warming is sound science. The doubts about nuclear power are equally soundly based.

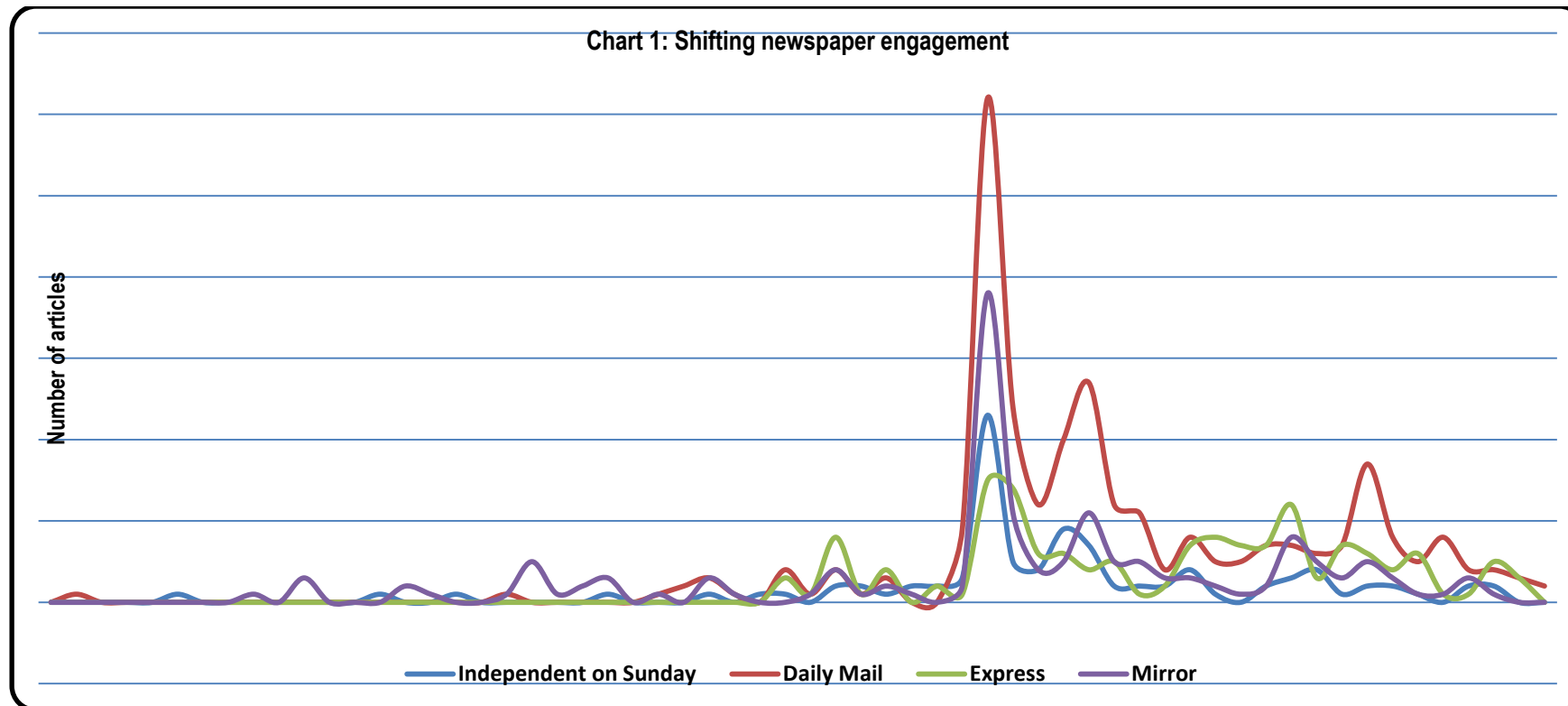
[3] Thus the concern about the impact of GM crops on the ecosystem, when modified plants can cross-pollinate 'natural' ones, is a real one. Of course, the impact of GM foods is likely to be minimal compared to the overall effect on the environment of farming, industry and sheer weight of human numbers. But there is a second justified concern, arising from the law of unintended consequences. Although GM foods are clearly safe to eat according to all normal criteria for food safety - and Mr Blair reiterated yesterday that only two modified foods, tomatoes and soya, have been licensed in this country so far - who knows what effect changes to the DNA structure of plants might have? The BSE crisis is the salutary demonstration of how little we know about the molecular science of food biology.

[4] Mr Blair deserves sympathy in another respect, too, in that these are difficult subjects to deal with in the media and across the cockpit of the House of Commons - the dispassionate assessment of risk does not lend itself to easy headlines.

However, this cannot excuse the fact that his first instinct, when ambushed by William Hague a year ago, was to bat aside concern on this issue. It has taken 12 months for him to complete the U-shaped route to the right position, which is to recognise the potential both for good and for harm in biotechnology, and to proceed with caution.

[5] So far, the potential for good has not been demonstrated convincingly. The main use of genetic science has been to produce crops that allow greater quantities of weedkiller and pesticides to be tipped over them. On the positive side, Mr Blair was able only to point to the possibility of 'golden rice' which is engineered to contain vitamin A, to combat blindness and malnutrition in poor countries. Good, but not enough to encourage the abandonment of the precautionary principle. The new, politically modified Mr Blair wrote yesterday that 'jobs and profit will never be more important for a responsible government than concern over human health and our environment.'

Appendix 7: Shifts in the intensity of media coverage



Key:

Independent on Sunday: $n = 9$; Daily Mail: $n = 299$; Express: $n = 150$; Mirror: $n = 155$

$N = 701$ [total number of newspaper articles on 'GM foods' and 'genetically modified foods' between January 1996 and December 2000]

Appendix 8: Empirical findings

Table 3: Shifting problematizations, behavioural actions and discourses

Political shifts	Time	Actor	Problematization	Behavioural action/recommended action	Discourses and counter-discourses
Low politics	1988–1990	Policy elites (Conservative)	Public anxiety over irradiated food + systemic inflexibility endanger elite agenda	(1) Centralized controls with formal advisory committees (2) Ministerial veto	New repertoire: technocratic rationality, authoritative science and (administrative) safety
	1997: May	Policy elites (New Labour)	BSE/CJD and the crisis of public confidence due to institutional failures	(1) Proposed decentralization + de-politicization with new FSA (2) Balanced consumer–producer interests (3) Market/policy transparency	New repertoire of entrepreneurial managerialism superimposed on old one. Minimal reaction from newspapers
Shift to high politics	1998: June + Aug	Newspapers (Prince Charles and Pusztai)	Public anxiety due to moral/scientific uncertainty and previous mismanagement of food scares	Call on elites to ‘slow’ the expansion of GM food pending more research	Counter-questioning of elite agenda; parallel technocratic discourse of elites; explicit challenges to both elite repertoires
Building pressure and momentum	1998: Aug + Oct	Policy elites	Escalating public resistance due to institutional failure to coordinate and communicate policy	(1) Further centralization and politicization with shift of locus of decision-making to Cabinet Office. (2) Provision of alternative sources for retailers	Mix of old and new repertoires fail to neutralize growing newspaper counter-discourses
	1998: Dec	Policy elites	Public anxiety due to lack of confidence in existing systems of safety control	Reviews: (1) advisory and regulatory framework for biotechnology (2) health impact of GM food (3) public attitudes	Mix of old and new repertoires but challenged by newspapers
	1998: Dec	English Nature	Scientific uncertainty due to unknown effects on biodiversity	Recommendation of a five-year moratorium on commercial cultivation	Parallel discourses of technocratic rationality and authoritative science treated as credible by newspapers
	1999: Jan	Policy elites	Government-led moratorium illegal in the absence of evidence of harm	Rejected calls for a moratorium	Rejection and use of old repertoire angers the newspapers
	1999: Feb	Newspapers (campaign launches)	Public anxiety due to: (1) scientific uncertainty (2) ineffective labelling policy (3) elite mismanagement of previous scares (3) refusal to slow the pace of development	Advocate a moratorium on GM crop cultivation and comprehensive labelling	Expanded problematization directly challenges to elite old and new repertoires
Escalation in high politics	1999: Feb	Policy elites (Tony Blair)	(1) Public anxiety due to newspaper campaigns. (2) Calls for moratorium illegal (3) Comprehensive labelling unworkable	Continuation of existing technocratic processes and plans for new food agency	Mix of old and new repertoires; counter-discourse of arrogant unresponsiveness from newspapers
Failure of high politics to arrest escalating conflict	1999: Feb – May	Retailers	Responsive to consumer anxieties about scientific uncertainties	De facto retailer boycott	Pro-consumer discourses; newspapers hail it as ‘victory’
	1999: May	Policy elites	Reviews: (1) no inherent health risk (2) adequate technocratic process (3) public anxiety due to institutional failure to be more inclusive and proactive	FSA to take the form of strategic advisory body and (functional) participatory governance.	Mix of old and new repertoires; newspapers angered by dismissal of health risks
High politics de-escalation	1999: Dec	Policy elites	Illegality of a moratorium but limitations in knowledge (old risk discourse)	Negotiation of a voluntary moratorium with biotechnology industry	Old repertoire; announcement goes largely unnoticed by newspapers
	2000: Feb	Policy elites (Tony Blair)	Effective apology and concession to newspaper problematization of uncertain risks and benefits	No action	Mix of old and new repertoires

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