The Politics of Politico-Epistemic Authority.

The Case of Independent Food Safety Agencies in the UK and in Germany.

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To Phoibe Edda

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List of Abbreviations

ACEE	Advisory Committee on Consumer Engagement
ACNFP	Advisory Committee on Novel Foods and Processes
ANT	Actor-Network Theory
ANSES	Agence Nationale de Sécurité Sanitaire de l'Alimentation, de l'Environnement et du Travail (French Agency for Food, Environmental and Occupational Health & Safety)
ASAE	Autoridade de Segurança Alimentar e Económica (Portuguese Authority for Economic and Food Safety)
BBC	British Broadcasting Corporation
BfR	Bundesinstitut für Risikobewertung (German Federal Institute for Risk Assessment)
BgVV	Bundesinstitut für gesundheitlichen Verbraucherschutz und Veterinärmedizin (German Federal Institute for Consumer Health Protection and Veterinary Medicine)
BMELV	Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz (German Federal Ministry for Food, Agriculture and Consumer Protection)
BIS	Department for Business, Innovation and Skills
BMVEL	Bundesministerin für Ernährung, Landwirtschaft und Verbraucherschutz (German Federal Ministry for Consumer Protection, Food and Agriculture)
BRAG	Better Regulation Advisory Group
BRE	Better Regulation Executive
BRTF	Better Regulation Task Force
BSE	Bovine Spongiform Encephalopathy
BVL	Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (German Federal Office of Consumer Protection and Food Safety)
CAC	Codex Alimentarius Commission
CAIQ	Chinese Academy of Inspection and Quarantine
CEG	Consumers in Europe Group
CMPS	Centre for Management and Policy Studies
COMA	Committee on the Medical Aspects of Food and Nutrition Policy
COT	Committee of Toxicity

CPLP	Comunidade dos Países de Língua Portuguesa (Community of Portuguese Language Countries)
CSA	Departmental Chief Scientific Adviser
CSAC	Census Scientific Advisors Committee
DCSA	Departmental Chief Scientific Advisor
DCLG	Department for Communities and Local Government (UK)
DFG	Deutsche Forschungsgemeinschaft (German Research Foundation)
DG	Directorate-General
DG SANCO	Directorate-General for Health and Food Safety
DoH	Department of Health (UK)
DRA	Departmental Research Agency
DTU	Danmarks Tekniske Universitet (Technical University of Denmark)
EBPM	Evidence-Based Policy Making
EC	European Commission
ECHA	European Chemicals Agency
ECVAM	European Centre for the Validation of Alternative Methods
ECVPH	European College of Veterinary Public Health
EFSA	European Food Safety Authority
ESRC	Economic and Social Research Council
EU	European Union
FAO	Food and Agriculture Organization
FSA	Food Standards Agency (UK)
GACS	General Advisory Committee on Science
GCSA	Government's Chief Scientific Adviser
GLP	Good Laboratory Practices
GMO	Genetically Modified Organism
GSRU	Government Social Research Unit
GTM	Grounded Theory Method
HM	Her/His Majesty
IARC	International Agency for Research on Cancer
ICVAM	Interagency Coordinating Committee for the Validation of Alternative Methods

ILGRA	Interdepartmental Liaison Group on Risk Assessment
ILSI	International Life Sciences Institute
IMF	International Monetary Fund
IO	International Organisation
IPA	International Public Administration
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IRA	Independent Regulatory Agency
IRGC	International Risk Governance Council
ISO	International Standards Organization
JRC	Joint Research Centres of the European Commission ‘
MA	Millennium Ecosystem Assessment
MAAF	Ministry of Agriculture, Fisheries and Food (UK)
MAFF	Ministry of Agriculture, Forestry and Fisheries of Japan
MBE	Most Excellent Order of the British Empire
NIFDS	South Korean National Institute of Food and Drug Safety Evaluation
NGO	Non-Governmental Organisation
NHS	National Health Service (UK)
NMI	Non-Majoritarian Institution
NMVRVI	Nacionalinis Maisto ir Veterinarijos Rizikos Vertinimo Institutas (Lithuanian National Food and Veterinary Risk Assessment Institute)
NRL	Nationale Referenzlaboratorien (German National Reference Laboratories)
OECD	Organisation for Economic Co-operation and Development
Ofcom	Office of Communications (UK)
OIOO Policy	One In One Out Policy
OST	Government Office of Science and Technology (UK)
OTM	Over-Thirty Month Rule
PUS	Public Understanding of Science
RA	Risk Assessor
RCT	Randomised Controlled Trials
RIA	Regulatory Impact Assessment

RIU	Regulatory Impact Unit
RM	Risk Manager
RPC	Regulatory Policy Committee
SAC	Scientific Advisory Committees
SACN	Scientific Advisory Committee on Nutrition
SCM	Standard-Cost Model
SPS	Sanitary and Phytosanitary
SSRC	Social Science Research Committee
STS	Science & Technology Studies
UBA	Umweltbundesamt (German Environment Agency)
UK	United Kingdom of Great Britain and Northern Ireland
UNEP	United Nations Environment Programme
UNICEF	United Nations International Children's Emergency Fund
UNSC	United Nations Security Council
US	United States of America
VMD	Veterinary Medicines Directorate (UK)
VWA	Voedsel- en Warenautoriteit (Food and Consumer Product Safety Authority)
WHO	World Health Organization
WTO	World Trade Organisation

Introduction

> 'Dear Sirs and Madams, we welcome you to the Aviation House. Please remember that your mobile phones can potentially interfere with our microphones. We therefore kindly ask you to turn off your devices.'

This is not the welcome message at one of the exclusive theatres of London's Westend, but a typical introductory message to an 'open meeting' hosted by a scientific advisory committee at the British Food Standards Agency, a so-called 'independent regulatory agency' responsible for assessing and managing food-related risks in the UK. The committee's chairman proceeds:

> 'May I please have your attention for just a brief moment. Before we start with the discussion, I would like to ask the members to bring potential conflicts of interest with any of the agenda items to our attention.'

We live in paradoxical times. The policy problems that politicians attempt to solve using 'sound' scientific expertise seem to be multiplying. Whether we are talking about climate change, global health, or food (safety) policy – the latter of which is the subject of this thesis – the demand for reliable evidence and 'independent' scientific experts is growing. Today more than ever, policy-making is taking place in expert institutions that are insulated from electoral pressures and hierarchical political control (Thatcher & Sweet 2002; Mair 2005). Expert institutions unelected by the people and uncontrolled by the established institutions of representative democracy have spread across parliamentary democracies worldwide. Such 'non-majoritarian institutions' (NMIs) come in many forms and shapes, but what unites them is that they 'are created for the reason that the structures of power and decision-making sometimes need to be protected from the people, and from excessive input' (Mair 2005: 6). In this vein, the 'rise of the unelected' (Vibert 2007), which has occurred since around the mid-twentieth century, is said to mark 'an epochal transformation of the contours and dynamics of representative democracy' (Keane 2011: 212). Non-majoritarian institutions, and specifically 'independent regulatory agencies', as studied in this thesis, are expected to produce, and act based on *authoritative expertise*. As Vibert argued, while the credentials of the established

majoritarian institutions rest on their representativeness and electoral legitimacy, the legitimacy of non-majoritarian institutions 'rests on their expertise' (Vibert 2007: 58).

But at the same time using (scientific) expertise in policy-making has become more controversial. In contexts where policy goals and instruments are highly contested, where knowledge on long-term consequences is uncertain and where regulation is taking place in transnational networks, expert organisations are confronted with sceptical publics who are increasingly demanding transparency and opportunities for participation and control. The advent of a 'postnational constellation' (Habermas 1998) is characterised by a parallel move towards the 'scientisation', or 'expertisation', of politics and the contestation and politicisation of expertise (Straßheim 2013; Zürn 2015). It is this paradox that scholars in science & technology studies (STS) and interpretive policy analysis (IPA) have called the 'authority paradox' in late modern societies: the use of scientific expertise becomes the grounds on which to confer authority for political decisions and simultaneously it becomes the subject of political struggle and public contestation (Bijker et al. 2009; Hajer 2009a; Beck et al. 2014; Gluckman & Wilsdon 2016). As expert bodies claiming authority over science-policy matters are multiplying in overlapping jurisdictions in the postnational constellation, we can simultaneously observe a pluralisation and decline of expert authority. While the institutions of the classical representative-parliamentary democracy are increasingly delegating powers to NMIs both on the national and transnational level in the hope that these can speak in the name of 'objective (scientific) expertise' on complex policy problems, the objectivity of NMIs is being more and more questioned by critical publics.

Yet, while most of the existing literature in political science highlights that expert authority constitutes a decisive 'source' that NMIs can draw on in policy-making, it does little to explain how – in light of this paradox – their expert authority becomes established and cultivated or undone. This thesis, by contrast, takes the question of how non-majoritarian institutions establish and maintain expert authority as its research puzzle. If, as most of the existing literature claims, it is their embodiment of authoritative expertise and insulation from representative-parliamentary politics that explains the growing influence of NMIs, how is then their expert authority produced? How do NMIs attempt to construe expert authority in light of the contestation and politicisation of expertise?

Using an in-depth case study of the British Food Standards Agency, I will examine how NMIs build and cultivate political and epistemic authority. Drawing on Max Weber's and Hannah Arendt's writings on authority and based on the praxeological perspective of 'science and technology studies', I will reconstruct the commonly used – and often undertheorised – notion of 'expert authority' of independent regulatory agencies. This will allow me to show that the expert authority of 'the unelected' is essentially based on what can be understood as representational practices despite the often-claimed 'unrepresentative nature' of these institutions (Sosay 2006; Maggetti 2010: 2; Papadopoulos 2010).

1.1 The Rise of the Unelected in the Postnational Constellation

More than two decades ago political scientists began to research the rise of a new type of political institutions. These are institutions that are neither directly elected by the people nor directly controlled by elected officials, but nevertheless exercise official authority (Thatcher & Sweet 2002: 2). A broad variety of institutions and bodies, as diverse as independent central banks, risk management and assessment bodies, standard-setting boards, economic regulators, rating agencies, auditors, the European Commission and international organisations (IOs) such as the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF), has been brought together under the term of 'non-majoritarian institutions' (NMIs). There is a general consensus among scholars that NMIs have not only been growing rapidly in the past twenty years, but have also gained political significance and now constitute a fourth branch of government (Vibert 2007). A widely accepted definition of NMIs is provided by Thatcher & Sweet (2002: 2), who have conceptualised them as 'those governmental entities that (a) possess and exercise some grant of specialised public authority, separate from that of other institutions, but (b) are neither directly elected by the people, nor directly managed by elected officials'. In view of the rise of unelected bodies since the late 1970s, the role and functions of NMIs are increasingly becoming central research theme for political science scholars. The conventional political science literature has been interested in NMIs as a specific type of actors that – due to their distinguishing traits, i.e. formal independence and expertise – have an influence on policy-making: There is general agreement that the growing number and influence of NMIs is

inherently linked to what Habermas termed the 'postnational constellation (Habermas 1998). The 'postnational constellation' refers to an increasingly polycentric and complex political order that is economically, ecologically and politically globalised and features considerably heightened international competition as well as new centres of political power emerging above and beneath the nation state level (Habermas 1998; Zürn 2002; Leibfried & Zürn 2005). Across OECD countries, strategic industries and public monopolies in various policy fields, such as utilities, telecommunications, have been privatised since the 1980s and 1990s. Likewise, many other fields, such as financial policy or food and agricultural policy, have been liberalised. In Western Europe, the move to privatise state infrastructures and to liberalise trade in goods and services coincided with an intensified process of European integration in the aftermath of the establishment of a single European market in 1993. These developments culminated in heightened international competition and were accompanied by a multiplication of institutions and organisations beyond the state, including the World Trade Organisation's (WTO) and the European Union's (EU) competition policy. A plethora of IOs have been established to solve problems transcending national boundaries. The power of transnational corporations, with their worldwide production facilities, and of financial investors, with their global electronic capital flows, increased relative to that of the state. Transnational business actors and non-governmental organisations (NGOs) are increasingly engaging in informal regulatory networks that emerged as important actors beyond the nation state.

Taken together, then, the 'postnational constellation' describes a historical and socioeconomic context in which the capacities and resources relevant to exercising power are dispersed among a wide range of state, non-state, international and supranational actors, most of which can be characterised as 'unelected expert bodies'. In this reconfigured polyarchic institutional landscape unelected expert bodies designed to ensure the effectiveness and credibility of ever more complex policy-making processes are on the rise. At the same time the postnational constellation also represents a situation of 'institutional void' – to draw on Marten Hajer's formulation (Hajer 2003). This is a situation of uncertainty, where settled norms are lacking, and political actors within both established and emerging institutional structures work to negotiate new norms and social roles. Thus, in the postnational constellation, the authority of political actors and institutions becomes a matter of deliberation and contestation.

Against this backdrop, many scholars have brought forward that the postnational constellation has significantly affected the conditions for and the activities of domestic governance. In response to the 'postnational constellation', it has been widely argued, the resources and capacities of national governments to formulate distributive and redistributive social policies have been eroded. At the same time, however, increasing market openness was accompanied by more rules and independent regulatory bodies (Vogel 1996). A seemingly contradictory consequence of economic liberalisation is therefore the intensified regulation of market failures and of the competitive challenges of globally integrated markets (Gilardi 2007). It is thus these postnational conditions for governing that have given rise to the growing number of NMIs on the national, inter- and supranational level since the 1970s onwards. In the complex and interwoven networks of postnational governance, NMIs are believed to be better at making efficient decisions because of their specialised expertise and credibility (Majone 2001b; Gilardi 2002; Vibert 2007). One specific form of such expert NMIs are so-called 'independent regulatory agencies' (IRAs), i.e. government agencies, which 'operate under the authority of appointed rather than elected officials, and are insulated from electoral pressure' (Koop & Hanretty 2017: 39). Be it the sector of energy, telecommunications, water services, healthcare, public transport, competition, utilities, finance, social regulation, or of consumer protection, former state monopolies have been privatised, marketised and transnationalised since the last decades. Here, IRAs provide consumer information and exercise assessment, authorisation, standard setting and oversight activities with the aim of enforcing competition and protecting social/consumer rights and the environment (Jordana et al. 2011).

According to the textbook model of IRAs, their formal independence from parliaments and ministries protects them against political interference into decision-making processes. Hence, due to their 'independent' technoscientific expertise, IRAs are deemed capable of objectively handling ostensibly technical matters and to 'speak with greater authority on the facts and their assessment of them' (Vibert 2007: 43). As such 'non-elective' bodies, whose legitimacy is primarily based on the 'need for insulation from day-to-day politics and technical expertise', IRAs – just like all NMIs – are thought to 'not rely on any claim of representativeness' (Maggetti 2010: 2). Thus, most of the existing scholarly literature on the 'rise of the unelected'

treats NMIs as unrepresentative expert bodies, while their 'expert authority' is presupposed and not seen as a phenomenon that needs to be explained.

This thesis, by contrast, argues that building and cultivating the expert authority of NMIs requires a lot of practical work as well as carefully developed devices and infrastructures. And this practical work indeed involves practices of representation – more specifically, representative practices that are anchored in context-bound 'knowledge orders', i.e. in a deeper layer of collective symbolic and meaningful rules and structures of knowledge that shape who counts as an authoritative expert in a given context.

1.2 The Expert Authority of NMIs: Three Approaches

The theoretical framework developed in this thesis enters new scholarly ground, since it merges Max Weber's and Hannah Arendt's writings on political authority with concepts from science & technology studies (STS) to introduce these perspectives to the literature on NMIs, where they have so far received only little attention. Among the existing literature dedicated to studying NMIs as expert bodies in the postnational constellation, the theoretical framework which I will develop in this thesis can be located within a broader set of what I call 'culturalist knowledge order approaches' (Reckwitz 2002; Straßheim 2013; Jung et al. 2014). These can be demarcated from 'rationalist interest-based delegation approaches' as well as from 'norm-based epistemic communities approaches'. Rationalist, norm-based and culturalist knowledge order approaches differ considerably, both in terms of how they define expertise as an explanatory problem and what they take as their central explanans.

'Rationalist interest-based delegation approaches' (Majone 1994, 1997; Thatcher 2000, 2001; Gilardi 2002, 2004; Thatcher 2005; Gilardi 2008), take the delegation of authority to expertise-based NMIs as well as their subsequent expertise-use behaviour as their core explanatory problem. Rationalist scholars explain the studied patterns of delegating authority to NMIs and their use of expertise by referring to the assumed *interests* and beliefs of the utility-maximising actor. In contrast to this rationalist explanatory strategy, the epistemic communities literature on NMIs (Haas 1992; Zito 2001; Haas 2004; Cross 2013) assumes a *norm-oriented* action model that emphasises the central role of shared norms and knowledge

epistemic communities in defining the rules for coordination in the postnational constellation. The central explanatory problem here is the patterns of expertise-based coordination of heterogeneous actions and interests, which is explained by reference to mutual normative expectations – i.e. a collectively shared normative order.

However, what unites 'rationalist interest-based' and 'norm-based' approaches is (1) that they presuppose the expert authority of NMIs as given and thereby (2) conceive of the relationship between science and politics as one between two separated spheres. Expert authority is thus imagined as something that exists by virtue of specific traits of NMIs (i.e. formal autonomy and specialised knowledge) and as something that can be used as a decisive resource in the political process. The 'expert authority' of NMIs in the postnational constellation is so much taken-for-granted by rationalist and norm-based approaches that they lack the analytical capacity to analyse how their epistemic authority is built and translated into political authority.

Culturalist knowledge order approaches (Hajer 1995; Barnett & Finnemore 1999; Jasanoff 2011b; Sending 2017) by contrast, take the expert authority of NMIs as an achievement. They focus on the problem of establishing NMIs as authoritative experts – which they see first and foremost as a matter of the social reproduction (or transformation) of collective knowledge orders. The expert authority of NMIs is grounded in deeper structures of socially shared way of meaning making at the science-policy nexus. In so doing, culturalist approaches understand the relation between expertise and policy as one of *co-production*. In such approaches, authoritative expertise and political order are understood to be jointly produced and to enable each other. Moreover, culturalist approaches foreground the multiplicity and contestedness of competing knowledge orders in the postnational constellation and thus of the discourses and practices by which expert authority is (re)produced or transformed.

1.3 The Politics of Politico-Epistemic Authority

Following a grounded-theory-based research agenda (see below), this thesis's theoretical framework has emerged in dialogue with (a) the qualitative in-depth analysis of the British Food Standards Agency's and the German Federal Institute for Risk Assessment's authorisation and legitimation practices and (b) the sensitising theoretical concepts drawn

from Max Weber's and Hannah Arendt's writings on authority and the praxeological knowledge order perspectives in STS. This theoretical framework makes five main arguments:

(1) The expert authority of NMIs is something that is endogenous to the *politics of politico-epistemic authority*. The politics of politico-epistemic authority involves both authorisation and legitimation. Authorisation involves 'practices of representation': Unlike decision-making power, authority is a form of guidance, council, or advice that is accepted without question. This '*unquestioning* recognition' is rooted in a claim to represent 'a transcendent outside' (Arendt 1970). An authority, then, is someone who – via the use of specific practices and technologies – successfully positions him-/herself as having privileged access to this outside and the capacity to *represent* this outside and otherwise unavailable entity. Positioning oneself as a politico-epistemic authority thus involves a two-pronged claim to represent the transcendent outside of 'external reality' and the 'common good': (a) a claim *of epistemic representativeness,* which involves demonstrating one's greater proximity to an external 'objective reality', (b) a claim of *political representativeness,* which involves demonstrating the relevance of this external reality to ensuring the common good desired by a specific constituency. Legitimation refers to claiming the correctness of the actual exercise of authority with respect to specific norms (Weber 1978; Zürn 2012a).

(2) In (late) modernity, authority has become increasingly questioned, problematised and contested and has to constantly justify itself (Furedi 2013). Such reflexive and liquid authority, it is argued, is widely present in the late modern and postnational governance (Simmerl & Zürn 2016; Krisch 2017; Zürn 2017). When authority goes beyond being an uncontested transcendent source of legitimation, it becomes part of the realm of contingency, deliberation and justification. It is thus politicised. However, such reflexive authority continues to depend on having recognised privileged access to some kind of a legitimising 'outside' to be conceived as valid and legitimate – namely the transcendent outside of an external 'objective reality'. More specifically, reflexive authority continues to be based on the above-described (temporarily) recognised knowledge claim regarding a specific 'objective reality' (epistemic authority) and the ability to make this knowledge claim relevant for the realisation of the common good

of an imagined community, or constituency (political authority). Thus, epistemic and political authority are de facto intertwined in the postnational constellation and take the form of 'reflexive' politico-epistemic authority. From this perspective, NMIs and other expert organisations are institutional manifestations of this intertwinement. To become recognised as an authority, it is not sufficient for them to merely refer to one of these two transcendent resources – either to an imagined constituency and its common good, or to some kind of objective reality. It is precisely this combination and co-production of political and epistemic authority that constitutes the expert authority of NMIs.

(3) Politico-epistemic authority is reflexive in three ways. *First,* to become stabilised, claims to politico-epistemic authority must be sustained by specific practices of legitimation – yet, in struggling to reconcile epistemic and political authority the respective legitimatory sources themselves become contested. Legitimation practices that stabilise political authority on the one hand, and those that testify epistemic authority on the other hand, must be painstakingly reconciled (Korinek & Veit 2013; Jung et al. 2014). In struggling to combine epistemic and political authority, NMIs attempt to be recognised as the voice of the people and of science and therefore rely on a distinct set of legitimatory practices. *Second,* in response to this, NMIs increasingly adopt practices and institutional efforts aimed at reconciling political and epistemic legitimatory demands. These take two forms: On the one hand, these include the testing of new participatory procedures and their incorporation into science advice processes and institutionalised expert arrangements (Abels & Bora 2004; Abels 2009). On the other hand, they include a series of institutional and legal reforms aiming at the more stringent application of 'sound science' in risk assessment or 'evidence-based policy-making' in general (Straßheim & Kettunen 2014). At the same time, efforts to democratise expertise and efforts to scientise policy advice and decision-making have both become contested. *Thirdly,* the contestedness of politico-epistemic authority and its legitimatory sources is becoming further intensified in the postnational constellation. The postnational constellation is characterised by a multiplicity of competing knowledge orders which make the culture-specific knowledge order that underlies specific claims to authority visible and thus contestable (Jasanoff 2013; Straßheim

2013; Jung et al. 2014; Straßheim & Kettunen 2014; Winickoff & Mondou 2017). The polycentric and multi-level governance structures that characterise the postnational constellation engender a visible overlap of multiple knowledge orders and competition between them.

(4) Knowledge orders can be understood as a deeper layer of collective symbolic and meaningful rules that contain the basic premises according to which epistemic and political authority are attributed and legitimated in a given context (Straßheim 2013; Jung et al. 2014). They are manifested and constantly renegotiated in three levels at the science-policy nexus: discourses, institutions, and practices. In light of the contestedness of knowledge orders, constant competitive struggles between different knowledge orders at multiple sites are taking place. If a change occurs in a knowledge order that has been temporarily dominant, a consequent change occurs in the attribution of expert authority. A knowledge order becomes temporarily dominant if a specific way of ascribing political and epistemic authority manifests itself across discourse, institutions, practices. Four ideal-typical 'varieties of knowledge orders' at the science-policy nexus can be distinguished according to the specific mode of how authority is claimed and legitimated (Straßheim 2013):

- We can speak of a dominant *decisionistic knowledge order* in the following case: Authorisation is primarily based on a claim to represent a specific constituency's common good, while claims to represent a specific 'objective reality' play a secondary role. This claim to politico-epistemic authority is justified on the grounds of input-oriented legitimatory practices.
- We can speak of a dominant *technocratic knowledge order* if authorisation is primarily based on a claim to represent an objective reality, while the representation of a specific constituency's common good is subordinate to or equated with representing this reality. Such a claim to politico-epistemic authority is justified on the grounds of output-oriented legitimatory practices.
- If authorisation is not based on a hierarchy between claims to represent an objective reality and a constituency's common good and is justified on the grounds of input-oriented legitimatory practices, we can speak of a dominant *advocatory knowledge order*.
- If authorisation is not based on a hierarchy between claims to represent an objective reality and a constituency's common good and is justified on the grounds of output-

oriented legitimatory practices, we can speak of a dominant *rationalistic knowledge order*.

Knowledge orders hence are the contested configurations of the (decisionistic, advocatory, technocratic, rationalist) premises according to which the tense relationship between epistemic and political authority is reconciled and legitimised at the science-policy nexus. As such, knowledge orders are either stabilised or transformed on the grounds of either political (decisionistic, advocatory) or epistemic (technocratic, rationalistic) reflexive framings. In this sense, the politics of politico-epistemic authority is structured by knowledge orders but it also simultaneously structures it. Knowledge orders are embedded within and structured by the interplay between national and supra- or transnational institutional-cultural contexts. In the postnational constellation, actors who seek politico-epistemic authority thus borrow, adapt and translate elements of different institutional and discursive contexts in order to legitimise their claims to politico-epistemic authority in the multi-layered contexts in which they operate.

(5) NMIs who seek to establish themselves as an 'expert authority' thus claim epistemic and political authority by virtue of specific practices. Viewed from the adopted praxeological perspective in science and technology studies (STS), these practices can be conceptualised as 'translations' (Callon 1984; Latour 1987, 2004). These are practices that link the discursive and the material; they thus encompass both 'sayings' and 'doings'. Translating for politico-epistemic authority is thus a discursive-material act of positioning oneself as a representative who is speaking in the name of 'reality' and/ or a specific constituency, i.e. an outside, unavailable and transcendent entity. The translation perspective allows us to study the politics of politico-epistemic authority as a micro-practice in which authorisation unfolds in three entangled dimensions (Jasanoff 2013; Straßheim 2013; Jung et al. 2014; Straßheim & Kettunen 2014; Winickoff & Mondou 2017): (1) the attribution of competences (social dimension); (2) the manufacturing of boundary objects (object dimension); (3) the recalling, projecting, anticipating, experiencing and imagining of sociotechnical developments (temporalisation). Depending on the underlying knowledge order, competences can be

attributed and legitimised, boundary objects manufactured and sociotechnical developments recalled, projected, anticipated and imagined according to decisionistic, advocatory, technocratic, or rationalistic premises.

1.4 The Case of Independent Food Agencies

It is now two and a half decades since the first case of BSE in humans – i.e. the human variant of Creutzfeldt-Jakob disease or 'mad cow disease' – was diagnosed in 1994. Yet, until today the 'BSE crisis' is still emblematic of the above-described postnational governance dilemmas of the contested (scientific) expertise of NMIs – namely a loss of public trust, market promotion and consumer protection (Ansell & Vogel 2006: 3). The field of food (safety) regulation and specifically 'independent food agencies' established in response to the BSE crisis represents a particularly suitable case to examine the politics of politico-epistemic authority. I selected the British FSA as a case study to serve a heuristic function in conceptualising the politics of politico-epistemic authority, because it offers an intriguingly rich lens through which to look at how NMIs build and cultivate expert authority. The in-depth analysis of the FSA case and its focused comparison with the German BfR has allowed me to build a theoretical framework on the establishment and cultivation of the expert authority of NMIs in the postnational constellation.

Salience of food (safety) policy:

Since around the mid-1990s food (safety) policy has become a politically salient policy issue due to a series of food-related scandals and disputes. Notably the BSE crisis, but also dioxin contamination, beef hormones, and GMO food attracted considerable public attention and placed the safety of food onto the political agenda in the European Union and many of its member states. During the 1990s and early 2000s, negative newspaper headlines across Europe reflected the public concern over these food scares after the British government stated in a 'bombshell announcement' that cases of Creutzfeldt-Jakob disease were most likely caused by the consumption of BSE-infected meat (Geslain-Lanéelle 2014: xvii). In the British media, then, the BSE received more attention than the Chernobyl catastrophe in the subsequent years (Dressel 2002), while in German media the BSE crisis likewise came into the media spotlight after the first German BSE case was officially acknowledged in 2000 (Feindt & Kleinschmit 2011). In both countries, and almost across the entire EU, the BSE crisis prompted a fundamental loss of public trust in the capacity of policy-making institutions – which had for a long time period ignored scientific warnings on the human variant of BSE – to adequately produce and use 'regulatory science'. These 'food scares' and the resulting loss of public trust in food safety regulation were perceived as politically relevant because the field represents a socio-economically important regulatory arena, which has 'important implications for producers, trade liberalisation, and cultural attitudes and norms' (Ansell & Vogel 2006: 5). Beyond the safety aspect, food risks touch on manifold 'neighbouring' policy fields, such as agricultural policy, environmental and climate policy (Feindt & Flynn 2009), consumer protection (Vos 2000), and public health (Friant-Perrot & Garde 2014). In order to take account of the 'dynamic and fluid nature of what food (safety) policy stands for and how it has developed' since the early 2000s, it is therefore appropriate to speak – with parentheticals – of 'food (safety) policy', as Katharina Paul has argued (Paul 2009: 2).

Food (safety) policy as postnational governance:

The high sectoral complexity and issue saliency of food (safety) policy coincides with the Europeanisation and transnationalisation of European of food (safety) regulation. Although traditionally considered a domestic policy issue, food (safety) policy 'has become an

important exemplar of a global administrative system that is enlarging its reach and power' (Winickoff & Bushey 2009). The above-mentioned food scares demonstrated the need for European and transnational regulation and coordination and created a kind of 'critical juncture' that led to a delegation of regulatory competences from member states to the EU and to new multi-level governance structures (Chatzopoulou 2018; Thomann 2018). In 1999, DG SANCO – Directorate-General for Health and Consumers – was established. The rationale behind its establishment was to remove public health policies, including food policy, feed and animal health, from industry pressures, by adding them to the DG on consumer protection. This shift towards incorporating consumer protection and public health issues into food safety policy was also reflected by the seminal White Paper on Food Safety (Commission of the European Communities 2000b). The White Paper on Food Safety proposed the introduction of the 'from the farm to the fork' approach, i.e. an integrated statutory framework covering the EU's entire food chain (Paul 2011). Likewise, it proposed the establishment of the European Food Safety Authority (EFSA) as a body designed to provide independent authoritative science advice to DG SANCO. Subsequently, in 2002, EFSA was established to conduct food-related risk assessment. As part of this institutionalisation the separation model between 'scientific risk assessment' and 'political risk management' was introduced (Millstone & van Zwanenberg 2002). EFSA is governed by a 'management board', whose members – unlike other EU agencies – are selected not based on nationality but based on experience and expertise (European Parliament & Council of the European Union 2002). The agency's risk assessment work is supported by a 'scientific committee' made up of the chairs of the 'scientific panels'. At the same time, many EU member states have established 'independent food agencies' at the national level[1], even though not all of them have a strict separation between risk management and assessment (Herges et al. 2017). However, within the postnational, networked multilevel governance structures in food safety policy, it is not only the national food authorities that are obliged to cooperate with EFSA, but vice versa; in order to effectively fulfil its mandate of risk assessment EFSA has to work closely with national food agencies (Friant-Perrot & Garde 2014; Abels & Kobusch 2015). Each member

[1] These countries include Belgium, Bulgaria, France, Germany, Greece, Ireland, Croatia, Malta, the Netherlands, Austria, Sweden, Hungary and the UK.

state is obliged to provide a so-called ‘focal point’, which allows for the vertical information exchange with EFSA. Moreover, member states and their national agencies participate in various EFSA bodies and networks and hence contribute to horizontal cooperation in the EU multi-level food safety governance system. Based on EFSA’s risk assessments, the final risk management decisions on regulating food risks, including on approvals and authorisations, are taken by the comitology procedure, which involves various intergovernmental committees. Moreover, with the EU’s increasing concern for the nutritional quality of food and the growing burden of ‘non-communicable diseases’, notably obesity, DG SANCO began to experiment with new modes of consultative governance. These included transnational initiatives, such as the DG SANCO platform on Diet, Physical Activity and Health, which since 2005 is bringing heterogeneous societal stakeholders together to jointly develop solutions to the obesity problem (Jarman 2011). In this context, the EFSA’s work in the field of nutrition continues to grow (Friant-Perrot & Garde 2014).

At the international level, the Codex Alimentarius Commission develops standards for assessing and handling food-related risks as well as food labelling and trade of food. It is an international organisation with 182 member states. However, the participating national delegations led by agricultural ministries and food agencies usually include many private actors, especially food industry representatives (Büthe & Harris 2011). Thus, the Codex Alimentarius Commission is not only an intergovernmental governance arrangement, but also an arrangement of transnational governance, as it is characteristic for the postnational constellation. Since 1995, when the World Trade Organization (WTO) adopted its new Sanitary and Phytosanitary (SPS) Agreement it has enhanced the Codex’s legal status within the global trading regime. From that point on, WTO member states have been able to ‘sue other members for maintaining food and environmental safety standards that are stricter than Codex standards’ (Winickoff & Bushey 2009). Thus, it is this plurality of institutions and public and private actors with their own regulatory approaches (Verbruggen & Havinga 2017) that makes food (safety) policy an exemplar of the postnational constellation. Food (safety) policy reflects the shared regulatory authority at the global, regional, and national levels and between public and private actors, which is characteristic for the postnational constellation.

Contested expertise:

In addition, food (safety) policy serves as an exemplar of the politics of politico-epistemic authority, because the nexus between food (safety), nutrition, consumer protection, public health, agriculture, trade, environment and climate policy is shaped by various disputes over what counts as valid expertise (Guivant 2002; Bäckstrand 2003; Levidow 2005; Winickoff & Bushey 2009; Leach et al. 2010; Kinchy 2012). There are several reasons for this: First, the 'scientisation' of food (safety) policy – i.e. the invocation of science as the main legitimatory source of European and transnational food regulation (Weimer & Pisani 2016) – has forced all stakeholders, including civil society actors, to frame their interests and concerns in scientific terms. Thus, the increasing European and international efforts to establish a science-based food (safety) policy has not gone uncontested. The scientisation of food (safety) policy has become a site of contestation in which a plurality of experts with differential epistemic paradigms on risk assessment compete on expert authority and struggle over what is recognised as authoritative expertise. Second, the justification of liberal market policies with reference to 'sound scientific expertise', specifically on GM foods, is increasingly being met with the civil society's growing capacity for 'counter-expertise'. This civil 'counter expertise' aims at unmasking the injustices and inequalities of particularistic polices that are being cast into seemingly 'science-based' and 'politics-insulated' food (safety) policies. Thus, the scientisation of food (safety) policy has led to a parallel 'repoliticisation-move', in which various actors have sought to demonstrate that what is portrayed as a 'scientifically rigorous' framework for assessing and managing food-related risks in fact embodies a range of value choices regarding global justice, public health, consumer protection and the environment. Third, the coexistence of multiple regulatory arenas, institutional structures and expert actors – often with competing rules and ways of producing 'regulatory science' – resulted into different 'epistemic jurisdictions' (Winickoff & Bushey 2009). Such competing epistemic jurisdictions have become most evident in debates surrounding the precautionary principle and risk assessment policies in more general. Just months after the WTO came into being, Codex launched the first formal 'scientific framework' for food regulation (Joint F.A.O. & World Health Organization 1995), which represented the scientisation of the global food risk regime. Yet, at the same time, the role of the precautionary principle in the context of the

scientised food policy regime hence became subject to disputes. Heated debates emerged on nationally or regionally distinctive approaches to risk assessment and the role of uncertainty and the weight of public attitudes therein.

British and German Food Safety Agencies as an exemplar of NMIs seeking expert authority:

In this thesis, studying the case of the British Food Standards Agency (FSA), and contrasting it in comparison with the case of the German Federal Institute for Risk Assessment (BfR), serves as a theory-generative example to conceptualise how NMIs build and construct politico-epistemic authority in food (safety) governance. Following the above-mentioned series of food safety crises and controversies in 1990s and early 2000s, many European Union (EU) Member States and the EU set up 'independent' food safety agencies that were mandated to assess food safety risks without political interference. These institutional reforms constituted an official acknowledgement of what was perceived to be a widespread crisis of public trust in how science was used to regulate food-related risks to public health. Granting food safety agencies independence from government ministries was the first important measure to restore the lost public trust in risk regulation. In particular, this formal independence was intended to demonstrate a credible commitment to 'sound scientific risk assessment'. Many international institutions had previously adopted a separation of 'independent scientific risk assessment' and 'political risk management'. These institutions included the Codex Alimentarius Commission, as described above and beyond the Codex, the World Health Organization (WHO) and the Organisation for Economic Co-operation and Development (OECD) (Alam 2014).

I selected the cases of the British Food Standards Agency (FSA) and – as a contrasting case – the German Federal Institute for Risk Assessment (BfR) because in both countries the established organisation of the science-policy nexus was fundamentally reorganised in the wake of the BSE crisis, however, in different ways that I will briefly explore in the following. Yet, before turning to these differences, it is important to note that in both countries the organisation of the science-policy interface in food (safety) policy – which was never a politically salient issue but rather one framed purely technically – became a frontstage political theme. Both countries adopted new models of organising the science-policy nexus. These

reorganisations were embedded in a reform rhetoric in which technocratic science-policy models were criticised; it was recognised that political and other non-scientific criteria were a relevant and indispensable part of 'regulatory science'. Accordingly, in both countries we find discourses promoting the principles of 'openness' and 'public participation' and 'stakeholder dialogue', alongside the notions of 'scientific independence', and 'transparency' (Millstone 2009). However, beyond such reform rhetoric, the two countries seem to have interpreted the lessons of the BSE events differently.

The UK interpreted the 'separation model' conceptually rather than formally. This meant that risk assessment and risk management were considered to be two separate analytical processes; however, they were not seen as requiring a formal-institutional separation as was the case at EU level, or in Germany. By the introduction of the Food Standards Act 1999, the responsibilities of the Ministry of Agriculture, Fisheries and Food (MAFF) for food safety policy, including for both assessing and regulating risks, were transferred to the newly created Food Standards Agency (FSA) in 2000.[2] The FSA was established as an independent non-ministerial government department 'to protect public health from risks which may arise in connection with the consumption of food (including risks caused by the way in which it is produced or supplied) and otherwise to protect the interests of consumers in relation to food' (Food Standards Act 1999). One of the main purposes of the establishment of the FSA was to restore consumers' confidence in the capacity of the state to responsibly regulate and manage food risks in the 'post-BSE era' (James 1997). In its white paper 'The Food Standards Agency – A Force for Change' (MAFF 1998), the government had stated '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'. This related to the widespread criticism of MAFF of being responsible for both food safety and food production issues. Therefore, it was argued, there was a need for 'organisational and cultural changes' that could 'best be delivered by creating a new and powerful body, at arm's length from Government and independent of the food industry' (MAFF 1998:1). Furthermore, the FSA was also assigned some functions

[2] The MAFF was dissolved in 2002 and its functions were transferred to the newly established Department for Environment, Food and Rural Affairs (DEFRA).

in nutrition policy, notably in relation to food labelling and information, while it was attributed a shared public health function with regard to the interrelation between health and diet with the Department of Health (Barling 2004). Hence, in the FSA's case the 'independent agency model' was intended first and foremost to demonstrate its independence from agriculture and business. It was thus designed to signal the primacy of public health[3]. Against this background, it is remarkable that the FSA was mandated to both conducting scientific risk assessment and fulfilling risk management tasks. Being tasked with delivering scientific opinions, as well as with formulating policy and overseeing the food controls carried out by local authorities was not understood as an expression of lacking independence in the UK but of securing the necessary tight coordination between the two (Böschen et al. 2002).

Like the FSA, the establishment of the BfR goes back to the BSE crisis. However, the German debate surrounding the process of reforming food safety governance at the national level differed from that of the UK. In contrast to the UK, Germany did not interpret the transnational discussion of the 'separation model' in conceptual terms but instead understood it in strict organisational terms. The guiding principle of having a food safety authority that is independent of external influences was first formulated in an expert report drawn up as a result of the BSE crisis by the president of the Federal Audit Office. The report recommended the establishment of a scientific institution that was responsible for risk assessment and communication and independent of external – non-scientific – interference (Wedel 2001). This specific interpretation was fundamentally shaped by the discussion of having an independent agency mandated to conduct risk assessment that occurred in parallel at the EU level and resulted in the establishment of EFSA in 2002 (Fischer 2007). Accordingly, the Federal Institute for Health Protection of Consumer and Veterinary Medicine (BgVV) was dissolved, and two new agencies were created in its place in 2002: one scientific risk assessment and risk communication agency, the Federal Institute for Risk Assessment (BfR), and one risk management agency, the Federal Office of Consumer Protection (BVL). In

[3] However, in the course of a reorganisation reform of the coalition government the FSA's functions relating to nutrition and nutrition labelling were removed from the agency. While nutrition policy in England and Wales was moved to the Department of Health, country of origin labelling was transferred to the Department of Environment, Food and Rural Affairs UK Government (2010).

practice, this mainly implied that all scientific tasks previously carried out by the BgVV were transferred to the BfR, while the BVL was assigned all management tasks, mainly monitoring and authorisation. Hence, the idea of separating scientific risk assessment and political risk management, which gained special prominence during the transnational discourse on reforming food safety governance in response to the BSE crisis, was implemented here both conceptually as well as formally and organisationally. The BfR was established in 2002 as an institution under public law (Anstalt des öffentlichen Rechts), which is not subject to ministerial supervision as it is usual for German agencies. The main tasks of the BfR include scientifically assessing and communicating health risks from food and feed, chemicals and consumer products. In contrast to the FSA, the BfR does not have nutrition as part of its remit.

Thus, this brief description of the formal institutional mandate demonstrates that the British FSA and the German BfR are particularly illustrative cases of different conceptions of the science-policy relationship. As such, the formal features of the two agencies can be plausibly expected to have an impact on how they generate politico-epistemic authority in practice and on the grounds on which specific knowledge order this occurs. At the same time, however, as noted above, a central argument of this thesis is that the authority of independent agencies cannot simply be deduced from their formal mandate. Expert authority is not a 'trait' of formal institutions but has to be built and cultivated in the context of 'contested expertise', which is particularly salient in the field of food (safety) policy, as I have argued above.

Moreover, as briefly illustrated in this introduction, while the institutional reforms in both countries referred to the 'separation model', either conceptionally as in the UK or even formally as in Germany, the new agencies in both countries were at the same time embedded into a broader discourse that framed the BSE events as a failure of 'classical-modernist' notions of formal, probabilistic risk assessment to acknowledge the unresolved uncertainty and ambiguities that characterised BSE (Commission of the European Communities 2000a; House of Lords Select Committee on Science and Technology 2000; Philips et al. 2000; Böschen et al. 2002).

The newly established independent national food (safety agencies) in the UK and in Germany were hence both confronted with controversies between social actors from different social

spheres and conflicting – ecological, economic and social – perspectives on food (safety) policy. Accordingly, in both countries the issues of 'safety', 'acceptance, 'costs' and benefits' were framed differently by heterogeneous actors participating in the post-BSE discourse (Stirling 2003; Böschen et al. 2010). Recognising these intractabilities in risk assessment, official reports on post-BSE European risk governance called for an enhancement of the transparency, openness and accountability of risk assessment processes. These reports demanded to admit the public into domains that were previously reserved for scientific risk assessors and in this way to establish a new form of more open risk governance (Gottweis 2008; Millstone 2009; Paul 2009). They emphasised the importance of stakeholder participation, 'two-way dialogue' and public engagement in rebuilding public trust, thereby opening risk assessment for a more inclusive approach. Over time, the conceptual ambiguity of 'risk assessment' resulting from these discourses became also apparent at the transnational level when in 2007, the Food and Agriculture Organization (FAO)/WHO Codex Alimentarius Commission (CAC) formally adopted a text that more or less explicitly repudiated a strict interpretation of the 'separation model' on the grounds that it emphasised the importance of non-scientific 'framing assumptions'. These were said to account for competing risk assessments in the view of the codex (Lee 2009; Millstone 2009). In order to ensure epistemically coherent risk assessments, the codex agreed that members should make their framing assumptions explicit by documenting them in explicit 'risk assessment policies' (Codex Alimentarius Commission 2003: 43–44). By so doing, some authors (e.g. Millstone 2009) have argued that the codex moved in the direction of more open, cyclical and iterative models of risk assessment, as advocated, for instance, by the International Risk Governance Council (IRGC 2005). From this more comprehensive view of risk governance, the exclusive focus on acting based on probabilistic science as a validation mechanism for risk assessment is problematic, since knowledge of food risks here is seen as inherently contestable for both epistemological and normative reasons (Abels et al. 2014).

Hence, from the very outset of their establishment and in their early years, the FSA and the BfR had to operate in a 'Janus-faced' discursive environment: on the one hand, they were established as independent agencies conducting sound scientific risk assessments according to the so-called 'separation model' – be it conceptionally, or strictly organisationally – while

at the same time, they were also confronted with the expectation of including stakeholders and incorporating democratic norms in the risk assessment process.

The two cases of the British FSA and the German BfR thus can be excellently used as heuristic case studies to reconstruct how expert authority is build and cultivated in the context of a complex and contested transnational discourses surrounding 'scientific risk assessment' in a way that are reconfigured these discourses with ideas and practices embedded in domestic cultures and traditions.

1.5 An Interpretive Comparative Case Study Research Project

In this thesis, I follow an interpretive comparative case study research methodology (Yanow 2014; Merriam & Tisdell 2015; Schaffer 2015; Boswell et al. 2019), which differs from conventional, positivist comparative case study research in political science (George & Bennett 2005; Gerring 2007; Yin 2009). Scholars located in the positivist tradition of political science research have elaborated a rather strict set of methodological rules and strategies for comparative case study analysis, notably regarding the selection of 'most similar' or 'most different' case study designs. In contrast, the *interpretive* case study research approach I have adopted puts an emphasis on 'openness' to inductively identifying comparative themes as well as to accepting the failure of expected categories of comparison and the emergence of unexpected ones (Yanow 2014; Boswell et al. 2019). It is a research methodology that is based on abductive reasoning and interpretation rather than on testing hypotheses. Accordingly, the research process starts with exploring 'sensitising' theoretical concepts and with examining data in parallel. What is important here is being open to a broader variety of possible explanations for the collected data before working hypothesis are formed and (dis)confirmed in arriving at a final interpretation (Charmaz 2006: 47). In this vein, the interpretive case study research approaches pays great attention to the language- and practice-based constitution of politics and offers 'thickly contextualised' understandings of social realities (Yanow 2014: 133).

In line with this approach, the theoretical framework presented above grew out of the interplay between theory and the in-depth analysis of the empirical material collected on the two cases

under study. Although the theoretical framework developed in this thesis is grounded in the comparative case study centred around the British FSA and the German BfR, it aims at providing a conceptual heuristic and broader theoretical arguments for other cases that deal with the problem of expert authority in contested fields.

The distinct research strategy adopted in this thesis is an interpretive 'focused-comparative' case study research design that is combined with the 'grounded theory method'. By 'focused comparison', I refer to an exploratory in-depth case study of a single case – here the British FSA – from which comparative categories emerge in an inductive way. These comparative categories form the basis for a 'focused' comparison of the in-depth single case study with another case – here the German BfR. This interpretive 'focused comparison' enables a detailed contextualisation and enables an exploratory research approach, which is particularly useful for the purposes of this thesis. As argued previously, this thesis considers 'independent regulatory agencies' in a new way, namely not as actors that simply 'possess authoritative expertise' but as actors that are engaged in an ongoing process of building and cultivating politico-epistemic authority and so doing rely in representational practices despite their seemingly 'unrepresentative nature' .

Methodologically, the project makes use of and adapts – in a hands-on manner – the data collection and data analysis tools of the grounded theory method (GTM). GTM is a general methodological strategy for handling and conceptualising data, according to which data analysis and theory construction are an iterative, inter-related and evolving process (Glaser & Strauss 1967; Strauss & Corbin 1998; Charmaz 2006). GTM hence fits well with the overall 'open-iterative' interpretive comparative case study research approach (Yanow & Schwartz-Shea 2006; Truschkat 2013).

1.6 Outline of the Chapters Ahead

This introduction will be followed by *chapter 2*, in which I will provide a structured literature review focussing on the question of how the NMIs literature theorises expert authority. While highlighting that expert authority constitutes a decisive 'source' for policy-making in the postnational constellation, most of this literature explains little about how the expert authority of NMIs becomes established in particular settings. In further developing this argument, I will

locate the existing literature on NMIs in relation to the three classes of social theories as put forward by Andreas Reckwitz (Reckwitz 2002; Reckwitz 2004). On this basis, I will distinguish 'rationalist delegation approaches', 'norm-oriented epistemic communities approaches', and 'culturalist knowledge order approaches'. I argue that the emerging strand of culturalist approaches is the only one that conceptualises the main problem of NMIs as the maintenance of expert authority and specifically as one of the social (re)production of collective knowledge orders. Furthermore, I emphasise that culturalist approaches fill an important research gap by highlighting the fact that NMIs who seek expert authority require specific *practices* in their day-to-day performance of expertise. Building on this structured literature review, the chapter concludes by specifying the characteristics of the individual strands within culturalist thinking on which my own theoretical framework will selectively draw in the subsequent chapter.

Having located my study within the existing literature on NMIs, in *chapter 3* I then aim at developing my own theoretical framework for analysing what I call the 'politics of politico-epistemic authority' in three steps: First, I conceptualise expert authority as something endogenous to the *politics of politico-epistemic authority*. In doing so, I will discuss Max Weber's and Hannah Arendt's thoughts on authority to specify this concept. When further discussing the concept of authority, I will then turn to the recent literature on political and epistemic authority in the postnational constellation (Zürn 2012a; Furedi 2013) to explore the *contestedness* of politico-epistemic authority. Here, I will explore the concept of *knowledge orders* as a crucial concept in culturalist explanations of politico-epistemic authority in more detail and distinguish between three levels at which knowledge orders are manifested: *discourses*, formal *institutional arrangements*, and *practices*. Third, I will conceptualise the practice level of knowledge orders, which are at the centre of the practice-based approach to the politics of politico-epistemic authority developed here. In doing so, I will draw on the 'sociology of translation' perspective (Callon 1984; Latour 1987, 2004).

In *chapter 4*, I will elaborate on the research design and methodology that I have adopted in this thesis. First, I will outline the overall methodological basis of 'interpretative comparative case study research' (Yanow 2014; Boswell et al. 2019). In this way, I will emphasise what I call a 'focused-comparative' case study research design and on the specific 'methodological

fit' of interpretive research and the 'grounded theory method' (GTM) (Yanow & Schwartz-Shea 2006; Truschkat 2013). In the second part of chapter 4, I will elaborate on the basic principles and on the tools and procedures of data collection and data analysis of (GTM). I will place a special focus on the way in which I adapted these in a hands-on manner for the purpose of my study.

Chapter 5 presents the results of the in-depth case study of the British FSA and is hence the empirical centrepiece of the thesis. In a first step, I will describe the central discourses as well as formal institutional and cultural elements that make up the context in which the Food Standards Agency (FSA) was embedded. Afterwards, I will examine the FSA's context-bound practices of building politico-epistemic authority by zooming in on the agency's role and competence attributions *(social dimension)*, practices of objectivation *(object dimension)* and temporal ordering work *(temporal dimension)*. Here, I will undertake a diachronic analysis that explores the dynamic development of the FSA's authorisation and legitimation practices in the period from its establishment in 2000 to 2015. I show how, in the FSA's first years, an 'advocatory knowledge order' was (re)produced across these three dimensions of authorisation and legitimation and how the FSA in so doing constantly referred to specific policy discourses as well as invokes specific elements of the institutional-cultural context in which it operates. Over time however, the discursive context on which the agency drew in its attempts to build politico-epistemic authority has gradually changed from an emphasis on input legitimacy to output legitimacy. I will show how, in response to this shift, the FSA's practices authorisation and legitimation shifted towards a more 'rationalist' mode. By doing so, I will specifically focus on the invocation of specific 'consumer constituencies' that is related to specific practices of authorisation and the contestedness of these practices.

Building on the insights and comparative categories gained from the in-depth case study of the FSA, *chapter 6* presents the results of the 'focused' comparison of the FSA with the German BfR. While the in-depth analysis of the FSA's advocatory authorisation and legitimation practices will show how these were closely enmeshed with specific discourses and institutional-cultural elements of the British context, chapter 6 provides a more condensed analysis of the German BfR from a comparative perspective. I will show how the BfR selectively recombined specific institutional-cultural elements of the German context with

newer science-policy discourses to underpin its ‘technocratic’ mode of authorisation and legitimation. I argue that this focused comparison provides a contextualised explanation of the way in which the NMIs on the national level built and cultivated politico-epistemic authority in the postnational constellation. Moreover, it also explains how they so doing (re)produced a specific knowledge order.

In the final chapter, I will relate the key findings of the study back to the broader literature on the expert authority of NMIs in the postnational constellation. Thus, in addition to summarising key findings, I will present five broader lines of argument. I conclude with discussing how these lines of argument could be applied to other cases and empirical fields that deal with similar problems. On this basis, I will finally suggest avenues for further research.

2 Non-Majoritarian Institutions and Expert Authority– The Three Core Approaches

I have argued in the introduction that the existing literature on non-majoritarian institutions highlights that expert authority constitutes a decisive 'source' for policy-making in the post-national constellation, yet it does explain little on how their expert authority becomes established and cultivated – or undone – in particular settings. I have further set out the reason why this theoretical and empirical gap seemed puzzling to me: First, the literature both within governance studies and science & technology studies has shown that expert authority is far from being an unquestioned and uncontested source of governance in late modern societies. Rather, we find an increasing pluralisation of expertise provoking rival claims of different groups of experts – even in policy fields that have a long tradition of expertise-based policy-making, such as the field under study in this dissertation, food (safety) policy. What is more, it does not take an expert to become aware of the multiple controversies over rival knowledge claims related to what came to be known as BSE, dioxins in eggs, or the more recent public dispute over glyphosate. In this chapter, I will proceed in two steps in theorising the politics of expert authority. First, I will map the existing literature on NMIs with regard to the question of how it theorises expert authority. As we will see, these accounts fail to explain how NMIs come to be recognised as experts. Rather, they preassume expert authority as a given attribute of NMIs. Second, I will develop my own theoretical framework whose core will be made up of the three concepts of 'politico-epistemic authority', 'knowledge orders' and 'practices' allowing to shift the focus to the actual authorisation and legitimation work needed to build and sustain the authority of NMIs operating in the postnational constellation.

2.1 Mapping the Literature on Non-Majoritarian Institutions

Today, there is a vast literature dealing with NMIs in the postnational constellation. An increasing part of this work is specifically interested in NMIs as expert institutions and transnational expert networks. This literature ascribes a crucial role to expertise when it comes to explaining, the rise and the behaviour of these institutions as well as their influence on postnational policy-making. Yet, the precise framing of expertise as an explanatory problem

differs between different strands of literature. In what follows, I re-read this literature through the lens of expertise. In so doing, I argue that the different literatures dealing with the NMIs as expert institutions vary according to their underlying theoretical grounding and as such can be structured according to three broad (idealised) classes of social theories, as described by Andreas Reckwitz (Reckwitz 2002; Reckwitz 2004). Reckwitz distinguishes between three theoretical approaches to understanding action and social order, rationalism; norm-oriented theorising and cultural theory[4]. With this classification in mind, I will group together major contributions according to whether they predominantly rely either on a rationalist understanding of expertise (delegation approach), on a norm-oriented understanding (epistemic communities approach), or on a culturalist understanding (knowledge order approach).

Locating the existing literature within the three classes of social theories allows me to pointedly clarify what is to be gained by drawing on a specific approach. In so doing, my intent is to demonstrate the advantages of positioning my theoretical framework, in cultural theoretical approaches that differ profoundly from rationalist and norm-based theoretical accounts. In so doing, at least one seminal work from each research approach will be presented in more detail. As will be shown, depending on their respective theoretical grounding, the three research approaches differ not only in terms of how they frame expertise as an explanatory problem, but also in how define their main explanans, as well as how they view the relationship between expertise and policy and status and role of experts in policy-making. Vice versa, what each approach has in common is a shared set of basic assumptions and themes relating to expertise and therefore their 'family resemblance' (Wittgenstein 1953). In exploring these resemblances and forming the three clusters of research approaches accordingly, I will at some point inevitably overplay the commonalities of the literatures

[4] Reckwitz (2002; 2004) argues that rationalist theories explain action in terms of individual interests and purposes and understand social order as the aggregation of 'single interests. Norm-oriented theories explain action with respect to collective norms and values; social order here is rooted in shared normative rules that allow for the collective coordinating actions. In Reckwitz's perspective, the different strands of cultural approaches differ from these two in that they explain actions by reconstructing the symbolic structures of knowledge. These are seen, from the perspective of cultural approaches, to enable and constrain actors to interpret the world in a certain way and to act accordingly. Social order here is embedded in 'collective cognitive and symbolic structures, in a "shared knowledge" which enables a socially shared way of ascribing meaning to the world' (Reckwitz 2002: 246).

grouped together under one approach. Similarly, situating each approach in the frame of the Reckwitzian three idealised classes of social theories unavoidably plays down the fact that many empirical contributions blur the boundaries of these abstract ideal types by combining elements. As such, more often than not they constitute hybrid approaches[5]. Yet, I argue, the creation of these boxes fulfils the purpose of this chapter as it allows me not only to systematise the existing literature on NMIs, but also to contrast their different underlying assumptions and related insights to the maximum.

2.2 Rationalist Delegation Approaches

One of the most popular analyses of the general transformation of state governance in the postnational constellation of the European Union has been Giandomenico Majone's thesis of the evolution towards a new type of state in Europe, namely the 'regulatory state'[6] (Majone 1994, 1997). As a result of the coincidence of liberalisation, privatisation, and Europeanisation, he argued, a 'regulatory state' would be established in Europe, and its institutions and relevant standards of legitimacy and accountability would, for good reasons, take on a non-majoritarian form. Because the European 'regulatory state' does not have the 'positive' state's means for taxing and spending at its disposal, and is divided by a number of deep linguistic, geographical, economic and ideological cleavages, the strict application of majoritarian standards would, according to Majone, only produce deadlock and possibly even disintegration (Majone 1998: 11). In his view, 'non-majoritarian decision-making mechanisms are therefore more suitable for complex, plural societies than are mechanisms that concentrate power in the hands of the political majority' (Majone 1996: 286). Consequently, he argued, the non-majoritarian institutions of the European 'regulatory state'

[5] Christian Büger and Frank Gadinger make a similar argument in proposing a Reckwitzian structuring of International Relation (IR) theory to locate what they call 'practice theoretical constructivism' (Praxistheoretischer Konstruktivismus) within Reckwitz's type of 'cultural theory' (Bueger & Gadinger 2008).

[6] While the 'positive state' in the conventional understanding was a state directly affecting the market—i.e. by buying or supplying public goods and services—the 'regulatory state' aims to achieve the same objectives indirectly, i.e. through regulation. Some authors even speak of a new model of 'regulatory capitalism' (Levi-Faur 2005, 2006) suggesting that the rise of regulation in public policy is not only a major transformation of the state, but also of the economic order.

may be legitimately removed from the direct influence and accountability of national parliaments and the governments. Their legitimacy is seen as resting on technical expertise and the insulation from day-to-day politics that together would enable effective and efficient problem-solving in complex societies, rather than on input-legitimacy[7] (Majone 1996: 296, 2001a, 2001b).

Majone's explanation for the rise of a plethora of expertise-based NMIs in the EU has been widely shared among political science and public administration scholars (Scharpf 2003; Eberlein & Grande 2005; Vibert 2007; Curtin 2014). European agencies, which mostly have a statutory commitment to more indirect regulation by providing expertise and information, it is commonly argued, are better suited to effectively coping with the policy challenges of the postnational constellation than more traditional regulatory bodies with broad direct regulatory powers. In particular in the area of social regulation (i.e. in environmental and consumer protection, risk regulation and occupational health), so it is argued, there is a strong political dependence on relevant, timely and credible expertise[8] (Majone 1997: 264). In view of the highly complex and uncertain postnational constellation, social regulation is seen as facing a setting in which 'an information strategy seems more appropriate than direct regulation (…), where it makes sense to use mandatory labels, warnings and other forms of risk communication as an interim protective measure, pending the completion of more detailed scientific and economic analysis'[9] (Majone 1997: 264).

[7] The shift to the regulatory state is, according to Majone however not reserved to the EU. In his writings, Majone always refers to the European 'regulatory state's' historical precedents, which one could find in the administrative history of the United States since the late nineteenth century, such as various regulatory commissions, bodies and agencies (e.g. Majone 1997: 265–266).

[8] Majone initially talks of information. Yet, drawing on the perspective of the sociology of knowledge I argue that Majone in fact refers to expertise; and this should not be conflated with information. The difference between information, knowledge and expertise is crucial: As Bateson put it in his widely shared definition, information is 'the difference that makes a difference' to someone within a specific field of knowledge or action (Bateson 1972: 453). Knowledge is created from information but is bound to the human capacity to judge and act, and as such is based on previous experiences. Expertise, then, is a specialised form of knowledge in a certain field that is socially recognised as being far above the average and relevant for decision-making in a given social context (Limoges 1993; Willke 1998).

[9] Majone analytically distinguishes between two modes of regulation. Direct regulation 'relies on orders, prohibitions, legally binding standards, and on other command-and-control techniques', whereas indirect regulation 'attempts to change behaviour indirectly, either by changing the structure of incentives of the different policy actors, or by supplying the same actors with suitable information' (Majone 1997: 265).

Delegation theories[10] hence relate the spread and the rising influence of NMIs to the rise of the regulatory state in the 'postnational constellation' of the European Union. While some, such as Majone, relate the rise of NMIs exclusively to the delegation of regulatory powers from the national to the supranational level, others see the regulatory state in the postnational constellation as integrated into the European multi-level governance system that covers both delegation of regulatory competences to NMIs at the supranational and the national level (Thatcher 2000, 2001; Geradin & Petit 2004; Thatcher 2005; Gilardi 2008). What they have in common is their central claim that political principals delegate regulatory powers to NMIs, such as independent regulatory agencies, either to increase efficiency in decision-making by relying on the superior expertise of NMIs or to demonstrate their credible commitment to a given policy[11] (Majone 1997; Döhler 2002; Gilardi 2002; Elgie & McMenamin 2005; Gilardi 2007; van Thiel & Yesilkagit 2011). From this perspective, the delegation of powers and competences to expertise-based regulatory bodies means that policy-making is insulated from the influence of new parliamentarian majorities and the temporal political deadlock majoritarian politics is likely to bring about in the complex political system of the EU full of veto players. Another reason why delegation to NMIs occurs, it is argued, is that it enables governments to signal their 'credible commitment' to efficient and expertise-based regulation to other member states as well as to private investors and other trust-seeking stakeholders[12]. Credibility is seen as an essential resource that politicians can draw on, since regulatory

[10] Within political science, there are different traditions in the study of delegation (Gilardi 2004; Flinders 2009). I use the term 'theories of delegation' to refer to the dominant strand in political science and public administration that borrows heavily – but not exclusively – on rational-choice institutionalism and principal-agent models. This tradition complements rational choice institutionalism and its principal-agent approach by insights of historical and sociological institutionalism to embed functional principal-agent accounts within broader historical and institutional contexts. Yet, conventional delegation theories remain dominated by frames and concepts of rational choice institutionalism and its model of principal-agent relationships.

[11] Majone argues that delegation to NMIs is either based on the logic of efficiency-enhancing or of credible commitment. These two logics result from a comparison between the present and future policy preferences of the principal, or between the principal's present preferences and those of its successors (Majone 2001b). In the case of stable preferences, the principal will see delegation to NMIs as a technology of efficiency-enhancing, whereas it will conceive of delegation as a technology of commitment in the case of unstable preferences.

[12] For a long time, delegation scholars had however argued that 'credible commitment' is particularly important for economic regulatory policies that require the demonstration of investor-friendly courses of action while for social regulation, where consumers rather than business actors are the main target of policies, credibility is less necessary Gilardi (2002).

policies crucially depend on the trust of a plethora of actors[13]. Policy-makers have to credibly demonstrate their commitment to their proclaimed course of action (Majone 1997, 2001b). Delegation of powers to a NMI is seen as a way for governments to bind themselves and to 'remove their future freedom of action' (Gilardi 2004: 73). In contrast to their majoritarian principals, non-majoritarian agents do not succumb to the temptation of political opportunism due to their independence and their preferred orientation towards expertise. Thus, these rational choice-based accounts on delegation stress the role of NMIs in solving the problems of choice over time (Gilardi 2004: 70).

Underlying this account is the assumption that NMIs can be differentiated from majoritarian actors via their independence and expertise. The formal independence from parliaments and ministries protects NMIs against any political interference into decision-making processes; due to their independent expertise, NMIs are deemed capable of objectively handling ostensibly technical matters. As such 'non-elective' bodies, whose legitimacy is primarily based on the 'need for insulation from day-to-day politics and technical expertise, IRAs – just like all NMIs – are thought to 'not rely on any claim of representativeness'; their legitimation is said to be 'based on a large array of "non-democratic" justifications' (Maggetti 2010: 2). The large group of NMIs that make up the institutional structure of the postnational constellation, i.e. 'independent central banks, the European agencies, network governance arrangements, as well as national independent regulatory agencies, in this view 'do not conform to the representative model' of democratic institutions (Gilardi 2008: 25). NMIs here appear not only as unelected but also as 'unrepresentative' institutions (Sosay 2006; Maggetti 2010: 2; Papadopoulos 2010).

In this line of argumentation, expertise is conceived of as an inherent quality of NMIs. NMIs are seen as 'possessing' authoritative expertise that enables effective problem-solving and lends credibility to regulatory politics. Expertise is hence taken ontologically as a given. Moreover, the assumption underlying the delegation model is that politics and (scientific) knowledge production can be clearly divided. Broad value-based policy goals and the

[13] It is seen as a resource of great worth for agencies because it enables them to build networks, to gain political influence, and to effectively enhance their room of manoeuvre (for a detailed argumentation along this line see also (Carpenter 2000, 2001).

objectives of regulatory politics, it is argued, are (and should be) first framed and decided by electorally accountable principals – here in the form of a formal mandate and institutional design. The faithful identification of the 'objectively best' means to achieve these goals and practical details of implementation, by contrast, is (and should be) according to this perspective delegated to independent experts. Yet, delegation theories also point to the fact that the interests of political principals and expert agents can diverge[14] over time and NMIs consequently use their expertise in their own self-interest, rather than their political principal's interest. Accordingly, Majone and many others argue 'it is up to the principals to structure relationships with their agents so that the outcomes produced through the agents' efforts are the best the principals can achieve' (Majone 1998: 25). This argument comes close to what Habermas described as 'expanded decisionism'[15] (Habermas 1970: 365).

Building on this expanded decisionistic assumption, delegation scholars then focus on how different factors – logics of delegation, varying degrees of formal independence from elected principals, institutional incentives – orient NMIs towards different types of 'instrumental', 'strategic' knowledge use or even 'non-use (Maggetti 2007; Boswell 2009; Schrefler 2013; Rimkutė 2015; Ossege 2016). This conception of expertise is thus related to the rational choice determined ontology and epistemology of delegation theories. Expertise here becomes an explanatory problem in the form of individual expertise-use behaviour that can be explained by reference to the interests and beliefs of the utility-maximising actor. In this, individual utility-maximising expertise-using behaviour is constrained or enabled by (predominantly formal) institutions surrounding the principal-agent relationship (Gilardi 2002; Eberlein & Grande 2005).

[14] According to Majone (1998: 25) 'this is because political coalitions change from those existing when the principals adopted a certain policy, and also because bureaucracies develop separate interests through institutionalisation and external pressures'.

[15] According to Habermas the 'expanded decisionistic model' combines the decisionistic and technocratic, and 'maintains the antithesis between technical knowledge and the exercise of political power as defined by Weber and Carl Schmitt'. 'The scope of pure decision', Habermas says, has been restricted to a core of strategic decisions 'that simply cannot be rationalized any further' (Habermas 1970: 365).

2.3 Norm-Oriented Epistemic Communities Approaches[16]

Another much-acclaimed strand of literature focuses on NMIs as being the hub of and at once influenced by transnational communities of experts. The focus of this literature is on how transnational expert networks use their authoritative expertise to guide and inform policy-making and thus enable policy coordination in the postnational constellation that is lacking sufficient knowledge, clearly defined actor interests and a hierarchy of norms (Haas 1992). From this perspective, NMIs are part of and influenced by such transnational communities of experts. In a nutshell, the main argument made by scholars of epistemic communities[17] is that policy coordination under the complex conditions of the postnational constellation is enabled either by seeking advice from or by delegating specific issues to a network of like-minded experts sharing 'consensual knowledge' and a 'shared set of normative and principled beliefs, which provide a value-based rationale for the social action of community members' (Haas 1992: 3). These expert networks, of which are regulatory agencies and other NMIs an essential part, are taken as a collective-actor type in its own right that features specific qualities. They are conceptualised as an 'epistemic community', i.e. 'a network of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area'[18] (Haas 1992: 3). Due to their

[16] Locating Haas' epistemic communities framework, which is labelled 'constructivist' in political science, within norm-based approaches may not be obvious to the reader at first glance, for one might specifically argue that cognitive elements (i.e. 'shared knowledge' and 'causal beliefs') indeed do play a central role for the explanation of (collective) action within the framework, as will be shown in the following. Yet, the cognitive element here is relegated to a residual category in which knowledge is understood as merely 'empirical knowledge' which is linked to 'truth' and 'validity'. Knowledge here does not form a structure of meaning underlying norms and interests but is viewed rather as information actors can use to realise their interests and obligations. In culturalist thought in social theory, by contrast, knowledge is bound to structures of meaning and symbolic codes, as argued by Reckwitz (2004: 151 ff.) and as I will demonstrate in the subsequent section dealing with culturalist approaches to NMIs.

[17] Peter M. Haas in particular has developed the epistemic community research program and introduced it to a broader community of scholars in a special issue in International Organization (Haas 1992). Since then, the epistemic community framework has been receiving increasing attention well beyond the subdiscipline of International Relations (IR), notably also among policy and public administration scholars (Haas 2015: 14–16).

[18] Epistemic communities share four defining characteristics distinguishing them from other types of actor networks, such as scientific disciplines, professions, interest groups, social movements and bureaucracies (Haas 1992: 16–20): '(1) a shared set of normative and principled beliefs (…); (2) shared causal beliefs (…); (3) shared notion of validity – that is, intersubjective, internally defined criteria for weighing and validating knowledge (…); and (4) a common policy enterprise – that is a set of common practices associated with a set of problems to which their professional competence is directed (Haas 1992: 3).

consensual knowledge and shared normative principles, epistemic communities help policy-makers to overcome situations of uncertainty, to modify values, to frame meanings of action, to define interests and preferences and to set standards and rules enabling policy coordination (Adler & Haas 1992; Richardson 1996; Radaelli 1999; Verdun 1999; Zito 2001; Cross 2013). Haas (1989) in his study on the formation of the Mediterranean Action Plan, for instance, explains the creation of a regime between actors with divergent interests by reference to the shared knowledge provided by an epistemic community of ecologists and marine biologists. Thus, like the previously introduced delegation theories, this literature not only assumes that epistemic communities are an ontologically given actor, but also takes their expert authority as already taken for granted. With their given authoritative expertise, epistemic communities can exercise influence on policy-making. Hence, 'the explanatory logic of epistemic communities approach kicks in only *after* actors have produced a consensual knowledge base that is recognised as authoritative and policy-relevant' (Sending 2015: 15).

The underlying rationale is the linear model of 'speaking truth to power': like-minded epistemic communities function as a 'transmission belt' (Haas 2004: 576) for the transfer of the best available (often scientific) expertise into politics. In this linear model, 'usable knowledge', understood as 'accurate information that is of use to politicians and policy makers' (Haas 2004: 574) is 'delivered by responsible carriers to politicians' (Haas 2004: 574). The relationship between science and politics is conceived as one between two separated spheres between which communication runs unidirectional from science to politics. 'The more autonomous and independent science is from policy, this linear account goes, 'the greater its potential influence' (Haas 2004: 576). Experts are influential if, on the one hand, their 'expertise and claims are developed behind a politically insulated wall' (Haas 2004: 573), and if, on the other hand, political decision-makers recognise 'the limits of their abilities to master new issues and the need to defer or delegate to authoritative actors with a reputation for expertise" (Haas 2004: 576). Hence, the epistemic communities approach shares with delegation theories the assumption (and normative postulation) of a strict separation between both spheres. Yet, contrary to delegation theories, this separation is based on a technocratic instead of an expanded decisionistic argument: Based on their shared knowledge and normative principles, it is argued, epistemic communities both establish a particular problem

frame as politically and socially relevant and at the same time formulate an optimal 'scientifically sound' solution path for policy-makers to deal with this problem. Eventually, the knowledge provided by epistemic communities becomes institutionalised within the unrepresentative institutions of national administrations and international secretariats (Haas 1992: 4). Thus, like in the old technocratic model of policymaking described by Habermas (1970) [19], the problem of political closure and decision-making (which is seen as being particularly salient under the fundamental uncertainty of the postnational constellation) is solved by the scientific or expertise-based determination of the menu of choices. Political decision-making is no longer a matter of contingency but is scientifically pre-determined.

Moreover, in contrast to the rationalist explanatory strategy of delegation theorists, epistemic community scholars assume a norm-oriented action model. 'Because the behaviour within and by an epistemic community is guided by various kinds of normative and causal beliefs', Haas argues, 'it will differ from the behaviour typically analysed and predicted by rational choice theorists and principal-agent theorists'[20] (Haas 1992: 20). In the view of Emanuel Adler, Haas's co-editor of the 1992 seminal *International Organization* special issue on epistemic communities, 'the sharing of premises and expectations, or "theories," creates the "evidence" that confirms the validity of norms' (Adler 1992: 107–108). The explanatory problem, then, is no longer individual expertise-using behaviour, but expertise-based intersubjective coordination enabling the emergence of social order in the postnational constellation. In addition to the explanandum, also the central explanans differs: Instead of interests, shared normative expectations and causal beliefs become the privileged shapers of action. In Haas's study on the Mediterranean (1990), for instance, the epistemic community organised around the United Nations Environment Plan (UNEP) convinced national policy-makers to adopt a

[19] According to Habermas, in the technocratic model politics 'becomes the mere agent of a scientific intelligentsia, which, in concrete circumstances, elaborates the objective implications and requirements of available techniques and resources as well as of optimal strategies and rules of control Habermas (1970: 364).

[20] The framework of epistemic communities has been developed as part of the constructivist turn in International Relations in the beginning of the 1990s (IR) (Guzzini 2000). Unlike to the then dominant paradigm in IR, which takes international politics as a sphere of conflicting interests, power and bargaining processes, the consensual knowledge and shared norms provided by epistemic communities are seen as constitutive for how states and other political actors formulate their interests, reconcile differences of interest and modify existing preferences through learning (Haas 2015: 4–5).

new set of environmental norms, which than resulted in effective policy coordination. In Adler's study on the emergence of international nuclear arms control cooperation, the American arms control epistemic community helped formulate specific norms and rules, researched and proposed verification means, and suggested post-treaty reviews and conditions for withdrawal from agreements (Adler 1992).

2.4 Culturalist Knowledge Order Approaches

A third and still emerging approach calls for a more knowledge-sociologically inspired approach focussing on the growing expert authority of NMIs in the postnational constellation. A growing number of knowledgeable actors with claims to policy-relevant expertise, such as international organisations (IOs), nongovernmental organisations (NGOs), private business actors, and expert circles, it is argued, have become influential actors in their own right. Like epistemic communities scholars, these scholars hence suggest that NMIs are more than the reflection of political principals' interests. Rather than being interested in how NMIs with their (already given) authoritative expertise exercise causal influence on policy-making, detailed accounts of how the expert authority of NMIs is brought about lie at the heart of this third strand of literature.

Compared to the two previously outlined approaches, this literature is more heterogeneous. It diversifies in the three directions of *cognition- and mind-based*; *discourse-based and practice-based strands*. These are, however, united by an analytical shift from normative to *symbolic-cognitive knowledge social orders* – often described as 'cultural schemes', 'symbolic codes', or 'interpretive frames' that provide actors with a supra-individual social reality and function as rules for action. Thus, while they share a focus on knowledge orders, they vary according to where they see knowledge localised – inside the human mind; in discourses, or in practices. In what follows, each subtype of culturalist approaches will be presented with its peculiarities and main elements, on which my own theoretical framework will – selectively – draw in the subsequent subchapter.

Cognition- and mind-based approaches

With respect to international organisations (IOs), it has been argued that these 'can become autonomous sites of authority, independent from the state 'principals' who may have created them, because of power flowing from at least two sources: (1) the legitimacy of the rational-legal authority they embody, and (2) control over technical expertise and information.' (Barnett & Finnemore 1999: 707). Hence, this literature specifically intends to depart from the understanding of authority as formal decision-making competences that can be delegated to NMIs. While such an understanding of authority is predominant in delegation theories, it is abandoned here in favour of a relational understanding of authority, i.e. authority as a social relationship. In their seminal book *Rules for the World* Michael Barnett and Martha Finnemore define authority as 'the ability of one actor to use institutional and discursive resources to induce deference from others (Barnett & Finnemore 2004: 5). Following Weber and sociological institutionalist approaches they argue that it is often because of their appearance of neutrality and expertise that international organisations (IOs) and their bureaucracies, i.e. international public administrations (IPAs) are authoritative. As bureaucracies, they embody 'rational-legal authority, that modernity views as particularly legitimate and good' (Barnett & Finnemore 1999: 707). However, what is seen as even more important for IOs to create 'the appearance of depoliticization', is expertise: 'By emphasizing the "objective" nature of their knowledge, staff of IOs are able to present themselves as technocrats whose advice is unaffected by partisan squabbles' (Barnett & Finnemore 2004: 24). Expertise, it is argued, 'persuades us to confer on experts, and the bureaucracies that house them, the authority to make judgments and solve problems' (Barnett & Finnemore 2004: 24). Expertise is hence seen as central to their authority. Even in the absence of formal decision-making competences, IOs contribute – via their expert authority – to rule making in the postnational constellation. Expert authority, it is argued, empowers them 'to define shared international tasks (like "development"), create and define new categories (like "refugees"), create new interests for actors (like "promoting human rights") and transfer new models of political organization around the world (like markets and democracy)' (Barnett & Finnemore 1999: 699).

Thus, this perspective highlights that expert authority enables IOs to shape the construction of actors and categories and as such precedes actors, preferences and categories in world

politics. Expert authority works through the constitutive social relation of an authoritative actor prompting deference from a subordinate. In contrast to the epistemic communities framework, expert authority here does not directly flow from technical knowledge and training, but from the 'set of cultural values' that legitimises expert authority (Barnett & Finnemore 1999: 708). Borrowing from cultural theories, this perspective views the expert authority of IOs as deriving from a global culture, 'world polity' (Barnett & Finnemore 2004: 43), or 'world authority structure'[21] (Barnett & Duvall 2005: 55). The literature on the authority of IOs moreover differs from both delegation theories and the epistemic communities approach in terms of how the relation between policy and expertise is conceptualised. Whereas the latter literatures take expertise and policy as strictly separated spheres of objective knowledge claims on the one hand, and subjective values, norms and interests on the other hand, the former conceives of them as deeply intertwined. Putting an emphasis on the constitutional role of expertise in making actors' interests, categories, classifications and meanings, this body of thought conceives of expertise as productive in creating political subjects. Vice versa, pointing to the cultural embeddedness of expert authority, these scholars study expertise as resulting from a shared order of knowledge, i.e. a collective cognitive-symbolic order of meaning. Thus, these scholars conceive of expert authority as something that presupposes a deeper layer of symbolic rules, or of 'culture'.

Discursive approaches

However, taking their cue from Michael Foucault's discourse analysis others have shown that expert authority in the postnational constellation is not something that flows from a dominant single knowledge order in a straightforward way and that can then be 'possessed' by a specific actor type. Rather, these scholars from international political sociology and interpretive policy studies argue, expert authority is exercised in multiple and ongoing discursive struggles over

[21] This global culture, it is argued, consist of two central components. One central component relates to the global diffusion of Western rationalization. What has been described by Weber as the structuring of action in terms of means and ends and in terms of standardized impersonal rules, it is argued, has come to define all spheres of life. A second component of this global culture, or world polity, according to this perspective, is liberalism valuing the virtues of markets and capitalism as the best or only means to progress (Barnett & Finnemore 2004: 166). This argument is based on sociological institutionalism and the 'world polity' approach in particular (Thomas et al. 1987; Finnemore 1996; Lechner & Boli 2005).

the definition of policy problems (Litfin 1994; Hajer 1995). Thus, these scholars acknowledge the conflicts and struggles that surround actors' attempts to authoritatively conceptualise policy problems and through which prevailing discursive knowledge orders are either challenged and transformed or reinforced. Expert authority and discursive orders here are seen as co-constituted: the expert authority of NMIs is then understood as dominant discourses 'solidified' in institutional arrangements; it is created within the frame of an established or an emerging discursive order that becomes dominant over another discursive order. Yet, these scholars argue, even if a discourse has become authoritative and as such solidified in institutional arrangements, a discursive order and the actors drawing authority from it require a 'constant discursive reproduction to guarantee the continuity of its meaning structures' (Hajer 1995: 125).

One of the first political scientist to turn to Foucauldian discourse theory was Karen Litfin in her study of the controversies surrounding ozone depletion in the formation of the Montreal Protocol (Litfin 1994). Litfin argued that expert authority lies with the actors she labels 'knowledge brokers'[22]. These are, in her view, intermediaries between academic science and politics that have the 'discursive competence' to interpret knowledge consonantly with specific narratives about social problems and then to successfully promote these expertise-based narratives in policy struggles (Litfin 1994: 4). Similarly, in his seminal study on the 'Politics of Environmental Discourse' (Hajer 1995), Marten Hajer highlights how IOs, most notably the OECD and UNEP, formed what he calls 'discourse coalitions' around specific 'story-lines'[23] that successfully managed to reframe economic and environmental issues as essentially intertwined during the 1980s. Out of these story-lines, Hajer shows, the discourse

[22] Liftin uses the term of knowledge brokers to refer to 'the agents of a discursive shift' (Litfin 1995: 253). According to her knowledge brokers is 'a term which, unlike epistemic communities, highlights the discursive nature of knowledge' (…) what is fundamentally important is not their identities, but rather their ability to translate and interpret knowledge in accordance with new or pre-existing sets of linguistic practices which entail specific constructions of the world' (Litfin 1995: 253).

[23] According to Hajer 'story-lines are narratives on social reality through which elements from many different domains are combined and that provide actors with a set of symbolic references that suggest a common understanding (Hajer 1995: 62). In the search for discursive hegemony, Hajer further argues coalitions are formed among actors attracted to a specific (set of) story-lines. 'Discourse-coalitions are defined as the ensemble of (1) a set of story-lines; (2) the actors who utter these story-lines; and (3) the practices in which this discursive activity is based' (Hajer 1995: 65).

of 'ecological modernisation'[24] derived its wider social support and eventually become dominant[25] out of several antagonistic environmental discourses[26] (Hajer 1995: 73–103). It was the very discursive work of these expert circles in and around these 'technocratic institutions', Hajer argues, that 'provided an alternative conceptual language and delivered concrete solutions that suggested pragmatic ways of overcoming environmental problems' (Hajer 1995: 95). Thus, scholars following these Foucauldian discursive approaches indicate the inseparability of expertise and political power, which are co-constituted in discourses: Expertise is not authoritative per se under a specific knowledge order, but necessarily requires discursive work to make actors believe in its validity and relevance for political problem-solving. Vice versa, expertise plays a fundamental role in the (re-)construction of policy problems and dominant discourses.

Practice approaches

Like discursive approaches, approaches drawing on the practice theory of Pierre Bourdieu assume that expert authority in the postnational constellation is not grounded in a single knowledge order, but rather in multiple and overlapping orders of knowledge (Huysmans 2006; Villumsen Berling 2011; Sending 2015). More often than not, elite groups, groups of experts, diplomatic circles and professions, compete both with IOs and among each other for expert authority, thereby invoking different orders of knowledge (Sending 2015). Therefore, instead of assuming Weberian cultural sources of authority that straightforwardly materialise

[24] According to Hajer, 'this policy discourse of ecological modernization recognizes the ecological crisis as evidence of a fundamental omission in the workings of the institutions of modern society. Yet, unlike the radical environmental movements of the 1970s, it suggests that environmental problems can be solved in accordance with the workings of the main institutional arrangements of society. Environmental management is seen as a positive-sum game: pollution prevention pays' (Hajer 1995: 3).

[25] This discourse hegemony is present, according to Hajer, 'if the credibility of actors in a given domain requires them to draw on ideas, concepts, and categories of a given discourse' (discourse structuration), and 'if a given discourse is translated into institutional arrangements' (Hajer 1995: 60–61).

[26] Until the 1980s, environmental pollution and degradation, he argues, was not generally recognised as a structural problem, but rather as something that could be addressed by 'ad hoc, and ex post remedial measures' (Hajer 1995: 25). Studying the changing environmental discourse through the 1970s and 80s, Hajer shows how new discourses, ranging from 'limits to growth' to 'blueprint for survival, and 'small is beautiful' came to challenge prevailing institutional arrangements addressing environmental degradation. Yet, what became hegemonic instead, Hajer demonstrates, was the discourse on 'ecological modernisation' (Hajer 1995: 73–103).

in the rational-legal and expert authority of IOs, these scholars adopt an 'analytical strategy that seeks to capture relations between actors and their ongoing competition for authority' (Sending 2015: 18). In this view, expert authority is 'something that inheres in relations between actors' and a 'product of actors' search – and struggle – for recognition'[27] (Sending 2017: 312). For instance, the transformation of the WHO's authority as the sole internationally recognised expert institution on health that has occurred from the 1980 onwards, here is explained by empirically tracing the process in which a multiplicity of actors competed for expert authority on international health governance: Until the late 1980, the WTO was recognised as the sole authority on health – it was understood from an integral, 'intersectional' angle, as being inherently linked to socio-economic structures, culture and gender. Its authority was then challenged by an alliance of the World Bank, the Rockefeller Foundation and UNICEF, which brought questions of cost-effective targeted interventions and greater private sector involvement to the core of global health considerations. When the WHO sought to regain authority on health governance in the late 1990s, it did so by establishing a Commission on Macroeconomics and Health, whose experts linked investments in health to economic growth (Sending 2017).

Hence, from this perspective, NMIs' quest for authority is inherently linked with a specific body of knowledge claims about that which is to be governed. Expert authority and political authority are therefore seen as intimately bound up with one another. Authors adopting this Bourdieu-based perspective on expert authority are thus primarily concerned with the practices by which such authority is generated, cultivated or rebuilt within an already hierarchically organised field; and share a designated commitment to the multiplicity of knowledge orders that are produced and reproduced by actors' shared practices. This includes highlighting the (symbolic) resources used by actors who put forward a specific claim to

[27] According to the sociology of Pierre Bourdieu (1984, 2000) actors' competition for authority is shaped by a specific field, i.e. an already structured social space of relations between positions anchored in certain forms of material and symbolic capital that constitute specific speaker positions (Bourdieu & Wacquant 1992: 16). The competition between actors within fields is motivated by their search for recognition (Sending 2015, 23-25). On this view, Sending argues citing Bourdieu (1989: 23) ,authority emerges as a result of actors' search for recognition, where some actors have "obtained sufficient recognition to be in a position to impose recognition" by virtue of shielding or transforming their particular resources into 'rules' that all actors have to refer to in order to gain recognition (Sending 2017: 318).

authority. Likewise, this includes analysing the structuring of such claim making practices by the field they are embedded in. Moreover, this perspective implies putting an emphasis on how the social relationship underlying authority is objectified by a specific knowledge order and on how actors searching for authority invoke and reproduce this knowledge order. Hence, in this view of authority, knowledge orders create a common framework of meanings and symbols within which expert authority can be legitimately practiced, that is, claims to knowledge and truth can be successfully made.

A more recent, practice-based approach focussing on the expert authority of NMIs gains its inspiration from the literatures of science & technology studies (STS). Even more than the previously outlined Bourdieu-based perspective, this perspective drawing on Bruno Latour, Michel Callon and John Law (Callon & Latour 1981; Callon 1984; Law 1986b) puts the focus on expert authority as a concrete social practice – namely translation. These are the (micro)-practices through which authoritative expertise is produced – i.e. drafting and circulating documents, holding meetings and consultations, establishing infrastructures of expertise, and other every-day practices. This approach considers the material dimension in establishing a certain body of knowledge as true and as politically relevant. Authoritative knowledge is here not only a matter of cognition and discourse, but also inherently connected to physical bodies, material infrastructures, objects, buildings and other material artefacts that shape the ways of 'doing expertise'. Authoritative expertise is a practical achievement that is anchored in material arrangements. Socio-material practices of authoritative knowledge production assemble different social actors and knowledge claims and translate them into representations of a specific policy problem. These practices are closely embedded into institutional contexts. As Sheila Jasanoff has shown in her seminal comparative work on life science polices in the United States, Great Britain and Germany, practices of authoritative knowledge production differ according to national 'civic epistemologies' (Jasanoff 2005). These national orders of knowing and reasoning influence how the authority of policy-relevant knowledge is constructed[28]. When it comes to how specifically NMIs operating in the postnational

[28] Expertise in Britain relies on the British empiricist tradition and tends to draw its authority from formulating a common-sense vision that can be viewed from everywhere and from the 'collective witnessing' of

constellation manufacture expert authority, this literature has pointed out that it is far from clear whether NMIs in the postnational constellation craft their own practices of authoritative knowledge production, or whether they in fact incorporate and reproduce particular national traditions of authoritative knowledge production. With respect to the WTO, Sheila Jasanoff has shown that it de facto adopted what is commonly seen as a U.S. culture of authoritative expertise (Jasanoff 2011a). However, taking the example of maritime piracy governance of the United Nations Security Council (UNSC), Christian Bueger empirically traces a broader variety of epistemic practices (Bueger 2015). These range from quantification and measurement of piracy to the interpretation work conducted by a collective of heterogeneous experts by which the interrogated sources of local knowledges become translated into a reporting document on maritime piracy. Whereas the latter uses standardised reporting forms, databases and a strict methodology to produce numbers on piracy, the former uses participant observation and interviews with local interlocutors to compile case studies assembling narrative knowledge on piracy. Yet, as Bueger shows, these two epistemic practices were not recognised as authoritative in the same way: While the quantification of piracy was recognised as an authoritative knowledge claim, the local knowledge on piracy remained contested.

By highlighting the various devices of 'translation' used in creating representations of what is conceived of as true and politically relevant, this perspective zooms in on the dynamic construction of authoritative expertise. This work hence rejects the longstanding myth of the separation between science and politics as distinct social spheres. Instead, it argues that knowledge and epistemic authority is in fact jointly constituted with political authority. The supposed separation between the two is a result of the practical 'boundary work' (Gieryn 1999) performed to create the appearance of separation, which is fundamental for modernity (Miller 2001). Yet, in fact, this work shows, these practices of knowledge-making shape the construction of governance or of political orders more broadly; vice versa political orders

demonstrable facts. Drawing on Germany's corporatist political culture, German expert bodies, by contrast, generate authoritative expertise through a process of collective group reasoning explicitly based on principles of political representation. US expertise, in turn, relies on formal modelling, simulations and quantitative, mathematical representations that hide the professional judgement inherent in all knowledge production in order to create the appearance of impartial expertise.

shape practices of knowledge-making and natural order[29]. The very intricate mechanisms of the coproduction of authoritative expertise and political order in concrete micropractices and the ways in which these draw on deeply rooted cultural norms and practices are moved to the centre of analysis, while such supposed nitty-gritty processes are left unexamined by the previously outlined approaches. STS-inspired scholars highlight the *performative* role of expertise (Callon 2007). At the heart of their accounts is the acknowledgement of the practices through which authoritative expertise – often embodied in material devices and other sociotechnical arrangements – is practically performed and how social and natural realities emerge from this constant enactment. Thus, contrary to the two previous strands of cultural reasoning, the focus on performativity does not imply a structural determinism. In performing authoritative expertise, it is argued, actors enact discourses and thereby bring about both certain natural and social realities; yet in order to do so, their performances need to allow for constant modifications and adjustments. From this perspective, practices can stabilise a dominant knowledge order – but also gradually transform and even resist it.

2.5 Conclusion: Situating the Literature on NMIs in Social Theory

The status and role of expertise has been a core theme in the previously discussed literature. All approaches treat expertise as a central explanatory problem. But reading these three approaches to NMIs through the lens of expertise it has also become clear that they differ in terms of a number of interrelated assumptions and themes. The three approaches differ considerably as to *how* they define expertise as an explanatory problem and their central explanans. They also vary according to their conception of the expertise-policy relationship and to how they view NMIs as experts. Table 1 summarises their main assumptions:

[29] 'Knowledge and its material embodiments', Sheila Jasanoff writes, 'are at once products of social work and constitutive of forms of social life' (Jasanoff 2004: 2). Scientific knowledge and other forms of expertise, she argues, are 'not a transcendent mirror of reality' but shape and are shaped by 'social practices, identities, norms, conventions, discourses, instruments and institutions' (Jasanoff 2004: 3). In short, expertise here is depicted as an epistemic practice that is bound up with society and political order.

	Central Explanans	**Expertise an explanatory problem**	**Expertise-Policy Relationship**	**Status and Role of NMIs as experts in policy-making**
***interests:* delegation approaches**	- Interests and beliefs	- Delegation of authority to expertise-based NMIs - individual expertise-use behaviour	- separation model (expanded decisionistic)	- *causal* influence on policy-making
***norms:* epistemic communities approaches**	- Normative Order	- NMIs as a part of epistemic communities - expertise-use in inter-subjective coordination	- separation model (technocratic)	- *causal* influence on policy-making
***culture:* knowledge order approaches**	- Knowledge Order *Cognition* *Discourses* *Practices*	- NMIs as authoritative experts - Maintenance or transformation of expert authority	- co-production	- *constitutional and* performative role in policy making

Table 1: Rationalist, norm-based and culturalist approaches to NMIs, my compilation

As we have seen, the existing literature on NMIs in the postnational constellation can be roughly ordered in Reckwitz's three-fold classification of social theories: rationalist, norm-based, cultural. Delegation theories take the delegation of formal authority to expertise-based NMIs and their expertise-use behaviour as their core explanatory problem. They correspond to *rationalist* social theory in that they rely on the assumed interests and beliefs of the utility-maximising actor as their explanans. What underlies their interest-based conception of expertise is moreover a specific assumption on the expertise-policy relationship, that could with Habermas be termed 'expanded decisionism': in this view policy goals and the objectives of regulatory politics are decided by electorally accountable principals, whereas the identification of the best means to achieve these goals is delegated to independent experts. Related to this, delegation theories are interested in NMIs as experts that exercise a causal

influence on policy-making. In contrast, the epistemic communities literature assumes a *norm-oriented* action model as described by Reckwitz: on the basis of shared norms and knowledge epistemic communities define norms and rules for coordination in the postnational constellation. Not interests and beliefs are here viewed as the main explanans of individual expertise-use behaviour, but the expertise-based coordination of heterogeneous actions and interests is explained by reference to mutual normative expectations, hence a collectively shared normative order. Like in rationalist approaches, the relationship between science and politics is conceived as one of two separated spheres, but this time, communication is said to run unidirectional from science to politics invoking a technocratic instead of an expanded decisionistic science-policy model. Rationalist and norm-based, accounts thus presuppose the authority of NMIs and their expertise as given, while this is made the explanatory problem in *culturalist* accounts: By conceiving expert authority as something that presupposes a deeper layer of symbolic rules and structures of knowledge, cultural approaches focus on what enables actors to be deemed as experts and their knowledge as authoritative expertise and as such gain agency. Hence, these scholars are concerned with the deeper layer of collective symbolic and meaningful rules that enable 'a socially shared way of ascribing meaning to the world' Reckwitz (2002, 246). Culturalist approaches understand the relation between expertise and policy as one of co-production. Authoritative expertise and political order here are jointly produced and enable each other. While culturalist approaches share these core assumptions, they localise shared knowledge and symbolic structures differently, namely either in cognition, in discourse, or in practice. Related to this, these scholars are predominantly interested either in the constitutional role of expert cultures and discourses in making authoritative expertise and political order, or in the practical performance of expert authority reproducing or transforming political order.

The task of this subchapter was twofold: *First,* the aim was to work out the points at which certain strands of the existing literature on NMIs, when read through the lens of expertise, can be distinguished from one another; and thereby to demarcate culturalist approaches, which lay the foundations for my own theoretical framework, from their rational and norm-based theoretical alternatives. As I have shown, rationalist and norm-based approaches highlight that the expertise of NMIs constitutes a decisive 'source' in postnational policy-making. Yet, both

do explain little on how the authority of NMIs and their expertise becomes established and cultivated – or undone and transformed in particular settings; they presuppose expert authority as granted by virtue of specific traits and characteristics of NMIs. Thus, these approaches reduce the explanatory problem of expertise either to individual expertise-use behaviour or to expertise-use in intersubjective coordination. From a culturalist perspective, however, the problem of expertise – the maintenance of expert authority – is first and foremost one of the social reproduction (or transformation) of collective knowledge orders which requires patterns of repetitive actions in the day-to-day conduct of expertise. *Second*, this chapter aimed at specifying the peculiarities of the single strands within culturalist thinking, on which my own theoretical framework will selectively draw in the next chapter. On the basis previously discussed subtypes of culturalist approaches – most notably STS inspired practice approaches – I will make use of particularly four elements of culturalist thinking and develop them further: (1) understanding the expert authority of NMIs and their knowledge as something to be explained instead of taken for granted; (2) the foregrounding of the multiplicity and contestedness of competing *knowledge orders* in the postnational constellation; (3) the *complementary* understanding of discursive and practice approaches and the STS inspired concept of *translation practices*.

3 The Politics of Politico-Epistemic Authority – Towards a Conceptual Framework

In what follows, I will develop a theoretical framework, comprising three core concepts, to analyse what I call the politics of politico-epistemic authority. In line with the grounded theory approach of inquiry, I shall use these concepts as a heuristic device for the empirical reconstructing of and the further theoretisation from the two cases. In this vein, the here presented concepts and lines of theoretical argumentation are at the same time already also the product of the exploration of the empirical material. First, I conceptualise expert authority as something endogenous to the politics of politico-epistemic authority. In doing so, I will discuss Max Weber's and Hannah Arendt's thoughts on authority to specify this concept. I will then draw on the recent literature on political and epistemic authority to explore what makes up the contested politics of politico-epistemic authority in the postnational constellation (chapter 3.1.). Second, I will explore the concept of knowledge orders as a crucial concept in culturalist explanations of politico-epistemic authority in more detail and distinguish between discourses, formal institutional arrangements, and practices, which are the three levels at which knowledge orders are manifested (chapter 3.2). Third, I will conceptualise the practice-level of knowledge orders, which is at the centre of the practice-based approach to the politics of politico-epistemic authority developed here. In doing so, I will draw on an STS-inspired perspective on practice, which has already been very briefly introduced in the previous chapter (chapter 3.3). Fourth, I will conclude the chapter with briefly summarising the core concepts of the developed framework (chapter 3.4).

3.1 Politico-Epistemic Authority

After the first two years of grappling with the empirical material I had collected and analysed up to that point, I arrived at what I considered the most plausible interpretation of what I had observed: In the aftermath of the BSE crisis, governments in both countries decided to establish 'independent' food (safety) agencies in order to restore expert authority in food (safety) related matters; yet in contrast to what much of the existing literature assumed, expert authority was not simply a characteristic of or a useful resource of these independent agencies.

Instead, much of the observed doings and sayings of these agencies were about building and self-legitimating *epistemic* and *political authority*. This insight took me into the unanticipated realm of Max Weber's and in particular of Hannah Arendt's popular take on authority[30] and thus into a de novo iterative loop of grounded theory research. Prompted by my empirical insights, I attempted to understand whether and to what extent I could re-read, re-code and re-sample my data through the lens of the 'sensitising concept' of authority. The first problem of this undertaking was that, although authority is a key concept in political thought and social theory[31] (Friedman 1990), many scholars fail to distinguish it from related concepts. Most contemporary scholars draw on Max Weber's sociology of domination in their conception of authority (Zürn 2012a; Furedi 2013). Yet, not only do they often treat authority synonymously with 'power'; they even refer to it as '*legitimate* power', making the conceptual confusion between authority, power and legitimacy even worse. Thus, in order to further examine my ad-hoc hypothesis, which relates the emerged patterns in the data to what is commonly understood as 'authority', it was first necessary to disentangle the concept of authority from power and legitimacy.

In what follows I will therefore proceed in two steps: *First,* drawing on Max Weber and on Hannah Arendt, I will outline a conception of authority that acknowledges its intimate relationship to the concepts of legitimacy and power without treating them as simply interchangeable terms. I will start by discussing Weber's concept of authority and its reception in political science. What proves important for the understanding of the politics of politico-epistemic authority that characterises food safety agencies is Weber's distinction between authority and legitimacy. On this basis, I will then argue that Hannah Arendt's thoughts on

[30] A further, very prominent theorisation of authority has been provided by Joseph Raz (Raz 1990). Yet, Raz's focus lies on the normative question of whether an authority's ability to command obedience can be morally justified. As this normative question is not in my research interests, which aim at offering an *interpretive analysis* of the *politics* (instead of the moral normativities) of expert authority, I did not further engage with Raz's writings.

[31] From antiquity forward, authority has always been fundamental to political theory, and it is still used broadly, today. As Frank Furedi has recently shown in his sociological history of authority, the term was contested in ancient Greece and given a powerful meaning as *auctoritas* in the Roman Republic (Furedi (2013). Through the Middle Ages and the Reformation, Europe was dominated by debates on religious and secular authority, while the modern world attempted to rationalise the foundations of authority in the form of democratic consent and science.

authority allow us to sharpen our understanding of what distinguishes the expert authority of nonmajoritarian institutions such as independent food (safety) agencies from the more direct forms of decision-making power that are characteristic for majoritarian institutions. *Second*, I will set out what I take to be the main elements of the particular type of authority exemplified by independent (food safety agencies), namely expert authority. I understand expert authority as politico-epistemic authority. Here, I also refer to more recent theoretical debates on the dynamics of expert authority in the 'postnational' constellation.

Authority in Max Weber's Sociology of Domination

At the core of Weber's seminal work *Economy and Society* was what he termed the 'sociologically amorphous' concept of power (Weber 1978: 53). For Weber, power in a general sense meant 'the possibility of imposing one's own will upon the behaviour of other persons' (Weber 1978: 942). The concept of authority or – domination *(Herrschaft)* – that he developed was intended to refer to a special form of power and therefore had to be more precise, he postulated[32]. Weber made two main specifications: First, authority according to Weber is based on a minimal degree of *voluntary obedience*, which distinguishes authority from power (Blau 1963: 306–307). In his view, power is about imposing one's will even when others resist, including using force and violence. Authority, by contrast, according to Weber, involves eliciting *obedience to commands*[33]. In the case of authority, there is a certain correlation between command and the perceived duty to obey, Weber argues. Accordingly, compliance is based on a sense of obligation[34]. Second, to qualify as authority, Weber argues that an additional condition is to be fulfilled, namely *a priori deference of judgement* (Blau 1963: 307). In a relationship of authority, Weber argues, the subordinate person suspends his/her own judgement and accepts that of an acknowledged superior without having to be

[32] Weber used the term Authority (Autorität) and domination (Herrschaft) synonymously. See Simmerl and Zürn (2016) for a more detailed discussion.

[33] Whereas power for Weber is 'the probability that one actor within a social relationship will be in a position to carry his own will despite resistance, regardless of the basis on which this probability rests', authority means the 'probability that a command with a given specific content will be obeyed by a given group of persons' (Weber, 1978, 53).

[34] In Weber's words authority 'rests on an alleged absolute duty to obey, regardless of personal motives or interests' (Weber 1978, 943).

convinced that this is the right thing to do: '(..) the manifested will *(command)* of the *ruler* or rulers is meant to influence the conduct of one or more others *(the ruled*) and actually does influence it in such a way that their conduct to a socially relevant degree occurs as if the ruled had made the content of the command the maxim of their conduct for its very own sake' (Weber 1978: 946). Thus, authority needs to be able to withstand contestation. Even in the absence of agreement through rational arguments, authority must find obedience and recognition. In an authority relation, it is thus the social status of the speaker, which is decisive, not the content of the argument[35]. Following Weber in viewing of *voluntary* and *a priori* obedience as constitutive for authority, we can now be more specific about the phenomenon we refer to in speaking of authority: we can understand it as *'unconditional willing obedience'* (Blau 1963: 307).

Weber: Authority and Legitimacy

For Weber, if authority is to stabilise itself, it has to be based on *shared beliefs* that socially legitimate it[36]. Thus, what is crucial for authority, according to Weber, is that 'the particular claim to legitimacy is to a significant degree and according to its type treated as valid' (Weber 1978: 214). The institutionalisation of authority is thus embedded in a social context, a 'legitimate order' (Weber 1978: 31–33). Weber then famously identified 'legal', 'traditional', and 'charismatic' authority as the three possible ways in which legitimacy is claimed and attributed within different systems of authority[37].

Although, consequently, for Weber, an authority is usually apt 'to establish and to cultivate the belief in its legitimacy' (Weber 1978: 231), he did not explicitly make legitimacy a third

[35] From this vantage point, authority is the precise contrast of what is conceived as persuasion through rational argument, where only the substance of the argument matters, while the social status of the speaker is – at least in the ideal type – irrelevant for the person adopting the action (Friedman 1990: 67).

[36] 'Purely material interests and calculations of advantages' Weber argues, 'result (…) in a relatively unstable situation. (…) In addition, there is normally a further element, the belief in legitimacy' (Weber 1978: 213).

[37] According to Weber, in modernity belief in the legitimacy of the political order grounded in legal and rational norms had superseded legitimation through tradition. Yet, he mistrusted the capacity of rationally devised rules to influence and inspire the public and therefore tended to emphasise the legitimising potential of charismatic leaders (Furedi (2013: 10–15).

defining characteristic of authority. The belief in legitimacy secures and facilitates the obedience that is required for authority but does not necessarily and exclusively constitute it. Hence, in this reading of Weber, authority is not identical or reducible to legitimacy. More often than not, however, leading scholars, particularly in post-war American social science, have lumped authority and legitimacy together, defining authority as 'power that is legitimized' (Friedman 1990: 60)[38]. One reason for this widespread confusion is to be found in Weber's writings themselves, which remain rather ambiguous as to how authority and legitimacy relate to each other. Often Weber speaks of 'legitimate authority', identifying authority with legitimacy, thereby to some extent allowing using legitimacy and authority interchangeably.

The difficulty with equating authority and legitimacy is that it fails to acknowledge the distinction between two quite distinct levels of belief, as Michael Zürn has argued (Zürn 2012a, see for a similar argument Friedman 1990: 68–71). 'Legitimate authority', according to Zürn's interpretation of Weber, can be understood as a complex structure consisting of two tiers: at the *first level* – the level of authority – there is a belief that attributing authority serves the common good. The main claim here is that obedience is desirable to achieve a given common good. In this sense, the attribution of decision-making or judgemental authority to an actor, i.e. the competence to make authoritative decisions or judgments, is generally recognised. At the *second level* – the level of legitimacy – there is a belief in the correctness of the actual exercise of authority with respect to a shared normative arrangement. What is at stake here is whether and to what extent authority is exercised in accordance with certain criteria of recognition and acceptance. Thus, the second level of recognition involves a claim that sustains the first level recognition of authority (Zürn 2012a). Therefore, an authority needs to consistently and carefully cultivate belief in its legitimacy, as Weber has already pointed out. The failure to distinguish these two levels of belief tends to obscure one fundamental

[38] To name but some influential examples, Talcott Parsons, who translated Max Weber's work into English for the first time and was Weber´s most important American populariser, de facto equated authority with legitimacy by reserving authority for those power relationships that are deemed as legitimate (Uphoff 1989). David Easton broadened the term 'legitimacy' to 'cover all command-obedience relationships' (Easton 1979: 208). Robert Dahl refers to authority as 'legitimate influence': 'When the influence of a leader is clothed with legitimacy it is usually referred to as authority' (Dahl 1963: 19). And Harold Lasswell and Abraham Kaplan conceptualize authority as 'the expected and legitimate possession of power' (Lasswell & Kaplan 1950: 133).

problem, namely that authorities cultivate their legitimacy with varying degrees of success – as a result of which there can, in extreme cases, be authority without legitimacy (Adorno et al. 1950; Sennett 1980; Marcuse 2008; Zürn 2012a). Acknowledging the conceptual distinctiveness between authority and legitimacy, as Michael Zürn suggests, thus allows us to consider the precarious nature of authority and to study acts of (self-)legitimation and de-legitimation of authority, i.e. strategic acts of enhancing or diminishing beliefs in the legitimacy of an actor who seeks to establish or cultivate authority. This distinction between authority and legitimacy is illustrated by the following summary table 2:

	Authority	**Legitimacy**
understood as …	… the belief that attributing authority serves the common good	… the belief in the correctness of the actual exercise of authority
highlights …	… that authorities need to build and cultivate beliefs in their legitimacy	

Table 2: Authority and legitimacy according to Weber, my compilation

Weber: Authority and Power

However, there is a certain lack of conceptual clarity in Weber's concept of authority distinguishing between what I have suggested is the defining characteristic of independent food (safety) agencies, namely the coupling of epistemic and political *authority*, which is different from *decision-making power* of majoritarian institutions. In Weber's view the basis for obedience is not only a wide range of motivational factors, such as incentives and rewards[39], but also non-physical threats or sanctions, as I have argued above. Authority, understood as unconditional willing obedience, is thus only demarcated from Weber's narrow (and antiquated) definition of power, which is confined to physical means of coercion. Yet, on this account, only the clearest forms of physical coercion result in power as opposed to obedience-based authority. This is obviously a very narrow understanding of power[40].

[39] Authority, he writes can be based on the most diverse motives of obedience ranging 'all the way from simple habituation to the most purely rational calculus of advantage' Weber (1978: 212).

[40] As we will see later, Hannah Arendt would even argue that Weber here refers to violence, that must be clearly distinguished from power (that is per se non-violent) (Arendt 1994: 46).

Paradoxically, Weber does not exclude rational calculation or fear as a basis for obedience and yet adheres to the idea that authority requires a minimal degree of voluntary obedience (Weber 1978: 212–213; Zürn 2012a). But if we regard, as Weber apparently would do, an employee's obedience due to fear of losing his job as voluntary compliance, the distinction between authority and coercive power would lose all its meaning. It seems that this ambiguity prompted leading post-war social scientists to conflate authority with other forms of non-violent direct political power, thereby promoting what Hannah Arendt criticised as a 'functionalised' understanding of authority (Arendt 1956a: 416). For instance, according to David Easton, 'a policy is authoritative when the people to whom it is intended to apply or who are affected by it consider that they must or ought to obey it' (Easton 1953: 132 cited in Ball 1987: 45). 'Both in the case where the legitimacy of the rulers is accepted and where the rulers are obeyed only because they possess a predominance of effective sanctions, the rulers can be described as authorities', he argues (Easton 1958: 180). Authority, in this view, covers everything that produces obedience. Authority is then regarded, Arendt rightly warns, as essentially equivalent to whatever else might make people obey: 'Their concern is only with functions, and whatever fulfils the same function can, according to this view, be called the same' (Arendt 1956a: 416). In this sense, authority becomes functionalised – that is, it becomes defined by its motivational function of gaining obedience. The act of obedience here serves as a proof of authority; no distinction between authority and decision-making power is in fact made, as the following summary table illustrates:

	Authority	**Power (= Violence)**
understood as …	…eliciting unconditional willing obedience to commands	…imposing one's will also against the resistance of others, including using force and violence
obstructs…	…the distinction between authority and non-violent decision-making power	

Table 3: Authority and power according to Weber, my compilation

Summing up, referring to Weber and subsequent interpretations of his work, I have been able to disentangle the relationship between authority and legitimacy. According to Weber, we can speak of authority if there is unconditional, willing obedience on the part of the subordinate that often, but not necessarily, rests upon a shared belief in the authority's right to command

(legitimation). Here, I follow Michael Zürn's recent argument that authority (i.e. the belief that attributing authority serves the common good) is not synonymous with legitimacy (i.e. the belief in the actual exercise of authority), even though, as Weber has argued, legitimacy secures and facilitates authority. Acknowledging this kind of conceptual distinctiveness between authority and legitimacy moreover allows us to consider the precarious nature of authority and to study acts of (self-)legitimation and de-legitimation of authority, i.e. strategic acts of enhancing or diminishing beliefs in the legitimacy of an actor who seeks to establish or cultivate authority.

Yet, as regards the conceptual distinction between authority and power, the picture is different. While Weber's understanding of authority differs from an understanding of power induced by physical force, its relation to other non-violent forms of more direct power, such as decision-making power backed by sanction or incentives, remains ambiguous. This ambiguity (that is still prevailing in Weber's reception within larger parts of scholarship) is grounded in Weber's understanding of authority as domination or rule (*Herrschaft*). The distinctiveness of authority can be clarified, I will argue in the following, with reference to Hannah Arendt's writings on authority. Unlike Weber, Arendt understands authority as a form of compelling guidance, advice, or counsel and hence strictly differentiates between every form of direct power and authority. As we will see later in this chapter, this distinction will prove important in understanding what I call the politics of politico-epistemic authority, which explain the phenomenon of independent (food) safety agencies.

Authority in Hannah Arendt's political theory

Arendt's conception of authority is based on the concept of *auctoritas*, which was shaped by the foundational moment of the Roman Republic. In her political theory, Arendt traces this Roman archetype of authority to its successors in contemporary political systems such as the U.S. political system, which emerged from the American Revolution. Although Arendt's approach to authority is outlined in a diverse array of her writings, the core of her concept is synthesised in her article 'Was ist Autorität?' published in 1956[41] (Arendt 1956b). In this

[41] This article has been later translated into English (Arendt 2006). In the following, I will refer to this version.

article Arendt argues that authority is based on '*unquestioning* recognition'. Arendt's emphasis on the *unquestioned* acceptance of an authority may at first sight build on Weber's previously discussed notion of authority as 'unconditional willing obedience'.

Yet, as we will see in what follows, in contrast to Max Weber's equation of authority on the one hand and domination or rule on the other hand *(Herrschaft),* Arendt explicitly excludes enforcement power backed by coercive means from her conception of an authoritative relationship. In Arendt's view the 'capacity of authority is limited to advising, initiating, proposing or giving guidance rather than commanding or mandating' (Klusmeyer 2014). This enables us to differentiate between authority and power in a stricter way than Weber allows us.

Arendt: Authority and Power

The 'hallmark' of authority is according to Arendt the '*unquestioning* recognition by those who are asked to obey' (Arendt 1970: 45, own emphasis). Authority exists where both the subordinate and the superordinate unquestioningly recognise the hierarchy between them as legitimate. The legitimacy of the inequality between the obeying party and the authority is reciprocally recognised: 'What they have in common is the hierarchy itself, whose rightness and legitimacy both recognise and where both have their predetermined stable place' (Arendt 2006: 93). Authority relies on this reciprocal and voluntary recognition. In Arendt's view, therefore, authority fails not only where it is enforced by violence, but also where it is accomplished by recourse to sanctions or incentives[42]. The *unquestioning acceptance* of the hierarchy that is so fundamental to an authoritative relationship is called into question here. The use of sanctions and incentives in her view is particularly symptomatic of nonauthoritative behaviour. Thus, unlike Weber, Arendt excludes enforcement power backed by coercive

[42] More than Weber, Arendt distinguishes authority also from persuasion: 'Authority, on the other hand, is incompatible with persuasion, which presupposes equality and works through a process of argumentation' (Arendt 2006: 93). Persuasion through debate presupposes a relation of parity between competing but equal parties, and Arendt suggests that not only the use of coercion and but also of persuasion is therefore symptomatic of nonauthoritative behavior: 'Against the egalitarian order of persuasion stands the authoritarian order, which is always hierarchical' (Arendt 2006: 93). Neither violence nor persuasion can create authority that is simultaneously free and unquestioning.

means from her conception of an authoritative relationship. Moreover, according to Arendt, authority is not to be conflated with more direct forms of power, such as joint action and decision-making power. It is instead, she argues, a form of power that is manifest as particularly compelling guidance, advice, or counsel. It is 'more than advice and less than a command, an advice which one may not safely ignore' (Arendt 2006: 123). Whereas direct power in the form of actions and decisions rests on peoples' desire for joint action, authority is a rather indirect form of power, an advice that is hard to ignore because of the insight into the superior competences of an authority.

Yet, what factors account for this voluntary and unquestioned recognition of hierarchy that underlies authority, according to Arendt? The answer to this question, she argues, cannot possibly lie in a definition of authority sources 'in general' (Arendt 2006: 91). She therefore proposes looking at what authority was over specific historical periods and what specific sources it relied on in its original form. In so doing, she draws on the etymological origins of authority that lie in the era of the Roman Republic, in which the idea of *auctoritas* gained shape and definition. If we want to comprehend the concept of authority, she argues, we need to 'understand authority as the Romans themselves already understood it theoretically and made it part of the political tradition of the West' (Arendt 2006: 106).

In ancient Rome, Arendt reminds us, authority was attributed to the 'founding fathers', that is, to those who founded the city of Rome and laid the ground for everything else. At the heart of Roman politics, Arendt argues, stands the sacredness of foundation. The foundation was regarded as a unique historical event that could never be recreated and therefore had to be *'augmented'* – that is, to be taken forward into the present – by all future generations. In this sense, the act of foundation was regarded as binding for all things to come: 'To be engaged in politics meant first and foremost to preserve the founding of the city of Rome' (Arendt 2006: 120). Those who revive the past and augment, that is carry forward the foundation into the present, were regarded as authorities. Those endowed with authority and the competence of augmentation were the elders, the senate. The authority of the senate was therefore derived from the founders, the *auctores*, of the city of Rome.

In contradiction to power (*potestas*), which is based on contemporary people's desire for joint action and thus resides in the people, authority *(auctoritas)* has its roots in the past. The

senate's function was to make the past of the foundation act present in the life of the city, that is to *re-present* the political community's foundation. The will and actions of the people were regarded as being 'exposed to error and mistakes and therefore need "augmentation" and confirmation of the council of the elders' in the senate (Arendt 2006: 123). In so doing, the senate lent authority to political decisions. The advice of the senate was authoritative in that it bound every act and decision back to the 'sacred beginning of Roman history, adding, as it were, to every single moment the whole weight of the past' (Arendt 2006: 123). In this vein, authority in Arendt's view serves to check and limit democratic decision-making power. As Arendt argues, the dynamic principle of the democratic rule of the assemblies is stabilised by limiting democratic power through authoritative institutions, which bear the authority to give weighty advice (Straßenberger 2013: 502).

It is the augmentation of the foundational moment through various practices that produces authority in the Roman context. Authority then functions as an intermediary between its subjects and the foundational moment of the political community upon which it rests. In other words, in its Roman origins Arendt saw the source of authority as something *transcendent* in the sense of something being *unavailable*: the beginning of a political order that is unavailable to the people. The foundation of Rome was not directly available to subsequent generations. It had to be transmitted and represented by the Senate, which acted as a mediator between the senate's origins and its present actions. In this sense, Arendt's reconstruction is of key importance to the concept of authority that I propose here:

Drawing on Arendt, we can conceive of authority as reliant on something transcendent and unavailable – an outside entity – which is represented as relevant to a community's political and social relations. We can think of authority as the successful *re-presentation of something transcendent* and *unavailable.* Authority rests on something *unavailable* – as it is rooted in the foundation of a political community – as well as something *contingent* because it needs to be brought into the present, that is, it needs to be interpreted, enacted and translated with respect to present actions[43] (Schulze Wessel 2006). However, while authority hence 'rests on

[43] In her work on the American Revolution, Arendt identified the Supreme Court as the institutional space bearing authority. The Supreme Court, she argues, constantly recalls the authority of the foundation and thereby endows

a foundation that warrants its exercise' (Furedi 2013: 8), it does not directly flow from this foundational source. Instead authority 'resides in certain technologies – such as the technologies of testimony and tradition, both written and oral – which link past and present through providing partial access to the excess of the foundational moment' (Dawney 2013: 30). Hence, authority depends on different practices and technologies of representation; it must actively position itself as having privileged access to this outside and thus being able to represent this outside.

Conclusion: From Weber and Arendt to 'politico-epistemic authority'

Referring to Weber's writings and subsequent interpretations of his work, I have been able to disentangle the relationship between authority and power and legitimacy. Weber's concept of authority is deeply intertwined with, yet not synonymous with legitimacy: Authorisation refers to claiming obedience to an acknowledged superior, which is deemed desirable in order to attain the common good of a given constituency, whilst legitimation refers to claiming the correctness of the actual exercise of authority with respect to specific norms. In making this analytical distinction between authority and legitimacy, we can sharpen our view of the precarious nature of authority and study strategic acts of (self-)legitimation and de-legitimation of authority, i.e. acts of enhancing or diminishing beliefs in the legitimacy of an actor who seeks to establish or cultivate authority.

Yet, the Weberian differentiation between authority and power remains rather imprecise, since authority here is demarcated only from violence (which, according to Weber, is a form of power). If we are instead to understand power as including decision-making power backed by sanctions or incentives, Weber's distinction between authority and power loses all its meaning. I therefore subsequently turned to Arendt, who is much clearer about the distinction between authority and power. Unlike decision-making power, Arendt argues, authority is a form of guidance, council, or advice that is accepted without question. This unquestioning acceptance, she argues, is rooted in a transcendent source, an unavailable outside (such as the Roman foundational moment). An authority, then, is someone who – via the use of specific

practices and technologies – successfully positions him-/herself as having privileged access to this outside and the capacity to *represent* this transcendent outside.

Establishing politico-epistemic authority can thus be understood, similar to how Jan-Peter Voß has argued (Voß 2016), as the act of positioning oneself as an unquestioningly recognised spokesperson for a twofold transcendent outside – a specific 'external reality' (epistemic authority) and a specific political constituency's 'common good', which is shaped by this external reality (political authority). To illustrate this somewhat abstract idea, let me briefly foreshadow some empirical insights that will be presented in chapters 5 and 6 later in the thesis. As we will see there, the way both food agencies positioned themselves as politico-epistemic authorities involved a two-pronged representative claim:

- (a) an epistemic claim to the external reality of either more broadly framed questions of food policy – involving issues of safety and nutrition alike and partly even of environmental sustainability (FSA) – or to more narrowly framed questions of food safety only (BfR), and
- (b) a political claim to the relevance of this external reality for the common good desired by a specific consumer constituency – here either a more heterogeneous consumer constituency including 'citizen consumers', 'knowledgeable consumers' and 'socially excluded consumers' alike (FSA), or a more homogenous consumer constituency limited to primarily the 'health-rights bearing consumer' and the 'knowledgeable consumer' (BfR).

This notion of politico-epistemic authority hence ties in with the more recent 'constructivist-performative turn' in democratic theory, notably Michael Saward's theory of 'representative claim-making' (Saward 2010: 36) and Lisa Disch's concept of 'spokesperson' that views actors as mediators who translate and transform those represented in performing representation (Disch 2008).

Postnational governing: from unquestioned to reflexive authority?

In at least in one further important sense, I will draw on Arendt's work on authority and reconfigure it through recent conceptual contributions to further develop my concept of the politics of politico-epistemic authority. Arendt begins her contribution titled 'What is authority?' by stating that this question is basically wrong: '[I]t might have been wiser to ask

in the title: What *was* – and not what is – authority? (…) because authority has vanished from the modern world' (Arendt 2006: 91, my emphasis). Authority, she argues, has eroded in the twentieth century, where the modern 'crisis of authority' that first became apparent in the revolutions of the eighteenth century reached its climax. For Arendt, authority – the above described Roman form of auctoritas that has shaped subsequent political philosophy – is inseparably linked to the world of tradition and religion that surrounded Roman institutions (Schulze Wessel 2006). In Arendt's view, the Romans established the trinity of religion-tradition-authority[44], which became the fundamental stabilising principle of social order throughout European history to the modern era. The modern critique of this trinity, she argues, then led to the decline of authority together with tradition and religion[45]. In this 'crisis of modernity[46], the old metaphysical questions and tradition lost their meaning; authority, tradition and religion disintegrated. This form of authority is thus impossible to deploy in modernity; it 'came to an end' (Arendt 1998: 8) as modernity successfully challenged, and liquefied, every form of authority referring to a transcendent exteriority.

Thus, Arendt's writings on the vanishing of authority in the modern era reflect her idealisation of Roman *auctoritas* and of its subsequent influence on Western civilisation (Klusmeyer 2014). Nevertheless, her thesis of 'vanishing authority'[47], I argue, effectively captures the decline of the normative foundation of authority since the beginning of modernity (Furedi 2013). As Furedi puts it, the foundation of authority within (late) modernity, 'lacks the cultural depth of Arendt's concept of auctoritas[48]' (Furedi 2013: 11). In (late) modernity, authority has

[44] Arendt describes this religion-tradition-authority trinity as follows: 'The past, to the extent that it is passed on as tradition, has authority; authority, to the extent that it presents itself as history, becomes tradition; and (...) [a]cceptance of tradition without religiously based authority is always non-binding' (Arendt 2005: 73).

[45] This trinity, according to Arendt, began to vanish with the protestant reformation that initiated along secularization process and finally ruptured in the early twentieth century.

[46] For a more detailed account on Arendt's understanding of the crisis as a distinctive condition of modernity see Norberg (2011).

[47] With respect this vanishing of authority Arendt argues that 'most will agree that a constant, ever-widening and deepening crisis of authority has accompanied the development of the modern world in our century' Arendt (2006: 91). In Arendt's view, the crisis of modernity is marked by a pervasive experience of alienation, meaninglessness and the subjectification of reality (Klusmeyer 2014: 146). Thus, she argues, the crisis of authority is not confined to the domain of the political but penetrates every dimension of social experience.

[48] As outlined above, the Roman auctoritas and the constitutional arrangements of the Roman Republic based on it codified the republic's common origin as the foundation for authority.

become increasingly questioned, problematised and contested and has to constantly justify itself. It increasingly requires reflection and is no longer a taken-for-granted institution: 'Lack of certainty about the authority of authority is both an encouragement to social problems claims-making and to its contestation' (Furedi 2015: 96). Against this background, some have argued that with her notion of 'unquestioning recognition', Arendt is referring to a historical form of authority. This specific form of authority, these authors argue, could be called 'simple' or 'solid' authority. However, in the late modern world, such authority has been gradually transformed into an ever more 'fluid' and 'reflexive' form, that is, into an increasingly precarious, contested and dynamic form of authority (Simmerl & Zürn 2016; Krisch 2017; Zürn 2017; similarly also Hajer 2009a; Venzke 2015, 2016). Such reflexive and liquid authority, it is argued, is widely present in the late modern and postnational world with its multiple sites of transnational regulatory-governance, its many informal and private institutions, and its forms of 'soft' law and of network governance without a clearly defined centre. Under these conditions, authority, it is argued, is performed in a reflexive manner (Zürn 2017).

Contrary to (supposedly) self-evidently valid and 'solid' authority of the nation state[49], postnational reflexive authority is seen to be only weakly institutionalised; its conduct is instead under a constant scrutiny and opened up to contestation. As a result, Nico Krisch argues using Zygmunt Bauman's terminology (Bauman 2000), authority is, just like modernity, constantly shifting location, form and sources and has therefore become liquid (Krisch 2017). Thus, these authors argue that rather than declining, the forms of authority have changed and become more diffuse and contested. In this vein, we should not understand solid authority, on the one hand, and reflexive, or liquid authority on the other as dichotomous categories[50]. What appears more reasonable is conceiving of these two authority forms as a

[49] It is however important not to 'romanticise' the solidity of authority bound to the nation state. As Krisch rightly remarks in discussing his concept of liquid authority, the modern state has never produced authority of an entirely solid kind (Krisch 2017: 246).

[50] Also, Arendt's unquestioned recognition does certainly not mean (unlike Michael Zürn claims) blind obedience and mindless submission. By recognizing a particular hierarchical authority relation as legitimate, the subject does not lose her agency. As Matt Whitt writes, '[t]his freedom is not the "uncompromising

continuum with unquestioning recognition on the one end (solid authority) and reflexive contestation on the other (reflexive authority) allows us to explore what I call the *politics* of politico-epistemic authority.

The politics of politico-epistemic authority

When authority goes beyond being an uncontested transcendent source of legitimation, it becomes part of the realm of contingency, deliberation and justification and is thus politicised. Yet, I argue, this does not mean the end to political actors' search for authority, that is, to their attempts to become a recognised representative of a transcendent exteriority that is deemed relevant to a community's political order. Instead, I suggest that reflexive authority continues to depend on having recognised privileged access to such a legitimising 'outside' – although in a new form: the ongoing decline of more solid forms of political authority in the late-modern and postnational constellation (Furedi 2013; Zürn 2018) goes hand-in-hand with the reconstitution of its transcendent foundation in the form of an external 'objective reality' as a validation for authority. More specifically, actors draw authority from demonstrating their greater proximity to an 'objective reality' that is deemed relevant to an imagined constituency and to the realisation of its common good. In other words, reflexive authority is based on a recognised knowledge claim regarding a specific 'objective reality' (epistemic authority) and the ability to make this knowledge claim relevant for the realisation of the common good of an imagined constituency (political authority). Drawing on the above-outlined STS-inspired strands on expert authority, I argue that epistemic and political authority de facto are intertwined in the postnational constellation and thus take the form of politico-epistemic authority. From this perspective, NMIs and other expert organisations are institutional manifestations of this intertwinement. To become recognised as an authority, it is not sufficient to merely refer to one of these two transcendent resources – either to an imagined

selfsufficiency and mastership" that is sometimes associated with individual autonomy, but the freedom to act, to make new beginnings' (Whitt 2010: 33). As argued above, contrary to Zürn's still very much Weberian conception of political authority, authority in Arendt's view must not be conflated with more direct forms of power, such as joint action and decision-making power, but must be understood as, a form of power that is manifest as a particularly compelling *guidance, advice,* or *council*. The subject of authority, that is those who are advised, are not constrained in their freedom to act otherwise (see also Straßenberger 2013).

constituency and its common good, or to some kind of objective reality. It is precisely this combination and co-production of political and epistemic authority that constitutes expert authority.

In the postnational constellation, authoritative benchmarks, models and technical standards of governing play a vital role in 'constituting the intersubjective epistemic frameworks through which actors interpret and act in the world' (Miller 2007: 331). In this sense, the combination of epistemic and political authority is constitutive of authoritative governing. Where there are overlapping levels of governance and various types of actors engaged in governing, epistemic authority works on 'molding the underlying epistemic frameworks that guide the definition of problems, the classification of social kinds, and the evaluation of social behaviours' (Miller 2007: 331). Thus, in the postnational constellation, epistemic authority 'develops momentum as an independent force of collective ordering' (Voß & Freeman 2016: 5). This is not to say that epistemic authority did not play an important role for the authority and legitimacy of national 'classical-modernist' government (Hajer 2009a); it has indeed always played a central role in the production of political authority and legitimacy (Ezrahi 1990, 2004). By the same token, we cannot say that epistemic authority is an uncontested tool of late-modern postnational governance, as it appears in the rationalist and norm-oriented literature strands, which take both the instrumental value and the authority of science in the realm of policy as taken-for-granted (chapter 2). On the contrary: the point is that it is 'politico-epistemic' authority that predominates in late modern postnational politics and it is precisely the 'reflexivation' of this special type of authority that gives rise to the major controversies of postnational governing.

What is, then, reflexive about politico-epistemic authority? In what follows I argue drawing on more recent contributions on this matter that politico-epistemic authority is reflexive in three ways. *First*, to become stabilised, claims to politico-epistemic authority must be sustained by specific practices of legitimation – yet, in struggling to reconcile epistemic and political authority the respective legitimatory sources themselves become contested. *Second*, practices and institutional efforts have emerged that explicitly attempt to reconcile political and epistemic legitimatory demands; hence politico-epistemic authority has undergone a further reflexivation. *Third*, the contestedness of politico-epistemic authority and its

legitimatory sources is becoming further intensified in the postnational constellation. The postnational constellation is characterised by a multiplicity of competing knowledge orders, which make the culture-specific knowledge order that underlies specific claims to authority visible and thus contestable.

The reflexive legitimation of politico-epistemic authority 1

Reflexive authority, it has been argued, appears as 'something that can be won and lost' (Hajer 2009a: 22); it is inherently precarious and often only *pro tempore*. Claims to objective reality (epistemic authority) and the common good (political authority) indeed remain central transcendent references for those seeking authority; yet they rarely suffice to sustain authority. Actors striving to gain authority must therefore reinforce such appeals with a reference to specific sources and procedures, which testify to the validity and legitimacy of their claims – that is with *practices of legitimation* (Zürn 2017). More recent contributions, notably Strassheim (2015) and Voß (2016), have thus argued to look at the relationship between political and epistemic authority through the lens of their distinctive legitimatory claims and sources that need to be coupled to underpin claims to authority. In this vein, the following table juxtaposes epistemic and political authority and their respective legitimatory practices[51]:

[51] This list of legitimatory practices is not meant to be exhaustive. It should be noted that those mentioned here are understood as *desirable normative ideals*, and not as empirically valid sources of legitimatory practices. The legitimatory sources mentioned as justifying political authority are based on (Brown 2009; Zürn 2012a; Voß 2016; Zürn 2017). At this point, I deliberately do not frame different legitimatory resources in terms of Fritz Scharpf's canonical distinction between input and output legitimacy (Scharpf 1970). First, because the classification of legitimatory resources as either out-put, or input legitimation differs according to their theoretical underpinning (Steffek 2012). For instance, participation can be understood both in terms of input legitimacy (direct democracy), or as a form combining input and output legitimacy (deliberative democracy). We can find this variance also in empirical manifestations of different participatory practices. Second, authoritative expertise is most commonly treated as a source of output-legitimacy by scholars using Scharpf's distinction (cf. Zürn 2012a), whereas the point in my argument is that the epistemic and political authority of expertise relies on legitimatory resources in its own right. These legitimatory practices can then be framed either predominantly in terms of input-legitimacy, or in terms of output legitimacy, as will be argued in chapter 3.2. The mentioned sources of epistemic legitimacy are based on Jasanoff (2011a), Latour (1987), and Merton (1942). Like the list of political legitimatory practices, these sources of epistemic legitimacy are ideals that are not always met in practice.

	Epistemic Authority	**Political Authority**
Successfully claiming representation of…	'objective reality'	'the common good of a specific political constituency'
Legitimation by…	- Mertonian norms - methods & laboratory protocols - peer review	- participation - accountability - protection of basic rights - effective problem solving

Table 4: Epistemic and political authority, my compilation

Much of epistemic authority, understood as a successful representative claim of an objective reality, rests on the evocation of the Mertonian norms of science (Merton 1942), most notably universalism, disinterestedness, and organised scepticism[52]. Accordingly, Sheila Jasanoff writes, 'alone among major social institutions, science is believed capable of delivering a true picture of' reality (Jasanoff 1987: 196). Such epistemic authority is moreover grounded in a range of scientific procedures such as methods and laboratory protocols (Latour 1987). The quality of the knowledge produced is assured through peer review. Peer review is used to validate the epistemic quality of knowledge by applying the objective standards of a given epistemic community. Not only are peer review procedures used to demonstrate strict checks on the quality of scientific work, but also to justify autonomy and self-control when it comes to judging the truth or significance of knowledge claims.

Political authority is based on a range of legitimatory sources that serve to justify 'the normative validity of a political order' (Zürn 2012b). These include accountability, participation, the protection of basic rights and effective problem-solving (Nullmeier et al. 2012; Zürn 2012b). Participation is considered to be of great importance when it comes to legitimating political authority; it is *the* democratic principle of self-determination:

[52] According to the principle of *universalism* scientific knowledge should be evaluated on the basis of '*preestablished impersonal criteria*: consonance with observation and with previously confirmed knowledge (Merton 1942: 118, emphasis in original). *Disinterestedness* requires that scientific work is not influenced by self-interested motivations of scientists. *Organized scepticism* refers to the 'detached scrutiny of beliefs in terms of empirical and logical criteria' (Merton 1942: 126).

participation legitimises political authority in that it gives every member of a political community a say in the formation of the political will. In modern mass democracies, electoral participation is the minimal expression of the principle of participation. Beyond this minimal form, participation is used as a legitimatory practice in various forms that differ according to various democratic-theoretical ideals: in the form of interest politics (pluralist theories), direct participation (theories of participatory or direct democracy), or public deliberation, where participation serves to produce more reasonable policies (deliberative theories) (Abels & Bora 2004: 19 ff.). Similarly, accountability not only refers to the practice of rewarding or sanctioning public authorities through voting. Deliberative theorists understand accountability as a practice of 'giving an account' of the reasons underlying authoritative claims[53] (Gutmann & Thompson 1996: 128 ff.). Accountable political authority is about demonstrating that one possesses the 'potentiality of reasoned elaboration' and being recognised as such (Friedrich 1958: 35). Rationalist theories, by contrast, view accountability as a matter of control. In these theories, accountability does not serve deliberative purposes but allows for transparency and ex-post sanctioning control (Andeweg & Thomassen 2005). The principle of basic individual rights and legal equality, derived from the principle of individual autonomy, is an essential source of legitimacy (Zürn 2012a, 2017). Here again, we find at least three different theoretical understandings of how the protection of individuals' universal civil and political rights provides a crucial legitimatory source of political authority (Masso 2006: 9–12). These include: individual rights, which are seen as an expression of universal reason, i.e. as something that is in any rational citizen's will and hence a necessary external constraint to majoritarian decision-making (liberal theory); alternatively they are viewed as a necessary condition for free and equal democratic public deliberation (deliberative theories); or – with some ambivalence – either as a hidden means of protecting existing privileges, or as contingent result of political agreement to be defended, but also criticised through political and moral arguments (theories of participatory or direct democracy). Finally, from the perspective of output-legitimacy-oriented theories (Scharpf 1997) effective problem solving is a principle that is closely related to enhancing the common good of specific political

[53] Such discursive, or deliberative accountability, then, overlaps with the deliberative notion of participation (Brown 2009: 215).

community. Among the here discussed legitimatory sources, effective problem-solving is probably the one with the least scope of interpretative variation.

Yet, in the case of politico-epistemic authority, these legitimatory practices are themselves contested and precarious. This can be understood as the most basic form of reflexive legitimation, which I call *'the reflexive legitimation of politico-epistemic authority 1'*. Claiming to represent a political community and its common good is not primarily an effort to establish an objective reality. Vice versa, claiming the truthfulness of 'objective reality' is not necessarily compatible with the articulation of a political community's common will. Legitimatory practices that once had been uncontestedly recognised as valid justifications for political authority on the one hand, and those that traditionally were taken-for-granted as attestations to epistemic authority on the other hand, here must be painstakingly reconciled (Korinek & Veit 2013; Jung et al. 2014). This is why the rise of NMIs and other expert organisations in the postnational constellation as discussed in chapter 2 has not only prompted political scientists to ask legitimacy questions that go beyond (national) majoritarian institutions, but has even challenged our basic understandings of legitimate authority itself. Controversies have evolved not only around the question to which extent actors indeed fulfil certain standards of legitimacy; but increasingly also around the appropriateness of those standards themselves (Nullmeier 2010; Rosanvallon 2011; Zürn et al. 2012c).

Such reflexive legitimation of politico-epistemic authority, I argue, not only applies to international organisations and the EU, but also with NMIs on the national level, such as independent regulatory agencies that are often part of transnational regulatory networks. Compared to the classical-modernist bureaucracies described by Weber, which drew their legitimacy from their direct accountability to the political leadership, the accountability relations of these bodies are much less clear. As we have seen above, their legitimacy grounded instead in their 'independent expertise'. Yet, in the last decade the underlying assumption that there is a clear line separating expertise from political values and interests has increasingly become problematised, not only through the above outlined STS inspired research, but also in practice (Lentsch & Weingart 2011). NMIs and other expert organisations operating at the science-policy nexus are said to produce a special kind of knowledge often referred to as *policy-relevant evidence* (Straßheim 2014) or *regulatory science* (Jasanoff 1990,

2011b), which fundamentally differs from academic science. In contrast to academic science, distinct issues of legitimacy arise in regulatory science and policy relevant expertise, 'where the knowledge needed for action is rarely definitive and the safety and well-being of many lives may hang on acting in time and acting well' (Jasanoff 2011a: 20). Thus, in struggling to combine epistemic and political authority, such expert bodies operating at the science-policy nexus have to reconcile epistemic and political legitimatory sources: they 'must be responsive to normative as well as cognitive demands' (Jasanoff 2011a: 21). These expert bodies hence attempt to be as the voice of the people and of science and therefore rely on a contested and inherently precarious set of legitimatory practices. They cannot readily rely on Mertonian scientific norms and demonstrate quality assurance through peer review to reinforce their epistemic authority: the Mertonian norm of disinterestedness, for instance, is in conflict with the demand that experts operating at the science-policy nexus are aware of the social implications of their work. Moreover, there is often a lack of established disciplinary conventions that could be applied in peer review to ensure that methodological standards are met (Jasanoff 2011a: 24). Thus, 'the guidelines for validating science in the regulatory context tend to be fluid, controversial, and arguably more politically motivated' (Jasanoff 1990: 79). Vice versa, they cannot readily rely on the above mentioned classical legitimatory practices to reinforce their political legitimacy but are confronted with fundamental controversies over the criteria of legitimacy justifying their authority. Notably, they face a general trade-off between allowing for public participation on the one hand and entertaining suspicion of being instrumentalised by individual interests and perspectives and losing their epistemic legitimacy on the other hand. Thus, one of the crucial issues expert bodies must deal with in their search for authority is related to the way in which the legitimatory sources of political and epistemic authority are reconciled. Taken together, these dynamics can be called the 'reflexive legitimation of politico-epistemic authority 1'.

The reflexive legitimation of politico-epistemic authority 2

Against this background, there have been various efforts to mediate different epistemic and political legitimatory demands in the last decade. These efforts could be called the *'reflexive legitimation of politico-epistemic authority 2'*, in the sense that they explicitly refer to the

ways in which the practices of reflexive legitimation 1 become the subject of reframing and institutional reform. Reflexivation 2 proceeds in a way that has been described with reference to the dialectic process of politicisation or democratisation on the one hand and the simultaneous scientisation of policy expert arrangements on the other hand (Maasen & Weingart 2005). With respect to the former, several authors have observed the establishment of what has been termed 'democratic experimentalism' (Dorf & Sabel 1998), that is, the testing of new participatory procedures and institutional designs and their incorporation into science advice processes and institutionalised expert arrangements (Abels & Bora 2004; Abels 2009). The repertoire ranges from stakeholder dialogues, citizen juries, and consensus conferences to focus groups. At the beginning of the 1990s, there was the hope that the establishment of such participative and deliberative arrangements would serve as a mechanism to guarantee not only the epistemic but also the 'political robustness' of scientific expertise (Einsiedel et al. 2001; Bäckstrand 2003; Maasen & Weingart 2005; Irwin 2006; Wynne 2006; Fischer 2009). Thus, these efforts are directly related to the demand to mediate between expertise and political legitimacy in a way that allows for 'democratise expertise' (Liberatore & Funtowicz 2003; Nowotny 2003; Maasen & Weingart 2005). They claim to provide a democratic procedure ensuring that knowledge claims are made for the common good of a political community.

In parallel, however, there has been a development pulling into the other direction, that is the scientisation of policy expertise. This development involves the 'evidence based policy movement' (Nutley et al. 2009) and a series of institutional and legal reforms aiming at the more stringent application of 'sound science' in risk assessment (Irwin 2006). Evidence-based policy making goes back to the rationalist tradition of policy studies. Yet, it was revised in the late 1990s and the early 2000s with a range of initiatives by the New Labour government in the UK. Here, evidence-based policy making was revived as a 'normative theory of policy choice', suggesting that 'policy decisions should always be based on the best available evidence[54]' and from there spread to the EU and around the OECD (Kay 2011: 236). Evidence-

[54] Some argue that the evidence-based policy making movement is characterised by its emphasis on evidence from the evaluation of policy implementation (Tenbensel 2004) whilst others use the term in a more broader way (Straßheim & Kettunen 2014).

based policy-making predominantly assumes a linear model of expertise, according to which scientific and quasi-scientific methods and techniques, such as cost benefit analysis, are strictly separated from political consideration and 'speak for themselves' (Straßheim & Kettunen 2014). Likewise, regulatory decisions continue to be justified exclusively in terms of scientific risk assessment, which is especially true for the field of European Union risk regulation in public health and environment protection (Weimer & Ruijter 2017). Notably through the development of explicit policies or guidelines for policy makers, the evidence-based policy and 'sound science' risk assessment movement attempts to integrate systematic, science-based procedures of knowledge production within policy-making and regulation (Davies et al. 2000; Tenbensel 2004).

Summing up, reflexivation 2 is characterised by 'a set of schizophrenic institutional reconfigurations designed to both reaffirm the authoritative role of "sound science" in 'evidence based' decision-making (…) whilst at the same time presenting scientific institutions as the transparent, accountable and authentic brokers of public deliberation (Chilvers & Kearnes 2016: 7). However, efforts to democratise expertise and efforts to scientise policy advice and decision-making have both become contested. Rather than opening up debates to a wide range of problem frames, participatory procedures in science advice sometimes constrain the room for truly critical debate and dissenting positions in assessing risks. With their strong bias towards finding consensus through 'rational' argument, they are viewed as a stabilising the interpretive power of 'deliberation experts' that emerge as a new type of expert in the context of such arrangements (Elam & Bertilsson 2003; Braun et al. 2010). Similarly, in response to the institutionalisation of models of evidence-based policy making and scientific risk assessment the underlying hope of rationalising policy-making has been quickly disappointed as new controversies over the intertwinement between science and policy emerged (Straßheim & Kettunen 2014).

The reflexive legitimation of politico-epistemic authority 3

As argued above, although contested and precarious, objective reality and the common good of a specific political constituency remain central anchors in claiming authority in late modern postnational governing. Yet, different actors have varying abilities to demonstrate their

proximity to these transcendent outsides. Politico-epistemic authority, accordingly, 'rests on the assumption that knowledge and expertise are unequally distributed, but that there is a common epistemological framework that allows us to judge this inequality' (Zürn et al. 2012c: 86). Thus, an underlying accepted knowledge order defines the criteria according to which politico-epistemic authority is attributed (or not) to certain knowledge claims. In the postnational constellation, there are, however, competing knowledge orders among different levels of governance, across different countries, societal sectors and networks (Jasanoff 2013; Straßheim 2013; Jung et al. 2014; Straßheim & Kettunen 2014; Winickoff & Mondou 2017). Against this background, we can observe a third form of reflexivation of politico-epistemic authority. As Holger Straßheim points out, 'the practices of objectivation, and the foundations of expertise and evidence vary to a large extent between different countries. While this might in itself be less problematic, it has become an issue of contestation with the growing influence of globally active science-policy organisations' (Straßheim & Kettunen 2014: 260). This is particularly true for risk assessment in many transnational policy domains, where attempts to harmonise standards across national borders pit alternative cultures of producing recognised expertise at the science-policy nexus against each other (Jasanoff 2013). As Silke Beck and others have shown, the Intergovernmental Panel on Climate Change (IPCC), which has served as a pioneer in such global assessments, faces intense controversies prompted by competing models of expertise resulting from the national 'civic epistemologies' (Jasanoff 2005: 255) of its constituent member states, that is, culturally specific ways of knowing (Beck 2012). Further well-known examples of such efforts to produce and validate global expertise are the Millennium Ecosystem Assessment (MA) and the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) (Beck 2015). Outside of the fields of global environmental and climate policy, the Codex Alimentarius Commission (Codex) is a key site in global food risk assessment (Winickoff & Bushey 2009). In attempting to incorporate diverse national (or regional) cultures of producing and validating what counts as policy relevant expertise, these international knowledge institutions form spaces of 'epistemic hybridity (…) where the boundaries between science and politics are subject to constant contestation' (Mahony 2015: 155). Moreover, Sheila Jasanoff argues, if such bodies succeed in producing and validating global assessments that gloss over the different epistemic cultures of their members, more often than not, these are 're-embedded in nation specific institutional

contexts and re-performed by national actors playing to local civic epistemologies' (Jasanoff 2012: 10).

Summing up, regulatory science being increasingly conducted within transnational, polycentric and multi-level governance networks engenders a visible overlap of and competition between multiple knowledge orders in a range of policy fields from climate change to food safety. As a result, '[r]egulatory science is often a focal point of conflict' (Winickoff 2015: 174). The *'reflexive legitimation of politico-epistemic authority 3'* hence precisely consists in the fact that its underlying knowledge order is constantly challenged by alternative knowledge orders within complex, decentred, overlapping, multi-sectoral and multi-level modes of postnational governing. Here 'the process of legitimation becomes reflexive as well, and conflicts over which justification is appropriate' arise (Zürn 2017: 20).

Conclusion: the politics of politico-epistemic authority in the postnational constellation

I have argued that we can draw in one further important sense on Arendt's writings on authority, power and legitimacy. Based on Arendt's thesis of the decline of authority in modernity, I specified what precisely constitutes the recently debated forms of 'reflexive', 'fluid', or 'liquid' authority in the postnational constellation: When authority goes beyond being an uncontested transcendent source of legitimation, it becomes part and parcel of what I call the *politics* of authority: reflexive authority continues to depend on such a legitimising outside, yet a specific external 'objective reality' increasingly serves as a transcendent source validating authority alongside the transcendent source of an imagined constituency and its common good. Reflexive authority, then, is based on a recognised knowledge claim regarding this objective reality (epistemic authority) and the ability to make this knowledge claim relevant for the realisation of the common good of an imagined constituency (political authority). Thus, to become recognised as an authority in the postnational constellation, actors have to successfully demonstrate their privileged access to and their competence as spokespersons for both of these transcendent outsides. Yet, representing a political community and its common good is not primarily an effort to establish an objective reality. Vice versa, claiming the truthfulness of 'objective reality' is not necessarily compatible with the articulation of a political community's common will. What is more, as I have shown, in the

postnational constellation, the reconciliation of epistemic and political authority is an extremely demanding undertaking, because it is characterised by a threefold reflexivation of the legitimation of politico-epistemic authority. First, both legitimatory practices that were once clearly defined as valid justifications for political authority and legitimatory practices that were traditionally taken for granted as attestations to epistemic authority, here undergo a process of problematisation, reinterpretation and contestation. Second, in reaction to this reflexivation of political and epistemic legitimatory practices of authority, they have become the subject of reframing and institutional reform aiming at the democratisation and the simultaneous scientisation of policy expert arrangements – which, however, have been and continue to be contested. Third, the postnational polycentric and multi-level governance system engenders a visible overlap and competition between the context-specific knowledge orders underlying a particular form of legitimising politico-epistemic authority. Here, the legitimation of politico-epistemic authority is constantly challenged by alternative knowledge orders and their inherent modes of legitimation.

Consequently, the production and cultivation of politico-epistemic authority of NMIs operating in the postnational constellation is a precarious undertaking. To be recognised as legitimate expert authorities, NMIs need to continually manufacture, re-establish, and reconfigure the bases of their authoritative claims, which are themselves contested. However, understanding politico-epistemic authority as reflexive authority does not mean that NMIs do not pursue strategies that allow them to solidify (at least pro tempore) their expert authority. Quite the contrary: if we examine emergent authorities in these terms, we may distinguish certain repertoires of practices that differ in their capacity to generate more solid or more liquid expert authority. I will conceptualise such practices of manufacturing and sustaining politico-epistemic authority in further detail in chapter 3.3. Yet it is important to first introduce the concept of ‘knowledge orders’ in a more precise and systematic way.

3.2 Knowledge Orders

Now that I have thoroughly explained ‘the politics of politico-epistemic authority’, which is my main explanatory problem, I will address the concept of ‘knowledge orders’ in more detail. As we have seen in chapter 2.4, knowledge orders is a crucial concept in culturalist

explanations of politico-epistemic authority. From a culturalist perspective, the creation and maintenance of politico-epistemic authority is a matter of social reproduction (or transformation) of collective knowledge orders. The previous section has highlighted how politico-epistemic authority becomes contested in the postnational constellation: the overlap and competition between multiple knowledge orders makes the traditionally taken-for-granted knowledge orders that underlie hitherto solidified politico-epistemic authority visible and contestable. Moreover, I have argued that it is far from clear how, precisely, different elements of national and transnational knowledge orders are combined by actors seeking politico-epistemic authority in the postnational constellation.

In what follows, I will argue that the dynamics between multiple knowledge orders in the postnational constellation and their manifestation in authorisation practices can be empirically explored using a more specified concept of knowledge orders.

Knowledge orders at the science-policy nexus

So far, I have, drawing on culturalist approaches, defined knowledge order as a deeper layer of symbolic rules and knowledge structures that provide actors with a supra-individual social reality and that function as rules for meaningful action. As such, knowledge orders also contain the basic premises according to which epistemic and political authority are attributed and legitimated in a given context; they hence enable specific actors to be recognised as authoritative experts or constrain them in their attempts to do so. This understanding of knowledge orders thus assumes that politico-epistemic authority is attributed to specific actors on grounds of a specific knowledge order; these actors are then recognised as experts within the scope of this knowledge order.

In this view, then, knowledge orders function as the central explanans of expert authority: if, due to the constant competitive struggles taking between different knowledge orders at multiple sites, a change occurs in a knowledge order that had been temporarily dominant, a consequent change occurs in the attribution of expert authority. Vice versa, the persistence of specific ways of creating of politico-epistemic authority results from (and at the same time in) the persistence of a given knowledge order. As Sheila Jasanoff writes of this explanatory logic,

it is '[t]hrough repeat performances of practices such as regulatory review, a political culture's commitment to a specific form of objectivity is continually reaffirmed' (Jasanoff 2011b: 323).

In the existing literature, there is an increasing number of terms conceptualising knowledge orders. These range from *knowledge/epistemic cultures* (Knorr-Cetina 1999) and *knowledge/epistemic regime*s (Wehling 2007; Böschen 2016) to the already mentioned *civic epistemologies* (Jasanoff 2005). These different concepts mainly differ in the level they address: (1) the concept of knowledge or epistemic cultures addresses the *micro-level* of 'those amalgams of arrangements and mechanisms … which, in a given field, make up how we know what we know' (Knorr-Cetina 1999: 1); (2) the concept of knowledge or epistemic regimes addresses – *at the meso-level* – the 'structured and (more or less) stabilised relation between practices, rules, principles as regards handling knowledge and different knowledge forms within a specific issue area' (Wehling 2007: 704 my translation); (3) the concept of civic epistemologies addresses the *macro-level* of '*institutionalised* practices by which members of a given society test and deploy knowledge claims used as a basis for making collective choices' (Jasanoff 2005: 255), my emphasis).

Based on the previous discussion of politico-epistemic authority, I define knowledge order as the *discourses, institutions, and practices that constitute the basic premises according to which both the competence to know a given objective reality (epistemic authority) and the competence to make this knowledge relevant to a specific political community and the realisation of its common good (political authority) is attributed and legitimated*. As such, the term 'knowledge order' used here not only encompasses the nested social layers at which knowledge orders are realised and (re)articulated (see below); it is also used to denote a specific type of social order.[55] When using the term knowledge order, I only use this notion to refer to the social order according to which the privileged epistemic authority of specialised knowledge and its relevance for a specific political collective is attributed in and through institutions, discourses and practices operating at the nexus between science and policy (Jung

[55] Thus, based on this specification, the term of knowledge order here is not used synonymously with social order. This distinction is of course only an analytical one. There is no knowledge order without a corresponding social order; vice versa there is no social order without an underlying knowledge order (Reckwitz 2002).

et al. 2014). Thus, this concept of knowledge orders focuses on the mechanisms and arrangements by which knowledge comes to be framed and recognised as authoritative expertise – and by which the actors producing this knowledge are acknowledged as experts – at the science-policy nexus.

As has been set out in the previous chapter regarding the threefold reflexivation of politico-epistemic authority, the postnational constellation is characterised by an increasing plurality of knowledge orders rather than by a single knowledge order. Therefore, I will subsequently use this term in the plural and speak of knowledge orders. Contrary to what the term knowledge *order* might suggest, knowledge orders here are understood as inherently contested and precarious, requiring careful work in order to be (temporarily) stabilised.

The nested levels of knowledge orders

As mentioned above, knowledge orders manifest themselves and are continually renegotiated at different social levels. In the following, I draw on the metaphor of an 'onion model' to offer a nested perspective on knowledge orders, as has been similarly suggested elsewhere (Korinek & Veit 2013; Jung et al. 2014). From this perspective, different layers of knowledge orders are nested in each other. At the macro-level, the outermost 'onion shell', knowledge orders take shape as discourses renegotiating the science-policy relationship and the relation between epistemic and political authority. At the meso-level, the middle onion shell, a dominant science-policy discourse is temporarily 'fixed' in formal institutional arrangements at the science-policy nexus. At the final micro-level, the innermost onion shell, the discursive and institutional attributions of politico-epistemic authority are enacted and performed in practices of authorisation and legitimation. And it is in these microprocesses that discursively and institutionally grounded attributions of politico-epistemic authority become either reproduced or transformed. Within this nested perspective on knowledge orders all levels are intertwined; their inter-relation is complex. However, for analytical purposes, it is sensible to avoid overemphasising the labyrinthine complexity of knowledge orders. Instead, it is useful to extract from the fuller reality of knowledge orders and to depict the inter-relations between the different levels in broader brushstrokes, as illustrated by the following figure:

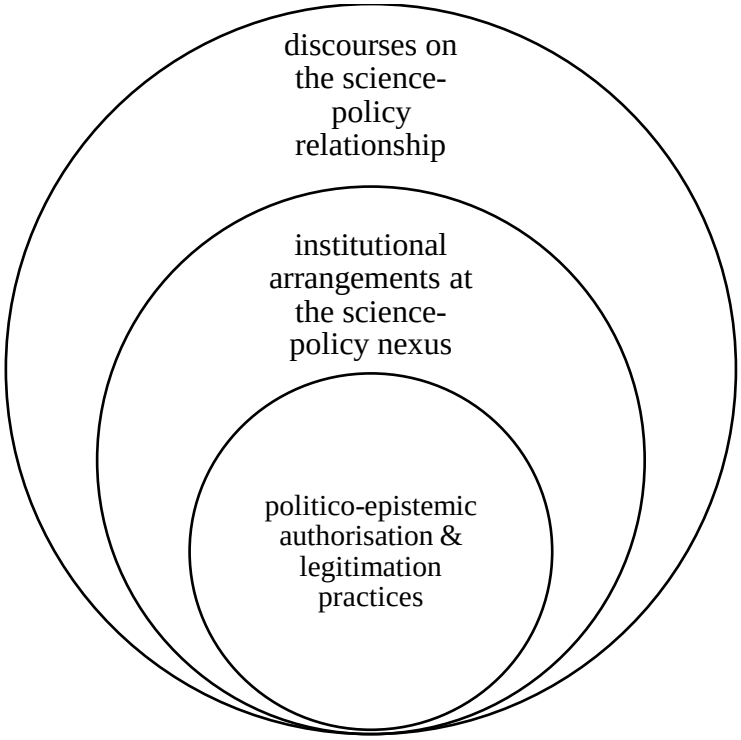

Figure 1: The' onion model' of nested levels knowledge orders, my compilation

By categorising discourses as macro-level phenomena, formal institutional arrangements as meso-level phenomena, and practices as micro-level phenomena, my intention is not to maintain the micro-macro dualism that has rightly been rejected as constituting a false idea of natural scales (Latour et al. 1988; Latour 2005). Rather, I use this distinction in order reveal how supposedly macro-level phenomena such as a 'knowledge order' transcend different levels and for how knowledge orders are actually made and remade across these interwoven levels. Conceiving of knowledge orders in their nestedness means putting a special emphasis on the way in which micro-practices, meso-institutional arrangements and macro-discursive formations act together in actors' attempts to gain politico-epistemic authority.

Varieties of knowledge orders

The nested model helps to highlight the fact that we can only speak of a knowledge order – in the sense of a specific dominant order – if a specific way of ascribing political and epistemic authority manifests itself across all three levels. Based on the previously introduced differentiation between authorisation and legitimation, we can distinguish between ideal-

typical patterns of meaning, which form four 'varieties of knowledge orders' at the science-policy nexus, as Holger Straßheim has argued:

authorisation / legitimation	hierarchical	heterarchical
input-oriented	decisionistic (1)	advocatory (3)
output-oriented	technocratic (2)	rationalistic (4)

Table 5: Varieties of knowledge orders (Straßheim 2013: 80)

Regarding the *dimension of authorisation*, we can differentiate between a hierarchical and a heterarchical mode of authorisation[56] (Bora 2001; Straßheim 2013; Jung et al. 2014). As I have argued above, authorisation practices at the science-policy nexus are always based on a coupling of two transcendent referents – a specific objective reality and a political community's common good. In this sense, all authorisation practices are 'multi-referential'. However, they differ from each other in how they relate to these two representative claims. On one hand, there is a clear prioritisation of the epistemic (or political) transcendent referent and thus a hierarchical relationship between the claim to represent objective reality and the claim to represent a political community's common good. On the other hand, such hierarchisation is lacking, and therefore, various horizontal or heterarchical relations between the two representative claims underlie authorisation practices. Regarding the *dimension of legitimation* we can – based on Fritz Scharpf's two forms of legitimacy – differentiate between input-oriented and output-oriented legitimatory arguments[57] (Scharpf 1997; see also: Zürn

[56] This analytical distinction reconfigures the differentiation theoretical concept of 'the multireferentiality of organisational communication' (Bora 2001).

[57] In recent years, the concept of 'throughput' legitimacy has gained prominence in the literature. As procedural legitimacy concerning the quality of governance processes, it is said to complement Scharpf's input and output legitimacy as a third dimension (Bekkers & Edwards 2007; Schmidt 2013). Yet, there is no consensus about what precisely throughput legitimacy is about. While some see the transparency of political institutions and processes as crucial for throughput legitimacy (Haus 2014), others emphasise the quality of deliberation (Papadopoulos & Warin 2007). The most general definition has been proposed by Vivien Schmidt, who understands throughput legitimacy as that 'what goes on inside the "black box" of (…)governance, in the space between the political input and the policy output' (Schmidt 2013: 5). Yet, I argue that procedural legitimatory

2012a; Straßheim 2013; Jung and Korinek 2012). In the case of input-legitimacy, the attribution of politico-epistemic authority is justified with reference to the authentic preferences of the members of a political community. Expertise gains legitimate epistemic and political authority if it is framed as *'expertise by the people'.* Input-oriented justifications are based on the idea of participation, be it through elections, direct participation, or deliberation. These practices lend input legitimacy to authorisation claims insofar as they are regarded as aggregating citizen's preferences without distortion (Scharpf 1997: Chapter 7). Yet, as I have argued previously, in the case of the politico-epistemic authority of NMIs and other expert institutions operating at the science-policy interface, such input-oriented practices are limited in their capacity to prove legitimate authority. Therefore, input-legitimacy here is complemented, or even substituted, by output-oriented legitimatory practices. While in the case of input-oriented legitimacy, the attribution of politico-epistemic authority is justified based on a political community's authentic preferences, output-oriented legitimatory practices justify authority by invoking the effectiveness of policy instruments. Expertise gains legitimate epistemic and political authority if it is framed as *'expertise for the people'.* Legitimacy is derived from the problem-solving capacity of specific measures.

Hierarchical authorisation assumes that the tense relationship between epistemic authority and political authority can only be reconciled by establishing a clear hierarchy of two representative claims[58]: Within this, there are two basic modes (1) On one hand, authorisation is primarily based on a claim to common good of a specific political community, while claims

practices, such as transparency and deliberative quality, are still framed either predominantly in terms of input legitimacy or in terms of output legitimacy in their concrete institutionalisation. Transparency and deliberative quality are certainly something that traverses both input and output legitimacy but is still subordinated to one of the two dimensions in their concrete institutionalisation. Thus, I understand throughput legitimacy as a subdimension either of input or of output legitimacy, rather than a separated dimension of legitimacy (for a similar argument see (Steffek 2015). From this view then, we could only think of throughput legitimacy as a separate dimension of legitimacy if a predominant (input- or output-oriented) framing was lacking. From this follows a particular empirical sensibility in terms of the concrete framing of procedural legitimacy.

[58] Underlying this assumption are models of the science-policy relationship that presuppose a primacy either of science or of politics as are well known from Jürgen Habermas' work and that I have already briefly discussed in (chapter 2). As Holger Straßheim has summed it up, while decisionistic and technocratic models assume the need (and the possibility in principle) of a clear demarcation between the supposedly incompatible worlds of science and policy, they collide in the course of producing policy relevant expertise at the science-policy nexus. This collision, then, can only be resolved through the primacy of politics (decisionism), or through the primacy of science (technocracy) (Straßheim 2013: 80).

to represent a specific 'objective reality' play a secondary role. Such politico-epistemic authority is justified on the grounds of input-oriented legitimatory practices. Here we can speak of a dominant decisionistic knowledge order. (2) On the other hand, authorisation is primarily based on a claim to represent an objective reality, while the representation of the common good of a specific political community is subordinate to this reality. Such politico-epistemic authority is justified on the grounds of output-oriented legitimatory practices. Here, we can speak of a dominant technocratic knowledge order.

Heterarchical authorisation, by contrast, assumes that the tense relationship between epistemic authority and political authority can only be reconciled by an 'intensification of boundary transaction' through 'productive reciprocity and meaningful communication' (Hoppe 2005: 204–208). Thus, there is no hierarchy between claims to represent an objective reality and a constituency's common good. Here again, there are two possible modes: (3) On one hand, such heterarchical authorisation is justified on the grounds of input-oriented legitimatory practices. Here, we can speak of a dominant advocatory knowledge order, in which science, like politics, is considered to be 'part of the regular political struggle over which view wins out in defining the public interest' (Hoppe 2005: 210). (4) On the other hand, such heterarchical authorisation is justified on the grounds of output-oriented legitimatory practices. Here, we can speak of a dominant rationalistic knowledge order, in which science, together with politics and society, is engaged in a process of reason-based deliberation with the aim of achieving consensus.

The Knowledge Order Cycle

Knowledge orders constitute both the framework that guides the attribution of expert authority *and* the temporary result of social action that made a specific body of knowledge authoritative. They are both structured and structuring[59]. Knowledge orders are the product of practices and discourses of authorisation and legitimation at the science-policy nexus. At the same time, they constantly structure authorisation and legitimation practices in that they shape the discourses, institutional arrangements and practices through which politico-epistemic authority is generated.

In the perspective adopted here – as should have become clear above – the structural effects of knowledge orders should not be understood in a static sense: even if a specific – decisionistic, advocatory, technocratic, or rationalist – knowledge order is dominant, it is not static but only temporarily stable. It is constantly being both restabilised and transformed (Jung et al. 2014). Knowledge orders are continually respecified in varying contexts and at various levels; here they are called into doubt and reassessed[60]. These continual re-specifications can either come in the form of smaller situational adjustments that further stabilise a specific knowledge order, or in the form of larger ones that incrementally or radically transform a dominant knowledge order.

Based on the existing literature on reflexive authority, I have argued in the previous chapter that the (re)ordering of knowledge orders in the postnational constellation involves two opposing modes; scientisation and politicisation. To gain a deeper understanding of these (re)ordering processes, we can, according to Jan-Peter Voß, understand scientisation and politicisation as two basic forms of (re-)reframing[61] (Voß 2018). In a *political* framing, he argues, 'the concern is with the relations of diverse values and interests and how innovations affect the "common good"'. In an *epistemic* framing, by contrast, 'the concern centres on

[59] This dialectical perspective on knowledge orders goes back to Anthony Giddens' structuration theory (Giddens 1984).
[60] The idea of such a knowledge order circle is based on Berger's and Luckmann's circular relationship between internalisation, objectification, and externalisation of knowledge orders (Berger & Luckmann 1967).
[61] Jan-Peter Voß in fact speaks of epistemic and political 'reflexivities' in this context, and I agree that the (re-)framing processes are reflexive in the sense that they guide 'the ways in which collective ordering processes are observed, problematized and shaped' (Voß 2018: 303).

factual conditions, functionality and potentials to optimize effectiveness and efficiency' (Voß 2018: 303). With regard to the concept of knowledge orders proposed here, reflexivation refers to the processes in which specific attributions of authority at the science-policy nexus become an object of observation, analysis, justification and critique.

The re-ordering of knowledge orders is hence expressed in a dynamic, in which epistemic (technocratic or rationalistic) and political (decisionistic or advocatory) reflexivations of the science-policy nexus become temporarily stabilised and institutionalised before once again becoming the subject of reframing (Voß 2018). From this perspective, a rationalistic knowledge order undergoes political reflexivation by being questioned and challenged on the grounds of value-based claims to the common good, while an advocatory knowledge order becomes epistemically reflexivised by being problematised with respect to factual conditions and functionality. It is important to note, however, that changing knowledge orders can be manifested not only in the 'full' replacement of the dominant knowledge order by an alternative knowledge order, but also in subtler forms: in the appearance of an alternative knowledge order challenging the existing one, or in the reconfiguration of a knowledge order from new combinations of different elements of alternative knowledge orders.

When considering this duality of stabilisation and transformation, we can also think of nested knowledge orders as a circular relationship, as the following figure 2 (next page) shows. Knowledge orders are contested configurations based on (decisionistic, advocataory, technocratic, rationalist) premises according to which the tense relationship between epistemic and political authority is – temporarily – reconciled, attributed and legitimised at the science-policy nexus. They are manifest at different and interwoven levels (discourse, formal institutional arrangements and practices), where they are either stabilised or by either political or epistemic frames.

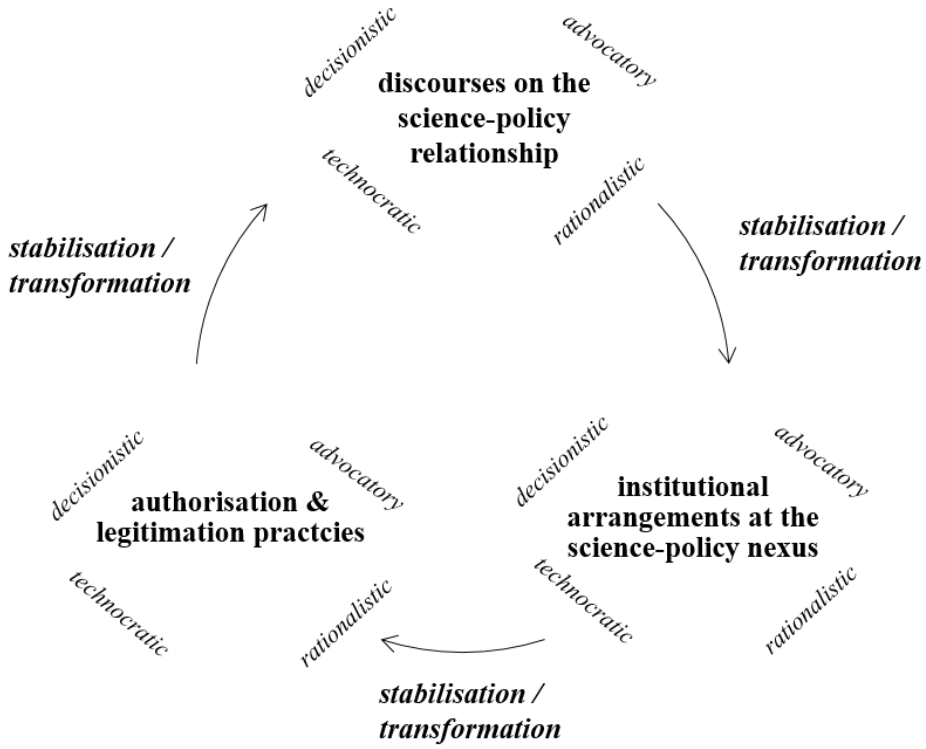

Figure 2: The knowledge order cycle, my compilation

Embedded knowledge orders

Knowledge orders are, for their part, embedded in institutional-cultural and discursive contexts at multiple and interwoven levels of the postnational constellation (national, supra- and international). In recent decades, research on the relationship between politics and (scientific) expertise – be it in the literatures of comparative public administration or of STS – has given rise to an increasing number of classifications and typologies conceptualising this contextual embeddedness. Since the 1980s, comparative research has revealed that nationally specific politico-administrative institutions and cultures of expertise shape how the relation between science and policy in regulatory politics is conceptualised (Brickman & Jasanoff 1980; Brickman et al. 1985; Jasanoff 1986; Wagner & Wollmann 1986; Wittrock 1991a; Wittrock et al. 1991b; Renn 1995; Halffman 2005; Jasanoff 2005). In his well-known comparison of three styles of using (scientific) expertise and policy advice in Japan, the US, and Europe, Ortwin Renn (1995) distinguishes between an adversarial or pluralist style

(USA), an embodied or service-based style (Great Britain), and a corporatist style (Germany, Sweden, and to some extent the Netherlands). Similarly, Willem Halffman (Halffman 2005) differentiates between different modes of demarcation and coordination between policy and (scientific) expertise that are embedded in 'national styles of regulation'. The best-known typology is Sheila Jasanoff's comparison of civic epistemologies in the USA, Great Britain, and Germany (Jasanoff 2005, 2011b). Based on a set of categories that has been systematically extended over recent years, she compares the cultural assumptions on accountability, objectivity, and expertise that characterise 'the institutionalized practices by which members of a given society test and deploy knowledge claims' (Jasanoff 2005: 255). Jasanoff shows that these nation-specific civic epistemologies reflect both 'institutionally sanctioned modes of action, such as litigiousness in the United States, but also the myriad unwritten codes and practices with which a polity supplements its formal methods of assuring accountability and legitimacy in political decisionmaking' (Jasanoff 2005: 21).

Such typologies are a major step in developing a deeper understanding of the contextual embeddedness of knowledge orders and the practice (reproducing) them. With respect to the above outlined ideal-typical varieties of knowledge orders they can, for instance, account for why we can more often observe patterns of a technocratic knowledge order in the contentious US style of policy-making, than in the British communitarian or in the German consensus-seeking regulatory style (Jasanoff 2005, 2011b). Yet, when it comes to studying possible convergences between countries, which are strongly associated with rapidly increasing international and supranational harmonisation processes in risk regulation and the rise of 'global knowledge-making institutions' (Miller 2007), these typologies are, I argue, of a limited analytical value (see also Ezrahi 2004; Halffman 2005; Hoppe 2005; Jung et al. 2014). In the context of the postnational constellation, in which, as I have argued above, the grounds on which expert authority is conferred and legitimated are precarious and contested in multiple ways, it is important to take a somewhat modified perspective on contextual embeddedness. It more useful to shift analysis away from stable and monolithic national institutions and 'styles of public knowledge making' (Jasanoff 2005, 2011b) to practices by which institutions are enacted and thereby constantly reproduced and modified.

The perspective developed here hence refrains from treating institutional-cultural and discursive contexts as rather stable and monolithic. Instead it focuses on the heterogeneity of institutions and discourses and argues that national actors striving for politico-epistemic authority selectively and creatively draw on both different nation-specific institutional-cultural elements and various features of supranational and international institutions and discursive formations. Unlike most institutionalist approaches in comparative political science, this perspective regards the structuring force of politico-administrative institutional arrangements and their interplay with supra- and international contexts as something that must be accomplished and enacted in practice rather than something that just is. Thus, I will not presume which specific context factors of multi-level postnational governance shape knowledge orders, institutional science-policy arrangements and the authorisation practices embedded within them. Instead, I suggest leaving the question of whether and how specific *national* and/or *supra- and international* political discourses, institutions and cultures of expertise are implicated in forming authoritative claims at the science-policy nexus open for empirical investigation.

Summing up, a specific knowledge order variant is dominant if the attribution of politico-epistemic authority follows a specific. Knowledge orders are contested configurations of symbolic rules and structures based on (decisionistic, advocataory, technocratic, rationalist) premises according to which the tense relationship between epistemic and political authority is reconciled and legitimised at the science-policy nexus. They are manifested at different and interwoven levels (discourse, formal institutional arrangements and practices), where they are either stabilised or transformed on the grounds of either political (decisionistic, advocatory) or epistemic (technocratic, rationalistic) reflexive framings. In this sense, the politics of politico-epistemic authority is structured by knowledge orders but also simultaneously structures it. Knowledge orders are embedded within and structured by the interplay between politico-administrative discursive institutional-cultural contexts at multiple levels (national, supranational and transnational). Within this multi-level institutional context, knowledge orders are shaped by processes of disembedding and re-embedding, in which temporarily stabilised patterns of attributing politico-epistemic authority become reflexivised. This requires us to look at the *practices*, which enable actors in the postnational constellation to

borrow, adapt and translate elements of different institutional and discursive contexts in order to legitimise their claims to politico-epistemic authority in the multi-layered contexts in which they operate. From this perspective, then, there is only a *preliminary* dominant knowledge order; knowledge orders are always in the process of being adapted and revised to take account of the different institutional and discursive contexts of the complex, multi-level modes of postnational governing in which they are embedded. The following figure illustrates these lines of argument:

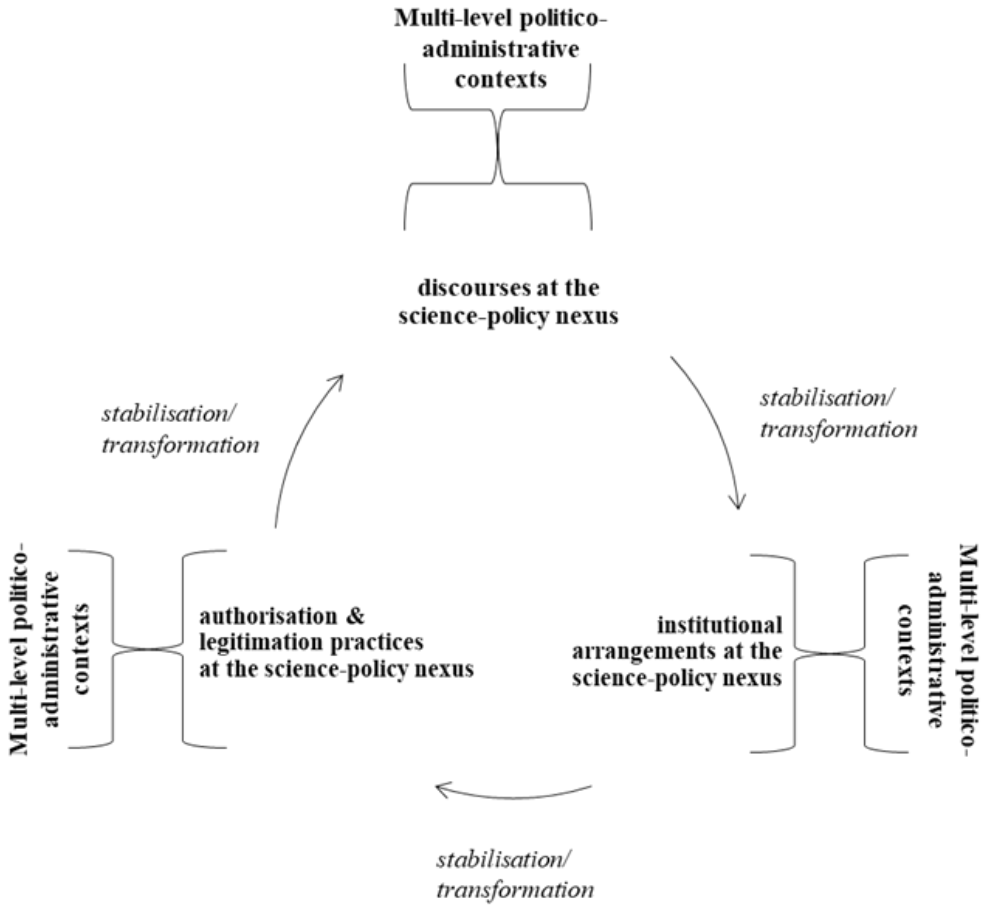

Figure 3: Embedded knowledge orders, my compilation

3.3 Practice

Having developed the concepts of politico-epistemic authority and knowledge orders, I now turn to the third concept making up my theoretical framework, namely practice. While, as argued above, knowledge orders are manifested at different levels – discourses, formal institutional arrangements, and practices – the practice level is at the centre of the practice-based approach to the politics of politico-epistemic authority developed here. Specifically, I refer to the concept of translation (Callon 1984; Latour 1987, 2004), which I have already very briefly introduced as the discursive and material micropractices through which authoritative expertise is produced (chapter 2.4). As I have argued, using the lens of translation allows us to focus on the intricate nitty-gritty practices of coproducing epistemic and political authority at the science-policy nexus and the way in which these draw on deeply rooted cultural norms and practices. In what follows, I will firstly explore this STS-based variant of practice theory and the concept of translation, and second, introduce three dimensions in which translation practices unfold.

The conceptual foundations of practice as translation

The notion of translation as a social practice was developed by STS scholars in the 1980s, notably Michel Callon, Bruno Latour, and John Law (Callon & Latour 1981; Callon 1984; Law 1986b). In developing the concept of translation, these authors drew on the semiotician and narrative theorist Algirdas Greimas (1990), who showed that narratives consist of several 'actants', that is, different story elements, such as a sender, a receiver, a hero, a helper, an antihero, or a villain. However, from the perspective of translation, these lack specific agency and facticity until the author invokes them in an act of configuration within a storytelling plot. The concept of translation, which later also became known as actor-network theory (ANT), took over the term 'actants' and generalised it to encompass both actors and material things and objects. Actants are human and non-human entities (e.g. objects, technical devices, or animals) that come into being when they are translated into relations and narratives drawn up to be accepted over competing narratives as more legitimate and relevant accounts of social reality.

Translation scholars use an often-strange vocabulary and exotic language. For this reason, their close proximity to other practice theoretical approaches, notably narrative approaches (Czarniawska-Joerges 2004), is not immediately apparent (but see Schatzki 1996; Reckwitz (2002). However, it would be a mistake, I argue, to be deterred by translation scholars' somewhat obscure language. To do so, would mean not benefiting from using the analytical and empirical opportunities resulting from their widening of the practice concept. Instead of focussing exclusively on 'sayings', translation puts an equal emphasis on materially grounded 'doings', it thus foregrounds practices that link the discursive and the material.

Together with his colleagues Bruno Latour and John Law, Michel Callon was one of the first to show what a translation perspective highlighting materiality can empirically offer (Callon 1984). In the following, I will illustrate this focus on the material by briefly zooming in on Callon's seminal study on the 'domestication of the scallops and the fishermen of St. Brieuc Bay'. Here, three French scientists attempted to figure out whether a new cultivation technique for increasing the production of scallops, which they had discovered during a voyage to Japan, could be transported to the aquaculture of St. Brieuc Bay in France, where scallop population had progressively dwindled through the 1970s. In his study, Callon focusses on the ways in which the scientists *translate* different human and non-human elements into a relationship (or network) aimed at restocking the scallop population in St. Brieuc Bay. This translation process involved bringing together the marine biologists' thirst for knowledge with the fishermen's economic interests and the scallops' reproductive behaviour. Callon shows how the three researchers brought three groups of actors into their story: a) the fishermen of St. Brieuc; b) their scientific colleagues in the discipline of marine biology; and c) the scallops of St. Brieuc. The interaction of these human and non-human actors forms, Callon shows, a powerful story about the causes of the declining scallop population in St. Brieuc Bay and the problem-solving capacity of the new conservation technique they observed in Japan.

The three scientists, Callon shows, (at least temporarily) succeeded in positioning themselves as authoritative experts, that is as spokespersons not only for their scientific colleagues, but also for the fishermen and the scallops. The scientist gained expert authority by re-arranging different human and non-human elements in relations that were stabilised through both a narrative plot with specific actants (including their respective identities, interests and

competences) and through a range of materials, such as towlines with collectors immersed in St. Brieuc Bay, the larvae anchored to these collectors, and numbers, tables, graphs and diagrams printed on diffusible sheets of paper. Using these materials, three groups of actors were brought into a relation with each other through small *translations*:

> 'The scallops are transformed into larvae, the larvae into numbers, the numbers into tables and curves which represent easily transportable, reproducible, and diffusable sheets of paper' (…), 'to their colleagues (…) the three researchers show graphic representations and present mathematical analyses. The scallops have been displaced. They are transported into the conference room through a series of transformations' (Callon 1984: 217–218).

Thus, translation is a mechanism of progressively displacing the three actors' many – and hitherto unconnected – identities and interests until they are united into one (Berger & Esguerra 2017). In the story of the scallops of St. Brieuc Bay, the researchers successfully claimed that the identities and interests of all three actors lie in promoting the research programme proposed by them. Translation can thus be regarded as the process that unites the many into one by speaking in the name of others. By doing so, taken-for-granted representations of nature, and social actors are produced. 'Both the fishermen and the scallops end up being represented by the three researchers who speak and act in their name' (Callon 1984: 216). In other words, humans and nonhumans come to be represented by the spokesperson:

> 'to translate is also to express in one's own language what others say and want, why they act in the way they do and how they associate with each other: it is to establish oneself as a spokesman' (Callon 1984: 223).

In a nutshell, Callon's study illustrates how the concept of translation grants agency to objects. Moreover, it shows how it allows us to study the previously developed concept of politico-epistemic authority as a micro-practice, namely as a discursive-material process of positioning oneself as a spokesperson – both for an external reality and a collective of social actors.

Translating for politico-epistemic authority

The translation perspective thus brings into empirical focus what I have previously described as the constitutive elements of a culturalist conceptualisation of politico-epistemic authority in the postnational constellation, namely performativity, contingency, and materiality. First, it highlights that politico-epistemic authority results from the *discursive and material actors' micropractices of authorisation and legitimation* by which they constitute their claims to authority at the science-policy nexus. I hence understand the politics of politico-epistemic authority as something that is established through 'performative' practices and that needs to be described by zooming in on both the sayings and doings of actors who seek authority. Second, the translation perspective sheds light on the contingency of how politico-epistemic authority is fabricated and legitimated. Viewed through the lens of the translation perspective, politico-epistemic authority becomes something that is continuously in the making and that requires painstaking efforts. Actors seeking epistemic and political authority have to reconcile claims to epistemic *and* political authority, and they have to legitimise these authority claims. However, as I have discussed in chapter 3.1, legitimatory practices have become contested themselves. Third, the translation perspective puts an emphasis on the material as an essential element in the practice of claiming and legitimating politico-epistemic authority. From the perspective of translation, material objects and infrastructures do not matter in and of themselves; instead, they are continuously made to matter in specific claims to politico-epistemic authority.

With these basic elements of translation in mind, I conceptualise the practice of gaining and legitimising politico-epistemic authority as unfolding in three dimensions of sense- and claim-making (Jung et al. 2014): (1) competence attribution *(social dimension),* (2) objectivation *(object dimension),* and (3) temporal ordering *(temporal dimension).*

Social dimension: attributing competences

In the social dimension, authorisation and legitimation practices in the above discussed sense are acts by which two actors become related in such a way that one speaks in the name of the other. Here, the politics of politico-epistemic authority unfolds in and through the definition

and performative enactment of roles and attributions of competence. Actors striving for politico-epistemic authority constitute themselves as experts at the science-policy nexus by actively adopting a position as 'spokespersons' for both a specific objective reality and a related political community's common good. From the perspective of translation, authority-seeking actors at the science-policy nexus therefore attempt to establish themselves as a superior and indispensable source of knowledge for both truth claims about a specific issue and their relevance for the common good of a specific community. In order to overcome specific problems actors face in attaining what they want, they have to follow the authoritative expert's judgment or advice (Callon 1984). Underlying the recognition of the authoritative spokesperson's judgement or advice is specific pattern of self- and other-attribution of judgemental and decision-making competence. This pattern of competence attribution varies according to the underlying knowledge order, as table 6 illustrates:

authorisation: *competence attribution* / legitimation	monopolistic	multipolistic
input-oriented	decisionistic (1)	advocatory (3)
output-oriented	technocratic (2)	rationalistic (4)

Table 6: Social dimension - translating through attributing competence, my compilation

Thus, we can make an analytical distinction between two modes of competence attribution: On one hand, according to a hierarchical authorisation pattern as described previously (chapter 3.2), either science or politics is attributed a monopoly on judgmental and decision-making competences. That is, within a decisionistic pattern politics is attributed a monopoly on decision-making competences (authorisation), which is then justified as being consistent with the authentic preferences of the constituency (input legitimacy); or, within a technocratic pattern science is attributed a monopoly on both judgmental and decision-making competence (authorisation), which is then justified on the ground of effectiveness and functionalities (output legitimacy).

On the other hand, within a heterarchical authorisation pattern, different types of contextualised specialised knowledge and the representation of affected groups are seen as being equally necessary to make rational judgments. Here, we thus can observe a largely multipolistic attribution of judgemental and decision-making competence to specific actors (advocatory or rationalist pattern of competence attribution).

Following the translation perspective, however, the process of constituting an authoritative expert has to be taken as being relational. Experts acquire competence attribution as a result of their relations with, and demarcation from, other actors – such as 'the layperson' (Gieryn 1999). Actors striving for politico-epistemic authority therefore attempt not only to mobilise and attract but also to frame, construct and discipline those in whose name they speak. Accordingly, the social dimension of the constitution of politico-epistemic authority refers not only to the spokesperson's competence claims, but at the same time also to the construction of those represented by the spokesperson. Consider Callon's scallops and fishermen: here, the question 'will the scallop larvae anchor themselves to collectors and grow' was enough to involve a whole series of actors, (including the fishermen, scientific peers, and the scallops) by establishing their identities and the links between them (Callon 1984). What is therefore central for actors seeking politico-epistemic authority is their ability to frame problems so that those in whose name they speak accept this problem frame as *their* frame. They thus have to translate the identities, roles and interests of the represented in a manner that makes them believe in their problem frame. In sum, the social dimension thus relates to the making of competence claims to represent both a specific objective reality and a related political community's common good. It pays special attention to the question of how through and within these competence claims both the represented and the representative are actively constituted, as well as the relationship between them (Saward 2010: 36).

The object dimension: manufacturing, using and circulating boundary objects

However, the represented can question if the spokesmen really are in fact competent representatives and rebel against claims of competence viewed as illegitimate. To be recognised as an authoritative spokesperson, actors seeking politico-epistemic authority therefore search for allies that might confirm that they are indeed competent spokespersons. The allies who attest the spokesperson's competence have not necessarily to be human beings. On the contrary, the translation perspective highlights that more often than not it is material "inscriptions" that are the most effective allies in the process of objectifying knowledge (Callon 1984; Latour 1987, 2004).

In particular in the realm of public policy and administration, but also in science, public and non-public documents constitute an essential inscription device used to objectify knowledge (Riles 2006; Hunter 2008; Freeman & Maybin 2011; Hull 2012). Viewed from the perspective of translation, documents can hence not only be understood as *objectivating* knowledge in the sense that they are the result of a process during which 'shared meaning' is created and externalised through language (Berger & Luckmann 1991). They can also be understood as material inscriptions that store and thus *objectify* objectivated knowledge. Documents produced, circulated and used at the science-policy nexus can hence be studied as inscriptions incorporating and combining several heterogeneous inscription devices, such as diagrams, graphs, models, statistics, lists, surveys, written text and transcripts. The capacity of inscription devices to translate relies on the combination of two important material properties: immutability and mobility. Through writing and visualisation, inscriptions are made immutable, that is, they render what is contested and not-yet-fixed immutable in textual or visual representations. 'They juxtapose elements, suggest their appropriate relationships, and they simultaneously make an argument about how the reader should fit into that world' (Callon et al. 1986: 223). Heterogeneous bits and pieces, such as chloroformed specimens, microbe colonies stuck into gelatine and the fishermen's nets are made docile and linked together in a piece of paper to frame problems and mobilise solutions (Latour 1987: 45). Yet, textual inscriptions are not merely able to display such heterogeneity; they are also mobile, that is they have the 'capacity to act at a distance upon the world in all its diversity' and 'impose a structure on the world' (Law 1986a: 49). Because they are materially embodied,

they are ready to use; they are directly available to everyone from everywhere and are presentable to everyone's eye. As material representations, they can move around and travel across time and space, while still holding their shape. Material inscriptions are thus immutable and at once mobile.

Inscriptions moreover function as instruments of coordination among the heterogeneous interests of actors from different worlds, which usually is an important part of the work of policy documents (Freeman & Maybin 2011). They are designed to function as 'boundary objects' (Star & Griesemer 1989) that enable both cooperation and conflict among heterogeneous actors. They can bring new actor constellations into being, as they are abstract enough to be flexibly interpreted and concrete enough to gain attention and enrol actors across the world of policy and science. Actors can relate to them according to their own interests and use them in their own concrete terms, while at the same time they remain a fixed common reference point in policy discourses (Korinek & Veit 2013). Characterising inscriptions as 'immutable mobiles' or 'boundary objects' thus highlights that they enable actors to act over time, space and between different worlds.

In this sense, documents exhibit the previously discussed 'affordances that go beyond their purely physical properties'; their material properties also invite and enable – in interacting with actors – specific uses (Jarzabkowski & Pinch 2013: 581–582).

In public policy-making, it is often *sets of documents* or *'document networks'* (Simons 2016) that lend particular actors, concepts and broader discourses their authority. Policy documents generate other documents – documents multiply (Freeman & Maybin 2011). White papers, for instance, are followed by written consultation procedures, in which responses are summarised into consultation reports again followed by the government's response to the publication report. Hence, documents are both enabled and constrained by previous documents and they enable and constrain further documents (Simons 2016: 181). To understand the authority generating power of documents, we must look therefore at how documents draw on one another. Direct references to other documents enrol these as allies that attest to the validity and relevance of the claim made. Just as in scientific papers, where references are 'aids which increase a paper's power to persuade' (Gilbert 1977: 120),

references in policy documents enrol ‘a previous and distant author(ity) in persuading the reader at the same time as, conversely, enrolling the reader in allegiance to that author’ (Freeman & Maybin 2011: 161). They thereby reciprocally validate each other (Gilbert 1977). Besides making direct references, documents can draw on one another more indirectly as well by providing concurring narratives, interpretive templates and scripts. Thus, it is in particular by such cross-referencing that documents function as a means of objectification and authorisation at the science-policy nexus.

Like authorisation through the social attribution of competences and roles, authorisation through material objectivation can follow different patterns that vary according to the underlying knowledge order, as is illustrated by the following table:

authorisation: *objectivation* / legitimation	calculative	social
input-oriented	decisionistic (1)	advocatory (3)
output-oriented	technocratic (2)	rationalistic (4)

Table 7: Object dimension - translating through objectivation by means of documents, my compilation

Thus, there are two basic modes of objectivation: On one hand, knowledge can be objectified (and as such authorised) through statistics, rankings, graphs, diagrams, and indicators, i.e. on the basis of ‘calculative-mechanical practices’, which are sequences of (supposedly) value-free calculations and syllogisms (Porter 1995; Stirling 1998, 2003; Heintz 2008; Rüb & Straßheim 2012). In the case of a decisiontistic knowledge order, the calculative-mechanical mode of objectivation is justified with reference to the authentic preferences of the members of a political community, for instance through ensuring political primacy in deciding on the conclusions following from the calculative evidence (input-oriented legitimacy). In contrast, in the case of a technocratic knowledge order, the calculative-mechanical mode of objectivation justified with reference to the effectiveness of political instruments and programmes (output-oriented legitimacy).

On the other hand, knowledge can be objectified through arguments in written text, in an expert report, in a written consultation or in written recommendations by an expert jury or advisory board, that is, on the basis of a 'negotiated social working consensus' between different social perspectives or the professional judgements of recognised and skilled practitioners (Stirling 1998; Wynne 2001; Stirling 2003; Rüb & Straßheim 2012). It is an empirical question whether this working consensus is reached among heterogeneous perspectives of different experts and social groups alike, or whether it is merely reached among different experts' 'trained judgment'.

In the case of an advocatory knowledge order, such a socially situated mode of objectivation is justified with reference to the authentic preferences of the members of a political community, which is ensured through the 'opening up' of objectivation processes to affected groups and stakeholders (input-oriented legitimacy). In contrast, in the case of a rationalistic knowledge order, the social mode of objectification is justified with reference to its effectiveness-enhancing capacity (output-oriented legitimacy). Of course, this distinction between calculative and social modes of objectivation is a purely analytical one: as Callon and Law, among others, have shown, most objectivations come in the form of 'qualculation', or 'calqulation', that is, hybrid forms of objectivation including both calculation and judgement (Callon & Law 2005; Cochoy 2008).

The temporal dimension: recalling the past and imagining the future

The politics of politico-epistemic authority is, however, not only a matter of competence and role attributions and of manufacturing, circulating and using boundary objects; it is also a matter of temporal ordering. Temporal ordering implies the practice of translating between the past, the present and the future, that is the 'time-related practices of recalling, projecting, anticipating, experiencing and imagining technoscientific and social developments' (Felt 2016: 181). In the temporal dimension, politico-epistemic authority is thus constituted through a successful claim to both collective experiences of the past and collective expectations of the future (Straßheim 2016). More precisely, it relies on two components: on an accepted claim to a specific past and the relevance of this past for a political community's common good; and

on a claim to a specific future reality and its relevance for the future realisation of a political community's future common good.

There are two basic modes of temporalisation, as is illustrated by the following table:

authorisation: *temporal ordering* / legitimation	linear	recursive
input-oriented	decisionistic (1)	advocatory (3)
output-oriented	technocratic (2)	rationalistic (4)

Table 8: Temporal dimension - translating through tempora ordering, my compilation

On one hand, according to the *linear temporal ordering* mode, the production and use of authoritative expertise in policy-making proceeds in a series of stages – a problem is defined, its cause is identified and then, based on "sound" "ex-ante evaluation" of its problem-solving effects, a specific 'evidence-based' decision is made, implemented, and eventually evaluated and adjusted accordingly. Thus, as Holger Straßheim put it, linear temporal ordering is based on the very thought of a 'stage based, cyclical mechanism which informs and rationalises policymaking, strengthens its "evidence-base" and enhances its "policy analytical capacity"' (Straßheim 2016: 156). Linear modes of temporal ordering moreover, often come in the form of 'trajectorism', that is, according to Arjun Appadurai, 'a deeper epistemological and ontological habit, which always assumes that there is a cumulative journey from here to here, more exactly from now to then, in human affairs, as natural as a river and as all-encompassing as the sky' (Appadurai 2012: 26). This 'omnipresent trajectorial narrative' takes technoscientific developments 'as at least somewhat predictable phenomena that can be analysed and eventually managed accordingly' (Felt 2016: 187). Thus, trajectorism refers to an imagined time's arrow with a known destination, a future that can be assessed and known on the basis of probabilistic knowledge featuring only low levels of uncertainty that can be reduced by applying standard procedures of knowledge production. As Andy Stirling writes, '[t]hey hold in common a basic reductive, quantitative architecture, conceiving "risk" as a

function of the "magnitudes" and "likelihoods" of a determinate range of "outcomes"' (Stirling 2003: 33). In doing so, linear temporalisations often adhere to the maxim of a clear separability between the process of knowledge production and its application, i.e. to a model in which values only appear in the "later" stages of the application or political use of expertise in policymaking. Risk, viewed from such a linear temporal perspective, assumes a specific form of 'simple' uncertainty upon which one can act because it can be – by relying on laws of probability – calculated about in the presented (Hacking 1990). In the case of a decisionistic knowledge order, such a linear mode of temporal ordering is justified with reference to the will of the people; it is in the interest of the people to be provided with probabilities on their futures but the question of what follows from these probabilities in the present is left to the people (input legitimacy). In the case of a technocratic knowledge order, the linear mode of temporal ordering is, in contrast, justified in terms of effective problem-solving that can be more or less simply deduced from the identified probabilities (output legitimacy).

On the other hand, temporal ordering can follow a *recursive* mode. Here, practices of temporal ordering are seen as being situated within specific social and historical contexts. Therefore, the relationship between such contexts, practices of temporal ordering and specific futures is understood as recursive, mutually interdependent and full of ambiguity and ignorance (Straßheim 2016; Barbehön 2018). In contrast to linear modes of temporalisation, recursive temporal ordering does not rely on a credible ground for the allocation of a specific probability of a well-defined future scenario. Here, '[t]he future is not determined but an open and unforeseeable horizon of possibilities, a space that is constantly emerging as a result of currently performed actions' (Barbehön 2018: 15). There is recognition that the future 'is not entirely determined by physical imperatives, but is open, within bounds, to formative influences from contingent (or directed) social and institutional forces' (Stirling 2003: 54). Moreover, recursive temporal ordering recognises a more radical form of uncertainty. This more radical form of 'incertitude' (Stirling 2003) goes beyond simple and still reducible uncertainty and acknowledges the possibility of 'unknown unknowns'. Moreover, recursive temporalisations recognise the possibility that specific paths taken can produce irreversibility in the future and thus break with the cyclical mechanism of linear temporalisations (Barbehön 2018). Instead of being assessed based on exclusively on probabilities, possible futures are

imagined on the basis of collective deliberation and negotiation in order to develop effective means to either avoid them from happening to shape the future in a desired way. Here, technoscientific knowledge still plays an important role but it is only one among many knowledges and interests (Straßheim 2016). In so doing, recursive temporal ordering does not assume that the (objective) process of knowledge production and its political use in policymaking can be procedurally separated, but instead proceed on the basis that the two are copresent and in an interplay with one another. This understanding is particularly evidentiary in two specific submodes of recursive temporal ordering: precaution and pre-emption. In the case of an advocatory knowledge order the recursive temporal ordering is justified with reference to the preferences of the people; it is 'by the people' that inherently uncertain futures are legitimately imagined and shaped (input legitimacy). In contrast, in the case of a technocratic knowledge order, recursive temporal ordering is justified in terms of rational and effective problem-solving; only through a recursive mode of temporal ordering can future policy problems be solved in a rational and effective way (output legitimacy).

3.4 The Framework in a Nutshell

Three concepts thus make up the developed culturalist framework for studying the politics of expert authority in the context of postnational governance developed, (1) politico-epistemic authority, (2) knowledge orders, and (3) practice:

Politico-epistemic authority: The Arendtian 'unquestioning recognition', which is grounded in a 'transcendent outside' as the hallmark of authority, has become highly fragile (if it has not almost vanished) since the modern era, particularly in the face of the postnational constellation and the multiple contestations of authority this has brought about. But, as I have argued previously, in the *politics* of politico-epistemic authority, 'unquestioning recognition' still remains something important that actors strive for in their quest for epistemic and political authority. In this vein, establishing politico-epistemic authority can be understood as an act of positioning oneself as a spokesperson of a specific external reality (epistemic authority) and of a specific political constituency whose common good is dependent on this external reality (political authority). These two transcendent outsides are still a key referent, though

essentially contested, in the politics of politico-epistemic authority: Actors are attributed politico-epistemic authority (1) if they can successfully make a claim regarding both a specific objective reality (epistemic authority) and the relevance for the realisation of an imagined constituency's common good (political authority) (2) and legitimate this dual claim to epistemic and political authority based on either an input-oriented or an output-oriented legitimation narrative.

Knowledge orders: From the culturalist perspective adopted here, politico-epistemic authority is grounded in knowledge orders. As *contested* configurations of symbolic rules and structures, knowledge orders shape the criteria according to which the ability to make recognised claims to a specific objective reality (epistemic authority) is ascribed. At the same time, knowledge orders shape the criteria according to which the ability to make this knowledge claim relevant for the realisation of the common good of an imagined constituency is attributed and legitimised (political authority). Knowledge orders are manifested at the interwoven levels of discourse, (formal) institutional arrangements and practices; here they are either temporarily stabilised or transformed based on a reflexive framing that is either political (decisionistic, advocatory) or epistemic (technocratic, rationalistic). We can speak of a (temporarily) dominant knowledge order underlying politico-epistemic authority if a dominant – decisionistic, technocratic, advocatory or rationalistic – *pattern* of symbolic rules and structures, according to which political and epistemic authority is attributed and reconciled with each other, manifests itself across discourses, institutions, and practices. In the postnational constellation, knowledge orders are shaped by their embedding into national as well as supra- and international politico-administrative institutional contexts. From the culturalist perspective adopted here, institutional and cultural contexts do not predetermine a specific variety of knowledge orders. Instead, the culturalist perspective on the embeddedness of knowledge orders requires us to engage with the *practices* through which actors *selectively* borrow, adapt and translate different elements of different institutional contexts in their quest to make and legitimise claims to politico-epistemic authority in the multi-layered context in which they operate.

Practice: While knowledge orders are (re)produced or transformed at the three levels – at the levels of broader societal discourses, formal institutional arrangements and practices at the

science-policy nexus – it is practices that are at the very core of the adopted culturalist-practice-theoretical perspective. Practices are conceptualised as translations, that is a practice that links the discursive and the material; they thus encompass both ‘sayings’ and ‘doings’. It is a discursive-material process of positioning oneself as a representative who is speaking in the name of another entity – be it a social collective, nature or reality. As such, the translation perspective allows us to study the politics of politico-epistemic authority as a micro-practice in which authorisation unfolds in three entangled dimensions: (1) the attribution of competences (social dimension); (2) the manufacturing of boundary objects (object dimension); (3) the recalling, projecting, anticipating, experiencing and imagining of sociotechnical developments (temporalisation). Depending on the underlying knowledge order, competences can be attributed and legitimised, boundary objects manufactured and sociotechnical developments recalled, projected, anticipated and imagined according to decisionistic, advocatory, technocratic, or rationalistic premises.

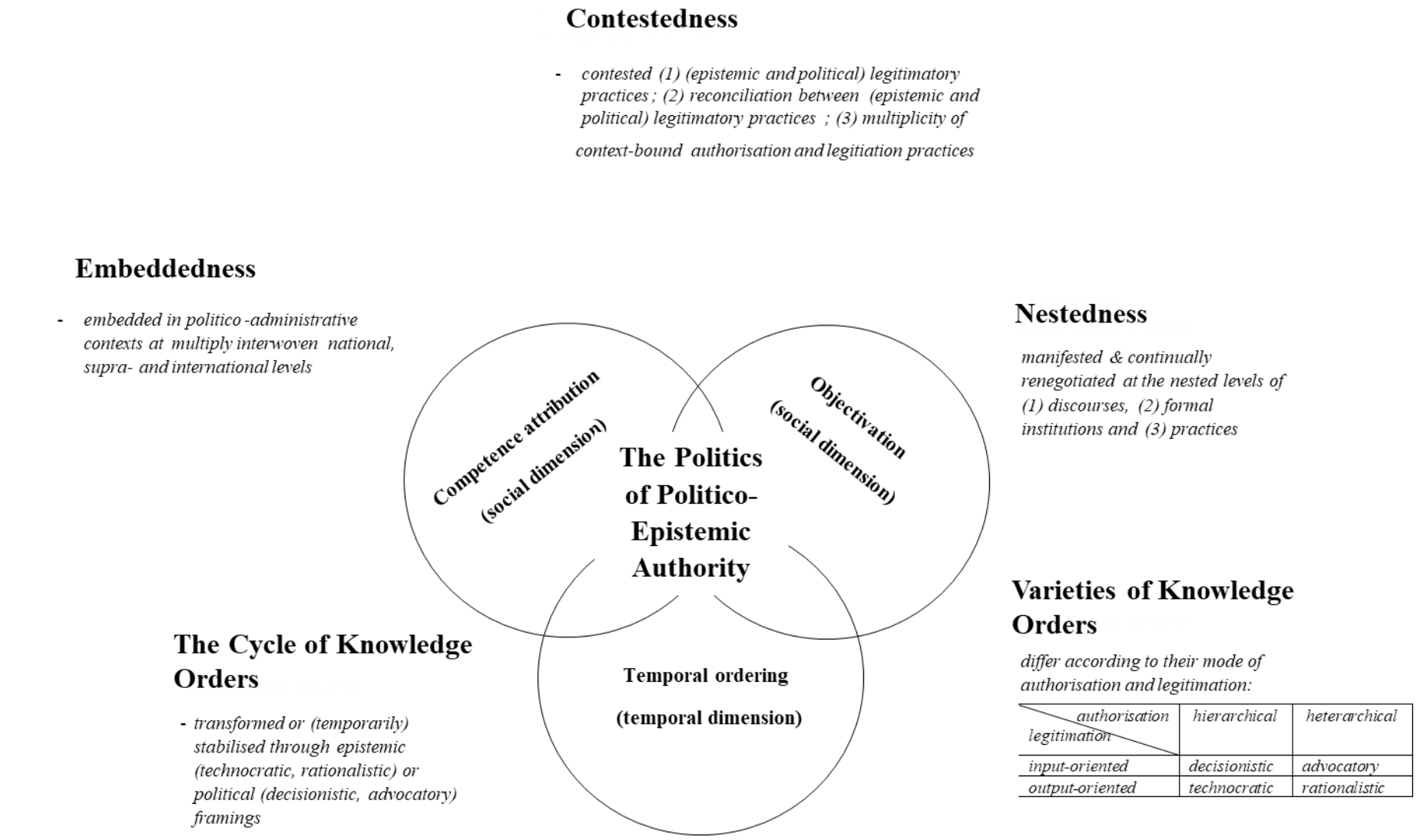

Figure 4: The framework in a nutshell, my depiction

4 Research Design and Methodology

4.1 Interpretive Comparative Case Study Research: Methodological Basics

The thesis is based on an in-depth case study analysis of the British Food Standards Agency (FSA), which I compare to the case of the German Federal Institute for Risk Assessment (BfR). As I already argued in the introduction, both cases represent political attempts to restore public trust by reorganising the science-policy interface in food (safety) policy by establishing independent regulatory agencies in a terrain where both political legitimacy and expert authority have become fragile. The comparison seemed analytically fruitful because, according to their formal mandate, the two agencies represent two different models for organising the science-policy nexus: on the one hand, there is the FSA with its 'hybrid model' for combining scientific risk assessment and politico-administrative risk management tasks and, on the other hand, the BfR, which embodies the 'separation model', i.e. it is mandated to exclusively conduct risk assessment, while risk management tasks are performed by the ministry and its departmental agency. Due to these formal differences between the two cases, it was plausible to assume that the authorisation and legitimation practices would also vary between the two agencies. At the same time, both food agencies were embedded within an increasingly Europeanised food safety governance system and both faced the paradox of expert authority in the postnational constellation, as described in the introduction. Thus, the two cases are well suited to illustrate how IRAs who operate in different national contexts but are embedded within the same transnational governance networks respond to and cope with challenges they commonly face.

However, whereas a set of methodological rules and strategies for comparative case study analysis has been elaborated by scholars located in the positivist tradition of political science research, notably regarding the selection of 'most similar' or 'most different' case study designs (George & Bennett 2005; Gerring 2007; Yin 2009), this thesis follows, in line with the adopted interpretivist-praxeological perspective, other methodological premises (Yanow 2014; Merriam & Tisdell 2015; Schaffer 2015; Boswell et al. 2019). In this chapter, I will hence outline the distinct research strategy that I adopted in this thesis, which is based on an interpretive 'focused-comparative' case study research design, combined with a 'grounded theory method'.

4.1.1 Interpretive 'focused-comparative' case study research design

The research design underlying this thesis can best be understood as what I term *interpretive 'focused-comparative' case study research*. First, a central characteristic of the adopted *interpretive* case study research approach is its 'openness' to inductively identify comparative themes as well as to accepting the failure of expected categories of comparison and the emergence of unexpected ones (Yanow 2014; Boswell et al. 2019). It is a research design that is aimed at generating abductive reasoning[62] and interpretation rather than at testing hypothesis. It 'operates according to a "logic of discovery" – i.e. an iterative, open-ended, evolving mode of research – as opposed to the typical social science preference for a "logic of justification" in which invariant procedures are rigorously applied with the aim of producing generalisable and predictive results' (Boswell et al. 2019: 9). In this vein, interpretive case study research approaches are based on 'meaning-focused understandings of social and political realities' and therefore offer 'thickly contextualised renderings of social realities' (Yanow 2014: 133). In following this approach, the empirical analysis in this thesis put 'situated meanings' at the forefront and allowed concepts – in an iterative dialogue with the existing theoretical literature on knowledge order approaches – to emerge from the field. An interpretive case study research design was used to explore and tease out the phenomenon under study in a rich and illuminating way. In this way, I was able to distinguish different dimensions that resulted into the matrix-typologies presented in chapter 3.3. I will elaborate this aspect in more detail below when discussing the 'fit' between 'interpretive case study research' and 'grounded theory method'.

Second, what I call *'focused comparison'* is an important element of interpretive case study research. The primary rationale for interpretive analysis is 'to compare because it is essential to providing "*decentred*" explanations of the social world', that is, it allows for 'unpack[ing] practices as (…) contingent believes and actions (…) as the basis for explanation, as opposed to laws and rules, correlations between social categories or deductive models' (Boswell et al. 2019: 4, my emphasis). This rationale is precisely what motivated my interest in the empirical investigations of independent food agencies: to focus on the social construction of politico-epistemic authority as a contingent practice. A further rationale for the *focused* interpretive comparative case study research design I adopted here was the following: I understand 'focused comparison' to mean an exploratory in-depth case study of a single case, from which

[62] Adduction is 'a type of reasoning that begins by examining data and after scrutiny of these data, entertains all possible explanations for the observed data, and then forms hypotheses to confirm or disconfirm until the researcher arrives at the most plausible interpretation of the observed data' Charmaz (2006: 47).

comparative categories emerge in an inductive way. These comparative categories form the basis for a 'focused' comparison of the in-depth single case study with another case or several other cases. It thus enables a detailed contextualisation. Such a 'focused-comparative' case study research design enjoys the advantage of allowing an exploratory research approach. An explanatory approach is, I argue, particularly useful for the purposes of this thesis, because as I have argued in chapter 2, this thesis considers 'independent regulatory agencies' in a new way, namely not as actors that simply 'possess authoritative expertise' but as actors that are engaged in an ongoing process of building and cultivating politico-epistemic authority[63]. After an initial phase of fieldwork (see below), I decided to conduct an in-depth single case study on the British FSA and, building on this, I chose to conduct a 'focused comparison' with the German BfR. The reason for this decision mainly related to 'field access and data availability'. The here suggested interpretive case study research requires qualitative data that enable the researcher to zoom in on micropractices and the processes around which they evolve over time. Although field access and data availability may seem a prosaic reason for research design at first sight, 'the quality and quantity of information that is currently available, or could easily be gathered, on a given question' constitutes one decisive factor in case study research design (Gerring 2007: 57ff; Boswell et al. 2019). As field access and data availability was much better for the British FSA than for the German BfR from the outset of the research project, it is mainly for this practical reason that I decided to conduct an in-depth case study on the FSA and to compare it with the BfR[64]. However, there were also more conceptual reasons for choosing this research design. Comparing the in-depth study of the FSA with the BfR provided me with a rich understanding of this particular case and – in dialogue with the existing theoretical literature on knowledge order approaches – enabled me to develop the theoretical framework presented in chapter 3. Notably, this focused comparison shed light on the 'contextual embeddedness' of the way in which the FSA built and cultivated politico-epistemic authority and (re)produced a specific knowledge order. Thus, based on the focused interpretive comparative case study research design, I was able to place the in-depth case study of the FSA in a broader social context. Asking why the FSA built politico-epistemic authority in a way that differed from that of the BfR and vice versa created an opportunity for reflection upon the contextual explanations for each. Moreover, my interpretive 'focused-comparative' case study research design allowed

[63] As discussed in chapter 2, there are many quantitative cross-case studies of IRAs either based on a rationalist delegation approach or on a norm-based epistemic communities approach that both treat IRAs as possessing authoritative expertise and as being capable, based on this, of acting as authoritative experts.

[64] This aspect will be elaborated in detail in chapter 4.2.2 dealing with 'data collection' below.

me to undertake diachronic analysis, i.e. analysing variations within a single case, and thus to explore the dynamic development of the FSA's authorisation and legitimation practices in the time period studied: from 2000 to 2015.

4.1.2 The methodological fit of interpretive case study research and GTM

While there is a broad variety of interpretive research methods (Yanow & Schwartz-Shea 2006), grounded theory method (GTM) fits particularly well with the above-suggested 'open-iterative' comparative case study mode. According to the seminal definition of GTM put forward by Strauss and Corbin, it is a method that aims at developing 'theory that was derived from data, systematically gathered and analysed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another. A researcher does not begin a project with a preconceived theory in mind (…). Rather, the researcher begins with *an area of study* and *allows the theory to emerge from the data'* (Strauss & Corbin 1998: 12, my emphasis). In a similar vein, Strübing argues that GT is a 'research style for the development of theories based on empirical data' (Strübing 2014: 10).

In this sense, I understand the aim of this thesis – the empirical analysis of the practices by which independent food agencies build and cultivate politico-epistemic authority – as the basis for developing a theoretical account of the authority of nonmajoritarian institutions that is 'grounded' in a specific area of study and emerges in an iterative dialogue with the empirical data collected through the comparative case studies of the FSA and the BfR. However, in line with the adopted interpretive-praxeological perspective , I will use GTM without drawing on the actor-centred-interactionist theoretical tradition that is often associated with GTM when used as a 'theory' rather than as a 'methodological tool' (Truschkat 2013). While many scholars of GTM refuse to use it as such a 'methodological technique' (Atkinson et al. 2003: 151) and warn against 'methodological eclecticism' at the expense of a more 'holistic understanding' of GTM (Strübing 2014: 2), I argue that combining interpretive comparative case study research and GTM advantageous for two reasons: First, despite the different theoretical traditions of interpretive case study analysis and GTM, both have a particular proximity when it comes to practical methodological implications (Yanow & Schwartz-Shea 2006; Truschkat 2013). These common methodological implications revolve around the idea that there is an ineluctable tension between a researcher's necessary prior knowledge of the object of analysis on the one hand and the equally important necessity of an 'epistemological break' with this prior knowledge, i.e. a rupture in the established way of conceptualising an issue. In GTM this has been described as a tension between two aspects: on the one hand, 'theoretical sensitivity', i.e.

'the researcher's ability to "see relevant data", which means to reflect upon empirical data material with the help of theoretical terms' and on the other hand, 'emergence', i.e. the researcher's capacity to abstain from approaching empirical data with preconceived concepts (Kelle 2005: 4). The second commonality between interpretive analysis and GTM is the strong emphasis both put on the iterative, provisional and open-ended nature of the research process and on a research style that creates the conditions for novelty and surprise. This is ensured in particular through the theory generating dialogue between data collection and data analysis (Wagenaar 2011: 243–244). As such, Hendrik Wagenaar argues, GTM is a 'heuristic strategy of discovery, which is at the core of every study of an interpretative bend' (Wagenaar 2011: 244). This implies that the corpus of empirical material is not predetermined but gradually extended throughout the research process. Data collection begins with the first round of material selected based on initial 'sensitising concepts'. What guides subsequent data collection are preliminary 'interpretive hypotheses'. Second, what sets GTM apart from interpretative analytics is that it combines the described methodological implications with concrete techniques that can guide and organise the research process. However, GTM does not constitute a strict protocol regulating the microsteps of analysis (Strübing 2014: 79). Rather, it suggests procedural principles that help to interpret research material in a way that breaks the text down to separate parts and to put it together in new ways afterwards. This means that the procedural proposals made by GTM, which will be elaborated in more detail below, are aimed at ensuring the 'epistemological break' through analysing the concrete empirical material in a manner that avoids to just reproduce the researcher's prior knowledge and concepts. I argue that these aspects are good reasons for using GTM as a practical heuristic methodological strategy of interpretive analysis. Notwithstanding the fact that some scholars emphasise that there are also several misfits between interpretive analysis and GTM (Truschkat 2013), many scholars have argued that what characterises GTM is that it can be easily adapted for the purposes of interpretive case study research as often used in interpretive policy analysis (Yanow & Schwartz-Shea 2006; Wagenaar 2011: 244).

Whereas in this chapter, I have established the methodological basics of interpretive comparative case study research and the complementary use of GTM, I will elaborate on the way in which I used this research strategy as a practical, hands-on methodical approach in what follows.

4.2 Grounded Theory Method

In what follows I will first briefly describe the basic principles of GTM. Second, I will describe how I adopted GTM's procedural suggestions in the course of data collection and, third, during data analysis.

4.2.1 Basic principles

Glaser and Strauss (Glaser & Strauss 1967) formulated their methodological approach at a time when qualitative research in sociology was increasingly coming under pressure and was waning. This was a time when sophisticated quantitative methods were on the rise (Bryant & Charmaz 2007: 33). When developing their approach, Glaser and Strauss had two basic starting points: First, they critiqued what they perceived as an 'embarrassing gap between theory and empirical research' (Glaser & Strauss 1967: 2). Against this background, they identified the need for a methodology that would allow social science researchers to develop empirically grounded theories. Second, their formulation of grounded theory was directed against the then dominant approach in ethnographic practice, which they critiqued as constituting a merely descriptive, illustrative and methodologically and theoretically insufficiently elaborated (Mey & Mruck 2011: 14). In the words of Glaser and Strauss:

> 'Most writing on sociological method has been concerned with how accurate facts can be obtained and how theory can thereby be more rigorously tested. In this book we address ourselves to the equally important enterprise of how the discovery of theory from the data – systematically obtained and analysed in social research – can be furthered. We believe that the discovery of theory from the data – which we call grounded theory – is a major task confronting sociology today, for, as we shall try to show, such a theory fits empirical situations and is understandable to sociologists and layman alike. Most important, it works – provides us with relevant predictions, explanations, interpretations and applications' (Glaser & Strauss 1967: 1).

In this way, Glaser and Strauss (1967) challenged what they considered a number of problematic research practices: (1) '[b]eliefs that qualitative methods were impressionistic and unsystematic', (2) '[s]eparation of data collection and analysis phases of research', (3) '[p]revailing views of qualitative research as a precursor to more "rigorous" quantitative methods', (4) '[t]he arbitrary division between theory and research', (5) '[a]ssumptions that qualitative research could not generate theory' (Charmaz 2006)

In this context, GTM incorporates the following key elements (Charmaz 2001: 245):

- conducting data collection and data analysis in parallel

- developing analytic codes and categories, but out of data rather than preformulated hypotheses
- developing middle-range theories directed at explaining behaviour and processes
- constantly drawing-up memos (‘memo-making), ‘that is, writing analytic notes to explicate and fill out categories, the crucial intermediate step between coding data and writing first drafts of papers’
- sampling not for representativeness but to challenge and specify emerging conceptual categories that lead to theory construction
- prolonging the beginning of the literature review

Thus, according to GTM, data analysis and theory construction are conceived of as an iterative, inter-related and evolving process, or, as Strauss & Corbin 1998: 34) put it: ‘Concepts and design must be allowed to emerge from the data’. These basic elements or principles of GTM should therefore be understood as constituting in ‘a true interplay’ (Strauss & Corbin 1998: 34). While these principles have continued to form the basis of GTM up to the present, GTM has differentiated itself into a network of several sub-strands. According to Strübing (2014:7) these include Charmaz’s ‘constructivist’ variant (Charmaz 2006) and Clarke’s ‘situational’ variant (Clarke 2005). However, as I will loosely draw on GTM as a heuristic methodological strategy in a hands-on manner and adapt it for the purpose of this thesis, these differentiations are of limited relevance for the scope of the thesis.

4.2.2 Data collection[65]

As has been evident from the above, GTM conceives data analysis and theory building as an iterative process. Data analysis and data collection are hence not viewed as being separate from each other but as two parallel processes in any research project (Morse 2007: 237–240). In the following, I will, however, for the sake of presentation describe the threefold sampling methodology of data collection, which was conducted according to (Morse 2007: 237–240). This sampling strategy comprised the processes of (1) convenience sampling, (2) purposeful sampling, and (3) theoretical sampling. Throughout these three sampling steps the following text corpus was compiled:

[65] Large parts of the data of this study were collected as part of the research project ‘Studying the Changing Knowledge Orders of Political Expertise’ at the WZB Wissenschaftszentrum Berlin für Sozialforschung and Humboldt Universität funded by the Volkswagen Foundation.

- 39 expert interviews: 19 for the FSA case (among them 14 with FSA officials and committee members, 2 with NGO members, and 3 helicopter experts) and 20 for the BfR case (among them 8 with BfR Officials, 7 with BMELV officials, i.e. the BfR's 'parent ministry'; and 5 with the BVL, i.e. the BfR's risk management 'sister agency').
- 350 documents: 50 for the BfR case, 300 for the FSA case

Convenience sampling

Following (Morse 2007: 237–240) convenience sampling constituted the first sampling method of the research project. Selecting experts who were close to the objects under study and had a deep knowledge in the field – i.e. food (safety) policy in UK and Germany and the two food agencies in particular allowed me to gain a first overview of the object of enquiry and its basic 'dimensions and trajectory' (Morse 2007: 235). With these experts, I conducted, partly in tandem with the project leader (see fn 66) so-called 'helicopter interviews'. These interview subjects included academic experts, advisors to the government, and policy-makers in Germany and the UK. Furthermore, I asked these 'helicopter experts' to name other field experts as interviewees and central documents published by the agencies under study in order to develop a 'snowball sample' of expert interviews and documents. Finally, these 'helicopter interviews' also served as a 'test bed' for trying out the first draft of the interview guide for the subsequent round of expert interviews (Bogner & Menz 2009: 46). I hence used these initial interviews primarily as an 'exploratory tool' and source of 'context knowledge' that provided me with a basic understanding of the field and the generation of first working hypothesis (Bogner & Menz 2009: 46).

Purposeful sampling

After having identified the general trajectory and having gained an overview of both food agencies and food (safety) policy in the UK and Germany, I adapted the sampling method in order to seek confirmation of the information obtained. This was where I applied 'purposeful sampling' with the aim of confirming the information and assessments gained through convenience sampling (Morse 2007: 237–240). What is characteristic for GTM is that 'coding' and 'memoing' (see below) starts immediately, as soon as data collection begins. In so doing, I was able to extract from the previously conducted 'helicopter interviews' a specific trajectory in which the agencies had developed as well as specific lines of conflict around which these developments revolved. Building on this, I used purposeful sampling to select persons who

have experienced most of these developments and from whom I expected to gain a rich description of the underlying tensions and conflicts. These were persons who 'are endowed with a specific form of professional wisdom, which differs from the knowledge of a layperson' (Abels & Behrens 2009: 139). They possess 'exclusive expert knowledge' in the sense of specialised 'knowledge of action and experience, which has been derived from practice, is reflexively accessible, and can be spontaneously communicated' (Bogner & Menz 2009: 46–47). These persons were hence interviewed as experts. The interviewed experts included leading agency officials mainly, but also senior members of agency advisory committees, ministry officials, and for each case one major consumer NGO representative[66].

These experts were hence interviewed not as individuals but in their institutional and organisational contexts. In the realm of public policy, it is important, as Gabriele Abels and Maria Behrens have pointed out, to reflect upon the strategic role of the interviewees: 'an individual interviewed also (…) is present as a collective, strategic actor (for example a political party, an association, a department) operating in the political sphere' (Abels & Behrens 2009: 140). What underlies the concrete expert interview situation is thus a specific 'interactional model' between the interviewee and the interviewing researcher that is shaped by all sorts of 'structural social categories', such as 'gender, age, professional status/title, experience and background' (Abels & Behrens 2009: 141). In the expert interviews conducted for this thesis, field access and the interactional situation during the expert interviews were additionally influenced by the fact that food (safety) policy is a contested and politically salient field (see chapter 1.4). Due to the contestedness of the field there were high incentives (respectively pressures) for the interviewees, who as civil servants were anyway obligated to neutrality, to

[66] The author, partly in tandem with the project leader, conducted the interviews from August 2012 to October 2014 in the cities of Berlin, Braunschweig and London. The fact that the talks could only take place at irregular intervals was due to the full schedules of the interview partners and the difficult access to the field. The interview contributions of all interview partners are greatly acknowledged. In the German case the 8 interviews were conducted with leading BfR officials, 7 with ministerial officials, and 5 with the 'sister agency' BVL. On average, the interviews lasted 100 minutes, while the shortest interview lasted 50 minutes and the longest one 180 minutes. They were conducted in German. 18 interviews have been fully transcribed, 2 have been partly transcribed. In the British case 14 interviews were conducted with FSA officials and with senior members of the FSA's scientific advisory committees, and 2 with a representative of a major consumer organisation, while 3 interviews were conducted with 'helicopter interviews'. On average, the interviews lasted 70 minutes, while the shortest interview lasted 30 minutes and the longest one 70 minutes. They were conducted in English. 15 interviews have been fully transcribed, 3 have been partly transcribed. The reasons for these differences lie in specific institutional set-up of each agency. As discussed in the introduction (chapter 1), the BfR is an independent agency that is exclusively mandated to conduct scientific risk assessment, whereas the BVL is responsible for risk management. Moreover, while independent in terms of all scientific matters, the BfR's parent ministry has the legal oversight. In both countries, all interviewees were assured that direct citations and information taken from the interviews will be used in anonymised form only. In consultation with a professional translator, I translated into English all exemplary interview citations taken from the interviews conducted in German.

answer tactically and to circumnavigate controversial issues. Specifically, those interview partners who occupied leading positions in the studied agencies possessed high professional self-presentation skills that were employed in strategic ways during the interview situation. The interactional situation was hence characterised by several asymmetries. However, these asymmetries could be partly counteracted by carefully planning the interviews. An intensive preparation was an important prerequisite for my ability to position myself 'as [an] expert from a different knowledge culture' (Bogner & Menz 2009: 60). Furthermore, the first interviews that were in each case conducted with persons who occupied the highest leading positions, i.e. presidents and directors, were carried out in tandem with the senior project leader of our research project. In this way, it was normally possible to demonstrate that the interviewers were experts in a different discipline. This competence attribution to the 'interviewer as experts from a different discipline' proved advantageous: It was here where the interviewee's argumentative and interpretative patterns came to light in a rather direct way, since the interviewee did not assume without question that the interviewers shared them[67]. Throughout the interview phase, I increasingly acquired 'field knowledge', which enabled me to position myself in some interview situations more as a 'co-expert' and to create a conversation in which I could also discuss preliminary findings or working hypothesis with the interviewee. Moreover, this enabled me to ask some more critical questions that forced the interviewee to demonstrate the legitimacy of his or her perspective. This was helpful with regard to my research interest in the agencies' practices of building and legitimating politico-epistemic authority in the contested field of food policy. However, the above-named asymmetries could not always be reduced. In some cases, I was attributed the role of a layperson and the young female junior researcher in the interview situation. However, I often succeeded in using this asymmetry in a productive way because such lay-expert and gendered asymmetries often transformed in 'goodwill' by the interviewee towards the interviewer (Abels & Behrens 2009: 144–146). This goodwill manifested itself in the general openness of the interviewee, which was advantageous for the intended way of 'open', theory-generating expert interviews.

The semi-structured expert interviews I conducted were based on an interview guide (Helfferich 2011), which I revised after having tested it during the initial 'helicopter interviews'. In contrast to the exploratory helicopter interviews, the focus here was on the thematic comparability of

[67] However, this strategy of positioning oneself as an expert from a different discipline did not always succeed in bringing to light the interpretative patterns of the interviewee. Specifically, this proved difficult when persons from the middle management were interviewed. Some of these interviews were very technical.

the data (Bogner & Menz 2009: 47). Accordingly, the interview guide consisted of five main thematic blocks:

- *entry point:* brief introduction into the research project, institutional context and organisational position of the interviewee, short cv of the interviewee
- *experts within the agency:* Who counts as expert? ➔ roles, competences, organisation of in-house expertise and advisory committees, modes of stakeholder involvement
- *coordination of knowledge-production:* How is knowledge production organised internally? ➔ procedures for drafting statements, for developing the strategic approach, for creating research programmes, for deciding on projects, and for evaluation and audit
- *forms of evidence:* What counts as evidence? ➔ consultations of experts, public/stakeholder consultation, expert surveys, risk assessment, modelling and simulation, benchmarking
- *lines of conflict, challenges and developments:* What is contested? By whom? ➔ major challenges, tension between scientific and political demands, main changes since the last decade?

While the interview guide included questions that were asked for informational purposes, the majority of the questions were formulated in an 'open' way so that the interviewees were encouraged to engage in individual sense-making and interpretation, which was essential for the adopted interpretive case study approach. In the case of the FSA, which, as we will learn in chapter 5.3 publishes all its papers, agendas, and minutes as part of a far-reaching transparency regime, the expert interviews allowed me to gain insights into the relative importance of specific practices and developments that would otherwise be hidden in the vast number of published documents. In the case of the BfR, by contrast, where most knowledge production and decision-making remained concealed from the public (chapter 6), the expert interviews served as a source of data in a policy domain where field access was particularly difficult. Thus, though in different ways, in both cases the expert interviews had a 'systematising function'. Beyond this however, the expert interviews were also conducted to generate data for theory building (Bogner & Menz 2009: 47–48). In this sense, the expert interviews aimed at generating 'interpretative knowledge', i.e. 'the expert's subjective orientations, rules, points of view and interpretations, which suggest a picture of expert knowledge as a heterogeneous conglomeration' (Bogner & Menz 2009: 52). Thus, expert interviews were conducted to generate 'specialised knowledge' that is exclusive in the sense that it is not available to the researcher without conducting interviews.

However, the here generated knowledge, as Bogner and Menz point out, does 'not exist as an entity prior to interpretation, and in this sense interpretative knowledge is always the result of

an act of abstraction and systematization performed by the researcher'[68] (Bogner & Menz 2009: 53). Moreover, expert interviews constitute a sort of qualitative data that are 'co-produced' by the interviewee and the interviewing researcher, a process which is essentially shaped, as I have shown above, by the underlying 'interactional model'.

In parallel and in dialogue with the first analysis of the expert interviews, I therefore began to collect official policy documents – including websites – which played a central role in these developments in a chronological order. In contrast to expert interviews, policy documents constitute a data source that is not an 'analytic construction' co-produced by the researcher and are therefore an often-used way of data triangulation in qualitative policy analysis (Sedlačko 2018). In line with the adopted praxeological perspective, I regarded these documents as 'reality generating' and performative tools used by the agencies in their authorisation and legitimation work. Finally, I also participated in a number of meetings and events of both agencies, which were open to the public and took field notes of my observations. The triangulation between these three forms of qualitative data enabled the multiple comparisons in coding and memoing that are postulated by GTM (see below).

The resulting text corpus of expert interviews and documents was intentionally broad so that it offered sufficient options for comparison and variance over the entire investigation period from 2000 to 2015 and across the agencies' different organisational units. After having identified the (1) agencies' practice of competence and role attribution (social dimension), (2) the way in which they drafted and used guidance documents to establish objectivity (object dimension) and (3) the way in which they coped with the uncertainties surrounding risk assessment (temporal dimension) as relevant dimensions of politico-epistemic authority, I turned to the strategy of theoretical sampling.

Theoretical sampling

Theoretical sampling is based on the idea that the sampling of additional empirical material is guided by the emerging theoretical constructs and dimensions (Morse 2007: 237–240). As Glaser and Strauss put it, theoretical sampling 'is the process of data collection for generation theory whereby the analyst jointly collects, codes, and analyses his data and decides what data

[68] As Bogner and Menz argue, '[a]ll too often scholars forget that anything that is said, both in everyday situations and in the particular situation of the interview, is not just said *about* some subject in a social vacuum, but is also said *for* the concrete interaction partner (Bogner & Menz 2009: 56).

to collect next and where to find them, in order to develop his theory as it emerges' (Glaser & Strauss 1967: 45). Following GTM, I divided the theoretical sampling process into two steps. In the first step, I extended the corpus by adding new material that enabled me to discover new categories that were relevant to my concept of politico-epistemic authority and its three dimensions. I did so by chronologically collecting documents published by the agencies. As mentioned above, I conducted theoretical sampling much more intensively for the in-depth study of the FSA case than for the comparative case of the BfR.

For the focused comparative case study of the BfR, a manageable number of documents I collected (n= 50) included annual reports, research reports, guidance documents, and websites. As we will learn later in the thesis, information disclosure was much more limited in the BfR's case than in that of the FSA. I collected these published BfR documents that were relevant to my research manually. This manual research was based on a combination of desktop research (the BfR's website) with the expert interviews, in which I asked the interviewees for relevant documents.

With regard to the in-depth case study of the FSA (n= 300), the much larger number of collected documents included annual reports, research reports, guidance documents, websites and above all 'board decision papers', 'committee papers' and meeting minutes. In so doing, in addition to documents named by interview partners, a specific focus was put on collecting documents that:

- dealt with the FSA's different intraorganisational arrangements and hence provided information about the agency's pattern of role and competence attribution (social dimension)
- represented 'guidance documents' that articulate the basic norms and principles of the FSA's workings, notably processes of knowledge production and decision-making (object dimension)
- dealt with the FSA's ways of coping with uncertainty and anticipating the future (temporal dimension)

To collect all of these documents, I used 'wayback machine'[69], a digital archive of the world wide web, and 'DownThemAll![70] (DTA), a download manager browser extension that downloads all linked files associated with a certain webpage. Together these digital tools enabled me to collect the FSA's published documents in a chronological order from 2000 to 2015. In this first step of theoretical sampling, I used the qualitative data analysis software

[69] https://web.archive.org
[70] https://www.downthemall.org/

MAXQDA, which allowed me to easily sort and scan the large amounts of the archived FSA documents. I selected specific key words for each dimension of politico-epistemic authority and related types of documents to browse the text corpus. Based on this keyword research, I compiled a large text corpus consisting of around 1500 documents. Furthermore, I used MAXQDA[71] to create and organise a complete text dataset consisting of the collected documents, the conducted expert interviews and my field notes documenting my direct observations.

In the second step, I narrowed the document text corpus I had collected to date down to specific documents that could help me to differentiate, elaborate, refine, and validate my categories and dimensions. I put a special focus on interrelations between categories and their different specifications and assorted characteristics. To reduce the text corpus in this way, I moved forward on the timeline from 2000 to 2015 and selected documents according to the following criteria, which should ensure their particular relevance for the FSA's frontstage practice of building and legitimating politico-epistemic authority:

- their publication was separately announced on the FSA's website
- they were referenced in the FSA's performance reports (i.e. reports designed to demonstrate how the FSA as a whole or specific organisational units performed on a specific matter)
- discussed in the FSA's open board meeting or the open meetings of its scientific advisory committees

Any document that fulfilled at least two of these criteria was included in the reduced corpus consisting of 350 documents[72] and the 39 transcribed expert interviews for both cases. The selected documents were then analysed using the 'constant comparison technique' to discover similarities and differences across the studied time period. Here, the comparison criterion arose from my first ideas for the potential four varieties of 'politico-epistemic authority' – decisionistic, advocatory, technocratic, and rationalistic – which I consolidated using constant comparison. I then contrasted the first drafts of the four varieties of politico-epistemic authority with each other and in terms of their development in the studied time period. This included comparing their manifestation in the social, object and temporal dimension of authorisation and legitimation practices over time.

[71] https://www.maxqda.de/

[72] 50 for the BfR case, 300 for the FSA case

The outlined use of constant comparisons ultimately resulted in 20 openly coded[73] documents and interviews, approx. 40 further documents that were still openly coded but not analysed based on line-by-line coding, and the remaining set of approx. 330 selectively coded documents that were coded using key word research offered by MAXQDA. Thus, theoretical sampling specifically involved the ongoing comparison of the emergent categories and lines of conceptual argumentation with the collected empirical material until theoretical saturation was achieved. This was the case when the analysis of additional material no longer revealed new insights about the theoretical account I had developed.

4.2.3 Data analysis

According to GTM, data analysis is fundamentally based on coding. Coding enables 'a conceptual abstraction of data and its reintegration as theory' (Holton 2007: 265). In this chapter I present, for the sake of better readability, sampling/data collection and coding/data analysis as two discrete stages of the research process. However, they are not in fact separated and do not come chronologically according to GTM. Rather they are conceptualised as being interdependent and in practice conducted in parallel, as should have been already clear from the above. The same is true for the three different kinds of coding suggested by GTM, which likewise do not take place in strict sequence and which I will present in what follows. There are several types of coding that depend on which line of GTM one follows. However, as I have already argued above, I loosely draw on GTM as a heuristic research strategy and, therefore, these variations in nomenclature and procedures are of limited relevance for the scope of the thesis.

Open coding

The goal of open coding is to develop a multiplicity of codes to explore 'whatever theoretical possibilities we can discern in the data' and based on this to 'move toward later decisions about defining our core conceptual categories' (Charmaz 2006: 47). This involves breaking up data into smaller parts (line-by-line or section-by-section), which are then intensively analysed. The core process underlying this 'epistemological break' of the data is to compare data with data and assign analytical codes to the data by asking questions such as the following as suggested by Böhm 2004: 271):

- What? What is at issue here? What phenomenon is being addressed?
- Who? What persons or actors are involved? What roles are they attributed?

[73] The applied coding principles will be presented in greater detail in the following in chapter on 'Data Analysis'

- How? What aspects of the phenomenon are addressed (or not addressed)?
- When? How long? Where? How much? How strongly?
- Why? What justifications are given or may be deduced?
- Whereby? What methods, tactics and strategies are used to achieve the goal?

In interaction with these questions also what Charmaz calls 'sensitising concepts' helped me to think analytically about the collected data during open coding (Charmaz 2006: 17–18). According to Charmaz 'sensitising concepts'

> 'offer ways of seeing, organizing, and understanding experience; they are embedded in our disciplinary emphases and perspectival proclivities. Although sensitizing concepts may deepen perception, they provide starting points for building analysis, not ending points for evading it. We may use sensitizing concepts *only as* points of departure from which to study the data' (Charmaz 2003: 259; emphasis in original).

Thus, understood in this way, sensitising concepts serve as 'tentative tools' for developing codes assigned to the data; if they prove irrelevant, they can be adapted or even discarded. The codes that emerge on this basis are provisional and open to other interpretive possibilities and rewording. As I have already argued in chapter 3, I drew on different sensitising concepts in this thesis, as figure 5 again illustrates. With this web of sensitising concepts in mind, I considered the following five adapted W questions as key to open coding:

(1) *epistemic authority:* What is at issue here? In relation to which specific 'external reality' does epistemic claim-making occur? – Is the issue at stake limited to food safety? Or are other framings of food policy also addressed? e.g. nutrition, agriculture, environmental sustainability

(2) *political authority:* Who? – What constituencies are represented and involved? Which roles do they embody, or which ones are attributed to them?

(3) *legitimation:* Why? – What input-legitimacy-oriented or output-legitimacy-oriented justifications are given or may be deduced?

(4) *contextual embeddedness:* Where? – Which contextual elements are at work?

(5) *contestedness:* When? How long? – In which situations of consensus or dissensus? What kind of change occurs?

In addition to these code generative W questions I applied 'dimensionalisation' as a further open coding technique that is aimed at developing subcategories by differentiating the characteristics and the degree of variation within categories (Kelle & Kluge 2010: 73–82).

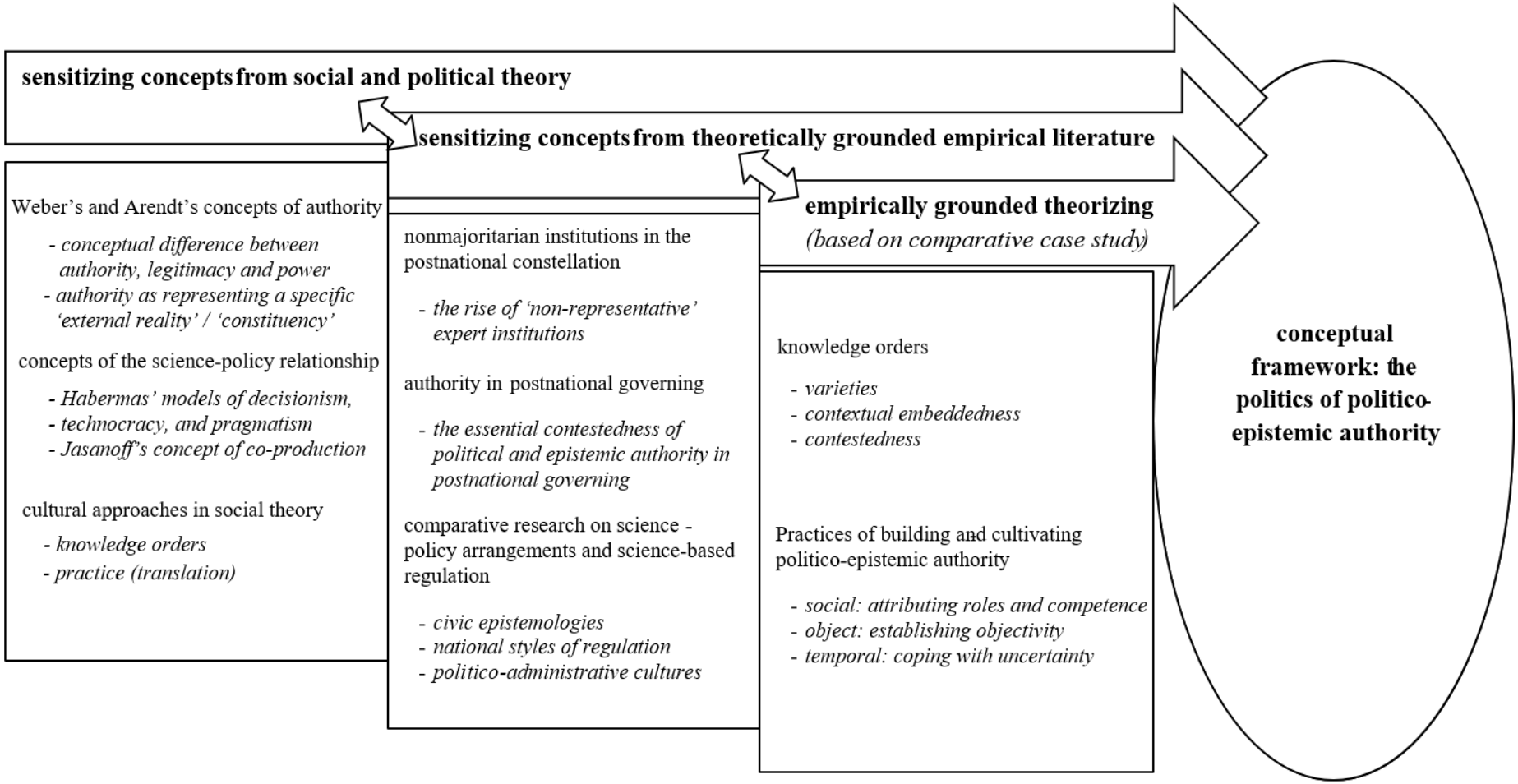

Figure 5 From sensitising concepts to empirically grounded theorising on the politics of politico-epistemic authority, my compilation

Axial coding

By reflecting on the systematisation and 'dimensionalisation' of coded data, I had already crossed the boundary towards 'axial coding' (Breuer et al. 2010: 84). Building on open coding, I used axial coding to 'specif[y] the properties and dimensions of a category' (Charmaz 2006: 60). As coding progressed, specific patterns began to emerge that eventually resulted into what (Glaser 2002) calls 'core categories'[74]. The core categories bring together the hitherto developed concepts and categories in a model-like manner and encourage thinking in contexts and conditions. In my case, this were the following five categories as discussed in chapter 3:

(1) *Authorisation:* In which mode (monopolistic vs. multipolistic) is judgement and decision-making competence attributed? In which mode (calculative vs. socially situated) is objective knowledge produced? In which mode (linear vs. recursive) is the future anticipated and uncertainty addressed?
(2) Representative claim: On behalf of which particular consumer constituencies and their specific 'common good' are authorisation claims made?
(3) *Legitimation:* In which mode (input-legitimacy-oriented vs. output-legitimacy oriented) are specific authorisation practices justified? Which type of knowledge order is (re)produced by specific patterns of authorisation and legitimation?
(4) *Contextual embeddedness:* What contextual elements to account for the identified patterns of building and cultivating politico-epistemic authority and the representative claims underlying them?
(5) Contestation: Which dilemmas, tensions, ambiguities and lines of conflict do actor's attempts to build and cultivate politico-epistemic authority confront? Which dynamics or changes occur throughout the studied time period and why?

This 'reconstruction logic' (Breuer et al. 2010: 87) then served as a procedural guide for my further coding activities. The connections between the categories of the coding heuristic constituted a first 'working hypothesis' and were then examined by constant comparison with the empirical material. In so doing, I used the key words search function offered by MAXQDA. During open coding I noted a list of key words that indicated specific characteristics.

Selective Coding

[74] As Holton (2007: 279) argues, core categories 'can be any kind of theoretical code: a process, a typology, a continuum, a range, dimensions, conditions

, consequences, and so forth'.

The last step of coding, i.e. 'selective coding' aimed at intertwining these five 'core categories' by recoding large parts of the material in order to clarify the relationships between the core categories and to bring about a theoretical conclusion (Strübing 2014: 10) – which in my case was directed at different modes of building and cultivating politico-epistemic authority. What selective coding is hence primarily about is the readjustment of the hitherto developed analytical perspective. What had been coded up to now in relation to a number of different tentative 'working hypotheses' that were repeatedly modified throughout the project, was now revised through selective coding. The aim here was to arrive at a more consistent perspective than was possible during the axial coding (Strübing 2014: 10). In this vein, selective coding gave rise to a specific story line; the story to be told. This meant that the specific focus put on the object of inquiry, the presentation of results, and the 'empirically grounded theory' was linked by a 'common thread' (Breuer et al. 2010: 92).

What played an important role in my selective coding work was the sampling procedure. Using maximal comparison, I searched for data that was likely to deviate from my hitherto identified empirical patterns in the developed categories. This material was, first, the BfR case that was contrasted with the case of the FSA. Second, this material related to all documents published since around 2006 and the passages taken from the expert interviews that deal with developments over time. I then compared this material with the documents published by both agencies in their earlier years in order to analyse variations within a single case, and thus to explore the dynamic development of the agencies' authorisation and legitimation practices from 2000 to 2015. Thus, maximal comparison allowed me to work out variations and thus the contextual conditions for specific modes of building and cultivating politico-epistemic authority. At the same time, it allowed me to account for the dynamic development and changes of these practices. At this point, using MAXQDA proved particularly helpful because it allowed me to analyse the quantitative distributions of codes over time, which offered important validation for my qualitative interpretation.

Memoing

As I have already mentioned above, these three steps of coding merged into one another, and occured cyclically. Likewise, 'memoing', i.e. the writing of 'theoretical notes about the data and the conceptual connections between categories' (Holton 2007: 265) accompanied the entire process of sampling and coding. Using memoing to increase the level of abstraction thus constituted an important step between data collection, analysis and the draft of the thesis. Using MAXQDA for the process of memoing was productive since the software allowed me to

directly link memos to codes or groups of codes that were, in turn, directly linked with the respective text data.

Presentation of Results

As the previous presentation of the adopted research strategy showed, GTM requires the researcher to follow certain steps and to make and reflect upon many methodical selection decisions. However, these individual intermediate steps are in part difficult to convey when it comes to writing up and presenting results. This is particularly true for the sampling and the coding procedures I applied. Thus, for the concluding remark of this method chapter, it is important to note that I will present the results of the empirical analysis in chapters 5 and 6 in a condensed manner, i.e. without depicting each of the previously described steps and decisions.

However, in presenting the results of the in-depth case study on the FSA (chapter 5), each chapter begins with a what I called a *'close-up'*. Here, I zoom in on one or a couple of texts that represent an analytically central situation that illustrates key aspects of the respective dimension of politico-epistemic authority in an exemplary manner. Doing so allows me to convey, at least partly, the way in which I used GTM to work closely with the collected empirical material in an inductive way during the first research steps.

5 The Politics of Politico-Epistemic Authority – The Case of the British FSA

> 'I suppose if we start with the external challenges, and it will be a growing challenge, is about, in a sense, the democratization of science, particularly with social media and a growing wealth of information on the internet, in the sense that science and evidence and knowledge is no longer the preserve of experts but is something that is accessible to all, and everyone has the ability to do literature searches for the and take whatever conclusions they want. And I think you see this in some of the writings that Ben Goldacre and others who write on what they call "bad science"; the extent to which there are many people who draw conclusions from evidence that the majority of people wouldn't support and the majority of scientists wouldn't think are correct to draw – which means that our voice and the voice of our Scientific Advisory Committees are just now one amongst many. So, the issue for us is how to make what we say a trusted source, trusted to consumers; so understanding how we build a brand, how we build value in that brand, how we build trust in the brand of us as people who advise consumers. I think that's probably the main external challenge' (interview official 32 – FSA).

5.1 Setting the Scene

This chapter recounts the central discursive and institutional elements that make up the context in which the Food Standards Agency (FSA) operated in building and cultivating politico-epistemic authority from its establishment in 2000 to 2015. This context was first shaped by the three New Labour governments under Tony Blair and Gordon Brown and notably by one of their most central policy discourses on 'modernising government'. Many regulation and public administration scholars have characterised the UK New Labour government (1997 – 2010) as a 'regulatory laboratory' (Rawlings 2010: 4). In so doing, these scholars point to the government's experimentation with a broader range of regulatory modes and arrangements of public management reform. These were embodied in the Blair Labour government's 'Modernising Government White Paper' of 1999 (Cabinet Office 1999) and the many subsequent papers and institutional arrangements produced by a plethora of policy advisory units that emerged at the centre of British government under Prime Minister Blair (Fleischer 2012: 283–358). This 'modernising government' discourse reads as if two voices were struggling to be heard: While one voice relied on a claim of input legitimacy and stressed the importance of 'social inclusiveness' and 'participation', another seemed to push for an improvement of the efficiency and effectiveness of policy-making and hence was based on a more output legitimatory claim. The input-legitimacy-oriented and the output-legitimacy-

oriented strand both split into a more general policy strand and a more science-policy focused strand, as is illustrated by the following table:

	input legitimacy oriented	output legitimacy oriented
general policy strand	**Social Exclusion**	**Better Regulation**
science-policy-focused strand	**Science and Society**	**Evidence-Based Policy Making**
Transparency		

Table 9: Modernising government discourse, my compilation

The broader 'modernising government discourse', which proved to be of importance in shaping the FSA's authorisation practices as I will show in this chapter, has five – interrelated – thematic lines shaping the contextual framework: On the one hand, the discourses on (1) 'social exclusion, (2) and 'science and society' were primarily grounded in an input legitimacy oriented narrative, while the discourses on (3) 'better regulation and (4) 'evidence based policy making' were primarily based on a claim to output legitimacy. (5) Finally, there was a broader discursive strand on transparency which spanned all dimensions. In building and cultivating politico-epistemic authority, nonmajoritarian expert bodies, such as the here studied FSA, could draw on these (partly competing) legitimation sources – and had to mediate between them. As I will show while describing each of these four discursive lines , they were institutionally anchored within strategic policy advice units at the centre of British government and reflected specific politico-administrative traditions as well as specific elements of the British 'culture of expertise'. Moreover, in presenting the four discursive lines and their institutional manifestations in the following subchapters, I will also focus in how these changed under Cameron's Conservative-Liberal coalition government. The major elements of the British institutional policy advice and science advice system will finally be recapped in a separate subchapter.

5.1.1 Social exclusion[75]

A keystone idea of New Labour's 'modernising government agenda' was to include those who were affected by social exclusion, as the following two quotes from the 'Modernising Government White Paper' excellently illustrate:

> 'Making sure policies are inclusive. We will devise policies that are fair and take full account of the needs and experience of all those – individuals or groups, families and businesses – likely to be affected by them' (Cabinet Office 1999: 16).

> 'In the past, important groups in society have been marginalised. By understanding the diverse needs of society and mainstreaming them into Departments' thinking, we will be able to make policy that is better for all' (Cabinet Office 1999: 19).

Directly linked to New Labour's dominant discourse on citizenship and welfare reform – the discourse on social exclusion[76] – was a new consultative 'joined-up' approach of a 'more open policy-making process' (Social Exclusion Unit 2001: 7; Cabinet Office 2000b). From its very beginning, the Blair government established the Social Exclusion Unit outside departmental line structures, based within the Cabinet Office and led directly by the Prime Minister (Byrne 2005: 152–153; Fairclough 2000: 51–54). As Fairclough has argued in his discourse analysis of the politics and the 'language of social exclusion', the unit was designed to secure 'joint-up government' with respect to social exclusion – to ensure effective coordination between different government agencies and effective "partnership" between government, local government, voluntary organisations, and business' (Fairclough 2000: 51).

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[75] Smaller parts of this chapter are based on Straßheim and Korinek (2016).

[76] The concept of social exclusion has its origins in France in the early 1970s, when it was used by the policy maker René Lenoir to refer to the groups at the margins of French society. Subsequently, it was used in social scientific debates on poverty. In the mid-1990s, the concept of social exclusion was then imported from these debates to the European Union and was skilfully exploited by the European Commission in '(re)defining it as a *European* problem requiring a *European* response', which required the Commission to actively propose adequate measures ((Bauer 2002: 388); similarly (Berghman 1995; Cousins 1998). The Commission used social exclusion as a reason to finance seminal research in this area. It was on the basis of this research that the Commission criticised the Member States' '"outdated" poverty policies and presented itself as a 'trend-setter in the fight against "new poverty" and "social exclusion"' (Bauer 2002: 388). Since the Lisbon Summit in 2000, the concept has been central to the Commission, which made it part and parcel of the 'Community Action Programme to Combat Social Exclusion 2002-2006' and thus of its social cohesion policy (Levitas 2005: 190). At the same time, the British academic and think tank landscape became increasingly interested in the concept of social exclusion and in the Commissions' efforts to develop a European social exclusion policy. Reflecting the topic's growing salience both domestically and at the EU level, the New Labour government fully embraced the concept, making 'tackling social exclusion' one of its policy priorities.

The reliance of the Social Exclusion Unit on input legitimacy is excellently illustrated in its initial leaflet. Here, the idea of working in 'partnership' with interested social groups was stressed as a general principle of policy-making; it stated that, when preparing reports, the Social Exclusion Unit would 'consult widely' with business and the voluntary sector, and 'a particular attention' would be paid 'to people who have direct experience of social exclusion' (Social Exclusion Unit 1997: 3). The drive for a more open mode of policy-making, which was tightly associated with the government's social exclusion agenda, hence found its expression in extensive public consultations with 'more than 200 representatives from business, local government, the voluntary and community sector, the research community, faith groups and minority ethnic communities' conducted by the Social Exclusion Unit in its first five years (Social Exclusion Unit 2001: 7).

This emphasis reflected New Labour's 'enthusiasm for the participation of ordinary people' in society (Clarke 2013: 209) including unemployed people, lone parents, especially young never-married mothers, ethnic minorities, low-income consumers, and other 'hard to reach groups' (Levitas 2005: 194; Fairclough 2000: 61). In order to tackle social exclusion and to build an 'inclusive society, it was argued, the welfare state was to be transformed towards 'social activation'. Directly consulting with 'ordinary people' and 'hard to reach groups' should lead these people to 'actively promote and manage their own well-being' (Clarke 2013: 209). A central practice of activation was to 'bring to life the capacities (…) and self-knowledge of "ordinary people"' in order to overcome social exclusion (Clarke 2013: 209). Labour's attempt to empower 'ordinary', 'hard to reach' groups extended well beyond welfare reform and its original focus on poverty to also include health and other aspects of well-being. As we will see later in this chapter, these included food and nutrition. As Blair put it in the most general sense at a speech regarding the launch of the Social Exclusion Unit, social exclusion encompassed all 'prospects and networks and life chances' (Blair 1997). Several guidance documents on public consultation and engagement have been developed and published by central government units in the Cabinet Office, by departmental taskforces under the New Labour government. For instance, the Cabinet Office published 'Viewfinder' (Cabinet Office 2002b), a guide for policy-makers to public involvement, in local policy-making in particular. In 2002, the Department for Communities and Local Government published 'Guidance on enhancing public participation' (DCLG 2002), in which it suggested a systematic approach to participation within local authorities, which were defined as a site of governance in tackling social exclusion in participatory ways (Wallace 2007). The Department of Health published two guidance

documents on public engagement aimed at establishing more socially inclusive health services (DoH 2004, 2008).

However, within the New Labour input legitimacy oriented discourse, social exclusion was not only understood in terms of participatory citizenship, but also within the frame of 'rights and responsibilities', in which 'individuals must assume liability for their own circumstances' (MacLeavy 2006: 90). A key aspect of New Labour's discourse on social inclusion and exclusion was therefore a preoccupation with the individual and 'cultural deficiencies' of the excluded, rather than with the structural conditions of unequal societies (Fairclough 2000: 61). It was the 'cultural lenses' and habits of specific excluded social groups that constrained the ability of excluded people to take up job opportunities, to pursue learning opportunities, and, as we shall see, to adopt a healthy lifestyle (Bowring 2000; Levitas 2005; Koller & Davidson 2008; Thompson 2011). All initiatives aimed at tackling deprivation and social exclusion had in common that they heavily relied on the notion of 'partnership'. For New Labour, the notion of partnership had been important in its drive to empowering citizens in developing capacities to cope with social problems. By increasingly using the notion of partnership, the New Labour government 'sought to place considerable emphasis on the involvement of community and voluntary organisations as partners to the public and private sectors' (Bochel & Duncan 2007: 9–10).

While New Labours social exclusion discourse initially also contained elements of classical social-democratic 're-distributive discourse (Levitas 2005) the focus on initiatives and interventions aimed at the behaviour of those considered 'hard-to-reach' and 'at risk' of social exclusion intensified over the years New Labour was in office. In particular, New Labour's social exclusion policies increasingly focused on targeting so called 'anti-social behaviour and problem families'. What came along with this shift were measures designed to prevent the 'perceived causes, in families, in classrooms, and in communities' (Cabinet Office 2007); the Social Exclusion Unit now focused on 'preventive work among the most hard to reach children and families deemed to have been immune to much of the Government's previous social exclusion drives' (Welshman 2013: 196). New Labours initially input legitimacy oriented modernisation agenda, which aimed at 'tackling social exclusion' via a collaborative and consultative 'joint-up governance' thus became increasingly reframed in a more output oriented way, namely in terms of the effective management of 'problem families', 'problem teenagers', and 'problem communities' (Rodger 2006). Or, as Welshman argued, the social exclusion policy work increasingly focused 'on the "high harm, high risk and high lifetime cost families",

with the aim of intervening as soon as they appeared at risk of exclusion, breakdown or criminal behaviour' (Welshman 2013: 197).

When the Conservative-Liberal Democrat coalition government came into power in 2010, the dominant citizenship discourse rhetorically shifted from 'social exclusion' to the concept of the 'Big Society'[77] (Straßheim & Korinek 2016). At its core, the Big Society concept blamed the breakdown of the welfare society on too much state involvement in the life of communities and individuals (Bulley & Sokhi-Bulley 2014: 455). Under Labour, Cameron claimed, government had grown to the point where 'it is now inhibiting, not advancing the progressive aims of reducing poverty, fighting inequality, and increasing general well-being' and where 'it has promoted not social solidarity, but selfishness and individualism' (Cameron 2009). The fundamental analytical move made by the advocates of Big Society then was to suggest not a Thatcherite 'simplistic retrenchment of the state', but – reflecting Sunstein and Thaler's philosophy of 'liberal paternalism[78] (Thaler & Sunstein 2009) – a thoughtful re-imagination of the state's role as 'choice architect':

> '[T]he re-imagined state should not stop at creating opportunities for people to take control of their lives. It must actively help people take advantage of this new freedom' (Cameron 2009)
>
> Similarly, there has been the assumption that central government can only change people's behaviour through rules and regulations. Our government will be a much smarter one, shunning the bureaucratic levers of the past and finding intelligent ways to encourage, support and enable people to make better choices for themselves. (Cameron & Clegg 2010: 7–8)

Big Society was thus about the government playing a vital role as 'choice architect' in empowering the personal responsibilities of citizens to make 'better choices' for themselves, their families, and communities. Remarkably, however, despite the Conservative-Liberal Democrat coalition government's use of 'Big Society' as a 'counterpoint to Labour statism' (Pattie & Johnston 2011: 407), the conservative-liberal democrat discourses of citizenship

[77] As the solution to what was called a 'broken society' (Cameron 2008), Cameron established the concept of Big Society as a catch phrase in the Conservative general election manifesto (Conservatives 2010). Since then, it and figured a as a major theme in the UK coalition government's agenda.

[78] In a number of speeches and publications, Cameron and other advocates of the Big Society concept also repeatedly referred directly to leading behavioural scientists, Thaler and Sunstein in particular. In order to both justify and achieve the grand social transformation from big government to Big Society, Cameron suggested that Britain should learn from the lessons of behavioural sciences (Straßheim & Korinek 2016).

and welfare state reform showed more continuities than discontinuities (Pathak 2013; Welshman 2013). The above-described primarily output legitimacy oriented social exclusion policies aimed at targeting problem populations, which begun under Labour since around 2006, had been continued and even reinforced by the Conservative-Liberal Democrat coalition government – now with a dedicated 'behavioural approach'. Some observers have even argued that there was 'arguably a direct line of descent (…) that runs through both Blairism and the ideas of Gordon Brown directly to the Coalition Government' (Butler 2014: 422–423). However, what did change, was that any justification in terms of input legitimacy eventually disappeared in the Big Society discourse on citizenship, which increasingly focused on the effectiveness of interventions – cost-effectiveness in particular – and the potential savings for the tax payer (Welshman 2013: 222–223).

5.1.2 Science and society

With New Labour, the Science and Society discourse gradually replaced the rather elitist 'public understanding of science' (PUS) agenda, which has had a long history in the UK. Since 1980s, the PUS agenda had centred around the Royal Society report titled 'Public Understanding of Science' (The Royal Society 1985), which was followed by several similar reports (e.g. Royal Society 1990; Department of Trade and Industry 1996). The reports argued that the public was widely disinterested in and had negative attitudes towards science – which was seen as deriving from a lack of knowledge about science. This ignorance of science was seen as the reason for a declining public acceptance of new technologies. Therefore, the report suggested that laypeople should be educated in science. In response to this report, a flurry of educational 'public understandings of science' activities were developed in the UK (Gregory & Lock 2008). These reflected what was coined 'the deficit model' by social science scholars (Wynne 1991; Ziman 1991). According to this model, science communication was a linear, one-way process of knowledge transfer from a specialist scientist to passive laypersons. Here, 'scientists do not have to build public trust, they assume that the public is already trusting' (Gross 1994: 6). However, with the BSE crisis– a crisis that centred on a serious loss of public trust in regulatory science and science-based policies – the PUS agenda and its deficit model fell into discredit in British policy discourse. After years of denial, the British authorities had to admit that there was enough evidence that clearly indicated that BSE was transferable from contaminated meat

to humans[79]. As argued in the introduction, the BSE crisis attracted enormous public attention in the UK (and beyond). It was hence in the very public spotlight that the key assumptions of the PUS agenda were suddenly disproved: Instead of 'speaking truth to power', authorities responsible for protecting consumers based on scientific risk assessment were simultaneously responsible for sponsoring the food and agriculture industries and hence promoting their interests. Purportedly 'science-based' policy decisions were made by 'small closed groups of scientific experts including many drawn from industries and the firms whose products were being regulated' (Millstone & van Zwanenberg 2002: 594). Consequently, rather than constituting two entirely separate spheres as suggested by PUS, the BSE crisis demonstrated that science and policy were entangled in various ways.

Against this backdrop, the dominant paradigm in the British science-policy discourse shifted from the PUS model to the 'science and society model' in the late 1990s and early 2000s (Gregory & Miller 1998; House of Lords Select Committee on Science and Technology 2000). Science and society overcame the focus on scientific literacy among the public and opened up questions on how to make science and technology more responsive to the public's needs and interests[80]. The house of lords' seminal 'Science and Society' report in 2000 was the first major document to emphasise this shift in the British science-policy discourse. The report reconsidered the PUS paradigm by concluding that there was not a lack of scientific literacy in the first place, but a 'crisis of trust' – 'public confidence in scientific advice to Government has been rocked by a series of events, culminating in the BSE fiasco' (House of Lords Select Committee on Science and Technology 2000: paragraph 1.1). Moreover, the report specified the 'roots' of the 'BSE fiasco' – namely the British elitist 'culture of secrecy' and the predominance of an overly scientistic way of framing policy problems.

As to the 'culture of secrecy' the report argued:

> 'The administrative culture of the United Kingdom is notoriously secretive. (…) [T]here is an abiding presumption that government information and decision-making processes are confidential and closed. This has left the field wide open to allegations of conspiracy and cover-up. This is particularly damaging when the subject-matter concerns risk, the assessment of which depends on many assumptions; and when questions of science are

[79] The human variant of BSE is called Creutzfeldt-Jakob disease or vCJD.

[80] This was the case, at last at the frontstage level of policy discourse. On a closer look, PUS was not entirely replaced but continued to shape British science policy thinking in government and in the science community (Irwin 2006). This is particularly evident in the 2002 HM Treasury report, called Robert report, which undertook a 'review into the supply of science and engineering skills in the UK' (HM Treasury 2002).

> involved, in which there is often a degree of uncertainty and room for disagreement. (House of Lords Select Committee on Science and Technology 2000: paragraph 2.45).

With regard to problem framing in British public policy, the report argued in its section entitled 'Framing the problem':

> 'Much public policy debate is confused by an assumption that the issues reverberating around science in the public domain, especially a whole variety of risk issues, can be reduced to a set of questions capable of objective and incontrovertible answer by scientific research. Most often, in truth, the issues are complex. Scientific understanding can contribute to a resolution of these issues, but only in partnership with judgements based on people's attitudes, values and ethics' (House of Lords Select Committee on Science and Technology 2000: paragraph 2.47 - 2.49).

In order to remedy the crisis of trust rooted in these two elements of UK's 'Ancien Régime' of science governance (Millstone & van Zwanenberg 2002: 594), greater openness and consultation were defined as necessary components of the 'new scientific governance' approach to be adopted by the Labour government (Irwin 2006). Thus, as the following quote from this report illustrates, a new input-legitimacy-oriented narrative, emphasising public deliberation and engagement, came into the British science-policy discourse with the Science and Society report:

> 'We have argued above that public confidence in science and policy based on science has been eroded in recent years. In consequence, there is a new humility on the part of science in the face of public attitudes, and a new assertiveness on the part of the public. Today's public expects not merely to know what is going on, but to be consulted; science is beginning to see the wisdom of this, and to move "out of the laboratory and into the community" (Firth p 297) to engage in dialogue aimed at mutual understanding' (House of Lords Select Committee on Science and Technology 2000: paragraph 5.1)

In the years after the House of Commons 'Science and Society' report was published, this shift towards input legitimation in science-policy discourse gradually became visibly institutionalised within Whitehall (Council for Science and Technology 2005). As Wilsdon and Willis have argued, '[c]onsultation papers, focus groups, stakeholder dialogues and citizens' juries have been grafted on to the ailing body of British science' with the aim of restoring public confidence (Wilsdon & Willis 2004: 18). For instance, a national 'consensus conference' on radioactive waste management and a national deliberative opinion poll on biotechnology were conducted in the beginning of 2000. Likewise, several major research programmes on 'participation and democracy', 'risk, policy and participation', and 'science and society' were launched (Kass 2000). At the same time, the Government Office of Science and Technology

(OST) launched an extensive programme for public engagement on nanotechnologies (OST 2005). From 2002 to 2003, GM Nation, a cross-departmental effort on a nationwide public debate about GM crops, took place.

Moreover, as a direct response to the BSE crisis, the New Labour government became a frontrunner among EU member states in establishing a 'Foresight and Horizon Scanning Centre' within the Office for Science and Technology with a comprehensive working programme in 2002 (OST 2002). This programme was specifically based on various horizon scanning techniques, which were later formalised in a specific 'toolkit' (Office of Science and Technology (OST) 2005). Characteristic for many of these techniques was that small groups of experts from departments and agencies shared their perspectives and knowledge with each other and with other relevant actors in order to detect early signs of potentially important technological and social developments. Thereby, a strong emphasis was put on the inclusion of a range of societal actors, who would work with the foresight and horizon scanning project teams. Various stakeholders were involved in jointly 'develop[ing] a range of possible paths and in using these to help shed light on how present action might contribute to determining possible future outcomes' – the explicit aim here thus was not to 'predict the future', but 'to broaden the range of decisions', that policy makers 'might need to consider in light of the variety of possible future impacts' (Bochel & Shaxson 2007: 34).

In 2004, the 'Science and Society Team' within the Department for Business, Energy and Industrial Strategy (BIS) established 'Sciencewise, Expert Resource Centre for Public Dialogue in Science and Innovation' mandated to help policy makers commission and use public dialogue to inform policy decisions involving science and technology issues (Thorpe & Gregory 2010; Pieczka & Escobar 2013). Sciencewise replaced the 'Copus Grants Committee', a funding body for public science communication activity in the UK. As Thorpe and Gregory have shown Sciencewise was designed to 'encourage "dialogue" and "engagement" multidirectional communication concerned with values, aspirations and concerns', whereas Copus pursued a more one-directional mode of science communication based on the deficit model of PUS (Thorpe & Gregory 2010: 274). In this vein, many observers have argued that the establishment of Sciencewise reflected an attempt to open up to a more 'deliberative democratic' way of science policy-making that characterised New Labour's Science and Society approach (e.g. Chilvers 2010; Pallett 2015). In so doing, the input legitimacy oriented 'Science and Society' discourse relied on New Labour's rhetoric of renewing the British 'public interest' culture through a more socially inclusive and transparent governance style than the traditional British

opaque style dominated by ‘closed-door settings’ (Jasanoff 2005). The traditional British style of policy making, as reflected in the PUS paradigm, tended to be ‘closed to all but a select inner circle of participants’, which resolved disputes ‘as far as possible through negotiation within this socially bounded space’ (Jasanoff 1995: 325–326).

However, with the coalition government’s revival of evidence-based policy making in 2010 and the subsequent launch of the ‘What Works’ centres network – both of which were part of the new government’s larger austerity programme (see chapter 5.1.4) – the dominant frame of public engagement and participation in science-policymaking fundamentally changed. It shifted from representing ‘a democratic act’ to constituting ‘a source of evidence based policy’ (Pallett 2019). In this context, the previous modes of public engagement and dialogue as institutionalised in Sciencewise were increasingly questioned in terms effectiveness and efficiency. And it was members of Sciencewise themselves who began to ask whether there was ‘any reason why science dialogue should not be more scientific about itself?’ (Burall & Hughes 2013: 18). They argued that Sciencewise would need to produce ‘its own evidence about what works in influencing policy’ (Burall & Hughes 2013: 18). As Pallett has shown, this implied that Sciencewise largely reconsidered how it produced evidence from its public engagement and dialogue work as well as how it presented and evaluated this evidence; i.e. by ‘using more quantitative measures, allocating more resources to evaluations, and adopting digital methods in order to satisfy requirements for statistical significance’ (Pallett 2019:13). During this process, Sciencewise even produced a detailed guidance document on how to measure the costs and assess the quality of public engagement in science-policy decision making in order to ‘demonstrate the practical value of public engagement, to justify and account fully for the time, effort and public funding invested’ (Warburton 2010: 3). Thus, with the Conservative-Liberal Democrat coalition government, the Science and Society discourse and its manifestation in public engagement practices within Whitehall changed from being framed in terms of input legitimacy – as a way to open up science-policymaking to citizen input and scrutiny – towards a more output legitimacy oriented frame of an effective tool of evidence gathering for the government.

5.1.3 Self-regulation and better regulation

In contrast to the initial discourses on ‘social exclusion’ and ‘science and society’, the ‘self-regulation and ‘better regulation’ discourse and linked institutionalised practices strongly relied on a claim to output legitimacy from the outset. Infused by the ideology of ‘new public

management' and its emphasis on 'efficiency and effectiveness', the role and function of the state became gradually reconfigured in the Modernising Government agenda.[81] While since the late 1980s, there were policies set in place aimed at improving the quality of regulation and reducing its impact on business, it was Prime Minister Tony Blair who made 'regulatory impact assessments' (a key instrument of better regulation) obligatory in the UK. In so doing, the main aim of state regulation was officially redefined in terms of an economised notion of 'regulating for competition', which came along with 'a preference for decidedly light-touch regulation' (Rawlings 2010: 5). Under this new regulatory paradigm, 'too excessive regulation' was seen as impeding innovation and economic efficiency and creating unnecessary trade barriers. This new paradigm took two forms: (1) 'self-regulation' and (2) 'better regulation'.

First, in line with the wider New Public Management discourse, 'Modernising Government' shifted towards an emphasis placed on reviewing policy outcomes, which was underpinned by an assumption that 'successful' outcomes would be best secured by self-regulation governance arrangements. According to New Labour's modernising government agenda, the voluntary agreements should be designed to direct actors' behaviour in a desired way. The White Paper embraced the idea that compliance costs could be significantly reduced by adopting a more cooperative style of 'enforced self-regulation' (Cabinet Office 1999). This prioritisation of compliance-centred self-regulatory governance relied on New Labour's belief that a regulatory style attuned to the motives and needs of the regulated was both more efficient and more effective than traditional 'command-and-control' regulation (Braithwaite 2003). In this vein, the government argued that '[s]elf- or co-regulatory arrangements can help to encourage industry or professional 'insiders' to enforce the rules (…) therefore, alternatives to state regulation' would 'often result in greater enforcement of rules than direct state regulation' (BRTF 2000: 24). Beyond this compliance-based argument for self-regulation, New Labour's 'modernising government' encouraged self-regulatory approaches as an alternative to statutory, 'command-and-control' approaches to regulation, because it believed that, in increasingly complex and fragmented societies, public goals could be better delivered when the state shared and negotiated regulatory powers with social interests: The Labour government preferred self-regulatory measures, because it argued that these would:

[81] Of course, the two decades of Conservative government (1979 – 97) had already centred on privatisation and a strong market ideology – however, it was under the New Labour Government that the discourse on 'better regulation', with all its peculiarities, as is described in this chapter, such as the strong focus on evidence-based policy making and impact assessment, intensified and came to be institutionalised within Whitehall's core executive.

> 'be better placed to draw in those with different interests to find workable solutions. Alternatives to state regulation which ensure that different groups have parts to play in the standardssetting, rule-making and enforcement functions will often be more effective than direct state regulation which can be remote and blunt in its application' (BRTF 2000: 24).

Second, the 'modernising government' agenda included a 'new drive to remove unnecessary regulation' (Cabinet Office 1999). To free businesses from overly burdensome regulations, one of the first administrative rearrangements by the New Labour government was to set up the Better Regulation Task Force in the Cabinet Office. However, in its attempt to demarcate itself from its predecessor's focus on deregulation, the New Labour government put a strong emphasis on striking the 'right balance' between 'providing proper protection and making sure that the impact on those being regulated is proportionate' (BRTF 2003: 1). This conception of better regulation reflected a tension between two regulatory models, which were combined within New Labour's better regulation reform initiatives (Prosser 2010b). According to the first model, 'better regulation' was predominantly about reducing administrative and regulatory burdens, i.e. about constraining the extent of regulatory measures. The second model, by contrast, put a stronger emphasis on 'better regulation' as a matter of procedural reform aimed at accountability and transparency, i.e. those regulated could understand and question the process, 'appropriate targeting', i.e. problem-focused interventions that avoid side effects, and 'proportionality', i.e. regulators should only intervene where necessary and should choose the option which achieved the desired results while being cost efficient (Cabinet Office 2003a).

What was emblematic for the combination of these two models in the Labour government's approach to better regulation was the central role of various forms of 'regulatory impact assessment' (RIAs), which were guided, meta-analysed and monitored by specifically convened pan-governmental bodies such as the 'Regulatory Impact Unit' in the Cabinet Office (OECD 2017). RIAs were made a mandatory requirement of any new law, regulation or policy. The Regulatory Impact Unit (RIU), established in 1997, was mandated to ensure departments' compliance with the regulatory impact assessment process and thereby. Remarkably, the RIU also had a dedicated team for the EU that not only worked on EU-level regulatory proposals, but also placed a strong emphasis on influencing and pushing the 'regulatory reform agenda' across Europe[82]. Moreover, a 'Better Regulation Taskforce' (BRTF) was established in 1997 conducting reviews on particular regulatory activities of line departments and agencies, which

[82] In fact, the UK played an active part in the work of the Mandelkern Group, whose report on a regulatory reform strategy for the EU was the basis for the European Commission's June 2002 Action Plan on better regulation.

were obliged to respond to the task force's reviews within 60 working days of publication. In parallel, also the RIU obtained a mandate to coordinate, guide and advice departments and agencies in complying with RIAs. The approaches to RIA ranged from the use of quasi mathematical cost-benefit analysis to softer and less strictly quantified forms of impact assessment. While the former were seen as tools designed to make regulation less burdensome, the latter put a stronger emphasis on making regulation qualitatively better and more responsive to the regulatory environment, i.e. through opening up decision-making to the input gathered from stakeholder consultations. Finally, a Panel for Regulatory Accountability was established as a separate Cabinet Committee with New Labour government in office, chaired by the Prime Minister. The panel met regularly to discuss departments' 'regulatory performance'. It was around 2005 that 'better regulation' was made the government's top regulatory priority, although, as we have seen, it constituted a keystone of New Labour's 'modernising government' agenda from the outset. It transformed the RIU into the Better Regulation Executive (BRE) directed by the Prime Minister. The BRE comprised a much larger number of staff than the RIU (now 100 staff members) and it obtained an even stronger mandate, as all departments were now required to submit their RIAs to the BRE for approval. Shortly after its establishment, BRE published the influential report titled 'Regulation – Less is More. Reducing Burdens, Improving Outcomes' (BRTF 2005), which recommended far-reaching measures for reducing regulatory and administrative burdens, whose implementation was watched by the BRE from 2006. It stipulated that the all departments should take part in an 'administrative burden reduction programme', establish a system of 'post-implementation reviews', as well as a rolling programme of regulatory simplification. In particular, it urged the introduction of the Dutch Standard-Cost Model (SCM), a methodological approach of applying targets for reducing costs to business.

This anti-regulatory discourse gained an even greater momentum with the incoming Conservative-Liberal Democrat coalition government. A part of the Conservative 2010 manifesto pledge was to radically reduce the burden of the 'increasing amounts of red tape and complex regulation' , which had, the manifesto argued, 'eroded Britain's reputation as a good place to invest, create jobs or start a business' (Conservatives 2010: 20). As a first act of his premiership, David Cameron personally wrote a 'letter from the Prime Minister on cutting red tape' to all ministers, in which he promised: 'I want us to be the first government in modern history to leave office having reduced the overall burden of regulation, rather than increasing it (Prime Minister's Office 2011). Accordingly, shortly after being in office, the coalition government announced several measures designed to help 'cutting the red tape'. First, it gave

the government's Regulatory Policy Committee (RPC) a new role as non-departmental regulatory oversight body, to which formal powers of real-time monitoring of the quality of impact assessments were attributed (Gibbons & Parker 2012). Since 2011, the RPC's review reports have contained a 'traffic light' system, which rated departmental regulatory performances in terms of 'red, 'green' and 'amber' ratings and which were published at the same time as the reviewed regulatory impact assessment (OECD 2017). Second, the coalition government established the principle of introducing new regulation only as a last resort and insisted on the 'one in, one-out' rule (Gibbons & Parker 2012). To ensure that the 'burdens' – the monetised costs – imposed by regulations were reduced, the new regulations that introduced such new burdens on businesses or the third sector could be brought in only by ensuring savings of at least an equivalent burden being made. In 2013, the government's deregulatory ambitions had even raised and the 'one in, one-out' rule was replaced by the 'one-in, *two*-out' rule and complemented by so-called 'post implementation reviews', i.e. reviews that evaluate whether the regulation has indeed met its intended objectives (OECD 2017). The 'one in, one-out', respectively 'two-out' rule applied to Whitehall departments and agencies, while independent regulatory agencies such as the Office of Communication (Ofcom), or the here studied FSA, have only been 'invited' to adopt the principle. However, although they were obliged to apply the rule, government departments were less enthusiastic about the Cabinet Office's 'one in, one-out' policy. Third, in response to this scepticism and in order to build up external pressure on departments, the Cabinet Office ran the 'Red Tape Challenge' from 2011 to 2014, which used digital crowdsourcing techniques as a consultative device in order to encourage the reduction of burdensome regulation (Lodge & Wegrich 2015). The Red Tape Challenge was designed to consult the views from businesses and the public on which regulations should be refined, maintained or withdrawn. However, what might at first sight be seen as a move towards involving elements of input-legitimacy into the better regulation agenda, in fact reflected, some observers have argued, a growing 'climate of antipathy towards health and safety regulation', which had taken hold among British business lobbyists and large parts of the media since around 2008 (Almond & Esbester 2018).

5.1.4 Evidence based policy making

As the following three quotes illustrate, the 'mantra' of evidence based policy making (Sanderson 2002: 4) – 'what matters is what works' – was a further keystone of New Labour's modernising government agenda:

> ‘We will be a radical government. 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. Britain will be better with new Labour’ (Tony Blair, Labour Party Manifesto for the 1997 General Election, cited in (Wells 2007: 22).

> ‘This Government has given a clear commitment that we will be guided not by dogma but by an open-minded approach to understanding what works and why. This is central to our agenda for modernising government: using information and knowledge much more effectively and creatively at the heart of policy-making and policy delivery’ (David Blunkett, then Secretary of State for Education and Employment for England and Wales Speech to the ESRC on 2 February 2002, cited in (Wells 2007: 22).

> ‘The Modernising Government White Paper we published last year set out this Government’s commitment to policy-making based on hard evidence. And as in education, or NHS reforms, or fighting crime, we must always be looking at the outcomes of policies – the benefits in people’s lives – not the process’ (Tony Blair, foreword in (Cabinet Office 2000a).

Modernising government was designed to overcome the (purportedly) ideology-driven policy frameworks of the past (Solesbury 2001). The New Labour government put a strong emphasis on ‘championing’ evidence-based policy making (EBPM) ‘as a major aspect of the increased policy capability and the fresh thinking required by a reformist government’ (Head 2010: 15). While ‘science and society’, with its emphasis on ‘public engagement’, embraced the idea of reconciling science-based policies with input legitimacy, EBPM was introduced as an explicitly output-legitimacy-oriented policy approach (Widmer 2009; Parkhurst 2017). The proponents of the UK’s EBPM discourse framed EBPM as a policy approach opposed to ‘opinion-based policy’ – a policy approach that relied on ‘the untested views of individuals or groups, often inspired by ideological standpoints, prejudices, or speculative conjecture’ (Davies 2004: 3). EBPM, by contrast, would help policy makers making ‘well informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation’ (Davies 2004: 3). Thus, as this quote illustrates, EBPM was explicitly promoted as a means of effectively delivering desired policies with the minimum of what is framed as ‘ideological bias’. In this vein, many British scholars have argued that EBPM tended to represent a form of ‘technocratic’ or ‘depoliticised’ statecraft (Clarence 2002; Parsons 2002; Wilkinson 2007; Boaz et al. 2008; Thain 2009; Diamond 2015; Wood 2015; Standring 2017).

The British EBPM discourse owed a good deal to the earlier 'evidence-based medicine discourse', which has been pushed by the Cochrane Collaboration since the early 1990s[83]. By embracing the vision of EBPM, the New Labour government thus borrowed significant elements of its 'modernising agenda' from the 'evidence based medicine' discourse's emphasis on 'rigorous evidence' (Solesbury 2001). The Modernising Government White Paper already set out New Labour's 'vision' of a modern style of policymaking, which would be founded on robust evidence gained from systematic learning and testing processes:

> 'Government should regard policy making as a continuous, learning process, not as a series of one-off initiatives. We will improve our use of evidence and research so that we understand better the problems we are trying to address. We must make more use of pilot schemes to encourage innovations and test whether they work. We will ensure that all policies and programmes are clearly specified and evaluated, and the lessons of success and failure are communicated and acted upon' (Cabinet Office 1999: 17)

Thus, as is evident from this quote the EBPM discourse, just as the better regulation discourse, strongly drew on the British 'empiricist culture' of expertise that privileges both empirical proof and an experiential repertoire of evidence (Jasanoff 2005: 152–153). Characteristic for the New Labour government's EBPM discourse was moreover the role of central strategic government units. These units – i.e. the Strategy Unit, the Performance and Innovation Unit, and the Centre for Management and Policy Studies (CMPS) within the Cabinet Office –were designed to produce both substantive analysis and guidance documents on EBPM. For instance, the Strategic Policy Making Team in the Cabinet Office (later Strategy Unit) invested considerable effort in developing such documents identifying the 'learning lessons' that a 'professional approach to policy making' should embrace. A key learning lesson was that there were specific skills – the use of robust evidence– which policy makers needed to acquire in order to be 'effective'. Therefore, one of the first projects of the Strategic Policy Making Team was to identify 'good practice' in EBPM across government departments. However, in its first report it concluded that 'although there are examples of good practice, in some areas of policy the generation and use of information and research in policy making is not as strong as it needs to be to support the Government's pragmatic approach' (Cabinet Office 1999: paragraph 7.5).

[83] The evidence based medicine movement has its origins in the UK, where in 1993 the Cochrane Collaboration, was established to develop and disseminate standards applying to medical practitioners based on systematic reviews and meta-analysis of healthcare interventions (Solesbury 2001).

The Cabinet Office interpreted this result as encouragement to strengthen its powers to monitor how government departments formalised their knowledge production processes, to gather formalised evidence from them and to ensure that the department's capacities to make best use of 'sound evidence' were improved (Parsons 2002). Against this backdrop, the HM Treasury produced the seminal 'Green Book', a guidance document on EBPM, which puts a special emphasises on the role of quantitative and economic analysis (HM Treasury 2003). Likewise, the central Government Social Research Unit (GSRU) developed training courses on the use of social research and analysis in policy making. In 2003, the GSRU also produced the first 'Magenta Book', a manual that provides guidance on a broader range of mostly formal quantitative policy evaluation methods (Cabinet Office 2003b). In parallel, the Performance and Innovation Unit in the Cabinet Office published 'Adding It Up: Improving Analysis and Modelling in Central Government' (Cabinet Office 2000a). The guidance report argued that in order to identify 'what works', the role of formal analysis and modelling in policy-making had to be strengthened. This included 'more and better data', improving microeconomic modelling, and making more use of both longitudinal studies and quasi-experimental research designs, which the report called, 'pilots (…) to test what works before options are rolled out nationally' (Cabinet Office 2000a: 53). To do so, a subsequent guidance document produced by the Strategy Unit in the Cabinet Office identified various – experimental, quasi-experimental and qualitative – 'pilot methodologies' (Cabinet Office 2003c). Thus, as is evident from these examples, EBPM did not just represent a frontstage rhetoric of the New Labour Government; great efforts were put into the institutionalisation of EBPM across Whitehall. This was also reflected in the development of the government research personnel, which increased from 250 in 1997 to 1000 in the time period from 1998 to 2006 (Davies 2008).

Under the Conservative-Liberal Democrat coalition government, EBPM and its institutionalisation in strategic policy units producing a network of guidelines and reviews continued and were even strengthened as they were defined as a central part of the coalition government's austerity policies (Pallett 2019). In 2012, the government launched a comprehensive civil service reform plan. This reform plan, a revived notion of EBPM, played an important role. The plan suggested creating a new institutional arrangement across government 'that can test and trial approaches and assess what works in major policy areas, so that commissioners in central or local government do not waste time and money on programmes that are unlikely to offer value for money' (HM Government 2012: 17). In response, the 'What

Works Network', made up of seven independent What Works Centres[84], was created in 2013. The core function of these centres was clearly framed in terms of an economised version of output legitimacy as follows:

> 'Undertake systematic assessment of relevant evidence and produce a sound, accurate, clear and actionable synthesis of the global evidence base which (i.) assesses and ranks interventions on the basis of effectiveness and cost-effectiveness; (ii.) shows where the interventions are applicable; (iii.) shows the relative cost of interventions and (iv.) shows the strength of evidence on an agreed scale' (HM Government 2013)

With the establishment of the What Works centres the new government put an even stronger emphasis on 'hard' calculative evidence, notably derived from 'randomised controlled trials' (RCTs) (Pearce & Raman 2014). This emphasis on RCTs is to be viewed in the context of a broader 'behavioural turn' in British policy making, which already had begun under New Labour where the Strategy Unit discussed the political relevance behavioural insights from a broader range of behavioural theories, but had its ultimate 'breakthrough' with the Conservative-Liberal Democrat government[85] (Pykett et al. 2013; Straßheim & Korinek 2016). The coalition government, along with various think tanks, notably the 'Alliance for Useful Evidence', promoted the use of RCTs as the 'gold standard' to gather evidence on the effectiveness of behavioural interventions to individuals ('nudges') (Haynes et al. 2012; Mulgan & Puttick 2013; Breckon 2015). In its seminal report on this issue, the Behavioural Insights Team argued that 'RCTs are the best way of determining whether a policy is working' (Haynes et al. 2012: 4). According to this report, behavioural interventions should only be pursued, if their effectiveness had been proven by RCTs. The economised notion of output legitimacy, which gained even greater importance under the Cameron government, is thus particularly evident in this report. The strengthened focus on using RCTs to identify 'what really works' was justified with reference to cost effectiveness: 'It is especially important in times of shrinking public sector budgets to be confident that public money is spent on policies shown to deliver value for money' working' (Haynes et al. 2012: 5). Thus, whereas under New

[84] These centres were a joint venture by the innovation think tank Nesta and the British Economic and Social Research Council (ESRC) on behalf of Government and included the National Institute for Health and Care Excellence (NICE), the Sutton Trust/Educational Endowment Foundation; the College of Policing What Works Centre for Crime Reduction, the Early Intervention Foundation, the What Works Centre for Local Economic Growth, the Centre for Ageing Better, and the What Works Centre for Wellbeing.

[85] David Halpern, the director of the Behavioural Insights Team – a unit initially based in the Cabinet Office to find new ways of applying insights from behavioural science to public policy in the UK since 2010 – also was appointed as the 'What works National Advisor' tasked with supporting the network.

Labour, the possibilities to use RCTs in the context of EBPM had been marked as limited due to practical and ethical problems (Cabinet Office 2003c), the guidance on EBPM produced under the Coalition government postulated that the choice of policy instruments should be determined based on RCTs.

5.1.5 Transparency

Last but not least, a fifth discursive strand of New Labour's modernising government discourse, which cuts across all of the four previous strands, related to transparency. Since New Labour came into power in 1998, transparency had been part and parcel of the government's policies. It was framed as a kind of universal good that was essential for both input and output legitimacy. This is evident from the following quotes taken from a speech by Tony Blair at the Campaign for Freedom of Information's (CFOI) annual awards ceremony on 25 March 1996 – about one year ahead of his election as prime minister – where he confirmed his commitment to far-reaching transparency, by especially referring to the BSE crisis:

> 'We want to end the obsessive and unnecessary secrecy which surrounds government activity and make government information available to the public unless there are good reasons not to do so' (Blair 1996b).

> 'I actually believe that if we want to make government effective in the modern world it simply is not possible to do that on the basis of government just handing down tablets of stone. In fact, you can see, in my view, both with (…) BSE it would have been far better if government had been more open, far better actually for the proper conduct of government' (Blair 1996b).

> 'A Freedom of Information Act is not just important in itself. It is part of bringing our politics up to date, of letting politics catch up with the aspirations of people and delivering not just more open government but more effective, more efficient, government for the future' (Blair 1996b).

As these three quotes from Blair's speech show, modernising government was essentially also about ending what Blair here called the 'obsessive and unnecessary secrecy' of government. By so doing, he specifically referred to the critique of the British 'culture of secrecy' that had been identified as the main culprit of the BSE crisis at that time. Furthermore, these quotes are indicative of the way in which transparency policies were actively framed in terms of both input legitimacy and output legitimacy: Transparency here was thought to contribute to 'catching up

with the aspirations of people and delivering more open government' and at the same time to deliver a 'more effective, more efficient, government'.

Therefore, one key aspect of the 'modernising government' agenda was to ensure 'that all public bodies are properly and fully accountable to the public' (Cabinet Office 1999: 32). In so doing, the new government demonstrated that 'modernising government' fitted neatly with the 'transparency movement' of the time. The transparency movement had existed since the 1980s and had played a crucial role in re-invigorating of the discourse on the right to freedom of information, which formed a central plank of the Labour party manifesto before it was elected in 1997. Thus, New Labour's approach to openness was responding to two developments: First, it directly respond to the above-described BSE crisis discourse, which identified an opaqueness of regulatory science and decision-making as the main cause of the scandal, as underlined by the quote above. Second, the New Labour modernisation agenda responded to a broader and more longstanding societal demand to break-up Britain's culture of secrecy (Worthy 2018). One central transparency policy initiative in this regard was first introduced in the white paper 'Your Right to know. Freedom of Information' in 1997, namely the Freedom of Information Act. In the white paper, the Labour government made clear that this act was aimed at opening up government institutions to public scrutiny:

> 'The objective of the Act is to help open up public authorities and other organisations which carry out public functions. First, it will empower people, giving everyone a right of access to information that they want to see. Secondly, it will place statutory duties on the bodies covered by the Act to make certain information available as a matter of course' (Cabinet Office 1998: 5).

Thus, as this quote shows, the act was the first in British history to provide citizens with a statutory right to access information and thus to scrutinise the public authorities' decision-making processes. Moreover, the quote shows that the Freedom of Information Act was very much linked to New Labour's efforts to open up government and to empower of citizens and stakeholders. In this way, as Ben Worthy has argued, New Labour's transparency policy initiatives fitted well 'with a wider, if vague, process of 'democratisation and reconnecting government with the people' and thus with the early modernising-government-agenda's emphasis on input-legitimacy (Worthy 2018: 6).

At the same time, New Labour also explicitly considered transparency and openness part of effective and efficient government. Its modernising government agenda sought to eliminate Britain's entrenched 'culture of secrecy', which was seen as giving rise to the inefficiency of public services (Vincent 1998). In this way, the FOI also served a specific form of transparency

that focused on improving services and preventing wasteful public expenditure and was thus seen as contributing to output legitimacy.

While the early New Labour government put a strong emphasis on the input-legitimacy-oriented strand of the transparency discourse in the processes of writing up and publicly consulting on its white paper 'Your Right to Know' from 1997 to 1998, this emphasis shifted over time. The reversal of the draft bill and the adoption of the act in parliament in 2000, which would only enter into force only five years later in 2005, indicate a much stronger emphasis on the above-described more output-legitimacy-oriented notion of transparency.

5.1.6 The British policy and science advice system

On the institutional level, the UK is characterised by a centralised 'policy and science advice system' at the core of government. When analysing how British expert bodies build and cultivate politico-epistemic authority, one should consider Whitehall's centralised policy advice system as an important contextual feature. With the election of Tony Blair's Labour government in 1997, the 'centre of government' was significantly strengthened by rearranging the prime minister's office and the cabinet office that now together formed the 'prime ministerial centre' (Rhodes 2005; Fleischer 2009). As has already become evident from the previous chapters, a flurry of strategic policy advisory arrangements emerged at the centre of British government under the New Labour government. These advisory arrangements were designed to provide policy advice on issues that were of concern and strategic relevance for the prime minister's modernising government agenda – notably 'social exclusion', 'science and society', 'self-regulation and better regulation', and 'evidence-based policy making' in more general. What was characteristic for these new central advisory arrangements was that they acted as 'think-tank-like' actors who were directly engaged in directing Whitehall departments on their work upon these cross-cutting issues (Fleischer 2012: 311). These advisory arrangements included central strategic policy advice units and individual special advisers (Eichbaum & Shaw 2008; Fleischer 2012). One of the main activities of central policy advice units was to produce and circulate a plethora of reports, guidelines and reviews on the modernising government agenda. By so doing, they invested great effort into establishing and cultivating the 'modernising government agenda's concepts, practices and professional norms as a standard way of policy-making in Whitehall.

This centralisation of policy advice reflected a specifically 'Anglo-Saxon' or 'Westminister' way of constantly 'modernising government', which has been in place since in the 1990s[86] (Richardson 2017). Due to their 'predication on territorial centralisation, executive dominance and majoritarian democracy', Westminster systems have traditionally operated in a way that decision-making power was asymmetrically concentrated in the core executive (Diamond 2014: 128, see also (Lijphart 1999). However, what set New Labour governments apart was their introduction of even stronger central units with powers over line departments (Halligan et al. 2011; Aucoin 2012; Diamond 2014). In this vein, some observers even speak of a 'prime ministerialisation[87]' of Westminister politico-administrative systems under in the Third Way era (e.g. (Dowding 2013).

The rise of strategic policy advisory units at the centre of government played a key role in this centralisation processes. They acted as both competing sources of advice and as 'conduits for a wider net of advice funnelled straight to the prime minister from various outside think tanks, interest groups, and independent researchers' (Grube & Howard 2016: 475). Thus, many observers have argued that the growing number of central strategic units, alongside the appointment of special advisers, had gradually curtailed the traditional monopoly of line departments over policy advice (Bevir & Rhodes 2006; Richards 2008; Diamond 2014; Craft & Halligan 2017).

At the same time, the monopoly of line departments was also challenged by the so-called NPM-inspired 'agencification' reforms, which had already begun under the 'next steps initiative' of the Major government (Elston 2014). In the course of agencification, both 'executive agencies' and 'independent regulatory agencies' (IRAs), such as the here studied FSA were established. However, although IRAs were formally designed to act independent from ministries (see chapter 2) and thus were – formally – not subject to the central government's coordination attempts, I will show later in the empirical analysis of the FSA that the FSA's practices of building politico-epistemic authority were embedded into Whitehall's centralised policy advice system.

[86] Beyond the UK, Australia, Canada, and New Zealand are usually seen as prime examples of Westminister politico-administrative systems (Lijphart 1999).

[87] According to Dowding the trend towards 'prime ministerialisation' is characterised not only by the centralisation of power within the centre of government, but also by the personalisation of politics and the decreasing importance of parties (Dowding 2013).

What was at least as an important contextual feature of the FSA's way of building politico-epistemic authority was the institutionalisation of science advice in Whitehall. Perhaps the most striking feature of the UK scientific advisory system is the role of the government's chief scientific adviser (GCSA), a position that has existed since 1964 (Wilsdon & Doubleday 2013). The GCSA is a civil servant appointed by the prime minister[88] and directly responsible to the prime minister and the cabinet. The GCSA is invited to attend cabinet committees and contribute scientific advice and evidence to the discussions and has a particularly close relationship with the science minister (House of Lords Select Committee on Science and Technology 2012: 10). The GCSA is also the head of the 'Government Office for Science', the central science advice unit in the British government, through a programme of projects that reflect the priorities of the Government Chief Scientific Adviser. The government office for science has two main areas of responsibility 'ensuring that government has access to the 'best scientific evidence and strategic long-term thinking' in government (Government Office for Science 2015: 3). Thus, in addition to ensuring and improving the quality and use of scientific evidence and advice in government, the 'Government Office for Science' is responsible for conducting foresight and 'horizon scanning' projects that use different forms of evidence to analyse complex future issues.

The GCSA has also a coordinating role across Whitehall departments, which is particularly evident in the GCSA's responsibility for developing, reviewing and monitoring the government's guidelines on science advice, which will be presented in more detail below (House of Commons on Science and Technology 2001: 10). Moreover, whilst maintaining an especially close working relationship with the science minister, the GCSA also engages directly with the 'departmental chief scientific advisors' (CSAs) within all British government departments. Whitehall departments usually have their own CSAs, with whom the GCSA has regular meetings that take place under in the cross-departmental CSA network. While the precise role of departmental CSAs differs between departments, the core of their role is to ensure the quality of the use of science in departmental decision-making processes. CSAs provide science advice directly to ministers and leading officials, while they themselves are advised by the GCSA. Departmental CSAs usually also have a role as 'head of profession' for the so-called 'scientific in-house staff' within their departments (Science & Technology Committee 2006: 13–15). In addition to their experiences as senior civil servants, departmental

[88] The appointment is for fixed term of five years, which may be extended by mutual agreement.

CSAs are usually expected to have an outstanding academic career to ensure their expert credibility. However, for many years, the actual relevance of the CSAs in policy formulation had considerably differed between departments; in some cases only a relatively junior, low profile position had been attributed to them (Glynn et al. 2003: 51–55). This changed as a result of a review on the role of departmental CSAs commissioned by Conservative-Liberal Democrat coalition government in 2011. The report identified personal and institutional 'essential characteristics' that CSAs were expected to have. More specifically, the report argued that CSAs should be recruited externally so that they had a 'substantial and recent background based outside the civil service' (House of Lords Select Committee on Science and Technology 2012: 22) and should be 'employed by their departments on a part-time basis to afford them the opportunity to maintain their links with academia, or industry, or both' (House of Lords Select Committee on Science and Technology 2012: 28).

In addition to their in-house expertise, which is usually led by departmental CSAs, British government departments also rely on external expert bodies, in many cases such as scientific advisory committees, the 'council for science and technology' or independent agencies[89]. Since around 2000, these bodies became increasingly formalised, e.g. there were rules on appointments, codes on conduct and concordats of cooperation between expert bodies and ministries (Glynn et al. 2003: 51–55). In the early years of the New Labour government, there was much debate and reflection on scientific advice in policy making. This was due to both the loss of public trust in regulatory science resulting from the BSE crisis and the government's focus on 'evidence-based policy making', as described above. A number of reports on the government's way of organising and using science advice was published in Labour's first years in office. These included the already mentioned 'Science and Society' report (House of Lords Select Committee on Science and Technology 2000), a review of the scientific advisory system (House of Commons on Science and Technology 2001), the Philips Inquiry on using science advice in the context of the BSE issue, which I have already briefly presented in the introduction (Philips et al. 2000), and a review of the procedures of risk assessment procedures used by scientific advisory committees dealing with food safety (May 2000b). In response to these reviews and reports, the New Labour government published several guidelines on the UK science advice system. In direct response to the BSE crisis, the GSCA published the first version of the 'Guidelines on the Use of Scientific Advice in Policy Making' (Office of Science and

[89] These belong to the group of so called 'non-departmental public bodies' (NDPBs), i.e. bodies that play an essential role providing scientific policy advice but operate semi-autonomous from departments.

Technology (OST) 1997). These set out a set of principles according to which government departments should use and present scientific evidence and advice. The implementation of the guidelines was regularly reviewed, and the guidelines were subsequently updated in 2000, 2005, and 2010. Likewise, the first version of the 'Code of Practice for Scientific Advisory Committees' was published in 2000 (Office of Science and Technology (OST) 2001) and subsequently reviewed and updated in 2005, 2007 and 2010. The code drew on key principles of the Phillips BSE Inquiry Report and was aimed at scientific advisory committees, their chairs, members and secretariats. It provided a framework for scientific advisory committees to operate within and addressed aspects of committee work, including its role and remit, responsibilities, working practices, publications and public consultations. Moreover, the above-described Green Book (HM Treasury 2003) and the Magenta Book (Cabinet Office 2003b), both published in 2003 and likewise updated several times, provided more methodologically oriented guidance on evidence-based policy making.

5.1.7 The British culture of expertise

The above-described (science-)policy discourses and the features of the British advice system also reflect what Sheila Jasanoff has called 'Britain's 'communitarian' culture of expertise (Jasanoff 2005: 259). In the British communitarian culture of expertise, which other authors also have termed a 'public interest culture' (Pollitt & Bouckaert 2004: 53), objectivity is established through a 'consultative-negotiated' mode of knowing. British authorities usually make use of extensive public consultations in order to demonstrate their commitment to 'seeking to obtain the public's consent (…) for measures devised in the public interest' (Pollitt & Bouckaert 2004: 53). This 'consultative-negotiated' mode of knowledge production assumes that it is this kind of consultative, negotiated knowledge production that ultimately renders a specific claim at the science policy nexus valid and legitimate. It is through public consultations that the 'view from everywhere' is established in policy-making in the UK (Jasanoff 2005). In the British culture of expertise, the privilege to make judgements on public policy and to contribute to discussions of such issues is hence not reserved for scientists. Thus, insofar as other social actors are seen to have the 'capacity to discern the truth' in the public interest these actors are involved in policy-making (Jasanoff 2005: 266). My previous discussion of the discursive and institutional context illustrated that the social exclusion discourse and its institutionalisation within Whitehall reflected this kind of consultative style of knowledge production and decision-making.

Another essential element of the British culture of expertise is its 'predilection for empirical proof ', which, in principle, should be 'evident to everyone, and hence count as common knowledge' (Jasanoff 2013: 141). This empiricist culture of knowing is closely linked with a pragmatic style of public knowledge-making that values common sense knowledge, i.e. a form of knowledge that is an easily assessable everyday experiential repertoire of knowledge (Jasanoff 2005: 152–153). This is mirrored in the above-described attribution of centralised competences in promoting and monitoring better regulation and evidence-based policy making to central policy advisory units. As has been evident from the previous analysis of the 'better regulation' and 'evidence-based policy-making', these two discourses strongly drew on this kind of British 'empiricist culture'. Moreover, the discourse on 'better regulation' and 'self-regulation' relied on a managerial style of policy-making that is likewise typical for the UK (Pollitt & Bouckaert 2004). Policy-making in the UK is traditionally characterised by an instrumental understanding of the state; the state here is not seen as a 'value in itself. The distinction between the state and the social-economic sphere is much less pronounced here than in continental European politico-administrative cultures (Kuhlmann & Wollmann 2013: 27).

Last but not least, the previous analysis points to the important role that the individual 'embodied expert' plays in the British culture of expertise (Jasanoff 2005). British policy-makers tend to rely on the 'embodied expertise' of individual experts at least as much they rely on collective expert bodies. This emphasis on the individual expert is reflected in the above-described institutional position of the chief scientific advisors. In the UK, chief scientific advisors are attributed a central position as 'science watchdogs' within departments and an external role as 'the charismatic megafauna' of Whitehall's science advise system (Wilsdon & Doubleday 2013). The figure of the chief scientific advisor hence builds on the 'embodied virtue' (Jasanoff 2005: 187) of the individual person who enjoys credibility and public trust. It is this type of individual expert who is trusted to make valid judgements based on both a documented academic career and a demonstrated 'record of selfless service to society' (Jasanoff 2011a: 30). The important role of the individual expert is not only reflected in the institutionalisation of the chief-adviser-system but also in how experts are appointed to serve on collective advisory committees. These are appointed primarily not based on their institutional affiliation but based on individual experience and expertise as well as their individual record of serving the society, which is viewed as proof of acting in the 'public interest'.

Thus, summing up, this chapter served to present the discursive, institutional and cultural context in which the FSA has operated since its establishment in 2000. As we will see in detail in the following chapters, these contextual features will be essential in unpacking and explaining the FSA's practices of authorisation and legitimation because the agency is situated in the wider webs of discourses as well as institutional and cultural traditions that shape its actions in specific ways.

5.2 Opening up for Advocatory Authority: Social Dimension

In this chapter, I will examine the FSA's practices of building politico-epistemic authority by focusing on the social dimension of competence attributions and their legitimation. As we will see, the FSA's social authorisation practices were based on what I call a multipolistic mode of competence and role attribution. These were primarily legitimated in terms of input legitimacy. As such they reflect an 'advocatory knowledge order' as it has been defined in my theoretical framework presented in chapter 3.2.

I will proceed in four steps: *First,* a 'close-reading' of the FSA board's open meeting on 14th November 2002 will serve as an entry point into the subsequent inquiry into the different practices constituting the social dimension. Zooming in on the board's open meeting, I will take this close-up analysis as an introduction into what I call 'multipolistic competence and role attributions' that underlay the FSA's attempts to constitute itself as an expert at the science-policy-public nexus. *Second*, the findings of the comparative analysis of the FSA's various practices of competence and role attribution will be presented. In so doing, I will pay special attention to the way in which the FSA's mode of competence and role attribution constituted and performatively enacted representative claims on behalf of different kinds of consumer constituencies. Within this analysis, the contextual embeddedness of the FSA's practices of competence attribution will repeatedly become evident. *Third,* I will separately recap and elaborate in more detail how the FSA in constituting itself as a competent spokesperson for food issues drew on specific contextual factors that were outlined in chapter 5.1. *Fourth*, I will turn the focus on the contestedness of the FSA's multipolistic competence and role attribution mode. As we will see, there has been a twofold shift from a primarily multipolistic to a more monopolistic mode of competence attribution: first, away from attributing judgement competences based on the experiences of organised 'elite' consumer representatives towards an emphasis on attributing competence based on formalised social science knowledge making

consumers an object of inquiry; second, a shift from a hybrid model of risk assessment and risk management competencies to a more separated model.

5.2.1 Close-up: open board-meeting

In the following, I will examine the open meeting of the FSA 'governing board' on 14th November 2002. It was the first meeting the FSA board, which was appointed to act 'in the public interest' (Webster 2002: 210), held outside the UK, namely at the MCE conference centre (Management Centre Europe) in Brussels. Based on the minutes and documents of the meeting, I will zoom in on the meeting from a close-up perspective. I will show that the FSA pursued what I call an advocatory mode of claiming politico-epistemic authority. This comprised two main elements: multipolistic competence and role attributions and an input-oriented legitimation narrative.

The board meeting was, like all 'open' board meetings, open to all interested actors; a simultaneous WebCast ensured that stakeholders and the general public were able to follow the proceedings. These included an opportunity to email questions during the meeting (FSA 2003g: 34). The meeting started, as was the custom, with the discussion of the minutes of the board's preceding meeting, followed by the 'Chairman's Report'. The chairman's report referred to a previous report of the 'Core Stakeholder Group on BSE and Sheep', which included not only scientists, but also business and consumer representatives. In response to this stakeholder report on BSE in sheep and goats, the agency's board had requested 'that the FSA executive should be pro-active in communicating possible risk to those communities that were major consumers of mutton and goat meat' (FSA 2002n: 3).

Within this context, Sir John Krebs, the FSA's chairman, reported that the FSA had hosted a special briefing with organisations representing the Asian, Muslim and African-Caribbean communities. At this meeting, the FSA put forward its stakeholder expert opinion on BSE in sheep and goats. It said 'that BSE had not been found naturally in sheep or goats, but that the possibility of it being there could not be ruled out'. 'If BSE were to be found in sheep or goats', the report further argued, 'meat from older animals could contain higher amounts of potentially infective material' (FSA 2002n: 3). According to Krebs, the ethnic minority group representatives had agreed to transmit the FSA's expert opinion to their communities; '[i]t was felt that where the message was seen to come directly from within the community it would be more effective than one issued by a government department as community leaders had a better understanding of how it could be put across most effectively' (FSA 2002n: 3).

The minutes further document that the board members welcomed the FSA's efforts to collaborate with 'hard to reach' ethnic minority groups. These bore a special risk due to their consumer habits, the board argued, noting that 'this meeting offered a channel of communication that could be developed further (….) in a series of meetings with minority ethnic communities to build stronger links' (FSA 2002n: 3–4).

These extracts from the agency's open board meeting in Brussels illustrate how the FSA sought to establish a range of relations with consumer representatives and how it positioned itself as an expert on food (safety) related consumer concerns in its early years. In more analytical terms, what we can observe here is how the FSA claimed politico-epistemic authority. It does so through a specific mode of competence and role attribution, which can be understood in light of the previously elaborated heuristic as an 'input-legitimated multipolistic competence attribution' that reflects an advocatory knowledge order (see chapter 3.3). This interpretation shall be substantiated in more detail in what follows:

In the chairman's oral report, the FSA is portrayed as an expert on health risks related to BSE in sheep and goats. It does not only rely on the expertise of its own staff, but also on the expertise of a specially convened 'stakeholder group'. The FSA's expertise on this matter is hence grounded in a multipolistic mode of attributing judgement competences. Judgement competences here are attributed based on both the specialised and formally certified knowledge of scientists *and* the professional experience, knowledge and views of business and consumer organisations. The FSA presents here its expert judgement on health risks resulting from the consumption of sheep and goats as being based on incorporating multiple competences, including those of stakeholders (epistemic authority). At the same time, it claims that it is specifically this peculiar kind of 'multi-competence' expert judgement that is relevant to the good of a specific *'hard to reach'* consumer group – namely, to the health of ethnic minorities (political authority). Ethnic minorities, it is argued, consume disproportionately large quantities of sheep and goat meat in the UK. Therefore, they are an 'at-risk group' whose organised representatives should be included into the process of risk communication.

Besides the FSA chairman's brief report, the open meeting also included the presentation and discussion of the FSA's more general, institutionalised involvement of consumers. In the run-up to the open board meeting in Brussels, the FSA had published a ten-page-long overview paper titled 'Consumer Involvement in Agency Policy Making' (FSA 2002j). The paper had six annexes each outlining a specific mode of consumer involvement, including the establishment of a consumer committee (annex 1), consumer representation on food-related

scientific advisory committees and working parties (annex 2), an internal survey of the FSA's different activities in consumer involvement in policy-making (annex 3) and of the consumer research undertaken (annex 4), an executive summary of the FSA's 2001 consumer attitudes survey (annex 5), and an extract from a case study on 'involving consumers in food policy', published by the National Consumer Council (annex 6).

According to the FSA, this tableau of papers clearly demonstrated its 'open approach to decision making in practice' (FSA 2004d: 34). The following (partly shortened) extract from the minutes of the agency's board meeting on 14th November 2002 records the discussion on this item:

> **Item 6 Consumer Involvement in FSA Policy Making**
>
> *(Paper FSA 02/11/04)*
>
> [Michael Walker declared an interest as a member of a consumer organisation. Michael Walker participated in discussion and determination of this issue.]
>
> 39. The Chief Executive introduced the paper, reminding the Board that this was an opportunity to review how the FSA involved UK consumers in its decision-making process. The UK had probably gone further than most other Member States in introducing consumer representatives on to Advisory Committees. Early fears that consumer representatives might 'water down' Committees and reduce their scientific rigour had not been realised. Their contributions had been particularly useful, especially in framing questions making sure real consumer issues were addressed and defending the level of scientific scrutiny given to issues. The FSA had also sought to involve consumer representation at an early stage in policy making, with the result that consumer confidence had improved. (…)
>
> 40. The Chief Executive introduced Nancy Robson, Chair of the FSA's Consumer Committee, who gave a brief overview of consumer involvement with the FSA and the role of the Consumer Committee. The Committee acknowledged the broad range of opportunities that the FSA had given to consumers to influence decision-making. In particular, the FSA's efforts to tackle exclusion and reach out to minority groups was welcomed and applauded. (…).
>
> 41. Board members confirmed that consumer involvement in decision-making was essential (…) The FSA had made good progress in this area in a relatively short time; however, there was still more that could be done. The FSA was investigating new and different ways in which to reach the public, especially those groups that were frequently excluded. (...) Issues that related to low income and other hard to reach groups were addressed in a note that was currently being prepared for the Board on behalf of the Consumer Committee. (FSA 2002n: item6)

As it can be seen in the minutes, the board discussion on this paper started with a short questioning about conflicts of interests. Here it was recorded by that Michael Walker declared an interest in the debated issue because he was a member of the General Consumer Council for Northern Ireland and participated in the discussion on the FSA's consumer involvement activities. In this way, the independence of the board from all possible interests should be documented and any suspicion of conflicts of interests avoided. A little later in the minutes, we find out how the attribution of judgement and decision-making competences to consumer representatives – be it at the level of the board or at the scientific advisory committee level – is legitimated by the FSA officials in an input-legitimacy-oriented mode: The substantial discussion of the paper begins with Jacqui Webster, the then Chief Executive. Webster argues that including consumer representatives in the agency's scientific advisory committees – and thus attributing judgement competences to them – did not prove to 'reduce the scientific rigour', but had been useful in 'framing questions making sure *real consumer issues* were addressed' (my emphasis).

Nancy Robson, the chair of the consumer committee, then outlines different activities undertaken by the FSA to involve consumers in policy-making. The consumer committee, which comprised different (lay and organised) consumer representatives (FSA 2002j: Annex 1), regularly advised the FSA on issues of consumer involvement in order to '[e]nsure views of all groups of consumers understood including by testing new methods to target *disadvantaged groups'* (FSA 2002j: Annex 2, 5, my emphasis).

Thus, these extracts from the FSA's open board meeting performance indicate what I call an *advocatory* mode of construing and legitimating politico-epistemic authority: The multipolistic mode of competence attribution is here embodied in the stakeholder group on BSE in sheep, in the consumer representatives in the FSA's scientific advisory committees, and in the consumer committee advising the board. This specific mode of multipolistic competence attribution is justified in an input-oriented mode. For instance, it is being argued that the issues pursued and the questions asked by the FSA in its various committees and internal branches shall address *'the real consumer issues'*, i.e. they should reflect the authentic preferences and views of consumers, especially those from 'hard to reach' and 'disadvantaged groups.

Furthermore, the close-up analysis of the open board meeting held in Brussels illustrates the way in which the FSA's mode of competence and role attribution can be understood as a representational practice : Here, the FSA is the *author* who employs numerous *actors* that are attributed competence in order to claim epistemic and political authority.

The various actors who are attributed judgemental competence on diverse grounds are:

- The FSA's governing board,
- the agency chairman John Krebs,
- the core stakeholder group on BSE and sheep,
- organisations representing ethnic minorities,
- the FSA chief executive presenting the paper on consumer involvement,
- Michael Walker, a member of the consumer organisation General Consumer Council for Northern Ireland,
- the consumer representatives at the FSAs scientific advisory committees,
- the chair of the FSA's consumer committee, Nancy Robson, and
- Jacqui Webster, the head of the FSA's consumer branch.

Taken together, all these actors are employed by the FSA to successfully make two sorts of representative claims: (1) a claim to represent the external reality of food-related issues, such as the risk of BSE in sheep, in a valid way *(epistemic representative claim)* and (2) a claim to the relevance of this external reality to the good of specific consumer constituencies *(political representative claim).* These consumer constituencies here are of two kinds: First, these are specific consumers belonging to ethnic minorities' and other 'frequently excluded' groups who are 'hard to reach', specifically 'at risk' and 'vulnerable' – whose social inclusion in risk communication is to be ensured through the FSA. These can thus be understood as *'socially-excluded consumers'*. Second, these are *all* UK consumers. These are provided with a range of possibilities to articulate their interests and perspectives in the framework of various 'consumer involvement' activities. These authorisation claims are made before a *'witnessing audience'* that consists of the European public in Brussels and the UK's 'wider public'. Both were invited to attend the 'open board meeting' on-site or via the web-stream at the FSA's website. In this sense, these consumers can be understood as *'consumer citizens'.* By depicting itself as an organisation that involves these consumer constituencies in various ways to represent their perspective and interests, the FSA is thus involved in 'construing consumers' in specific ways.

5.2.2 Practices of multipolistic competence attribution

Building on this close-up analysis and the emergent analytical categories of multipolistic competence and role attribution and the representative claim-making involved in this, this chapter presents the results of the comparative analysis of the FSA's authorisation attempts in the social dimension from 2000 to 2015.

5.2.2.1 The FSA board: combatting suspicions of cronyism with individual expertise and experience

As described in the introduction, the FSA is considered an 'independent agency', that is a 'non-ministerial government department' operating as 'an independent voice within government' at arm's length from ministers (FSA 2002d: 16). It is governed by a board composed of members from different societal spheres and fields. These are appointed not to represent particular organisations or views but to act 'in the public interest'[90]. The board has decision-making power with regard to the FSA's overall strategic direction not only on food safety but also on 'other interests of consumers in relation to food'[91]' and in particular 'for ensuring that decisions and actions take proper account of scientific advice and the interests of consumers and other stakeholders' (FSA 2002d: 54).

The members of the FSA board are not civil servants but external persons who, according to the agency, 'demonstrate substantial achievement in their chosen field', and who have 'expertise in food in food matters' (FSA 2002d: 14). The vast majority of the members were hence recruited as individual experts who had a demonstrated record of what the British call a 'selfless service to society' (Jasanoff 2011a: 30). The board consists of a chair, a deputy chair and up to twelve other members selected to cover a wider range of experience and expertise. The board members had experience in such diverse areas as science and academic research, higher education, public health, media, child and family welfare, food and farming industries, small farms and consumer representation.

For instance, among those board members who were appointed as consumer representatives, there were not only individuals, such as the former BBC News deputy chief executive, who after his retirement became a board member of Charity Article 19 (an organisation campaigning around the world against censorship and for freedom of information), or individuals such as the vice-chair of an association of disabled people. Among those board members who were appointed as representing producer and industry interests, there were individuals such as the director of a small family meat firm and simultaneously member of a group called 'Highlands & Islands Agricultural Partnership' that consisted of local authorities, enterprise companies, producer organisations, and environmental groups advising politicians and civil servants of

[90] The FSA staff is accountable through chief executive to the board, rather than directly to ministers.

[91] As pointed out in the introduction, the FSA's statutory remit according to the Food Standards Act 1999 comprises 'matters connected with food safety or other interests of consumers in relation to food', which the FSA translated in practice to matters on 'food safety and nutrition' (dietary health).

local issues on agriculture. Thus, speaking in more analytical terms, both judgement and decision-making competence were attributed to the governing board on a broad variety of criteria: These included different types of personal, individually gained skills and experience as well as a visible record of acting in the public interest. At least, these were the selection criteria invoked by the FSA when presenting its board members on its website and in its annual reports (FSA 2000j, 2005f, 2010a, 2015a).

Since many of the board members were, however, also stakeholders with specific interests, the FSA published declarations of board members' interests. Here, it distinguished between 'personal interests (direct employment or shared ownership) and non-personal interests (e.g. departmental colleagues with direct corporate links)' (Millstone & Lang 2008: 94). Moreover, the board's code of conduct says that

> '[a]ll personal or business interest which may or, in the judgement of the member, may be perceived by a reasonable member of the public to influence their judgement should be declared. Such interests will include, but will not be limited to, involvement in the agriculture, food and related industries' (FSA 2000a: 6).

This shows once again that board members were attributed judgemental and decision-making competence based on their individual capability to adopt a view and represent wider 'public interests' beyond their stakeholder group. This pattern of multipolistic competence attribution hence attaches particular importance to the individual expert who enjoys a high level of personal credibility to serve the public interest. This manifests the distinctive British culture of expertise as described in chapter 5.1.7., which becomes particularly apparent in view of the biography of the boards' chairman and deputy chairman: The chairman Sir John Krebs, the son of a Nobel-prize winning professor of biochemistry Hans Krebs, held a Royal Society research professorship at Oxford University and was a fellow of the Royal Society. He was internationally renowned for his research on the behaviour and ecology of animals and has received numerous awards for his scientific work. Thus, Krebs had an undoubtedly strong scientific reputation. However, he did not gain his scientific credentials in an area directly related to food (safety), but in the field of zoology. This demonstrates that he is attributed judgement and decision-making competence not primarily because of his specialised knowledge, but by reason of his individual experience and general scientific abilities, personal integrity and neutrality. This was also expressed by the health department, which formally appoints the FSA chairperson. With respect to the appointment of Sir John Krebs, the health department had argued that, based on his personal experience and 'neutral outlook' (Hajer

2009b: 132), Sir John Krebs would be able to gain 'the trust of some stakeholders', not at least because he 'has the advantage of not coming to the job with the baggage of any lobby group' (Beecham 2000: 826).

Suzi Leather, the deputy chair, did have some experience in consumer representation as a former research officer at the Consumer in Europe Group (CEG)[92]. Yet, her engagement in consumer interest organisations was 15 years prior to her more recent engagements as an individual consumer representative at the MAAF consumer panel and as freelance consumer consultant, as well as her most notable professional experience as leader of an NHS trust and healthy living centre where she focussed on tackling health inequalities and problems of nutrition and for which she was awarded an MBE[93].

This reflects the described pattern of competence attribution on the grounds of individual experience and 'service to society'. No one expressed this pattern of competence attribution better than Sir John Krebs himself. When the board was publicly criticised for a lack of direct consumer representation, he countered this criticism 'by pointing out that *all* its members were *consumers*, appointed for their *individual skills'* (Beecham 2000: 826, my emphasis).

Summing up, the dominant pattern we can observe here is the attribution of both judgement and decision-making competence on the grounds of a broad range of individual (professional) experiences and skills obtained by individuals who had served the society in their professional past. By representing such a diverse range of individual experiences and interests, the board was designed to avoid any suspicion of cronyism that was at the centre of public criticism of the old MAFF's handling of the BSE case (see chapter 1.4). Instead, the composition of the agency's board was intended to demonstrate that the new FSA would act in the 'public interest'. Here we see that the practice of multipolistic competence attribution, embodied by the FSA board, can also be thought of as an attempt to make an authoritative representative claim: the board and its different characters – the chair and deputy chair and its twelve board members – are employed as representatives capable of both making valid claims on matters connected to food safety and dietary health *(epistemic claim)* and judging the relevance of these matters to the good of consumers *(political claim).* Thus, in the context of the FSA's board both consumer

[92] The CEG is an umbrella body for over 30 professional and voluntary organisations with an interest on the effect of the EU on UK consumer affairs.

[93] The MBE stands for Member of the Most Excellent Order of the British Empire and is an honorary title within the British order of chivalry. The Order of the British Empire rewards distinguished contributions to sciences and the arts. Likewise, it rewards work with social welfare organisations and charities.

and industry representatives were attributed judgemental competence based on their presumed capability to articulate the views and interests beyond the social groups they represent. These stakeholders can be analytically understood as being predominantly employed as 'consumer citizens' who act in the 'wider public interest'.

Yet, this pattern of competence attribution (and the representative claim underlying it) also drew some criticism: First, although the FSA was keen to emphasise that its board was designed to be representative of and act in the name of the 'public interest', its actual composition showed, and increasingly so over the years, that this included not only non-economic, but also economic public interests. Second, the underlying pattern of attributing judgement competence based on individual experience and skills had been quite heatedly discussed not only in the run-up of the FSA's establishment but also in the agency's early days. The fact that individual expertise and experience as sources of the attribution of judgement skills were not undisputed will become even clearer later when we take a closer look at the role 'lay members' play in the FSA's scientific advisory committees and the FSA's 'consumer committee'. Both aspects will be elaborated in more detail in chapter 5.2.4. However, next I will first analyse the FSA attempts to position itself as an authoritative expert by maintaining so-called 'in-house experts' and the position of the agency's 'chief scientist' who both are expected to act as brokers between policy work and science advice.

5.2.2.2 In-house scientific experts: brokers between policy work and science advice

The FSA's day-to-day operations are managed by the agency's executive. The staff members are civil servants, led by a chief executive, who is accountable to the agency's board. The FSA maintains policy departments, in which scientific experts 'in an integrated way' in several sub-divisions[94]. These cover issues of chemical safety, microbiological safety, radiological protection and research management, contaminants and animal feed, novel foods, food chain strategy and nutrition (FSA 2002d: 17).[95] The FSA's scientific staff members, who make up nearly 50% of the total policy staff[96] and whom the FSA referred to as 'in-house scientific

[94] The FSA executive is explicitly organised in a way that 'ensures that policy makers and scientists work together in the same teams, rather than in different parts of the organisation' (Science & Technology Committee 2011).

[95] Initially, the FSA maintained one policy department, the 'Food Safety Policy' department., which starting from 2004 was split into several individual policy departments. Initially, the FSA maintained one policy department, the 'Food Safety Policy' department. In 2004, the Division of Nutrition was removed from the Department of Food Safety Policy and integrated into the new Department for Consumer Choice and Dietary Health. This new department was mainly staffed by nutritionists, household economists and analytical economists.

[96] Sixty-seven per cent of the scientific staff have a postgraduate qualification (FSA 2007n).

experts' or 'agency scientists', have different backgrounds in food-related natural sciences, such as toxicology, microbiology, or nutrition (FSA 2003r, 2006l, 2007p, 2008m). These in-house scientific experts are presumed to address the interface between policy work and science advice within their respective issue areas. And it was on the grounds of both their formal scientific qualifications and individual policy experience they were considered competent to do so.

This pattern of competence attribution chimes with the 'broader roles of leadership, policy development, management and communication' played by in-house scientific experts (FSA 2006l: 2). It is through their multiple competences that they are deemed capable to act as 'brokers' between scientific expert perspectives and policy perspectives, i.e. as translators who have to judge the relevance of scientific insights to the good of consumers (and other stakeholders) (interviews official 20 – FSA; official 25 – FSA; official 32 – FSA). The in-house scientific experts' professional experience covers those gained in the worlds of policy, business, and civil society, notably in the areas of public health and consumer representation. For instance, the then director of an important department, the Department for Consumer Choice and Dietary health[97], Gill Fine, was a nutritionist who had been head of food and health at Sainsbury's supermarkets prior to her appointment. She also had previously worked at the British Nutrition Foundation, a charity committed to nutrition education and nutritional public information[98] (FSA 2004f: 7). Thus, we see a pattern of multipolistic competence attribution, according to which judgement competence is attributed not only based on specialised knowledge certified by formal scientific qualifications, but also on the grounds of relevant individual professional experience: in the case of Gill Fine, it was individual experience at the nexus between private business and civil society.

The FSA's in-house scientific experts include two key groups (interview official 32 – FSA). First, there are the scientific and academic staff members within policy departments. They are credited with the ability to assess the risks of food-related policy questions based on scientific expert knowledge and at the same time to judge the resulting policy implications based on their experience in policy work. The in-house scientific experts, however, do not just include experts in 'scientific risk assessment' i.e. mainly toxicologists. As one interview explained, they also

[97] This reorganisation reflected the increasingly strong emphasis that the FSA put on the issues of 'healthy eating' and 'consumer choice', which went beyond questions of food safety, which I will focus on in further detail in chapter 5.4

[98] However, this charity was later publicly criticised for the lack of independence from industry (Chamberlain 2010).

include 'analysts' from 'social science, economics, operational research and statistics' who act as 'internal advisors to people across the organization (…) who want to commission certain types of research or evaluation of the work they do' (interview official 32 – FSA). During the interviews, the FSA's in-house scientific experts were often depicted as 'translators' (interviews official 23 – FSA; official 25 – FSA; official 32 – FSA); as one interviewee put it, "[they] are there advising on the translation, advising on making sure we balance and weigh the evidence correctly in our options appraisal and then the advice we give' (interview official 32 – FSA). As such, they combine risk assessment and risk management roles in that they not only 'consider the scientific evidence and reach an opinion on the implications for people's health', but also (…) a much wider range of evidence (…) for example, regulatory constraints, economic and social consequences and consumers' appetite for risk are all factored in' (FSA 2009e: 15).

The second group were the so-called 'committee secretariats', who act as a transmission belt between the external scientific risk assessment experts in the FSA's scientific advisory committees and the in-house risk assessment and management experts[99]. The committee secretariats are staffed with internal scientists who manage processes of science advice and formal risk assessment within the FSA. Much of their work involves supporting the FSA's external scientific advisory committees which are primarily responsible for preparing external formal risk assessments. These secretariats act as 'the interface between risk assessment and risk management' (interview official 20 – FSA) by structuring processes in the following way: Before a scientific advisory committee gives a risk assessment opinion, it is the secretariat's role to discuss 'with the policy people [the FSA's in-house scientific experts within its policy departments] what their issues are and what they want to get out of the (…) opinion (…), the specific questions that should be asked' (interview official 20 – FSA). On this basis, the secretariat draws up a paper 'in a way that provides the information that (…) the [scientific advisory] committee needs in order to come to conclusions' (interview official 20 – FSA). After the SAC has finalised its work, the committee secretariat 'is responsible for bringing together the papers for assembling the evidence' (interview official 32 – FSA).

Thus, it is the committee secretariats who – following discussions with the in-house experts working on 'risk management issues' – determine which questions are relevant for a specific

[99] As I will show in chapter 5.2.4 'The contestedness of multipolistic competence attribution', the FSA had 'not, generally, tended to label its various functions as either risk assessment or risk management in its day-to[-day]-work'; this changed however in 2005/2006, when the FSA's governance of science was discussed at the FSA board, where the FSA for the first time discussed at board level, whether it had' properly sperate[d] risk assessment and risk management functions in practice (FSA 2008l: 17).

scientific advisory committee. On the grounds of their 'brokerage' qualities they are attributed a twofold interpretive power: first, an extensive scope for interpretation regarding the policy implications of the results of formal risk assessments, and second, the power to frame the 'upstream assumptions' on which risk assessments conducted by the FSA's external scientific advisory committees are based (helicopter interviews 1 & 2). Vice versa, the secretariats are attributed the competence to 'make sure that that advice is used and reflected accurately' in risk management, as one head of a committee secretariat whom I interviewed put it (interview official 20 – FSA). This head of secretariat explained:

> 'So, I work very closely with the risk managers promoting the views that come from the committees, and fully accepting that they have to take other factors into account I make sure that what they say is consistent with the committee's advice' (interview official 20 – FSA).

This brokering role of committee secretariats between the FSA's risk managers and scientific advisory committees shows a specific understanding of the relationship between scientific risk assessment and risk management is underlying the FSA's mode of multipolistic competence attribution. This relation is seen as requiring 'more than a simple, "linear" handover to RA [risk assessors] flowed by another back to RM [risk managers]', there has to be a flow backwards and forwards', as one FSA member put it (FSA 2010b: 5).

However, besides this brokering role between internal risk management and external risk assessments, the secretariats also 'ha[ve] a function as in-house experts' who conduct their own in-house risk assessments: '[T]here are times when we need to respond very quickly to issues that are happening; we don't have time to get advice from the committee by the normal process, but we will perhaps produce a risk assessment that we then consult the (…) [committee] chair on so that he's able to endorse what we have done' (interview official 20 – FSA). Secretariat heads are moreover also involved in the in-house 'heads of profession group' as well as in the external cross-governmental 'advisory committees secretariat network' which meets biannually and functions as a 'self-help' group for committee secretaries. In this way, it is being argued, they are able to identify and follow the 'state of the art' of a given issue area or of cross-cutting issues to mutually inform each other about issues that might become relevant, and to share 'best practice' with regard to running SACs committee, (FSA 2008d: 8).

Summing up, judgement competence is attributed to in-house staff both on the grounds of a formal scientific background and on the grounds of policy-making experience. Thus, being a competent in-house expert requires blending skills in science advice and policy-making and

mediating between science and policy. In this sense, the FSA's scientific in-house experts are imagined as acting as brokers between science and policy. This pattern of multipolistic competence and role attribution reflects a heterarchical mode of authorisation according to which brokers operating at the nexus of different social worlds play an important role in managing and reconciling the tense science-policy relationship.

5.2.2.3 Embodied expertise performed by the FSA chief scientist

The FSA's chief scientist had the most '[h]ighly visible role to champion, communicate and provide assurance on (…) science' (FSA 2013b: 10) and hence was the most popular figure to embody the agency's mode of personalised multipolistic competence attribution (interviews official 23 – FSA; official 25 – FSA; helicopter interviews 1 & 2). Until 2006, Jon Bell, a renowned food policy risk assessment and risk management expert, who was also the FSA's chief executive, was appointed as the FSA's (part-time) chief scientist. However, in the FSA's first years, the role of the FSA's chief scientist role was not yet formalised. Actually, at that time, it was then FSA's chairman John Krebs who acted in a role that, as I will show, later became codified as including mainly 'being accountable for the integrity' of the FSA's risk assessment and risk management decisions as well as 'representing the FSA in scientific and other fora' (FSA 2006l: 7). As shown by a brief look at Krebs's many public speeches held in 2003 (FSA 2003a, 2003c, 2003i, 2003k, 2003q, 2003s, 2003u), he was de facto acting as the public face when it came to representing the FSA as a scientifically trustworthy organisation. As the following interview quote illustrates, he was widely recognised as having outstanding personal qualities and achievements that qualified him as a credible spokesperson and representative of the FSA not only as chairman on matters of policy but also as a kind of 'de facto' chief scientist on scientific matters::

> 'The organization was set up in 2000 and we were fortunate enough to have as our first Chair a very well-known and well respected scientist in his own right, Professor John Krebs, now Lord Krebs; and he was our Chair up till 2005. In 2005, our second Chair was someone from a consumer organization background, and one of the things that we noticed and that she felt was that there were questions being asked externally about whether we had retained our credentials, our principles. Because one of the things that we said at the beginning was that we were going to be a science and evidence-based organization' (interview official 32 – FSA).

Thus, the FSA in its first years was building on the 'embodied virtue' (Jasanoff 2005: 187) of its chairman John Krebs, through which it attempted to acquire credibility and trust and

constitute itself as an expert at the science-policy-public nexus in food (safety) policy. When John Krebs left the agency in 2005 and the FSA 'no longer had a scientist as chair', it decided to have 'a separate role within the organisation, of a chief scientist, who was a civil servant who had a strong science background and was supposed to bring that sort of scrutiny and challenge' (interview official 32 – FSA). Thus, from 2006 to 2013[100], Andrew Wadge, who was also the head of the FSA's chemical safety and nutrition divisions and had been a senior government scientist since 1986 at the health department, became the FSA's first formally appointed 'acting chief scientist'. With this formalisation of the role of the FSA chief scientist the FSA followed suit, to an extent, with the longstanding British tradition of 'chief departmental advisors' in Whitehall (see chapter 5.1.6). However, as an 'science-based' independent regulatory agency, the FSA decided that '"Chief Scientist" would be a more appropriate title than Chief Scientific Adviser' as the position had been called in other government departments since 1920 (FSA 2006l:7).

Thus, similarly to John Krebs, the different worlds of science advice, policymaking and public communication were encapsulated in the now formalised role of the FSA's chief scientist. Based on heterogeneous competences gained through a career at the science-policy-public interface, the chief scientist was expected to be capable of acting in all of these worlds. One interviewee described the chief scientist's hybrid brokerage role as follows:

> 'I mean his role is sort of a combination of a *champion for the agency's science* and the agency's use of science but also the assurance and challenge. So, there is two aspects to that. (…) he is a kind of a *head of profession for all the scientists*, engineers and social scientists in the agency, he's the sort of lead person. (…) So, there's that part. And then there's the sort of the *assurance* side of it (…) our chief scientist Andrew Wadge, he is a director (…), [h]e is part of the internal "executive management group", so he has *a part in all the decisions about policy*, (…) *which draw on, you know, risk assessment science (..) So he's there at the table and his role is partly to take part in eclectic discussion as any of the other directors would, but [his role is] also specifically to make sure that (…) the discussions are properly informed by science and analyses. And when decisions go to our board for sort of a higher-level policy decision and recommendation on new policy whatever, he will be there.* He's one of the (…) two people in the executive who regularly contribute to those discussions that are not part of the board – (…) one is the chief executive obviously and one is the chief scientist. *And he's there for all the discussions to provide that input and challenges any questions about the evidence-base behind a proposal or*

[100] At the end of 2013, Andrew Wadge left the FSA in the course of a major restructuring of science governance, including the role of the chief scientist. As I will show in the section 'The contestedness of multipolistic competence attribution', this restructuring, which was the result of a scientistic reframing of competence attributions at the science-policy nexus.

> *policy and the way it's being used, the way it's communicated, he's there to answer those questions, provide assurance that that what's being presented to the board has been properly informed by science'* (interview official 25 – FSA, own emphasis).

As it is evident from this quote, the chief scientist's role entailed different elements. The first was to function as a 'champion for science' within the FSA executive, a term that was often used within the FSA in relation to the chief scientist (FSA 2006l: 25). The term relates to the chief scientist's role in acting as the 'head of profession' for the FSA's in-house scientists, securing 'excellence in research' as well as the chief scientist's role of advising the agency on the recruitment of 'high-calibre scientists' (FSA 2006l: 27). To do so, the chief scientist maintains a 'chief scientist team', which is 'in charge of science governance and science commissioning' (interview official 32 – FSA) and supports the chief scientist in all his tasks. The chief scientist attended the meetings of the later established FSA's General Advisory Committee on Science (GACS)[101] and attended the other SAC meetings at least annually, where he also held 'feedback meetings' with each SAC discussing their work and coordination with the FSA's in-house scientists. Moreover, the chief scientist had a role of advising on appointments of SACs and the responsibility for the regular 'independent reviews of the SACs' (Science & Technology Committee 2011: 178–179). Thus, the 'championing science' element of the chief scientist's role involved embodying and promoting a kind of 'scientific virtue' in the form of 'excellent' science and scientists within the FSA executive and its SACs. The chief scientist's second more policy-oriented 'assurance and challenging role' was to keep a critical eye on how the FSA's in-house staff presented 'science transparently and consistently', notably 'through the preparation of board papers' (FSA 2006l: 25). Reflecting the FSA's mode of multipolistic competence attribution, this 'assurance and challenging' role was attributed based on the chief scientist's 'brokering skills'. As is evident from the quote above, the chief scientist's brokering activities involved two main capabilities: the ability to translate scientific evidence into the 'eclectic discussions' of the FSA's stakeholder-based board where the chief scientist attended all meetings and to ensure that the FSA's board used the FSA's science advice according to specific scientific standards. As the same interviewee further explained to me, the FSA's chief scientist and his team had been consulted on all policy papers for the board. In these consultations the chief scientist had worked to 'make sure that there was a (…) very close connection between the needs for policy and what's coming out of science (…) so that there is

[101] The establishment and role of GACS will be discussed in chapter 5.2.4.2.

a sort of a proper integration between the science and the policy development' (interview official 25 – FSA).

Moreover, in addition to his internal role of brokering between the FSA's in-house scientists and the agency's board, the FSA's chief scientist also performed an external representative and public communication role:

> '(…) and then there's a kind of external engagement element to it [the FSA's chief scientist's role] as well in that he obviously he is part of a network of chief scientists across government. (…) He is the kind of public figurehead for the Agency science. So, in terms of how we do it and so on, so he has a blog, (…) he gives lectures, talks and interviews and things like that, articles and things of that sort. (…) and ultimately, he is the one who is accountable for the way the Agency has used science in what it's doing. So, if something goes wrong, he is the one who has to sort of stand up and sort of take the responsibility, defend it or explain what we've done' (interview official 25 – FSA).

The interviewee here described the chief scientist's two more frontstage representative and public communication roles that proved to be particularly important for the FSA in its quest to build and cultivate epistemic and political authority. First, the interviewee referred to the previously described UK 'ecosystem' of governmental science advice (chapter 5.1.6). It is characterised by several cross-departmental institutional arrangements. These include the 'network of departmental chief scientific advisors' (DCSAs) and the 'chief scientific advisors committee' (CSAC) in which the chief scientific advisors regularly meet under the chairmanship of the 'government chief scientific advisor' (GCSA) in order to discuss cross-government substantial issues as well as 'good practice' of science advice (House of Lords Select Committee on Science and Technology 2012: 11). These kinds of cross-departmental science advice arrangements and networks used to constitute a performative arena for the FSA's enactment of its self-attributed judgement competence. Moreover, they constitute arenas in which external peers can 'testify to' the FSA's competency, as the FSA was keen on emphasising: By participating in the cross-governmental 'network of departmental chief scientific advisors', the FSA's chief scientist and his team were able to present 'high-profile' examples of the FSA's use of scientific evidence to a relevant community of peers, who ascribed valuable competencies in securing valid 'policy-relevant science advice' to the chief scientist (FSA 2008d: 8). Second, the interviewee refers to the chief scientist's role as 'the lead media spokesperson'. As such he was publicly accountable for the FSA's use of science advice in decision-making on issues of food safety and nutrition. The chief scientist fulfilled this public accountability role not only by engaging in more classical media outreach, i.e. producing press

releases, arranging pro-active media briefings and conducting interviews, but notably also through his own interactive 'chief scientist' web blog named 'Hungry for Science'.

'Hungry for Science': directly engaging with consumers through the chief scientist blog

On the FSA's webpage, all recommendations and policies that were in the public spotlight contained a 'The Science behind the Story' button which linked to the 'Hungry for Science' blog. As another interviewee put it:

> '[O]our chief scientist blog was very useful (…) People engaged on it and people really like it and it, it was quite new, (…) so it was innovative and people were keen to discuss things with Andrew (…) it has been quite useful for both explaining and discussing things and getting people's views in' (interview official 29 – FSA).

Thus, 'Hungry for Science' was not just intended as a one-way information and communication format for 'for explaining the agency's science to a broader public audience' (interview official 29 – FSA). The interactive blog was also set up as an interactive online discussion forum that accepted comments primarily from the general public, but in principle also from (critical) stakeholders. A closer look at the FSA's rationale for setting up the chief scientist blog reveals that it reflected the British culture of attributing judgement competence to the individual 'embodied expert', who enjoys a high level of personal credibility (chapter 5.1.7). The following snapshot of the blog shows an extract from one of the chief scientist's most popular

blog entries[102]. This blog entry was on 'traffic light labelling' – probably the most frontstaged issue in the FSA's attempts to build politico-epistemic authority, as I will show in further detail in chapter 5.4:

Figure 6: Snapshot taken from the chief scientist's blog (FSA 2007s)

This snapshot illustrates the FSA's reliance on the chief scientist as an embodied expert who is ready to engage with consumers and welcomes anybody interested in the FSA's workings: 'As the Food Standards Agency's chief scientist, I want this blog to show the importance of good science and how we use it to inform FSA policies and advice'. So doing, the blog used an everyday repertoire of language to establish the chief scientist as the 'voice of common sense' (The Telegraph 2007) at the FSA, for instance, by defending eating a bacon sandwich when accompanied by fruit and vegetables in a 'balanced diet'[103] or by dismissing 'detox diets'[104]. In this vein, it was designed as an – for that time extremely innovative[105] – interactive online format, where people could regularly directly engage with the chief scientist and vice-versa:

> 'We will read and respond to your comments as often as we can (…) I'm looking forward to seeing how this blog will supplement the other ways we use, such as open board meetings, media interviews, and our websites, to demonstrate our core values. These are: 'putting consumers first', 'being an independent voice', 'being open and transparent about what we do' (FSA 2006c)

Thus, the FSA's claim to what I call advocatory politico-epistemic authority here essentially built on the personally embodied scientific and public virtue of the chief scientist. The chief scientist here presented itself as being motivated by a desire to speak truth in commonly understandable terms in order to support consumer's 'evidence-based' choices. The following quotation from a member of the FSA's communication staff illustrates this aspect in a particularly impressive way:

> 'It [the chief scientist's blog] is used to "humanise" (through focussing on an individual) and demystify science within the Agency, comment on food-related stories in the media,

[102] It was the most popular blog entry according to the number of comments.

[103] In response to report of the World Cancer Research Fund warning against any consumption of processed meat products, such as 'bacon sandwich', which was published in 2007 received a lot of public attention, Andrew Wadge argued on this blog 'There is no evidence to say that the occasional bacon sandwich will cause cancer' (FSA 2007o).

[104] At the occasion of the new year 2008, Andrew Wadge discredited popular 'detox' diets (FSA 2007g).

[105] Andrew Wadge's science blog is widely recognised as a frontrunner in the networks of regulatory science blogging, which later became an established device used by governmental chief scientists' in the UK (Bell 2013).

> update stakeholders on meetings attended by the Agency's chief scientist, and communicate in more detail the science behind major Agency initiatives. (…) The blog's success is due in part to the chief scientist's readiness to engage with people who reply to his blog postings, and the fact that Agency staff, including non-scientists, understand the blog's potential to promote the work they do' (FSA 2007n: annex, 33).

Hence, the attribution of politico-epistemic authority to the role of the chief scientist relied on an embodied and personalised concept of expertise. This involved the competence to justify and communicate the FSA's science-based policies and recommendations to the lay public and the 'ordinary consumer' (interview official 29 – FSA). At the same time, the FSA's the chief scientist blog was also productive of specific consumer constituency, namely Here, the 'information-hungry consumers', who were predominantly addressed[106] and encouraged to participate in an 'informed debate' (FSA 2009e: Annex 1). Thus, the 'knowledgeable consumer' here is invoked to put his or her trust in the chief scientist for who he was and what he stood for: the FSA's most senior scientist, capable of and willing to communicate in a direct, responsive and common-sense way about the scientific evidence that underpinned the FSA's decision-making[107].

Summing up, judgement competence is attributed to the chief scientist not only on the grounds of a formal scientific background and policy-making experience, but first and foremost by invoking a personalised embodiment of expertise: namely one that is deemed valid, relevant and legitimate at the nexus between the worlds of science, policy and the public, notably by 'information-hungry' and knowledgeable consumers. To be attributed the multipolistic competences needed at this interface, the chief scientist put great efforts into his 'championing science', 'brokering' and 'public communication' activities and performances alike. As such, the chief scientist played an important role in the FSA's attempts to invoke epistemic authority. At the same time, he successfully claimed to speak and act for the knowledgeable consumer and is hence actively engaged in 'making' the consumer constituency.

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[106] In principle, also possibly more critical 'stakeholders' could use the science blog, yet this was very seldom the case.

[107] Finally, as the personal embodiment of the FSA's mode of multipolistic competence attribution, it is not a surprise that the chief scientist was closely involved in developing and publicly communicating the agency's response to significant food safety incidents. Here, he was attributed 'a specific role in ensuring that FSA's response and its advice [were] properly informed by the evidence and by robust risk assessment' (Science & Technology Committee 2011: 178–179).

5.2.2.4 Non-specialists in SACs: acting as knowledgeable consumer representatives

For the time period studied, the FSA maintained nine independent scientific advisory committee SACs[108]. These were made up of about 150 experts who advised both the agency's executive and its board. All SACs had at least one, and mostly two, non-specialist members who acted as 'consumer representatives'. These constitute a further example of the FSA's attempts to build multicompetence-based politico-epistemic authority: According to a FSA paper published in its early years, the role of non-specialist consumer representatives was predominantly 'to ensure that the consumer perspective is taken on board in the formulation of policy arising from the science' (FSA 2002p: 3). Against some stated concerns that the 'science should be left to scientists', the FSA argued that having non-specialists on scientific advisory committees would play a valuable role on expert committees (FSA 2002r: 12). In this view, non-specialist consumer representatives did not 'contaminate the purity of the risk assessment process', but they helped to ensure that questions are framed in a way that takes 'account of the issues of consumer concern' (FSA 2002j: 8). Moreover, their presence was seen to increase 'trust and understanding in the scientific process' (FSA 2002j: 8).

Despite the term 'non-specialist members', their role and competences were not exclusively defined negatively, as 'persons who are not experts', but also positively, as those with a 'range of representative and committee skills' (FSA 2002r: 12). As we will see in the following, the precise meaning of these skills was undetermined at first and evolved over time. In its early years, the FSA did not strictly separate 'lay member' and 'public interest representative' but saw them as two 'overlapping roles' of non-specialist consumer representatives in the SACs (FSA 2002r: 12). Accordingly, non-specialist members in advisory committees were selected following a public tendering procedure on the grounds of their broader competences. The non-specialist members had gained these competences either from their personal experience as consumers or from their institutional experience as representatives of organised consumer groups. In the agency's first years, non-specialist members in SACs covered a broad spectrum of backgrounds: a computer consultant, a marketing lecturer interested in food issues, a

[108] Until 2008, the FSA maintained 8 SACs: Advisory Committee on Animal Feeding stuffs (ACAF), Spongiform Encephalopathy Advisory Committee (SEAC), Scientific Advisory Committee on Nutrition (SACN), Advisory Committee on the Microbiological Safety of Foods (ACMSF), Advisory Committee on Novel Foods and Processes (ACNFP), Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT), Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC), Committee on Mutagenicity of Chemicals in Food, Consumer Products and the Environment (COM). In 2008 the Social Science Research Committee (SSRC) and the General Advisory Committee on Science (GACS) with a wider role, exceeding specialist areas, such as toxicology or nutrition (see for further detail below), were established.

manager of a charity engaging with young offenders, a home economist, an ethicist, a member of the UK national council of women, a chef of the culinary school 'Le Cordon Bleu' involved in food journalism and broadcasting, a mother with a strong interest in consumer affairs, a nutritionist involved in the consumer organisation 'Foodaware', a consultant physician involved in the 'Consumer's Association' or a policy adviser at the UK's then largest independent consumer organisation 'Which?'.

The fact that the non-specialist members included representatives of the UK's major independent consumer interest group is particularly remarkable[109] and indicates the FSA's initial interpretive openness towards what it considered 'a competent consumer representative'. This also involved experienced, organised consumer representatives.

However this openness was gradually reconfigured: while in the FSA's early years, 'non-specialist' consumer representatives on SACs were always referred to as both 'lay members' *and* organised 'public interest representatives', over time, only individual 'lay members' acting in their personal capacity as 'ordinary consumers' came to be counted as consumer representatives (FSA 2002r, 2002t). This was mainly due to a couple of external review and evaluation reports, which argued that the precise role and competences of SAC consumer representatives needed clarification (FSA 2000e, 2001t, 2002r). In response, the notion of being a non-specialist 'consumer representative' became explicitly dissociated from the idea of representing consumes as an act of representing broader social interest.

To cope with the indeterminacy of 'non-specialist consumer representatives', the FSA used the government-funded National Consumer Council's 'stronger voice programme' as a template to develop an 'induction pack' for non-specialist members on its SACs; they also held workshops with 'consumer representatives' to discuss issues relating to their role and, based on this, piloted a training course (FSA 2003d: 18). Whether they had a background as experienced members of consumer organisations or were inexperienced as consumer representatives, non-specialist members in the FSA's SACs were increasingly expected to act in their role as individuals who first needed to become adequately trained in 'representational skills'. The training package, which was designed to develop non-specialist members to become 'knowledgeable and confident', portrayed consumer representatives as well-informed persons with individual access

[109] The practice of incorporating consumer representatives in scientific advisory committees was, however, not entirely new. The FSA's predecessor, MAFF, had already selectively involved consumer representatives in its advisory committees, yet these were chosen from government-funded consumer interest organisations (Lang 1999).

to sound research and capable of applying scientific information to promote consumer interests. Consumer interests were imagined as consumer access to goods or services, consumer choice between a range of goods and services, the safety of goods and services, and the provision of accurate consumer information (National Consumer Council 1999: 15–17). The training guide comprised several techniques for gaining adequate knowledge as well as a checklist. The latter contained a test that challenged consumer representatives to 'look at issues from the consumer perspective' (National Consumer Council 1999: 14). Thus, while there were no 'hard formal' selection criteria for the FSA's 'lay members' on SACs, this training workshop was considered important for enabling non-specialist members to act as competent and knowledgeable consumer representatives. It is in this capacity that non-specialist members in SACs counted as 'experts in their own right', who had valid knowledge that ought to be incorporated into the agency's scientific advisory committees (Hajer 2009b: 154).

A closer look at the report published by the National Consumer Council in 1999, which had been used as a guidance document in the FSA's training programme, indicates that this involved two things: education in terms of concrete knowledge and communication skills and the framing of non-specialist members as being someone who represented the '*individual consumer in the marketplace',* who was clearly distinct from the *'citizen'* (National Consumer Council 1999: 6). 'As a consumer representative', it was argued, 'you have to know what *individual* consumers want and need' (National Consumer Council 1999: 13, my emphasis). 'Consumer interests' and 'citizen interests' were considered to follow different 'logics of interest', as presented in the following figure, taken from the Consumer Council's report:

Consumer interests	Citizen interests
Shorter term	Longer term
Often more narrowly focused.	Have a wider focus.
Rooted in problems as perceived by the individual.	Tend to have an influence which goes beyond individual experiences. They are often rooted in problems faced by the public at large.
Likely to lead to more tangible changes as they are more individually focused.	Likely to lead to broader policy changes.

Figure 7: Snapshot taken from the training package (National Consumer Council 1999: 7).

Figure 7 imagines a 'competent consumer representative' as an individual with short term interests and quotidian concerns that are narrowly focused and rooted in individually

experienced problems. This ‘individual consumer in the marketplace’ aims at achieving small, tangible improvements in his/her individual situation. As such the competent consumer representative is conceived as being distinct from the citizen. The citizen is portrayed to pursue a longer-term social interest aiming at broader policy changes with a wider focus that is rooted in common public problems. From this follows that those who understand consumer interests in a broader way and attempt to articulate them during knowledge production do not fit into this narrow frame of individual participants and cannot act as ‘competent consumer representatives’.

It is evident that this juxtaposition of ‘consumer vs. citizen interests’ is in tension with the above-described formal selection criteria and with the heterogeneous actual societal backgrounds of the appointed non-specialist members. In fact these did include institutionally experienced representatives of consumer interest organisations, which (at least partly) pursued ‘citizen interests’ – the longer-term social interest of consumers and the ‘problems faced by the society at large’ – in order to bring about ‘broader policy changes’ (National Consumer Council 1999: 7).

Summing up, the FSA included non-specialist consumer representatives as members of its SACs. Officially, these were attributed judgement competences based on their representativeness of two kinds of consumer constituencies. On the one hand, competence attribution occurred based on their professional experience and expertise in representing broader consumer interests. Here, the claim was about the ‘citizen consumer’. On the other hand, competence attribution occurred based on their qualities obtained as knowledgeable ‘ordinary’ consumers in the marketplace and on their (presumed) capacity to contribute their ‘ordinary consumer perspectives’ in order to make the committee’s scientific deliberations more comprehensible from a consumer point of view. According to the formal selection criteria, non-specialist consumer representatives at the FSA’s SACs thus comprised both ‘lay’ and organised ‘elite’ consumer representatives who both were portrayed as having certain skills to actively contribute to knowledge production, instead of functioning as mere recipients of science advice. However, in practice the role of the consumer representatives in SACs came to be narrowed down – they increasingly should solely represent the purported view of the ‘ordinary consumer’. This illustrates that the FSA’s attempt to claim politico-epistemic authority involved the ‘making’ of the consumer constituency – here the ‘knowledgeable ordinary consumer’. As I have shown, engaging the knowledgeable ‘ordinary consumer’ (as opposed to the ‘elite consumer interest group representative) turned out to be a lot of hard work.

To educate and thereby to create and discipline a competent ordinary consumer representative, the FSA implemented a coaching programme for non-specialist members, which actively constructed consumer representatives as individual lay persons representing the views of the 'ordinary consumer in the marketplace'. As we will see in the following, attributing judgement competence based on the assumption that 'ordinary consumers' may 'authentically' represent consumer views was likewise a central (and not uncontroversial) element of the 'consumer committee', which embodied a further manifestation of multipolistic competence attribution.

5.2.2.5 The consumer committee: representing organised interests and excluded 'ordinary views'

In its early years, the FSA faced a problem of low participation of consumers and consumer groups in formal consultations; above all, conventional consultation exercises were seen to have failed to reach specific groups 'with particular needs, such as those on low incomes' (FSA 2000e: 7). As one interviewee consulted during my informal 'helicopter talks' put it, the FSA felt it needed to do something to combat the 'rampant stakeholder fatigue' (helicopter interview 1). For the FSA this was particularly problematic, since it had been keen on stressing that 'knowing what people want is at the very heart of the agency's business' (Webster 2002: 211). Its mission of 'putting consumers first', the FSA tirelessly proclaimed, spanned all its activities:

> 'It [the agency] wants to ensure consumer needs are tackled effectively in all its activities, from decisions on its strategic direction to specific policy issues, and including the actions it takes or proposes in emergency situations' (FSA 2000e: 7, my supplement).

In order to avoid participation by a narrow range of consumer interest groups in the agency's extensive consultation activities, the FSA established a 'consumer committee' in early 2002. This consumer committee, it was argued, would be 'taking a strategic consumer-oriented view of food policy priorities' and 'looking after the interests of consumers' (FSA 2000e: 10). The committee's terms of reference were defined as follows (FSA 2002h: 2):

- 'alert the Agency to key issues of current or emerging consumer concern'
- 'comment on the Agency's strategic objectives and forward plan';
- 'provide the Agency with feedback on the effectiveness of its policies in responding to consumer concerns';
- 'advise on consultation methodologies, *including ways of reaching vulnerable and hard to reach groups*';
- 'review the work of consumer representatives on advisory committees';
- 'facilitate joint-working between the Agency and consumer groups';
- 'offer advice on any other issues that may be referred to it by the Board'.

Six of its members were nominated by the main consumer organisations in the UK: The National Consumer Council, the Consumer Association, Sustain, The Welsh Consumer Council, The Scottish Consumer Council, and The General Consumer Council of Northern Ireland. By including representatives of these consumer organisations, the intent was to 'construct a balanced committee with links to the views of established outside organisations, representing the widest possible range of population groups and interests, with an appropriate blend of expertise' (FSA 2001f: 4). A further six members, who were called 'representative consumers' or 'lay members', were recruited through open competition on the grounds of their 'personal experience'; thus this occurred on similar grounds as the above-described non-specialist members in the FSA's SACs (FSA 2001f: 13).

As the following quote from the committee's chair, Nancy Robson, shows, judgement competence concerning food-related consumer issues was attributed on the grounds of a wide range of individual and institutional experience in consumer issues: '[e]ach member of the Committee brings something different to the table, from professional expertise to a grass-roots perspective, but shares a common determination to improve the capacity of consumers to be aware of and involved in decisions that affect their everyday lives' (FSA 2003g: 2). By including both professional consumer representatives *and* lay persons – or, in the words of the FSA, 'representative consumers' – the committee was designed to 'ensure that the FSA's decision-making was open to a wide range of consumer interests', views and experiences, enabling a 'full understanding of consumer needs and views'; this particularly involved understanding the views and needs of 'low-income' and other 'hard to reach groups' (FSA 2002h: 5). Thus, in analytical terms, the consumer committee was expected to act as a representative of the 'socially-excluded consumer'.

Yet, the composition of the committee reflected an intense debate on its specific role and the competences of its members, which had taken place prior to the committee's establishment. Again, what was at stake in these debates was the very basis of attributing judgement competences. Both at the level of the board and in the context of a formal stakeholder consultation process, there were 'polarised views' on how to best staff the committee to make its members 'true' representatives of all consumer groups (FSA 2001k: 12, FSA 2001f).

As the minutes of the board meeting discussing the issue show (FSA 2001k: 12–14), some stakeholders and board members[110] preferred a 'consultative committee of individual consumers'. Consumer organisations, they argued, 'could put forward a "consumerist" viewpoint, which might not accurately reflect the views of "ordinary people"' (FSA 2001k: 12–13). In a similar vein, FSA staff members argued that the main weakness of having a 'nominated committee' that represented consumer organisations would be its difficulty in providing expertise on 'low income and other minority issues' (FSA 2001f: 13). 'Members of similar committees in the past', it was further argued, 'had tended to represent their own views rather than necessarily a wide spectrum of consumer opinion' (FSA 2001f: 12–13). Thus, from this perspective, representatives of consumer organisations lacked the ability to diagnose and thus legitimately claim to know the common good of *all* consumers, that is, including the particular needs of those regarded as 'weaker consumers', 'low-income' and other 'hard to reach' consumers. Against this background, the FSA advocated to turn away from the 'old' pluralist and corporatist approaches of consumer involvement to the involvement of 'ordinary' or 'lay' consumers. These lay consumer representatives, it was argued, should be 'appointed on Nolan principles', i.e., the principles that defined the ethical behavioural standards and responsibilities of good and competent public office holders: 'selflessness, integrity, objectivity, accountability, openness, honesty, and leadership'[111] (FSA 2002h: 16). Thus, in their explicit endorsement of 'lay consumer representatives', 'ordinary' people were attributed judgement competence on the grounds of their supposed authenticity and selflessness. By contrast, 'elite' or 'professional' representatives appointed by consumer organisation were seen as lacking judgement competences, because they represented supposedly particularistic interests.

Against this, some other board members pointed to one particular difficulty, namely that the 'background of potential members applying for appointment following advertisement would need to be considered carefully to make sure that particular *expertise* or *backgrounds* were

[110] Unfortunately, based on the minutes of the board meeting and related papers dealing with the issue, I could not trace back which specific board members were in favour of one or the other option. However, what is clear from this material is that – remarkably – the consumer representatives in the board argued against a nominated consumer body with professional representatives; it was argued that there would be a risk that such a committee 'might tend to conflict with rather than complement the board' (which comprised professional representatives) (FSA 2001f: 14).

[111] The so-called Nolan principles were published in 1995 and named after Lord Nolan, the first chairman of the Committee on Standards in Public Life, who was mandated to make recommendations on how to improve standards of behaviour in public life (Bew 2015). The first report of the committee, which was introduced by then prime minister John Major in response to the so called 'cash for questions' scandals of the 1990s involving Tory MPs (Bew 2015), articulated the 'seven principles of public life'.

included (or excluded)' (FSA 2001f: 13). In contrast to individual consumer representatives, members drawn from or nominated by consumer organisations, 'would have developed expertise in representing consumer views' (FSA 2001f: 12). A committee of individual consumer representatives would not just risk lacking expertise; 'a small group responding to advertisements for the committee could be also unrepresentative', they argued. Accordingly, judgement competence should be attributed based on institutional experience and expertise rather than on individual experience and authenticity. Moreover, for more pragmatic reasons, some also argued in favour of representatives nominated by consumer organisations and expressed a fear that there was 'no guarantee that suitable applicants will come forward' (FSA 2001f: 14).

The final consumer committee, which reflected the above-described equal mix of professional and lay consumer representatives, constituted a compromise between these two views: the capacity to exercise judgement on behalf of consumers was attributed based on a blend of institutional and individual experience and skills. The contested relationship between these two forms of competence attribution was also manifest in the provisions of the committee's code of practice. One paragraph in this code of practice is particularly instructive in this respect. In the initial draft version of the code, it said:

> 'The Committee is expected to represent a wide range of consumer interests. Some members may have sufficient expertise and experience to represent certain groups of consumers. Members must make it clear from what point of view they are speaking, for instance whether they are representing the views of an organisation or group of consumers or speaking in a personal capacity' (FSA 2002h: 5)

This paragraph grants equal status to the value of those judgement competences that were based on *'sufficient expertise and experience to represent certain groups of consumers'* and those judgement competences that were based on the personal experience of lay consumers speaking in a *personal capacity*. Following a discussion of the code at the committee's very first meeting, however, the committee agreed – on the suggestion of the committee's secretariat – to change the second sentence of this paragraph as follows:

> 'Members should *normally* *speak in a personal capacity* although they can also put forward the views of an organisation or group of consumers provided they make that clear at the time' (FSA 2002h: 5)

The amended version now established a hierarchisation between superordinate judgement competences based on personal experience on one hand, and the subordinate competences

based on organised interest representation and interest group expertise on the other hand. Thus, while the FSA executive recommended the inclusion of organised consumer representatives into the committee, it was ultimately their *personal discernment* rather than their institutional position that constituted the primary basis for attributing judgement competences to them.

However, it was precisely this hierarchisation between individual and institutional sources of competence attribution that again became contested by some of the committee's interest group members in the subsequent committee meeting. They requested that 'the wording on the limitations of political activity in the Code should be reviewed' – a request to which the FSA did not ultimately respond (FSA 2002i). The hierarchisation between personal experience and organised interest group experiences however remained contested among some board members, notably representatives of consumer interest organisations (interview member 24 – NGO).

Summing up, to give greater voice to consumers and to establish what I call advocatory politico-epistemic authority, the FSA not just attributed judgement competence to its scientific advisory committees based on specialised knowledge and formal scientific qualification. It also attributed judgement competences to the members of the specifically convened consumer committee. Like the non-specialist consumer representatives at the FSA's SACs, the consumer committee's members were attributed judgement competence based on both individually and institutionally gained experience and knowledge as well as representatives of consumer interests. These competence attributions centred on two ideas about 'representing consumers' at the science-policy nexus. On the one hand, representing consumers was a claim about the representation of the purportedly 'ordinary consumer' who would have a greater proximity to the needs of the excluded 'hard to reach' consumer groups, notably those being on 'low-income'. On the other hand, representing consumers was a claim about the representation of the purportedly 'particularistic' interests of specific consumer organisations. However, as I will show in chapter 5.2.4.5, the very terms of judgement competence on issues of consumer concern were essentially contested and became the object of renegotiations and change. We will see that, remarkably, the FSA's strengthening of consumer views and interests through the establishment of consumer committee came along with a new focus on individual, unorganised 'ordinary consumer representatives' as the 'true' and thus authoritative representation of consumer interests.

5.2.3 The contextual embeddedness of multipolistic competence attribution

In what follows, I will separately recap the discursive and institutional-cultural contextual elements that were implicated in the FSA's attempts to build and cultivate politico-epistemic authority. To constitute itself as an 'advocatory politico-epistemic authority', the FSA drew on several of the institutional-cultural and linguistic context elements described in chapter 5.1.

5.2.3.1 The FSA board: invoking the British 'public interest culture' and New Labour's 'stakeholder democracy'

The FSA's multipolistic competence attribution reflected, to begin with, the great hopes that New Labour's 'social exclusion' and 'science & society' discourses had pinned on the involvement of civil society actors, notably consumer representatives. As discussed in chapters 5.1.1 and 5.1.2, these promoted all sorts of public engagement as a new form of input-legitimacy-oriented 'stakeholder democracy' – an essential element of Blair's 'modernisation' programme on social exclusion and inclusion (Fairclough 2000: 120). Giving both those with experiences in consumer affairs *and* individual lay persons with a demonstrated record of a 'selfless service to society' judgement competences should empower consumer representatives. Thus, in line with the British culture of expertise (Jasanoff 2011a: 30; see also chapter 5.1.7). The latter were supposed to represent the 'ordinary consumer', who was imagined as a corrective to powerful and conflict-capable organised industry interests. In line with this discourse, the FSA board comprised stakeholders from all relevant social groups. Yet in practice, these were, as I have previously shown, appointed and expected to act not primarily as representatives of social interest groups. Most of them were, in line with the British culture of expertise, appointed based on their individual experience and skills – and above all due to their demonstrated record of 'service to society'. Hence, based on its representativeness of all relevant stakeholder groups, the FSA board was portrayed as being capable of making judgements and decisions 'in the public interest', thereby acting as a competent 'watchdog' by virtue of its representativeness of public and consumer interests and its 'independence' from elected government. Among all the innovative institutional arrangements and procedures set up by the FSA, the board was the most striking example of the Blair government's attempt to distinguish the new independent agency from its departmental predecessor, the MAFF, 'which was seen as opaque (…) and captured by producer interests' (Prosser 2010a: 44).

However, as is clear from the previous analysis, the board not only was designed to represent consumer interests (despite the FSA's constantly stated mission of 'putting consumers first')

but to a certain extent, also to consider economic perspectives and interests. This circumstance was seen as controversial, as revealed by a public consultation the government had conducted when setting up the FSA. Among those consulted 'there had been a clear support from most respondents (other than industry interests) for a majority of public and consumer interests in the membership' in order to make the FSA board a real 'consumer champion' (Prosser 2010a: 49). However, the Food Standards Act 1999 had dispensed with such a special board membership requirement. Moreover, over the years, the relation between consumer representatives and representatives of producer and industry interests changed substantially in the actual board composition, as I will show in (chapter 5.2.4.1), which looks at the contestedness of the FSA's multipolistic competence attributions in more detail. Here, I will also show that attributing judgement competence based on *individual* experience and skills and a personal 'record of service to society', which is, as I have argued, so deeply anchored in the British culture of expertise (chapter 5.1.7), in fact was a disputed matter.

5.2.3.2 The FSA's inhouse experts: manifesting 'hybrid risk regulation' as a form of 'evidence-based policy-making'

A second manifestation of the contextual embeddedness of the FSA's authorisation attempts in the social dimension is the above-described attribution of 'hybrid' risk assessment and risk management competences based on different skills and experiences. Operating as an independent agency that engages in both risk assessment and risk management, the FSA attributed judgmental competence to its in-house experts based on heterogeneous grounds: formal scientific qualification and scientific credentials as well as policy experience and a demonstrated record of service to society, or, in other words, based on their hybrid ability to make 'judgements constructed out of both scientific and non-scientific considerations' (Millstone 2009).

This mode of multipolistic competence attribution in the context of risk regulation reflects New Labour's 'modernising government agenda', which promoted 'risk-based regulation' as a new form of evidence-based governance (Cabinet Office 1999; NAO 2000; Cabinet Office 2002a). The 'risk-based regulation' discourse had been on the rise in Whitehall expert circles for several years even before the first New Labour government came into power in 1998 (Cabinet Office 1999). Since 1996, the UK Interdepartmental Liaison Group on Risk Assessment (ILGRA) had regularly published a series of influential policy reports and guidance documents on risk assessment (ILGRA 1996, 1998, 2000, 2001). The plethora of ILGRA reports – i.e. 'Use of

Risk Assessment within Government Departments', 'Improving Policy and Practice within Government Departments' – addressed the role of scientific risk assessment experts within departments and agencies. Notably these reports also discussed the balanced relation between scientific risk assessments and societal preferences in the decision-making process. Based on the ILGRA reports, the Cabinet Office's Strategy Unit published 'Risk: Improving government's capability to handle risk and uncertainty', which recommended that each department and agency should review its 'in-house expertise' in terms of its capacities for risk analysis and management (Cabinet Office 2002a).

Thus, the FSA's mode of having multicompetent 'in-house' expertise on risk assessment and management reflected this 'risk-based regulation' discourse. Remarkably, although being discussed in the broader frame of the output-legitimacy oriented 'evidence-based policy' discourse (see chapter 5.1.4), the Whitehall risk regulation paradigm was based on the premise that brokers operating at the nexus of different social worlds play an important role in managing and reconciling the tense science-policy relationship in a way that was not only effective but also complied with standards of input legitimacy. Only in this way, it was argued here, would it be possible to integrate considerations other than scientific ones into knowledge production and decision-making. However, this practice of authorisation, which manifested an 'advocatory knowledge order', was open to contestation and came into tension and change with Whitehall's 'audit explosion' (Power 2005), whose impacts came to be felt more strongly within the FSA over the years. I will study in more detail the contestation and resulting changes of the FSA's multipolistic competence attributions in chapter 5.2.4.2.

5.2.3.3 The FSA's chief scientist: drawing on the British 'embodied' notion of expert judgement

A further element of the contextual embeddedness of the FSA's multipolistic competence attribution is the culturally anchored and institutionalised 'personalised and embodied' notion of authoritative expert judgement (chapters 5.1.6 and 5.1.7). The FSA relied on the personalised embodiment of expertise in the form of the FSA's chief scientist, through which it attempted to constitute itself as a trusted authority at the science-policy-public nexus. The significance of the personalised expert authority became particularly evident with John Krebs, who, as shown above, was not only appointed the FSA's first chair but also acted as what later became codified as the role of the chief scientist. Due to both his scientific credentials and his proven record of putting his scientific excellence at the service of the public interest, Krebs was undoubtedly

considered competent to fulfil both roles. His successor, Andrew Wadge, a civil servant and renowned longstanding senior government in-house scientist, likewise personified this form of expert authority.

As the example of the chief scientist blog has shown, the FSA publicly demonstrated its competences to assess scientific matters related to a broad range of food issues (epistemic authority) and its ability to speak for the people, i.e. in the name of the good of consumers (political authority) by relying on the embodied expertise of the chief scientist. With its decision to formalise and hence to more publicly visibilise the role of the chief scientist since around 2006, the FSA directly reflected the longstanding British institutional tradition of 'chief departmental advisors' in Whitehall that manifests the country's predilection for 'embodied expertise'[112].

However, as we will see in chapter 5.2.4.2, Whitehall's reliance on the 'embodied expertise' of the 'chief departmental advisors' became questioned in the course of an enormous increase of audits, reviews and evaluations. These were, as we shall see, an expression of the increasing questioning of the authority of embodied expertise. Though previously recognised as an unquestionable proof of what Jasanoff calls the earned right to 'see for the people' (Jasanoff 2005: 289), i.e. to judge food-related issues and their implications for the good of British consumers, biographies such as that of Andrew Wadge no longer sufficed to legitimately claim judgemental competence at the science-policy-public nexus with the rise of a series of 'science audits' in Whitehall.

5.2.3.4 Non-specialist consumer representatives in SACs: representing 'common sense knowledge'

As I have argued in chapter 5.1.2, the FSA had been established in the context of the 'science & society' discourse in the UK. In response to the BSE crisis and the societal contestation of the issue of GM foods, the first New Labour government was strongly committed to greater openness and public dialogue in science advice. In order to open up what the 'Phillips report' on the 'BSE inquiry' had criticised a dominantly inaccessible scientific advisory system, several government reports and guidelines have argued for including 'lay members', 'consumer groups' and 'other stakeholder bodies' within arrangements and processes of science advice

[112] As I have noted in chapter 5.1.6, the chief departmental advisors have a long tradition within the British institutional system of science advice in Whitehall.

and risk appraisal (May 2000a; Science & Technology Committee 2000). The FSA was the first government agency to widen the membership of its SACs for 'non-specialist' consumer representatives.

However, with respect to the more specific norms and practices of including lay members as part of SACs, the 'science & society' discourse remained rather unclear. Beyond emphasising the need for more open and socially inclusive procedures and institutional arrangements, it did not provide much in the way of explicit guidance or working definitions of what precise role such engagement formats should play in the British previously 'scientist-only' expert bodies. Likewise, the FSA recruited its first 'non-specialist SAC members' without further specifying on what grounds these members would be qualified to act as 'competent consumer representatives'. Over time, it then attempted to institutionalise the role of its 'non-specialist' members by educating them, using a specifically designed training package, to represent the view of the individual 'ordinary consumer' participating in the marketplace. It sought to frame 'non-specialist' consumer representatives as being distinct from 'organised', 'elite' consumer representatives with broader social interests or with (purportedly) particularistic interests in a specific issue area. Thus, in this guise, non-specialist consumer representatives should bring to the table a general form of 'lay wisdom' – a form of knowledge that came to be defined as being different from the knowledge held by elite consumer representatives from seemingly particularistic consumer interests organisations. In this vein, the FSA's non-specialist members can be read as an expression of what Jasanoff calls the British 'communitarian civic epistemology', in which the privilege to make judgements on public policy issues is not reserved to scientists. To create a societal 'shared perception', the British culture of expertise attributes judgemental competence also to non-scientific, societal actors insofar as their 'capacity to discern the truth is regarded as somehow privileged' (Jasanoff 2005: 266). This was precisely the case with non-specialists in SACs, who were portrayed to represent the 'common sense knowledge' of 'ordinary consumers'. By including non-specialists as consumer representatives in its SACs, FSA attempted to demonstrate that British consumers didn't just have to rely on the FSA's food-related scientific claims (epistemic authority) but could also trust the agency to see for them and speak in their name (political authority).

However, as I have shown above, several specific efforts and devices were needed to realise such a 'performance of ordinariness', i.e. to make the non-specialist members at the FSA's SACs 'to look and behave like ordinary people' (Clarke 2013: 216). This shows that the FSA had to invest a lot of effort initially to make this specific version of the competent 'non-

specialist' consumer representative in SACs materialise. Seen in this way, studying this practice from the adopted micro view, excellently illustrates that the British 'shared-perception-rested' communitarian epistemology did not constitute some kind of pre-given source 'at hand' that the FSA could simply draw on but required the active creation of a 'shared perception' of the very terms of non-specialist advisory committee membership. As I will show in chapter 5.2.4.4, in practice, important issues about on what grounds and by whom the perspective of 'ordinary' consumer perspectives was at best represented remained contested.

5.2.3.5 The consumer committee

The members of the FSA's consumer committee were appointed based on their individually and institutionally gained experience and knowledge as well as their representativeness of consumer interests. Specifically, the consumer committee was mandated to advise the FSA on how to better reach and involve the 'vulnerable' and 'hard to reach' consumer groups, notably the 'low-income' ones. The attempt to represent the 'hard to reach' can be understood within the context of the special emphasis the newly formed FSA had placed on the role of nutrition in achieving what had been defined as one of the key aspirations of the New Labour government – the reduction of social exclusion (chapter 5.1.1).

Labour's 'enthusiasm for the participation of ordinary people' and 'hard to reach' people was related to its drive for activating citizens in the transformation of the welfare state, i.e. to lead people to 'actively promote and manage their own well-being' (Clarke 2013: 209). Here, a central practice of activation was to 'bring to life the capacities (…) and self-knowledge of "ordinary people"' in order to overcome social exclusion (Clarke 2013: 209). Labour's attempt to empower 'ordinary', 'hard to reach' groups thus extended well beyond welfare reform to include the above-described reforms aimed at 'modernising government' in general. Chiming with this discourse, the FSA problematised the poor representation of the 'hard to reach', who were traditionally (if at all) only marginally represented in the policy-making process. It hence identified representing the 'hard to reach' as a key challenge of its overall attempt to 'put consumers first'.

However, the questions of who, precisely, those 'hard to reach' groups that played such an important role in the social exclusion discourse were and who could legitimately represent them constituted a major challenge. Thus, in practice the FSA's embracement the 'social exclusion' agenda quickly raised the question 'of how to approach, represent and include the "hard to reach"' (Timotijevic et al. 2011: 493). As I have shown, the FSA attempted to cope with this

question by trying not to rely on the 'usual suspects', i.e. representatives of organised consumer groups as members of the consumer committee, who were typically deemed to represent 'particularistic' interests, thereby neglecting the interests of the genuinely 'ordinary consumer'. The FSA tried to recruit individuals as consumer representatives, who – through their demonstrated record of reaching out to ordinary people (mainly through their engagement in public health at the local level) – were deemed unlikely to be 'distracted' by political ideologies. Thus, attributing judgemental competence to individual 'ordinary' consumer representatives as well as to organised consumer representatives constituted a twofold representative claim that invoked both 'ordinary consumers' and 'elite consumer organisations' as representing a consumer constituency with legitimate social interests, stakes and needs. Yet, as we will see in the next chapter, this double representative claim on behalf of consumers had been contested on several grounds.

5.2.4 The contestedness of multipolistic competence attribution

When looking at the previously analysed practices of multipolistic competence attribution, we are clearly dealing with contested terrain. In this chapter, I will take a closer look at these competing competence attributions and tracing the resulting changes of the FSA's mode of multipolistic competence attribution.

5.2.4.1 The contestedness of the changing composition of the FSA board

As I have already briefly indicated in chapter 5.2.3.1, the fact that competence was attributed to board members based on *individual* experience and skills and on a personal 'record of service to society' was contested by relevant audiences. Although deeply anchored in the British culture of expertise, the practice of attributing judgement competence based on individual experience and skills had been quite heatedly discussed in both the run-up to the FSA's establishment and in the agency's early days. Consumer groups and academic food-policy experts feared that trough this selection criterion the board members would lack clear links to consumer and public interest groups, which would leave consumer interests poorly represented at the agency board. According to these critics, such as the UK Consumers Association, only the involvement of dedicated consumer representatives who could speak on behalf of consumer groups would ensure that the board would be 'well-attuned to consumer concerns and issues' (Consumers' Association 2003). These critics hence acted as 'witnessing audiences' who critiqued one of the representative claim that was closely connected with the FSA board as being inaccurate,

namely that individuals who were unexperienced in professional consumer interest representation would be capable of acting as competent consumer representatives on the sole basis of their demonstrated record of service to society and individual experience as ordinary consumers.

Moreover, the combined attribution of judgemental *and* decision-making competence to the board was likewise a contested matter. The collaborative form of 'regulatory partnership' propagated by New Labour's Third Way, in which the state acted as a supposedly 'neutral' moderator between different stakeholders negotiating a common vision of the matter at stake was portrayed by some critics as a form of 'blame shifting' (helicopter interviews 1, 2 & 3): 'One reason why this [the FSA's hybrid responsibility for (science) advice and decision-making manifested within the board] has occurred is that government ministers, reflecting on the political damage caused by the mishandling of BSE, have been keen to avoid taking responsibility for contestable and contested decisions' (Millstone 2006: 43). As the 'White Paper Food Standards Agency - A Force for Change' was published in 1998, critics were still optimistic that as soon as the FSA was up and running, there would be a clear functional separation between risk management and risk assessment, i.e. political decisions would be taken by elected representatives and ministers who were accountable to the parliament. However, the way the FSA was set up represented exactly the opposite as one field expert stated: 'Instead of the Food Standards Agency giving advice on options and ministers deciding, as far as I can tell since the FSA has been set up, ministers have not decided anything. The Board of the FSA acts as if it were a minister, even though it is not publicly accountable. (…) I have not spotted a minister taking a single decision on anything since the FSA was set up' (Böschen et al. 2002: 69).

Thus, from the FSA's very beginning, and even before its establishment, the composition of the FSA board was a matter of controversy. According to the initial 1997 draft plan for setting up an independent food agency,[113] persons with an industry background should have been entirely excluded as board members in order to ensure the FSA's independence from the industry (James 1997). The White Paper 'The Food Standards Agency: A Force for Change', published after Labour came into power in 1998, had already weakened this proposal by arguing that 'consumer

[113] Tony Blair, the then opposition leader, had engaged Phil James, a professor of nutrition, the then head of the Rowett Institute in Aberdeen and an individual (who had closely together with Britain's major consumer organisations) with developing a proposal for an independent food agency during the election, before Labour came into government.

interests should be in the majority' (MAFF 1998: chapter 6.1). Yet, over the years, the actual board composition changed considerably, as is illustrated in figure 8[114].

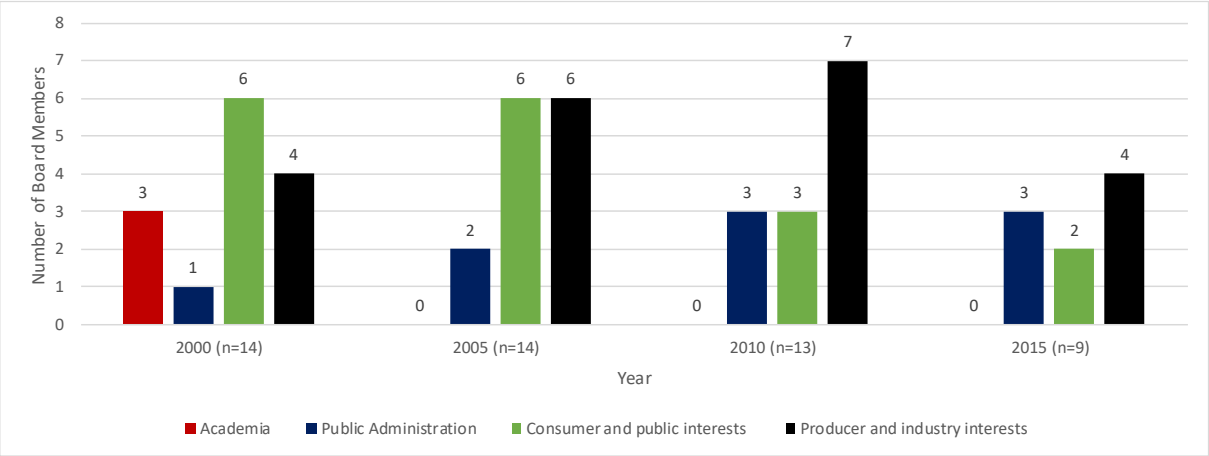

Figure 8: Development of the board membership from 2000 to 2015 (FSA 2000j, 2005f, 2010a, 2015a)

First, what is remarkable here is that only in the first years members from academia were part of the FSA board. Already from 2005 on, when Deirdre Hutton succeeded Sir John Krebs, no member from academia had been appointed again as a board member.

Second, the representation of members of the public administration incrementally increased over the years: from one representative in 2000 up to three representatives in 2015. This increase of only two members, in absolute terms, might not seem remarkable at first glance. However, as the total membership decreased from 14 members in 2000 to nine members in 2015, members of the public administration constituted for one third of the FSA board members in 2015. This shift that occurred with the election of the Conservative-Liberal coalition government in 2010 reflected the government's reinforced focus on deregulation (see chapter 5.1.3) that came along with a drive to gradually take over the reins of still formally 'independent regulatory agencies' (Dommett & Flinders 2015).

Third, the ratio of consumer representatives to representatives of producer and industry interests reversed over time in favour of the latter. In 2000, the consumer and public interest representatives constituted the major stakeholder group (6 out of 15 board members). The

[114] Based on the archived FSA board websites (FSA 2000j, 2005f, 2010a, 2015a), the board members have been coded according to the following criteria: Public administration = persons with a longstanding career in local, regional or national public administrations; academia = persons with a longstanding academic career; consumer and public interests = persons with a record of numerous positions in consumer organisations or in other non-economic public interest organisations (e.g. public health); producer and industry interests = persons who predominantly maintained positions within food, farming, catering, finance, or business consultancy.

appointment of Deidre Hutton as new chair in 2005, who previously had been the chair of the National Consumer Council, could be seen as a clear expression of the growing influence of consumer interests and perspectives. Yet, the actual board membership, as a whole, shows that the number of producer and industry representatives had also been increased from four to six board members. In 2010, under the then coalition government, the position of the chair was occupied by Jeff Rooker, the former Minister for Food Safety at the MAFF (1997–1999) and Minister for Food and Farming (2006 - 2008). Consequently, the chair was no longer a consumer representative, and the overall share of consumer and public interest representatives had been considerably reduced to three out of 13 board members. At the same time, producer and industry representatives constituted more than 50% of the membership (seven out of 13). In 2015, the dominance of producer and industry representatives continued; although the overall share of producer and industry interests fell below 50% (four out of nine), the new chair was Tim Bennet, a farmer, former chairman of the National Farmers Union of England and Wales (1998–2006), and former chairman of the milk sector company DairyCo. At the same time, the number of consumer and public interest representatives further decreased to only two board members.

As described above, board members continued being officially not appointed due to their representativeness of social interests but on the grounds of their individually demonstrated record of 'selfless service to society' that is important in British culture of expertise (Jasanoff 2011a: 30; see chapter 5.1.7)[115]. Moreover, their declarations of interests were published. Nevertheless, the gradual shift from a consumer to producer and industry dominance attracted much criticism by a major 'witnessing audience' consisting of consumer organisations, academic food policy experts and the media (Lobstein 2008; Millstone & Lang 2008; Lawrence 2014; Boswell 2018). The shift was strongly criticised as an expression of the 'business-friendly' 'lifting burdens' agenda (Prosser 2010b; Bochel 2011), which was increasingly pursued by both the Labour governments and especially by the Coalition government (see chapter 5.1.3). Thus, while the FSA built its authority based on the premise that its governing board would reflect the agency's slogan of 'putting consumers first', such criticism of the FSA's 'creep towards industry dominance' (Boswell 2018: 493) undermined this claim – the FSA's

[115] The vast majority of the producer and industry members not only had considerable business experience, but also a multifaceted record of societal engagement and/or experience outside the industry. For instance, Chrissie Dunn an executive director of a meat-marketing company, was at the same time a local, award winning food manufacturer and had previous experience in nursery, primary, secondary and special needs education both as a teacher and school governor; Ian MacDonald was a former United Nations Municipal Administrator for the City of Pristina in Kosovo and then self-employed management consultant and chartered surveyor.

'currency' of 'credibility and trustworthiness', it was argued, had been depreciated (Millstone & Lang 2008: 95).

Summing up, the multipolistic mode of competence attribution manifested in the FSA board was a contested terrain for three reasons: First, relevant 'witnessing audiences' disputed the representative claim that individuals with a general demonstrated record of 'service to society' were competent consumer representatives. Second, members of the 'witnessing audience' took an issue with the board's 'hybrid' judgement and decision-making competence, because they saw the combination of judgement and decision-making competence as a political attempt to avoid blame. Third, the portrayal of the multi-competence-based board as representing consumers and the 'wider public interest' was challenged when the development of the board's composition changed over time. With the relative increase of members with a producer or industry background, relevant members of the FSA's 'witnessing audience' disputed that the board itself constituted a collective body capable of acting in the consumer interest.

5.2.4.2 In-house experts: from a hybrid to a more separated model of risk assessment and management

A second focus of my previous analysis was on how the FSA's in-house experts were attributed judgemental competence and thereby constituted as experts at the science-policy nexus. I have shown that this occurred on the grounds of both their formal scientific qualifications and individual policy experience. This mode of multi-competence and role attribution reflects an 'advocatory' mode of authorisation. The FSA's in-house scientific experts were deemed capable of taking care of matters at the interface between policy work and science advice based on their multiple competences. Underlying this was the premise that brokers operating at the nexus of different social worlds played an important role in productively managing and reconciling the tense science-policy relationship. Only in this way, the FSA was arguing, it would be possible to integrate 'non-scientific considerations' into knowledge production and decision-making processes – notably consumer concerns and interests, but also other stakeholder's concerns. However, the attribution of multipolistic competences to the FSA's in-house scientific experts underwent gradual change as a result of what can be understood as an output-legitimacy-oriented 'epistemic reframing' (see chapter 3.2).

This reframing occurred as part of an increasingly differentiated 'web of science watchdogs', i.e. the gradual development of internal and external arrangements of scientific evaluation and scrutiny. It was since around 2006 when the FSA began to face almost an 'explosion' of science

reviews. The FSA as a whole, or separate parts of the agency, such as its SACs, came to be almost ceaselessly evaluated according to criteria of 'high quality science advice', effectiveness and efficiency. The most compelling implications of this development were the establishment of the FSA's 'general advisory committee of science' (GACS) as the FSA's 'science watchdog' and the reconfiguration of the FSA's risk assessment/management interface.

Establishing GACS as a 'science watchdog'

In the beginning of 2008, GACS was established as the collective 'science watchdog' body of the FSA (interview official 25- FSA): GACS was established as a result of the first House of Commons Science and Technology Committee review of the FSA's performance in terms of 'science advice, risk and evidence-based policy making' (Science & Technology Committee 2006). The review report 'strongly endorsed the principle of having an overarching scientific advisory committee' (FSA 2007n: Annex, 38). GACS comprised sixteen highly reputed members, including renowned medical physiologist Colin Blakemore[116] as the 'independent chair of the committee'. Its other members were the chairs of the individual FSA SACs, who acted as 'GACS members in an ex officio capacity', and four additional independent expert members, who were both reputed academics and experienced science advisors, as well as two lay members (FSA 2009d: 19). Comprising the leading scientists from the FSA's SACs-system[117], GACS's core task was to support the chief scientist in providing 'independent challenge and advice on the Agency's science governance processes as well as on how the agency obtains and uses independent scientific advice', in particular in its horizon scanning work[118] (FSA 2008g: 12, 2009d: 18).

By the same token, GACS's remit was to 'provide independent challenge' to the chief scientist himself. By the time of GACS's establishment, the FSA faced the 16-month long process of the Government Office for Science 'Science Review' ('GO-Science Review'). In this context, it was a clearly stated goal of the FSA to become recognised as an 'evidence-based organisation',

[116] Professor Colin Blakemore was scientifically publicly highly reputed; he was, according to the FSA's chief scientist one of the 'most influential and respected scientists in Britain' (FSA 2007a). He was not only President of the British Association for the Advancement of Science in 1997-1998 and Chairman from 2001-2004; he was also very much engaged in promoting dialogue between scientists and the public. As such he was a frequent contributor to radio and TV and by the time of the GACS was established he was producing the 13-part BBC2 series 'The Mind Machine'. Moreover, he was also known for his books on neuroscience written for the general public (FSA 2009d: 19).

[117] Until the establishment of GACS, SAC chairs met only once a year.

[118] As I will discuss in more detail in chapter 5.4.2.3, the FSA's horizon scanning work involved identifying emerging food-related future risks, such as obesity.

which used science in a way that reflected the core GO-Science Review benchmarks. To do so, the FSA aimed at demonstrating three principles of its approach to 'science governance': (1) that it drew 'on a depth and breadth of science and expertise', (2) that its 'use of science ha[d] integrity and [was] accountable', and (3) that its 'communication of scientific issues [was] recognised as leading the way' (FSA 2008o). The FSA hence embraced 'being evidence-based' as the main criterion of the GO-Science Review even before the review had started. Moreover, by that time, it simultaneously looked ahead to the forthcoming five-yearly 'quinquennial review' of its SACs[119] and started to carry out a series of 'self-assessment exercises'[120]. It mandated the new GACS to review the SAC's self-assessments, to develop performance indicators against the GO science review goals and to document the FSA's compliance with them. In this way, the FSA sought to demonstrate during the reviews that it was 'committed to continuing improvement on science governance' (FSA 2008o). Based on the SAC's documented self-assessments[121], the chair of GACS conducted periodic 'one-to-one discussions' with SAC chairs (FSA 2008i). Thus, since its inception in 2008, GACS was increasingly attributed the 'science watchdog' role.

Taken together, these developments constituted a shift in attributing judgemental competence in the context of science governance: Until then, the first and so far only 'science review' of the FSA had been carried out in 2002 by a heterogeneous review group. This former review group comprised the FSA chairman John Krebs, along with one reputed academic with experience in giving policy advice, two board members, one 'consumer member', and 'one member with industrial experience' in 2002 (FSA 2002q: 5–6). Beyond individual scientific experts, it also consulted a broader range of industry and consumer stakeholders on their views on the FSA's performance (FSA 2002q: 46–47). Thus, the attribution of the competence to judge and evaluate the FSA's SACs shifted from a once heterogenous review group whose members were recruited based on both scientific qualification and reputation as well as the representativeness of social interests, to the 'science-only' GACS.

[119] From 2011 onwards, the Cabinet Office required triennial reviews (Cabinet Office 2011).

[120] At the chief scientist's request, the SACs formulated 'Good Practice Guidelines', which complemented the FSA's Science Checklist. Each of these was meant to form 'a self-assessment tool' to enable SACs and in-house experts to 'judge their performance each year while preparing their annual reports' (FSA 2007n: Annex, Annex 6). Both guidance documents developed a large set of principles of good practice for science advice and research at the FSA (see chapter 5.3).

[121] The SACs self-assessments formed part of the report on the performance of the FSA SACs to the Government Chief Scientist, which was mandatory since 2008 (FSA 2008l: 21).

From a hybrid to a more separated model of risk assessment and management

A second shift in competence attribution concerned the separation between risk assessment and risk management. With the emergence of external science reviews and the establishment of GACS, the agency's mode of tightly intertwining risk assessment and risk management processes became an object of observation and critique and was eventually reconfigured. In its attempt to demonstrate its 'culture of continuous improvement' the FSA put a strong emphasis on implementing the actions that it announced in its response to the 'GO-Science Review' (FSA 2009e). The main issues addressed here 'centre[d] around the distinction between risk assessment and risk management' and the underlying multipolistic competence attributions to its in-house experts[122] (FSA 2009f: 2). In this respect, the 'GO-Science Review' recommended that the FSA 'should do more work to make the functional separation of risk assessment and risk management more transparent' (FSA 2009e: 14). To implement the recommended clarification and formalisation of the risk assessment and risk management roles, GACS conducted several case studies investigating how the distinction between the two was being 'observed and communicated in practice' (FSA 2009f: 2). While the FSA stuck to its system of attributing risk assessment competence to both its external SACs and its inhouse scientific experts[123], it established 'a set of criteria to decide which issues are sent to SACs and which [were to be] dealt with internally' (FSA 2009e: 14). These criteria marked a shift of risk assessment competence to the SACs as the FSA agreed to seek their opinion when: (1) the risk assessment underpinned 'a major policy decision', (2), there was a presumption that 'there may be a risk to health but that information has not been peer reviewed', (3) the FSA 'need[ed] an expert view on where the balance of the evidence [lay]', (4) [t]he area of science [was] still developing and the level of uncertainty [was] significant (FSA 2009e: 14). Thus, except for rather uncomplicated, routine risk assessments that did not attract public attention, the in-house expert's risk assessment competence was limited; it was now attributed to the SACs, whose members were for the most part recruited from academia based on their formal scientific qualifications and reputation. Whereas, previously, the FSA had 'not, generally, tended to label its various functions as either risk assessment or risk management in its day-to[-day]-work', (FSA 2008l: 17), this ultimately changed due to the House of Commons scientific review, the

[122] As I have shown above, the FSA's in-house experts combined risk assessment and risk management tasks in their role.

[123] As I have shown above, the FSA in-house scientific experts were attributed competence based on both their scientific qualifications and policy-making experience and they acted as brokers between risk assessment and risk management.

GO-Science Review, and the establishment of GACS[124]. However, as one interviewed member of GACS emphasised, while the mere *formal* definition of these criteria and the redefinition of risk assessment roles was an easy undertaking for the FSA's leadership, the implementation of these competence shifts in the FSA's *practice* was *'protracted and contested'* (interview official 26 – FSA Advisory Committee)[125].

Summing up, the FSA's in-house experts were initially based on the premise that these would act as brokers operating at the nexus of different social worlds. It was presumed that, in this way, political considerations could be integrated into knowledge production and decision-making and the tense science-policy relationship managed in an input-legitimated way. By contrast, the described 'science audit explosion' in Whitehall questioned this advocatory mode of competence attribution. It can be understood as an output-legitimacy oriented technocratic reframing of the FSA's initial advocatory authorisation mode in that it postulated a more clear-cut separation between epistemic and political premises of competence attribution. This separation was claimed to be justified with reference to an increased effectiveness of evidence-based policy-making. As we have seen in this chapter, this reframing had two important implications for the way in which the FSA reconfigured its mode of politico-epistemic authority: First, the attribution of judgemental competence in terms of science governance shifted from being attributed to a heterogenous review group, whose members were recruited based on both scientific qualification/reputation *and* representativeness of social interests, to a 'science-only' committee, the GACS. Second, the in-house expert's risk assessment competence was toned down; and instead mainly attributed exclusively to the FSA's SACs.

5.2.4.3 The changing role of the FSA's chief scientist

I have illustrated that the embodiment of the 'multi-competence expertise' in the person of the chief scientist had been essential to the FSA's attempts to claim politico-epistemic authority for several years. However, the FSA's mode of attributing multipolistic judgement competence to its chief scientist itself became an object of observation and critique – a critique in which the

[124] When the FSA's governance of science was being discussed at the FSA board in preparation of the forthcoming external science reviews, the FSA publicly discussed whether it had 'properly separate[d] risk assessment and risk management functions in practice' (FSA 2008l, 2009g: 18).

[125] This expert interview was not transcribed, because the audio recording was difficult to understand due to the high ambient noise level. The information above is therefore taken from the notes taken during the interview and partly from the audio recording.

criteria of 'high quality science' and effectiveness played an important role (Government Office for Science 2008).

Eventually, in 2011, the House of Lords Committee on Science and Technology launched a further science review, this time specifically focusing on the Whitehall's system of Chief Scientific Advisors (CSAs) (chapter 5.1.6). In the preceding years, the committee had published a number of science evaluation reports, which each included recommendations on the functions and duties of CSAs (House of Lords Select Committee on Science and Technology 2012: 7). It was against this background[126] that it decided to conduct a review specifically on the role and the core functions of CSAs[127]. The report identified personal and institutional 'essential characteristics' that CSAs were expected to have in order to effectively fulfil its main task of ensuring that 'scientific evidence is at the core of departmental decision making': First, the report concluded that '[t]he primary essential characteristic of all CSAs is that they must have standing and authority within the scientific community, nationally and internationally' (House of Lords Select Committee on Science and Technology 2012: 22). Second, the report further argued that CSAs were to be recruited externally or had a 'substantial and recent background based outside the civil service' (House of Lords Select Committee on Science and Technology 2012: 22). The evaluation report's third major recommendation advised that 'CSAs should be employed by their departments on a part-time basis to afford them the opportunity to maintain their links with academia, or industry, or both' (House of Lords Select Committee on Science and Technology 2012: 28). These recommendations, the report argued, reflected the 'vision of CSAs in terms of having the status and resources to challenge departmental policy making with scientific evidence, to oversee the use of evidence across their departments effectively and, critically, to be able to "speak truth to power"' (House of Lords Select Committee on Science and Technology 2012: 8).

Against the backdrop of this increase in science evaluations, the FSA chief scientist started to publish an annual report on the FSA's overall scientific performance in 2007. Moreover, since the same time, the chief scientist had 'reviewed and strengthened the governance process that are fundamental to winning the trust in the Agency's use of science' (FSA 2008d: Annex 1,6).

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[126] The 'Campaign for Science and Engineering', a non-profit organisation that is the UK's leading advocate for science and engineering, had been arguing for such a report for several years.

[127] To this end, a questionnaire was sent to all CSAs, including the FSA chief scientist. This questionnaire 'covered the employment arrangements, relationships within departments and relationships across departments of CSAs'(House of Lords Select Committee on Science and Technology 2012: 8). In addition, the committee held several oral evidence sessions

Eventually however, in response to committee's criticism of 'the appointment of Whitehall insiders to some CSA positions' (Wilsdon & Doubleday 2013: 9), the FSA eventually decided to move from its old model to a new model. Instead of having a part-time chief scientist who combined this role with his role as head of the FSA's chemical safety and nutrition divisions, it adopted the new model that involved having 'a full time Director of Science and Evidence' on the one hand and a part-time Chief Scientific Advisor (…) who is engaged in the academic community' on the other (interview official 32 – FSA). Thus, according to the new model, the FSA chief scientist was attributed judgmental competence exclusively on the grounds of scientific eminence and reputation in peer networks. One interview traced this shift as follows:

> '[T]hinking within the UK Government has changed. There was a very influential report by the House of Lords Science and Technology Committee back in 2011, I think (…) which talked about the role of Chief Scientific Advisors within UK Government; so, advisors to UK departments. And it was on the back of that that we considered that it was time for us to move from the model we'd had (…) to our current model, which is more in line with other UK Government departments, and more in line with the recommendations of that Science and Technology Committee' (interview official 32 – FSA).

By adopting the new model in line with the Science and Technology Committee's recommendations, the chief scientist's broker role was pushed into the background in favour of the 'science watchdog role', which the FSA believed to be effectively fulfilled by the new chief scientific advisor, Guy Poppy, due to his high scientific reputation, as the interviewee further explains:

> 'Comparing that system to what we have with Guy, I mean, Guy has a very live network of senior academics because he works in academia and is still well connected in science, (…) And our former Chief Scientist had, at one time, been a research scientist but had been away from the academic environment for so long that he didn't have those live connections. He was well respected and certainly managed our scientific structures, but couldn't bring *the semi-independent external perspective and scrutiny,* (…) to bear in the same way that having somebody who works for us only half the time and in academia half the time brings' (interview official 32 – FSA).

Thus, while, up to that point, the FSA's chief scientist had been deemed competent to perform a broker role at the nexus between the different worlds of science advice, policy making and public communication due to his heterogeneous skills and experience gained as both an academic and senior civil servant, this had considerably changed due to the 'audit explosion' in Whitehall.

Summing up, the FSA's arrangement of its chief scientist, who initially acted as a broker operating at the science-policy-public interface was likewise questioned in the course of the 'science audit explosion' in Whitehall. The role of and the premises of competence attribution to the chief scientist were reconfigured based on a claim to output-legitimacy in order to raise its science 'watchdog' role and to increase the effectiveness and efficiency of science-based decision-making at the FSA in this way.

5.2.4.4 Non-specialist consumer representatives in SACs

Another focus of the previous analysis of competence attributions across the FSA's different organisational settings pertained to the mobilisation of specific people as 'competent consumer representatives'. In response to the BSE crisis discourse, which criticised the UK's pre-BSE food governance regime on the grounds that it primarily benefitted the interests of farmers rather than of consumers, the newly established FSA attempted to mobilise 'consumers as subjects of policy in their own right (…) having separate interests from those of producers' (Draper & Green 2002: 615). This shift was embodied in the FSA's consumer representatives in its SACs.

However, as was already indicated chapter 5.2.2.4, the FSA put a lot of effort into framing their role and educating 'competent' non-specialist consumer representatives. According to the official selection criteria, these members could be recruited based on both individual competences (i.e. individual experience and skills as 'ordinary consumer') and institutional competences (i.e. institutional experience in representing consumer interests). Yet, in practice they were expected to attend the SAC's meetings as individuals in a personal capacity as 'ordinary consumers' who should represent the purported view of the knowledgeable 'ordinary' consumer 'in the marketplace'. Hence, they were expected to perform a role that was clearly distinct from the FSA's initial representative claim attached to non-specialist consumer representatives in which it invoked them as citizen consumers with legitimate broader social interests and entitled to be socially included into knowledge production.

It was precisely this 'top-down' predetermination of the role of non-specialists in SACs that became actively questioned and critiqued by the relevant audiences, mainly by various academics who dealt with food policy and publicly commented the FSA's consumer engagement practices (Jones & Irwin 2010; Irwin et al. 2013; Timotijevic et al. 2013). The following extract from the minutes of the FSA's Advisory Committee on Novel Foods and Processes (ACNFP), is a striking example of how relevant members of the FSA's audience

contested the representative claim inscribed into this narrowed-down framing of non-specialist consumer members: On November 2002, the committee held an open meeting 'to give the general public the opportunity to meet with the Committee and to discuss some of the issues that fall within the remit of the ACNFP' (FSA 2003b). Here, Naomi Salmon, a lecturer and researcher in law with a particular focus on food policy who attended the open meeting asked:

> 'The recent Eurobarometer Poll indicated that 70.9% of European consumers surveyed *"do not want"* genetically modified foods (…) Clearly, if public opinion were the deciding factor, no foods derived from GMOs would currently be marketed in Europe. How, and to what extent, does the ACNFP attempt *to take account of differing views regarding the necessity and desirability* of food products derived from GMOs through the assessment process in the UK?' (FSA 2003b, my emphasis).

In response to this question the committee argued that due to legal provisions and the ACNFP's formal remit, such survey findings could not 'be a primary consideration in any safety assessment'; such survey data were 'outside the remit of the ACNFP, who offer an opinion purely on the base of the safety data' (FSA 2003b). In response, Naomi Salmon objected that 'the *role of (...) consumer representatives* is to remind Members of *consumer opinion* and be aware of the *perceived desirability* of any novel foods'. She hence 'queried *whether there was adequate consumer representation* on the Committee, and whether the *role of the consumer representative was compromised* because the safety evaluation looked at the safety of a novel food from a scientific basis rather than the perspective of the people that they represented' (FSA 2003b, my emphasis).

As this little exemplary sequence shows, making competence attributions and related representative claims on behalf of a specifically constructed constituency of consumers was a precarious and contested undertaking for the FSA. Thus, attributing judgement competences to non-specialist consumer representatives in SACs can be viewed as a double-edged authorisation practice: On the one hand, it earned the FSA public trust and credibility in terms of its major slogan of 'putting the consumer first' (Stilgoe et al. 2006; Brooker & Taylor 2008; Hajer 2009b; Which? 2014). On the other hand, it created the problem that the FSA's 'witnessing audiences' regularly contested the limited role of non-specialist members that was defined as representing the 'individual knowledgeable consumer' who 'looked at the safety of a novel food from a scientific basis' instead of representing the legitimate social interests of consumers. Thus, the controversy here centred around the question of how to understand the role of non-specialists in SACs with regard to the democratic ideal of participation – was the participation of non-

specialists in SACs an expression of a pluralist-interest politics or was it more an expression of rationalist deliberation.

In light of this conflict, the FSA increasingly put a stronger focus on non-specialists 'as an effective tool' that was, in the first place, deployed to 'ensure that the advice is communicated in a way that is understandable to non-specialists' (FSA 2008d: 3). By now supposing non-specialists to represent the 'ordinary consumer', the FSA increasingly sought to treat non-specialists as a means of improving the public comprehensibility and consequently the 'efficiency and effectiveness of risk assessment and communication' (FSA 2008d: 3). This differed considerably from the FSA's initial purported expectation regarding non-specialist members, which had been (at least partly) framed in more input legitimation-oriented terms. Rather, it reasserted the old 'public understanding of science' (PUS) model of engaging lay persons it claimed to had left behind.

Remarkably however, in 2014, when I conducted my expert interviews, I was told that members of the policy departments were now once again internally discussing a need to rethink the role of lay persons in terms of a broader 'up-stream' engagement of 'civil society actors' in scientific risk assessment. When I confronted the interviewed staff member with the suggestion made by some critical social science scholars 'that food safety agencies should also (…) focus on improving (…) risk assessment frameworks to counteract interpretive bias of risk assessors, and not only the interpretive biases of consumers', he conceded that the FSA was thinking about 'engaging civil society more broadly in framing the questions for risk assessment':

> '(…) we think there's the potential for them to offer advice that is more relevant to the social perception of the policy issue, rather than to the technocratic interpretation of the policy issue that's driven by our dominant scientific discourse. Because even though policy makers are generally not scientists, because the overwhelming discourse in the organisation is scientific that leads to certain types of questions being favoured, being seen as more relevant or most relevant; and we need some external challenge to stop us developing blind spots where we don't ask and then answer the most socially relevant questions' (interview official 32 – FSA).

Yet, in the time frame studied in this thesis (2000–2015) this view of engaging lay consumers or civil society actors in risk assessment processes did not materialise. It remained based on 'technocratic' assumptions and treated as a 'bolt-on' to formal scientific risk assessment procedures.

Summing up, the multipolistic mode of competence attribution manifested in the role of non-specialist members was contested on several grounds. Their role became increasingly narrowed down to represent the purported view of the knowledgeable 'ordinary consumer in the marketplace' who needed scientific information to judge questions of food safety. Despite the FSA's previously described attempts to educate non-specialist consumer representatives accordingly, this narrowing down of their role became actively questioned and critiqued by the relevant audiences. However, the FSA kept on justifying non-specialist membership in its SACs in an output-oriented way and deployed them as a tool ensuring the SACs effective public communication. Thus, over time the old institutional path of the PUS model seems to have been revived in the agency's practice.

5.2.4.5 From the consumer committee to the ACEE to the SSRC

In chapter 5.2.2.5, I showed that similar lines of contestation shaped the establishment and the actual practice of the FSA's consumer committee. Even prior to the committee' establishment in 2002, the controversy here had already centred on the question on how to attribute judgement competence to consumer representatives: based on a more institutionalist (i.e. corporatist or pluralist) notion of '*organised* consumer interest representation', or based on an individualistic (and somewhat depoliticised-rationalist) notion of engaging the authentic 'ordinary consumer'.

The FSA executive attempted to emphasise an individualistic over an institutionalist mode of competence attribution to consumer representatives. From the FSA's perspective, it was primarily the *authentic experience and knowledge of individual lay persons* that qualified committee members as 'competent consumer representatives', although organised consumer representatives were likewise included into the committee. This mode of competence attribution followed a rationale anchored in the New Labour's social exclusion discourse, according to which individual consumer representatives could valuably contribute to the discussions across the FSA's various settings, because they brought the perspectives of the 'ordinary' consumer to the table. Members recruited based on their personal experience and qualities as ordinary consumers were expected to specifically represent the 'hard to reach' consumer groups, such as those on 'low income' – contrary to organised consumer groups who were typically deemed to represent 'particularistic' interests. Yet, it was precisely this hierarchisation between personal experience and organised interest group expertise and experiences that was contested from the committee's very beginning, notably on behalf of some of the committee's interest group members.

Against this backdrop, the FSA increasingly put a critical eye on the consumer committee and began to reframe its role with regard to the factual conditions and the effectiveness of consumer representation, over time. This resulted from increasing conflicts over competence attributions and role understandings that arose within the consumer committee. Some FSA officials questioned the committee members' adequate understanding of the issues at stake and therefore avoided presenting scientific issues to them. In turn, the committee members felt poorly briefed on policy issues (Rothstein 2013). Hence, in the FSA's practice the attribution of judgement competence remained largely reserved for scientists. The following scene of an 'extra meeting' on GM food, which I have reconstructed based on the meeting's minutes, illustrates the two conflicting political and scientised understandings of 'being a competent consumer representative': The FSA saw its role in relation to GM foods both in ensuring that 'food is safe to eat and that consumer choice is maintained' (FSA 2003h: 2). From the time it was established, the FSA therefore undertook a range of activities to assess the consumer acceptability of GM foods. These ranged from an extensive programme of both quantitative and qualitative work on consumer attitudes to the national dialogue on GM foods 'GM Nation' (Horlick-Jones et al. 2007). In 2003, the FSA executive invited the consumer committee to discuss both the 'pros and cons of the methods used' in its work on consumer attitudes on GM food in order to forward the committee's advice to the FSA board. These included formats such as 'citizen's juries' and public dialogues with young people and consumers on low incomes (FSA 2003m: 2). However, the consumer committee only received request and respective papers shortly before its open meeting, which visibly irritated the majority of the committee's members:

> 'Claire Whyley [a member of the consumer committee], supported by other members, said that it was a shame the Committee had not been able to discuss the research methods at an early stage. Her understanding of citizen's juries was that they were *not usually randomly recruited* to be *representative of a population* but selected to *represent particular views*' (FSA 2003m: 2).

As this quote indicates, the FSA's executive, which had initiated the citizen's juries on GM food, was of the opinion that the participants in citizen juries on GM foods had to be selected based on scientific methods that enabled 'random' recruitment. It was in this that way the participants would be 'representative of a population'. The committee members' understanding of citizen juries, by contrast, was a decidedly political one ('to represent particular views'). In this vein, some consumer stakeholders participating in the meeting in their role as 'witnessing audience' even contested the very representative claim the FSA had attached to the

'ordinariness' of individual consumer representatives. This is expressed in the following quote from a member of a food and health interest organisation:

> 'I have to say that I do question the motives of (…) the FSA (…) when they say, oh yes, we really want to talk to genuine consumers not the organisations that claim to represent them, because what they mean by that is we don't like what the organisations are saying to us so we want to find somebody else who says something else so we can justify what we've already decided to do, which sometimes they run into trouble with it, and in fact it's happened on the GM issue. There has been some good research with low income groups, and they have said exactly the same as the rest of the population, so despite their efforts to try to find somebody to say something else, they very often fail." (Timotijevic et al. 2011: 494)

Thus, as is evident from this quote, an alternative way of reading the FSA's emphasis on individual consumer representatives was that they instead of representing ordinary consumers were employed to de-politicise controversial issues. Seen this way, the FSA's strengthening of consumer views and interests through the establishment of consumer committee came along with a new focus on individual, unorganised 'ordinary consumer representatives' as the 'true' and thus authoritative representation of consumer interests. Organised 'elite' consumer representatives, who had recognisable stakes and interests in food-related issues, by contrast became demarcated by the FSA and in a certain sense placed in competition with 'ordinary consumer representatives'.

Ultimately, these conflicting understandings over the committee members' actual judgement competences hampered the committee's capacity to challenge the consultation methodologies used by the FSA, which was one of the committee's official key tasks (FSA 2002g; Rothstein 2013). Because of these conflicts, the consumer committee was eventually dissolved in 2005 and replaced by the newly established 'advisory committee on consumer engagement' (ACCE). In contrast to its predecessor, the ACCE was explicitly designed to 'be independent not only from the Executive but also from our stakeholders' – i.e. consumer interest groups. Therefore, the ACCE included members mainly from leading UK think tanks and persons who had 'extensive experience of engaging with the public' (FSA 2006d: 8). Most of these members shared being specialised in quantitative and/or qualitative consumer and marketing research. Hence, they were deemed capable of providing the FSA, as one interviewee put it, with 'well-evidenced insights on what consumers need' (interview official 21 – FSA Advisory Committee). In contrast to a number of the consumer committee's members, this interviewee told me that the ACEE's members did not conceive of themselves as 'activists who represent

consumer groups and their interests' but as people with a proven record of experience and expertise in 'public engagement' (interview official 21 – FSA Advisory Committee).

Thus, the ACCE's members were attributed judgement competences based on their quasi-scientific competences in consumer engagement methods. In contrast to the consumer committee, which was also meant to function as a 'forum for discussion of the substance of consumer issues' (FSA 2007e: 5), the ACCE's task was exclusively focused on methodological issues of consumer engagement: its main purpose was to assure the FSA board that the FSA was 'making best use of all its consumer processes and [was] using consumer insight and evidence appropriately' (FSA 2006d: 8). The committee's mandate was hence framed in a much more output-oriented way; it was mandated to monitor 'the effectiveness of the interactions between FSA and consumers, and the extent to which the agency listens to consumer views and gives them proper consideration' (FSA 2007e: 5).

Simultaneously to setting up the ACEE, the FSA executive pursued a plan to establish a separate 'social sciences research committee' (SSRC). The SSRC eventually came into being in the beginning of 2008 and was made up of senior social scientists from academia. One interviewee explained the rationale behind the SSRC's establishment as an attempt to establish a form of evidence-based consumer engagement policy:

> 'I think they then identified, "well, there's a practical need", which was, which was really about how to achieve a social scientific, a bit of a cultural transformation of the organisation into embedding ways of understanding consumers better hence the sort of focus on consumer engagement (…) I think the FSA was trying to make sure that it was very, very clearly seen as a body that had consumer interests at the heart of its decision making probably more than any other regulator in Britain and also very evidence-based and I think that there was a bit of a feeling, I think, (…) they had the sort of, quite, well entrenched series of scientific advisory committees which that was very sort of big science and as opposed to the sort of, well, what is we know about consumers? (…) so if the FSA did a big campaign about salt reduction for example and – so they're interested in well what's our evidence base about if we do X sort of why and how consumers respond' (interview official 21 – FSA Advisory Committee).

What is evident from these examples is that the simultaneous establishment of the ACCE and the SSRC marked a fundamental change in the way the FSA attempted to engage with consumers. Consumer engagement within the FSA came to be increasingly understood as a 'scientifically sound' commissioning of quantitative and qualitative social science research, including online panels, surveys, and focus groups. This also meant that the FSA's understanding of scientific evidence was broadened to also include social science research

beyond the 'Big sciences', as the interviewee put it. Thus, there was a shift from attributing judgement competence to the consumer committee based on both individual and institutional experiences and expertise in representing consumer views to attributing competence to social science researchers and professionalised consumer engagement practitioners. This shift also reflects the above described broader 'behavioural turn' in the UK's policy-making institutions that begun already under the first New Labour government and had its breakthrough with the Cameron coalition government – and which had gradually changed from a more input legitimacy oriented to a more output legitimacy oriented discourse (5.1.4). In connection with the SSRC's establishment the FSA had argued that a separate committee was necessary because of the FSA's growing focus on 'changing consumer behaviour' policies, which were based on social scientific evidence:

> 'Social science is important to the FSA as influencing and changing behaviour is a key policy goal that cuts across a number of our strategic aims (…) to meet our strategic aims we need to understand and influence behaviours – (…) *encouraging consumers to choose a healthy diet* (…). (FSA 2008a: 2, my emphasis).

This quotation shows that the FSA's behavioural turn emphasised the importance of encouraging people to adopt healthier behaviour. It also makes clear that the FSA's representative claim now had completely changed. It shifted from empowering consumer representatives to contribute their views and interests into the FSA's knowledge production processes to making consumers – in their role as 'choosers' facing different psychological and cultural behavioural barriers to a healthy 'lifestyle behaviour' (FSA 2008n) – the object of social science research and advice. It was against this background that a key element of the SSRC's mandate was to advise the FSA on these behavioural approaches because the agency felt it lacked capacities in this respect, as one interviewee explained:

> 'We also set up a social science research committee because that was an area where we recognized we didn't have the as much expertise as we would have liked, so it's extremely important to all our policies, most of which but not all of which, you know, concern the *behaviour of consumers* (…) we need to understand all of that, the economics and all the other aspects of social science' (interview official 25 – FSA, own emphasis).

The establishment of the SSRC, many of whose members were closely engaged in research of behavioural patterns and practices of consumers (FSA 2009a: 7–13), was hence essential for the FSA's behavioural turn in competence attribution. The SSRC's members were attributed judgement competence in a twofold sense: they were attributed the competence to

make validated claims on the specific attitudes and behavioural patterns of consumers (epistemic authority) and, at the same time, the competence to make judgements on the policy implications resulting from these insights, i.e. on specific interventions designed to effectively change consumer behaviour in a way that enhances their welfare and wellbeing (political authority).

With the growing importance of behavioural expertise for the FSA's attempts to build politico-epistemic authority (which will be analysed in further detail in chapter 5.4.2.3), the role of the SSRC within the FSA's network of scientific advisory committees was considerably strengthened over time – according to different interviewees (interviews official 25 – FSA; official 26 – FSA Advisory Committee; official 31 – FSA).

In the beginning of 2013, the FSA decided to abolish the ACCE (FSA 2013d: 5). Reflecting the overall behavioural turn in policy-making pushed by the Cameron government (chapter 5.1.4), the full responsibility of advising the FSA how it should gather and use evidence about consumers' views, attitudes and behaviour was assigned to the SSRC. Thus, over time, the FSA's mode of multipolistic competence attribution in representing consumers turned into a more monopolistic mode in which judgement competence was attributed based on formal social scientific qualification. By the same token, the FSA's representative claim also changed. It shifted from a claim on the empowerment of the consumer representatives to articulate and bring in their legitimate concerns and interests (as members of the consumer committee) to a claim on supporting of the consumer as a 'chooser' in the marketplace who was deemed to have 'bounded rationality' for various psychological, sociological and cultural reasons, which needed to be identified and effectively addressed.

Summing up, having a consumer committee that comprised both individual and organised consumer representatives was related to a specific representative claim – to represent both 'ordinary' 'hard to reach' consumers and 'elite', 'particularistic' consumer organisations. However, it was precisely this representative claim that was contested on several grounds. In practice, the consumer committee ran into problems when the members acted in a way that was perceived as too political because they articulated specific views and interests. Against this backdrop, specific consumer groups and academics, who participated as the 'witnessing audience' in open SAC meetings, were sceptical. They saw the involvement of individuals as representatives of purportedly 'ordinary' hard-to-reach consumers as a tactic of depoliticising controversial issues, such as GM food. In response to the contested nature of the committee's role and competences, the FSA began to reframe its initial advocatory mode of competence

attribution. It put a strong effort on questioning the conditions of effective 'consumer involvement'. This output-oriented reframing that reflected the Conservative-Liberal coalition government's focus on behavioural public policy led to the replacement of the consumer committee with the ACCE (from 2005 to 2013) and the SSRC. In contrast to the consumer committee, the members of the ACCE were attributed judgement competences on the grounds of their scientific, or quasi-scientific expertise or practical experience in consumer engagement methods. Competence attribution here was framed in a clear output-oriented way from the outset, as the monitoring of the effectiveness of the FSA's consumer engagement activities. The SSRC was staffed with various social science researchers who had a focus on consumers' behavioural patterns. By so doing, the FSA shifted from a mode of multipolistic competence attribution to a more monopolistic mode of attributing judgement competence based on formal social scientific qualification. Ultimately, this also changed the FSA's representative claim. It shifted from being a claim on empowering consumers to articulate their legitimate social interests and perspectives, hence as political subjects in their own right (consumer committee) to a claim on supporting of the consumer as a 'bounded-rational chooser' in the marketplace who was in need of effective behavioural policies and thus an object of social inquiry (SSRC)
.

5.2.5 Conclusion

In this chapter, I analysed the FSA's claim to politico-epistemic authority in terms of the social dimension. I showed that the act of building expert authority unfolds in and through the definition and performative enactment of roles and attributions of competence. In its drive to establish itself as an expert authority at the science-policy nexus, the FSA maintained various institutional arrangements and positions in which judgement competence (and, in the case of its governing board, decision-making competence) was attributed on diverse grounds. The preceding analysis made five main observations:

Mode of competence attribution: First, in the social dimension, the FSA's claim to politico-epistemic authority was based on a strategy of combining judgement and decision-making competence relating to food safety risks and other food-related matters of consumer concern – notably nutrition-related risks (epistemic authority) and their implications for food policy (political authority). Competence here was attributed based on multipolistic criteria: These included specialised and formally certified scientific knowledge and reputation, generalist experience and skills in policy-making and public communication, a 'demonstrated record of service to society', and, last but not least, representativeness of social interests, primarily

consumer interests and views. The latter applied to both professional consumer representatives of interest organisations and individual lay consumer representatives alike. In the FSA's understanding, individual consumer representatives should provide a general form of 'lay wisdom' of the 'ordinary consumer' – a form of knowledge that came to be defined as being different from the knowledge held by 'elite' consumer representatives, with seemingly particularistic professional interests. Further, individual consumer representatives were deemed unlikely to be 'distracted' by political ideologies due to their proven track of record of reaching out to 'ordinary people'.

	FSA
mode of competence attribution	• multipolistic • *specialised knowledge and scientific merit* • *generalist policy-making and public communication skills* • *individual professional experience and 'demonstrated service to society'* • *representativeness of social interests (professional and 'ordinary' consumer representatives)*
representative claims	• rather heterogeneous consumer constituencies • *'consumer citizen'* • *'knowledgeable consumer'* • *'socially-included consumer'*
legitimation mode	• primarily input-legitimacy-oriented
contextual embeddedness institutional-cultural discursive	• British public interest and communitarian culture • *individual's record of acting in the public interest* • *'embodied-expertise'* • *social exclusion & science & society*
contestation and change	• contestation of multipolistic competence attribution mode • *attempt to narrow the role of non-specialist members* • *attempt to separate risk assessment and management and to narrow the chief scientist's role as a multicompetent broker* ⇨ *reframing emphasising effectiveness and efficiency* ⇨ *shift towards a monopolistic mode of competence attribution*

Table 10: Summary of the FSA's multipolistic mode of competence attribution, my compilation

Representative claims: Second, through this mode of multipolistic competence and role attribution, the FSA made an effort to present itself as both 'expertise-based' and as

representative of different consumer constituencies: The ‘consumer citizen’ was a constituency imagined as consisting of active subjects in their own right who were given a range of possibilities to articulate consumer interests and perspectives in knowledge production and policy formation. This claim was most clear in the stakeholder-based governing board and in the consumer committee. The ‘knowledgeable consumer’ in the marketplace was expected to put his or her trust in the FSA’s competences, to follow its advice and to act in a rational and responsible way. This claim was particularly evident in the chief scientist’s blog and in the agency’s training package for the non-specialist members of its SACs. Finally, the ‘socially-included consumer’ was attributed a right to be equally treated and included in policy formation on the grounds of equal citizenship and in an attempt to counter the socially fragmenting impacts of markets. This claim was most evident in the appointment of those consumer representatives who were specifically expected to stand for those considered ‘hard to reach’ groups, particularly ‘low-income consumers’.

Legitimation mode: Third, the FSA’s mode of multipolistic competence attribution can be understood as a practice of advocatory authorisation in that it was primarily legitimised in terms of input legitimacy – as was expressed by the FSA’s oft-cited official slogan of ‘putting consumers first’. The FSA’s input-legitimacy-oriented justification of its multipolistic competence attribution was especially manifest in its governing board. Attributing decision-making competence to a board staffed with consumer and business stakeholders as well as academic experts reflected New Labour’s claim to promoting ‘stakeholder democracy’, i.e. renewed mode of governing that involved those who were regarded to have a stake in a specific matter. Likewise, the coupling of the risk management and risk assessment functions within the FSA’s policy departments was based on a specific premise: It was argued that the tense science-policy relationship could only be reconciled by maintaining multicompetent inhouse experts; this was the only option that allowed the FSA to integrate considerations other than scientific ones into knowledge production and decision-making. Last but not least, attributing judgement competence to non-specialist members in SACs and to the separately convened consumer committee was specifically justified with reference to the lessons learned from the BSE crisis that were articulated in the ‘science and society’ discourse. These lessons were primarily about opening up regulatory science and science-based decision-making to incorporate legitimate societal needs, views and interests into these processes.

Contextual embeddedness: Fourth, the analysis of the FSA’s practice of advocatory authorisation in the social dimension showed how the FSA’s multipolistic competence attribution mode drew on different cultural-institutional and discursive elements of the British

context in which it operated. To begin with, the FSA's stakeholder-based board, its non-specialists members in SACs and the consumer committee aimed at creating a 'shared perception' on food-related matters at the interface of science and policy. By so doing, these three bodies manifested the core elements of British public interest culture and communitarian culture of expertise. In all three bodies, individuals and organised representatives from different social spheres provided with an opportunity to contribute their views and interests. But at the same time, they were expected and deemed capable of adopting a 'public interest view' beyond their stakeholder group on the grounds of their demonstrated personal record of 'selfless service to society'. They were attributed the capacity to 'see for the people' and accorded the privilege of making judgements and contributing to policy discussions. Another key element of the British culture of expertise – the reliance on the embodied expertise of individual trustworthy experts – was especially manifest in the prominent position of the FSA's chief scientist, who claimed to embody both scientific and public virtue. The FSA's multipolistic mode of competence attribution also explicitly reflected dominant policy discourses. Notably, it relied on New Labour's social exclusion discourse in that it specifically aimed at representing the 'hard to reach' consumer groups, notably those on 'low incomes', and claimed that individual consumer representatives, recruited due to their personal experience and qualities as ordinary consumers, were particularly suitable for doing so. As I have shown, it was New Labour's discourses on 'science and society' and 'social exclusion', both on their part closely entangled with the communitarian British expert culture, that served as a central point of reference here. Thus, overall, this shows the prevailing importance of national institutional-cultural and discursive contexts in shaping the way the FSA claimed competence and defined its role as independent food (safety) agency. Despite being closely embedded within the increasingly harmonised EU risk assessment regime, which was premised upon a strict separation of scientific risk assessment from risk management, according to which EFSA adopted a monopolistic mode of competence attribution, the FSA's attempt to build politico-epistemic authority rested on a multipolistic mode of competence attribution. In this sense, the transnational discourse on the separation between risk assessment and risk management was re-embedded here into the British context.

Contestedness: Fifth, the FSA's advocatory mode of competence attribution and legitimation was multiply contested and it eventually shifted towards a more rationalistic mode of competence attribution. As I have shown, two major developments played an important role in this shift. First, the multipolistic mode of competence attribution that was embodied in the SACs' non-specialist members was contested in practice and, eventually, the FSA narrowed

their role so that they were expected to represent the (purported) view of the ordinary 'knowledgeable consumer in the marketplace'. Reasserting the old PUS model, non-specialist members were now deployed as an 'effective tool' to ensure that SACs communicated in a way that was understandable for lay persons. Over time, due to the growing importance of the evidence-based policy making discourse and the linked behavioural turn in policy-making, consumer representation was even further reframed with regard to the actual conditions and the effectiveness of consumer representation; there was a shift away from maintaining a separate consumer committee comprising also consumer interest organisations towards an emphasis on engaging 'ordinary consumers' (notably by the ACCE) and later towards an emphasis on looking at them as 'objects of inquiry' (notably by the SSRC). Consumer representation shifted from being about empowering individual and stakeholder consumer representatives as 'consumer citizens' – i.e. as subjects who are attributed the capacity to make valuable judgements and contribute their views and interests to the FSA's knowledge production processes – to making consumers and their decision behaviour – which were viewed as 'bounded rational' for various psychological, sociological and cultural reasons – an object of social science consumer research and evidence-based interventions. Second, in the context of the 'science review explosion' at Whitehall, the FSA changed its initially hybrid model of coupled risk assessment and risk management roles towards a more separated model and pushed the role of the chief scientist as a multicompetent broker into the background in favour of his 'science watchdog role'. These shifts implied that the criteria of formal scientific qualification, scientific eminence and reputation in peer networks played an increasingly important role in competence attribution.

5.3 Opening up to Advocatory Authority: Object Dimension

As the following analysis will show, a specific form of document, namely 'guidance documents', was central to the FSA's attempts to open up to what I call 'social objectivation'. Social objectivation involves a socially situated mode of knowing that is based on a working consensus among heterogenous actors.

In the following 'close-up view' of a key 'founding document' (chapter 5.3.1) I will first zoom in on the FSA's attempt to open up to a socially situated objectivation mode in its very first years. Here, I will distil and present in detail the typical ways in which the FSA drew on guidance documents in order to employ their specific (material) affordances. The subsequent

analysis of the different genres of guidance documents used by the FSA in authorising and legitimising its mode of knowing in chapter 5.3.2 will build on and broaden these insights.

First, guidance documents enabled the FSA to *objectivate* principles and standards of 'socially situated' knowledge production and decision-making at the science-policy nexus as a (purportedly) factual norm guiding its inner workings. Second, the material form of physical and digital documents enabled it to *materially objectify* its 'socially situated' mode of 'open' knowledge production and decision-making. As material objectifications, guidance documents were used in order to render the FSA's working principles and standards of socially situated knowledge production *visible* and physically accessible to its 'witnessing audience', i.e. all those interested in and having an eye on the agency's expertise. At the same time, guidance documents enabled the FSA to (at least temporarily) *blackbox* anything that might create tensions and frictions with this frontstage performance of social objectivation. Third, in their material form, guidance documents could also be *shared* and *negotiated*. Guidance documents could be circulated among multiple actors with the aim to including their input into the drafting and revision process. They could thus be used to 'enrol' these actors as 'witnesses' testifying to the FSA's open, socially situated and transparent objectivation mode aimed at creating a working consensus among heterogeneous actors. Due to their shareability and negotiability, guidance documents hence functioned as a negotiation and coordination device in building politico-epistemic authority. As I will show in chapter 5.3.3, the FSA's guidance documents reflected specific elements from the contextual discourses and institutional-cultural arrangements in which the agency was embedded (see chapter 5.1.). With the rise of the 'better regulation discourse' and a move towards comprehensive cross-governmental science reviews within Whitehall, the FSA's mode of social objectivation has, however, been questioned and as a result gradually reconfigured since around 2005 (chapter 5.3.4).

5.3.1 Close-up: zooming in on the FSA's 'founding meta guidance documents'[128]

One of the FSA's key 'founding documents' is the *'Statement of General Objectives and Practices. Putting the Consumer First'* (FSA 2000h). After enumerating broadly defined 'general objectives' and 'working practices', the nine-page document provides a more detailed account of the FSA's fundamental governance principles. In this sense, it can be understood as a '*meta* guidance document'. The statement groups the FSA's governance principles under

[128] This ‚close-up' analysis of the FSA's founding documents is partly based on (Korinek 2017).

several subheadings. The paragraphs under the subheading titled *'Openness and consultation'* (FSA 2000h:6) declare:

> '10. We are committed to operating in an open and transparent way. As an organisation we will be accessible to and actively communicate with all our stakeholders. Our decisions and the information on which they are based will be recorded and accessible, so that any organisation or individual can make informed judgements about the way in which we are carrying out our functions. (…).
>
> '11. We will consult widely on our activities. We will ensure that all relevant parties are given the opportunity and, whenever possible, the time to make their views known, including representatives of those affected by any proposed activity and the public. We undertake to maximise the effectiveness of our consultation process by using a range of consultation methods, appropriate to the issue under consideration, in addition to formal written consultation. Our aim is to ensure that we listen properly establish productive dialogues. Our consultation policy will be published'
>
> '12. Equally we will seek to promote links with other public bodies who have responsibilities affecting food safety and other interests of consumers in relation to food to ensure that we are, in turn, consulted, both formally and informally, on all relevant matters. Our relationships with other government departments are underpinned by concordats which set out clearly how we will work together in areas of mutual interest. (…).

These three paragraphs portray the FSA's mode of knowledge production and decision-making as one that draws on a broad variety of social perspectives and judgments ('stakeholders', 'all relevant parties') and on far-reaching transparency. Paragraph 10 provides for the accessibility and disclosure of information to the public, which is said to facilitate the knowledge and insights that were necessary 'so that any organisation or individual can make informed judgements'. Paragraphs 11 and 12 put emphasis on consultation as a means of achieving a social consensus between different subjective judgements and interests of heterogeneous stakeholders both within and outside the government.

However, already the document's next subheading, titled *'Consistent and proportionate: the Agency's approach to risk',* indirectly emphasises a more calculative objectivation mode, grounded in quantitative methodologies, such as probabilistic risk assessment and cost-benefit analysis:

> '14. We will develop and publish our approach to risk. In essence, we will maintain a policy based on the following principles. We undertake to adopt a consistent approach in all our decisions and actions. We will make decisions and take action that is proportionate

> to the associated risk. In doing so we will take due account of the nature and magnitude of the risks involved, to the costs and benefits of proposed actions, to the information provided by the relevant independent advisory committees and to any other appropriate sources of expertise. Decisions will be based on sound scientific advice, and we will commission programmes of research and surveillance specifically targeted to addressing our policy aims and objectives (FSA 2000h: 7).

Here, we see how the document juxtaposes two ways of producing objective knowledge. Calculative means of objectivation, such as probabilistic risk assessment and cost-benefit analysis, are based on a series of assumptions making the objectivation of knowledge production a matter of rigid application of standardised methodologies. In this sense, the document's section on the FSA's 'consistent and proportionate approach to risk' is at odds with its previously claimed commitment to a consultative and collaborative mode of objectivation. Remarkably however, these two modes of objectivation are listed successively as if they were a natural-seeming set of complementary epistemic principles. The same pattern of juxtaposing and oscillating between calculative and more socially open ways of objectivation is again present at the end the document, where it states the agency's commitment to 'better regulation':

> '20. (…) The principles of Better Regulation, as set out in the Government's Guide to Better Regulation, are incorporated into our working practices. We will strive to ensure the efficiency and effectiveness of the regulatory framework. (…) (FSA 2000h: 7).

By referencing the government's principles on better regulation, the FSA states that its working practices are based on the adoption of strict calculative methodologies to quantify and monitor the efficiency and effectiveness of food safety standards. Yet, directly after this paragraph, the Statement of General Objectives and Practices then concludes with a paragraph titled 'OUR PLEDGE' in block letters, which again promises to 'always put consumers first' and to actively seek the views and the feedback of stakeholders on the FSA's operations.

I have chosen these exemplary snapshots of the line by-line analysis that I have conducted on the Statement of General Objectives and Practices to illustrate an important aspect of 'meta guidance documents': They enable the FSA to suggest – at a very general level – that opening-up to more socially situated ways of objectivation is somehow easily commensurable or even complementary with the government's 'better regulation' agenda. The fact that the latter adopts a rather strict calculative way of objectivation that might create tensions with its overall attempt to opening up to socially situated knowledge production can be *backstaged* at this point, because the document states very basic principles instead of getting to grips with the nitty-gritty

details of each. In this way, concrete questions concerning the combability between different modes of objectivation are left at references relating to other documents. The observant reader of the document, interested in the compatibility of the FSA's heterogeneous objectivation modes, is referred to two public consultations on further guidance documents: the FSA's Code of Practice on Openness and the FSA's Approach to Risk. In dispersing the more detailed elaboration on the precise relation between the two modes of objectivation into two separate documents, the statement defuses the tensions between these two objectivation modes. By so doing, the statement almost imperceptibly establishes a route for the reader to follow.

Thus, let us, for a brief moment, follow this route: A few months after the publication of the Statement on General Objectives and Practices, two UK-wide written consultations on 'openness' and 'risk' were launched, as shown in figure 9.


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FOOD STANDARDS AGENCY

Food Standards Agency consults on openness and risk

Tuesday 29 August 2000

Ref: 2000/0035

The Food Standards Agency is today launching a public consultation exercise on its Code of Practice on Openness, and on a statement drawing together the factors it will take into consideration when assessing risk. The deadline for comments is 17th November.

The proposed Code of Practice sets out the policy on one of the Agency's core values - openness - and describes in general terms how the Agency is going to implement it. The draft statement on risk is a broad description of how the Agency intends to deal with risks from the time they emerge, to the decision-making and enforcement stages. Both documents are also intended as a guide to what individuals and organisations can expect from the Agency.

Launching the UK-wide consultation, Agency Chairman Sir John Krebs said: "These two documents will greatly influence the way in which the Food Standards Agency operates. This is why it is important for us to know what stakeholders and the general public think about them.

Figure 9 Press release on public consultation, snapshot of the FSA website on 29/08/2000

As figure 9 illustrates, it is not only linguistically that the FSA's performance of social objectivation is enabled. As material objects, the FSA's guidance documents can be shared among different actors. Thus, also their *materiality,* here in the form of a digital document and the websites on which they are made publicly accessible, enables frontstaging the claim to socially situated and negotiated knowing. Further, zooming in on these documentary snapshots illustrates the central role of materiality for the 'enrolment' of different actors into the FSA's frontstage performance of social objectivation: Below the chairman's statement, the terms of reference for the consultation exercise are detailed, pointing the interested reader to a download

link leading to the 'consultation package' on the 'consultation website'. The consultation package includes two guidance documents as well as consultation forms. Hence, the interested observer of the new agency here is 'enrolled' into the FSA's frontstaged commitment to a more socially open way of objectivating its knowledge production and decision-making processes.

Summing up, the close-up analysis has shown how two not easily compatible ways of objectivating knowledge on food-related policy issues are translated into a seemingly tension-free set of epistemic principles. This is enabled through the genre of 'meta guidance documents', because it is limited to enumerating broad, basic objectives and principles. Their specificities and operative implications are delegated to further guidance documents – namely two separate guidance documents on the FSA's 'policy on openness' and its 'approach to risk'. Moreover, by announcing that consultations on these separate policies on openness and risk assessment are to follow, the statement demonstrates the agency's responsiveness to external demands on opening-up risk assessment (see chapter 5.1.2). Simultaneously, possible tensions with the reassertion of calculative objectivation modes are blackboxed. As these examples illustrate, it is the materiality of documents both physical and digital that allows the FSA to juxtapose heterogeneous objectivation modes within one guidance document. It enables to frontstage specific aspects, while backstaging others, and to enrol different subjects into this undertaking. There are two different constituencies that the FSA attempts to enrol into this more socially open way of objectivation, (1) 'stakeholders', i.e. collective actors representing the views and interests of affected social groups, and (2) 'any individual' and a not further specified 'public', who are attributed the right to transparency, information and consultation. In so doing, the guidance document constitutes stakeholders and the general public virtually as 'witnesses' testifying to its frontstaged 'open' socially situated objectivation mode.

5.3.2 Practices of social objectivation

The close reading of two of the FSA's *'Statement of General Objectives and Practices'* served as an entry point to the FSA's practice of what I call 'socially situated objectivation'. Together my participant observation, document analysis and interviews revealed that drafting, presenting and circulating different sorts of guidance documents were one of the FSA's key authorisation practices. In this context, I could gain three overall observations: First, the FSA's knowledge production and decision-making processes were in general fundamentally 'paper oriented'. This means that the FSA's open board and other committee's open meetings that formed the most central part of the agency's frontstage activities were organised around documents: When an

issue was put on the agenda, a respective paper had been prepared, published on the FSA's website and circulated among all participants prior to the meeting. During the open meeting, the paper's authors briefly presented the paper, which was followed by a discussion of the paper. At the end of the paper's discussion, committee members mainly focused on proposing text edits, the committee chair then formulated the agreed changes, which were then implemented into the paper by the competent FSA staff. When the issue was again debated in a subsequent meeting, the revised paper (often including even 'tracked changes') formed again the basis of the committee's deliberation and final decision (and its presentation on the FSA's website). Second, guidance documents – documents that formulate objectives, as well as procedural and substantive norms and principles guiding the FSA's knowledge production and decision-making processes – played an important role at this. Frequently, the FSA referenced guidance documents and/or attached them to other papers dealing with specific policy issued that were submitted to its governing board in order to demonstrate that the proposed papers complied with the agency's own guidance documents. Likewise, the FSA's various regular performance reports, such as the FSA annual report, or the FSA Chief Scientist's annual report, referred to guidance documents as standards of evaluation. Third, a specific genre of guidance documents, which will be presented in detail below – 'strategic frameworks' and 'action plans' – were crucial in the FSA's extensive public consultation exercises. These formed a central device in the agency's attempt to establish evidence based on a 'social working consensus'.

5.3.2.1 Overview over the genres of guidance documents: scope and functions

In my analysis of the FSA's frontstaged objectivation practices, three 'genres' of guidance documents turned out to be of tremendous importance in the FSA's attempt to build and cultivate politico-epistemic authority: (1) the already introduced genre of meta guidance documents, as well as (2) strategic frameworks, and (3) action plans. In contrast to these three 'frontstaged' guidance documents genres, the FSA used (4) 'technical guidelines in its backstage operations. All these genres will be introduced in the following.

Frontstaged 'meta guidance documents'

To demarcate the FSA's mode of knowledge production from the pre-BSE mode of conducting food-related regulatory science, which had just been unmasked as a 'culture of secrecy' by the above-mentioned Phillips Inquiry, the FSA published a series of 'meta guidance documents' in its early years. Meta guidance documents are general 'how-to guides'. Characteristic for the

FSA's 'meta guidance documents' was that they defined a set of basic objectives, norms and principles of the FSA's knowledge production and decision-making processes. When I started my desktop research of the guidance documents the FSA had developed and published from 2000 to 2015, I immediately came across various meta guidance documents[129] (see table 10 next page). These can be distinguished between two different sets: (1) the above-presented 'founding' guidance documents, which frontstaged the agency's attempt to open-up to a social objectivation mode in that they formalised an open-consultative and transparent way of knowledge production and decision-making in its early years (which was primarily justified in terms of input-legitimation), (2) meta guidance documents that put an emphasis on more calculative-mechanical modes of objectivation (which was primarily justified in terms of output-legitimation). The latter were published around 2005. This shift reflects, as I will show in chapter 5.3.4, the increasing contestedness of social objectivation in the course of the increasing importance of the discourses and practices related to 'evidence-based policy making' and better regulation'.

[129] Meta documents were easily available from the FSA's website. For instance, under the 'Science & Research' tab, the website summarised the respective guidance documents forming the agency's approach to science and linked them for download in a colourfully accentuated and black bordered box called 'related items'. Hence, anyone interested in the agency's knowledge production and decision-making was presented with these guidance documents. A second reason was that meta guidance documents were specifically referenced in the FSA's various regular performance reports. These performance reports referred to these meta guidance documents as standards of evaluation against which the FSA had to justify its practices in knowledge production and decision-making in the course of external reviews and stakeholder consultations. By demonstrating its compliance with meta guidance documents, the FSA attempted to prove that it was living up to its 'core values' of 'putting the consumers first', 'openness' and 'independence'.

Year of Publication	Year(s) of	Title of Meta-Guidance Document	Self-Description
2000	-	Statement of General Objectives and Practices (FSA 2000h)	'This document is a statement of the general objectives that the Food Standards Agency intends to pursue and the general practices it intends to adopt in carrying out its functions under the Food Standards Act 1999.'
2001	-	Code of Practice on Openness (FSA 2001c)	'The Agency's Code of Practice on Openness deals in detail with the way in which the Agency will approach its general commitment to operate in an open and transparent way.'
2001	-	Publication of Information and Advice to the Public and Ministers (FSA 2001n)	'The document states "(a) How to put into practice the Agency's commitment to a policy of openness, in circumstances when we have information which may be limited or uncertain, and are unable to provide definitive advice to the public; and (b) How to put into practice our commitment to publish our substantive advice to Ministers."'
2001	-	The Food Standards Agency's Approach to Risk (FSA 2001r)	'A great deal of our work depends on understanding and dealing with risk. In this statement we describe how the Agency proposes to approach risk issues, so that everybody who may be affected by our decisions can understand our way of working.'
2001	-	Report of the Review of the FSA's Research and Surveillance. (FSA 2001)	'In May 2000, the Board asked for a review of the FSA's research and surveillance to be undertaken so that the many changes that might be necessary to the portfolio of projects and management procedures that it had inherited could be put in place with the minimum of delay. (...) The report contained 34 recommendations and the Board has received regular reports on their implementation.'
2002	-	Report on the Review of Scientific Committees (FSA 2002q)	The Board asked for a review of the role, methods of operation and effectiveness of the scientific advisory committees which advise on food issues. (…) It took into account recommendations from The Phillips Report and the May Review, and also the Code of Practice for Scientific Advisory Committees. (…) The Report set out 50 recommendations.'
2002	-	A Framework for Measuring Food Risk Management against Phillips' Lessons (FSA 2002a)	'In February 2001, the Board discussed how the lessons to be learned from the BSE Inquiry should be taken forward in the work of the Agency. It agreed that a framework should be developed for measuring the performance of the Agency against the Phillips lessons. (…) This paper, which takes account of comments made by the Board in earlier discussions, presents a framework and checklist for use for this purpose.'
2006	2012 2015	The Governance of Science (FSA 2006l)	'This document aims to describe the FSA's current arrangements for ensuring that its decisions are founded on the best scientific evidence and sound analysis, and to make proposals for strengthening these arrangements and making them more transparent.'
2006	2007 2012	Science Checklist (FSA 2006l: annex 4)	'The FSA has defined the governance of science as the methods by which the Board assures itself that scientific evidence is being sought, obtained, interpreted used and communicated appropriately and effectively by the Food Standards Agency. The attached checklist is one of the tools that has been developed to support the governance of science. It will be used to guide the Executive and Scientific Advisory Committees.'

2006	-	Statement of the Systems and Processes through which the FSA Gathers and Uses Scientific Evidence in Policy Making (FSA 2006l: annex 3)	'To fulfil its responsibilities the FSA depends on having access to the widest range of sources of scientific information and the expertise to use the evidence appropriately and effectively. This statement sets out the matrix of systems and processes in place for the governance of science. These systems are supported by the Science Strategy which describes how the FSA will obtain and use the scientific evidence it needs to support all its strategic objectives, ensuring the FSA has a sound scientific evidence base for its policies and advice.'
2006	2010 2012a	A Framework for Regulatory Decision Making in the FSA (FSA 2006a)	'This document, which has been circulated to all staff in the Agency, sets out in one place our core values, the principles we will follow when deciding whether we should intervene in an issue, and the different options we have for intervention.'
2006	2012	Good Practice Guidelines for the Independent Scientific Advisory Committees (FSA 2007n: Annex, Annex 6)	'The Guidelines relate primarily to the risk assessment process since this is the main purpose of most of the SACs. (…) Twenty-nine principles of good practice have been developed.'
2007	-	Being a World Class Regulator (FSA 2007c)	'This paper proposes criteria that, taken together, describe our aspirations as a world class regulator. We have assessed the performance of the organisation against each of the criteria and have used this assessment to identify those areas where most development is needed.'
2008	-	Statement of Compliance with the Regulators' Compliance Code (FSA 2008h)	'The FSA is committed to better regulation as we see this as a means to enhance consumer protection. Our approach to regulatory decision making, risk and our strategic focus are set out in key published documents that inform the way in which we develop policy and deliver consumer protection.'
2011/2012	-	Policy on Release of Underpinning Data (FSA 2011b, 2012f)	'In October 2010, the General Advisory Committee on Science (GACS) recommended that the FSA should develop an explicit policy on the release of underpinning research data. (…) This paper sets out the proposed key principles and features of the policy.'
2012	-	Framework on Use of External Data in the Peer-Reviewed Literature and Co-Funding of Research with Industry and Interest Group (FSA 2012d)	'The General Advisory Committee on Science was asked to advise on the circumstances in which it is reasonable for the Food Standards Agency to use data generated by, or to fund research in collaboration with, industry or non-governmental organisations (NGOs). The Committee identified five guiding principles that should be considered when addressing these questions.'
2012	-	Framework for dialogue between the FSA and the SACs (FSA 2012c)	'This framework sets out objectives and boundaries for dialogue between the Agency and its scientific advisory committees (SACs). It aims to ensure that this dialogue is effective, transparent, and respects the different roles and responsibilities of risk assessment and risk management.'

Table 11: Meta guidance documents from 2000 - 2015, my compilation

Frontstaged 'strategic frameworks and action plans'

During my desktop research, I came across a further 'genre' of guidance documents: 'strategic frameworks' and 'action plans'. These set out the agency's strategic priorities for specific areas of its remit, (e.g. food safety, nutrition) over several (mostly five) years. Thus, they were focused on the FSA's actions in specific issue areas and differed from 'meta guidance documents', which did not address a discrete thematic area.

From its very beginning, the FSA had been publishing every five years an overall strategy – the agency's 'Strategic Plan'. Each of the FSA's strategic plans was supplemented by a further strategic framework, namely the FSA's 'science strategies', which had two stated functions. First, they were designed to scientifically underpin the FSA's strategic aims as defined by its strategic plans. Second, they were set-up to identify emerging scientific issues that might be policy relevant in the future and hence should be accounted for in the FSA's next strategic plan. Beyond the FSA's strategic plans and science strategies, there was a further subgroup of strategic framework guidance documents. This subgroup of strategic frameworks each addressed a concrete – *and particularly intensely problematised* – food-related policy issue of consumer concern. Of special importance in this respect was the 'Nutrition Strategic Framework', which aimed at 'secur[ing] a sound evidence base to enable the Agency to promote a healthy diet' (FSA 2001l: 11). How this specific strategic framework was used in practice will be analysed in chapter 5.3.2.3.

Year of Publication	Year(s) of Revision	Title of Strategic Framework
2001	2001, 2005, 2010	Foodborne Disease Strategy (FSA 2001a)
2001		Nutrition Strategic Framework (FSA 2001m)
2001	2005, 2007, 2009, 2011, 2013, 2015	Strategic Plan (FSA 2001p)
2002	2005, 2010, 2011, 2015	Science and Innovation Strategy (FSA 2002s)
2008		FSA Approach to Sustainable Development in Policy Making (FSA 2008c)
2008		A Strategy for Social Science Research in FSA (FSA 2008a)
2011	2013	Forward Evidence Strategy (FSA 2011a)
2015		Science, Evidence and Information Strategy Delivery Plan (FSA 2015b)

Table 12: Strategic Frameworks from 2000 - 2015, my compilation

Frontstaged 'action plans'

The strategic frameworks were supplemented by more operational 'action plans'. While strategic frameworks constituted a rather 'high-level narrative of the key objectives and areas of work' (FSA 2016: 1), the FSA's various action plans defined very concrete outcome targets and often clear milestone-like 'action points' on the path to achieving these targets. Action plans were regularly scrutinised within 'progress reports' submitted to open board meetings, based on which they were regularly adapted. Strategic frameworks and action plans were highlighted on the FSA's website, as they were periodically discussed and revised in the FSA's 'open board meetings' – often following very extensive public consultation exercises.

Year of Publication	Title of Action Plan
2000	Action Plan on Food Labelling (FSA 2000b: Annex B)
2001	Strategy for Wider Implementation of HACCP (FSA 2001q)
2001	Nutrition Action Plan (FSA 2001m: Technical Annex)
2001	Action Plan Against the Diversion of Animal By-Products into the Human Food Chain (FSA 2001h)
2001	Action plan on import controls through frequent reports (FSA 2001s)
2001	Action Plan for Helping Food Allergic Consumers (FSA 2001b)
2001	Implementation of the Agency's Foodborne Disease Strategy: Action Plan (FSA 2001e)
2002	Agency Action Plan to Minimise Pesticide Residues in Food (FSA 2002c)
2003	Poorly Performing Plants Action Plan – 2002/2003 (FSA 2003l: Annex C)
2003	Food Intolerance Action Plan (FSA 2003f)
2003	Salt and Health Action Plan (FSA 2003p: Annex C)
2003	Action Plan to Implement the Recommendations of the Waste Food Task Force (FSA 2003j: Annex 3)
2004	Action Plan for the Implementation of Food Safety Management Based on HACCP Principles (FSA 2004a)
2004	Action Plan on Food Promotions and Children's Diets (FSA 2004b)
2004	Action Plan to Minimise Pesticide Residues in Food (FSA 2004g: Annex 4)
2006	Sustainable Development Action Plan (FSA 2006k)
2006	FSA Simplification Plan (FSA 2006f)
2008	Food Fraud Task Force Recommendations: Food Standards Agency Action Plan (FSA 2008f: Annex A)
2008	Agency Action Plan for Feed Law Enforcement (FSA 2008b)
2011	Red Tape Challenge Action on FSA Legislation (FSA 2011c: Annex B)
2012	FSA Capability Review: Action Plan (FSA 2012b)
2013	Agency Plan to Help Consumers with Food Allergies and Food Intolerances (FSA 2013a)
2013	Horsemeat Action Plan (FSA 2013c)

Table 13: Action Plans from 2000 - 2015, my compilation

Thus, 'strategic frameworks' and 'action plans' came along with their distinct prime qualities that could be used to social objectivation: Meta guidance documents were primarily used to objectivate the FSA's socially situated mode of knowing as a factual norm guiding its inner workings and to render it publicly visible. Based upon the basic principles established by meta guidance documents, the issue-specific strategic frameworks and their operationalising action plans were primarily used as coordinative 'boundary objects' (Star & Griesemer 1989) in the FSA's drive for socially situated knowledge production. Specifically, they were used in the establishment of a frontstage social 'working consensus' on a specific controversial and uncertain issue, as will be shown in chapter 5.3.2.3. The prime affordance of strategic frameworks and action plans (and the 'progress reports' documenting their implementation) was hence their shareability and negotiability.

Looking at how strategic frameworks and action plans developed over the studied time period from 2000 to 2015, we can – as in the case of meta guidance documents – distinguish between two different sets. These reflect the above-mentioned shift from a strong emphasis on an input-legitimated socially situated objectivation mode (strategic frameworks and action plans published from 2000 – 2005) to an output-legitimated calculative objectivation mode related to 'evidence-based policy making' and better regulation' (strategic frameworks and action plans published from 2006 – 2015), which will be analysed in more detail in chapter 5.3.2.3.

Backstaged 'technical guidelines'

While strong effort was put into making these guidance documents directly visible to different external and internal audiences (notably through the FSA website, performance reports and open board meetings), there was a further 'genre' of guidance documents that was much less visible: technical guidelines. I had to specifically search for these more detailed guidelines in the separate online archives of the agency's scientific advisory committees; sometimes I had even to consult my interview partners in order to find a specific one that was mentioned elsewhere in the FSA's more publicly displayed documents. In the course of my research,

there had been hardly any technical guidelines put on the agenda of open board meetings or used as a point of reference in the FSA's annual performance reports[130].

The FSA's frontstaged and backstaged guidance documents represented divergent notions of objectivity and distinct modes of objectivation, which jointly emerged with the activities of those using them. On the one hand, there were the frontstaged and less compelling guidance documents – meta guidance documents, strategic framework documents, action plans. These brought to the fore a more socially situated notion of objectivity, which portrayed objective knowledge as a balancing of a broader range of perspectives and the establishment of a working consensus – at least up until the above described shift from a socially situated to a more calculative objectivation mode occurred. This objectivation mode offered the FSA staff a certain space for professional discretion in carefully considering different considerations and sources of knowledge. On the other hand, there were the backstaged and much more compelling guidance documents – technical guidelines – emphasising a more calculative objectivation mode. Objective knowledge here had to follow stricter and more formalistic rules of knowledge production that left only a minimised discretionary space for qualitative expert judgement.

Year of Publication	Year(s) of Revision	Title of Technical Guideline
2000	2002, 2006, 2011, 2014	Guidelines for Planning and Reporting Surveys (FSA 2000d)
2002		ACNFP: Guidelines on the use of human studies in the premarket safety assessment of novel foods (ACNFP 2002b)
2002		COT: Risk Assessment of Mixtures of Pesticides and Similar Substances (COT 2002)
2002		ACNFP: Guidelines on the conduct of taste trials involving novel foods or foods produced by novel processes (ACNFP 2002a)
2005		ACNFP: Guidelines for the presentation of data to demonstrate substantial equivalence between a novel food or food ingredient and an existing counterpart (ACNFP 2005)
2005		COT, COM, COC: Joint Statement on Nanomaterial Toxicology (COT, COM, COC 2005)
2006		Administrative Burdens Measurement (FSA 2006b)
2007		COT: Variability and Uncertainty in Toxicology of Chemicals in Food, Consumer Products and the Environment (COT 2007)
2010		COM: Chemicals in Food, Consumer Products and the Environment: Guidance Statement - Thresholds for In Vivo Mutagens (COM 2010)

[130] The regularly revised versions of the agency's technical survey guidelines, that appeared as references of scientific quality assurance in annual performance reporting and other frontstage activities represent an exception.

2010		COC: Statement on the risk assessment of the effects of combined exposures to chemical carcinogens (COC 2010)
2011		COM: Guidance on a Strategy for Genotoxicity Testing of Chemical Substances (COM 2011a)
2011		COM: Guidance on Mutagenic Hazard Assessment and a Strategy for Genotoxicity Testing of Chemicals with Inadequate Genotoxicity Data (COM 2011b)
2011		ACNFP: Proteins in novel foods: issues for consideration (ACNFP 2011)
2012		COM: Interim Guidance on a Strategy for Genotoxicity Testing and Mutagenic Hazard Assessment of Impurities in Chemical Substances (COM 2012b)
2012		COM: Guidance on the Significance of Chemical-Induced Mutation for Human Health (COM 2012a)
2012		COC: Strategy for the Risk Assessment of Chemical Carcinogens (COC 2012a)
2012		COC: Risk Characterisation Methods (COC 2012b)
2012		COC: The Use of Biomarkers in Carcinogenic Risk (COC 2013)
2012		One In Two Out Governance (FSA 2012)
2012		Guidance For Policy Makers On Making The Introduction of Legislation (FSA 2012e)
2013		One In Two Out Methodology (FSA 2013e)

Table 14: Technical guidelines, my compilation

In what follows, I will proceed in three steps: First, I will present the results of my analysis of the FSA's uses of different 'genres' of guidance documents, which together make up what I understand as the FSA's socially situated objectivation mode. In so doing, I will place a special focus on how guidance documents enable three affordances – (1) objectivation: establishing the FSA's self-set principles and standards of socially situated knowledge production and decision-making as a seemingly factual norm guiding the agency's inner workings (specifically through 'meta guidance documents'); (2) share- and negotiability: allowing for the coordination and establishment of a working consensus among multiple actors (specifically through 'strategic frameworks and action plans'); (3) visibilisation: frontstaging specific elements that testify to the FSA's social objectivation mode, while at the same time concealing other frictional elements (through both).

In the course of this analysis, the contextual embeddedness of the FSA's practices of authorisation and legitimation will once again become evident. In a second step, I will recap on the contextual factors on which the FSA drew on constituting its socially situated mode of knowing as objective (chapter 5.3.3). Third, I will close this chapter by turning to the contestedness of the FSA's social objectivation mode and its reconfiguration over time (chapter 5.3.4).

5.3.2.2 Meta guidance: objectivation through consultation and transparency[131]

In order to establish social objectivation as a seemingly factual norm guiding the agency's inner workings, the FSA's meta guidance documents contained a range of provisions on public consultations and on transparency, as I have already elaborated in the introductory 'close-up' analysis. In the following, I will first illustrate in further detail how the consultative social objectivation mode was invoked and demonstrate how the specific genre of meta guidance documents enabled a constant oscillation between the frontstaged social objectivation mode and the backstaged calculative objectivation mode. Second, I will show how the meta guidance documents were used to establish far reaching public transparency and to visibilise the FSA's transparent social objectivation mode to 'witnessing audiences'.

Establishing the consultative social objectivation mode as a seemingly factual norm

In the FSA's meta-guidance documents different linguistic *and* material devices worked together in demonstrating the FSA's attempt to open up to a more socially situated mode of objectivation. At its core were different formats of stakeholder consultation. These reached from consulting with institutionalised stakeholder bodies, such as the consumer committee, or its diverse stakeholder fora, to more issue-specific workshop groups and ad-hoc written consultations. The basic principles according to which these consultative arrangements should operate were mainly codified within the FSA's 'Code of Practice of Openness' (FSA 2001c): (a) to include a broader range of social perspectives, (b) to consult stakeholders from the outset of the policy-making process (as early as is practicable), and (c) to serve the 'common interest'. Accordingly, the Code of Practice of Openness contained a specification intended to avoid the adoption of particularistic views from the agency's consultations:

> 'We will make the responses to consultation publicly available. We will consider any requests from consultees to keep all or part of their responses confidential but would wish to keep these to a minimum. We do reserve the right to disclose responses if we believe that, on balance, the public interest favours disclosure. For example, it may be necessary to publish responses in order to show how we have arrived at a particular

[131] This analysis of the FSA's founding documents is partly based on (Korinek 2017).

> decision, or why we have framed our advice in the way we have' (FSA 2001c: paragraph 3.2a).

Hence, the FSA's attempt to open-up to a more plural and socially situated mode of objectivation involved drawing on heterogeneous views gained from public consultations – yet in a way that avoided particularistic reasoning and allowed to establish a 'social working consensus' on a specific matter. Likewise, the FSA's 'Approach to Risk' put a strong emphasis on such a socially situated, consultative objectivation mode (FSA 2001p). In order to avoid the 'blindspots' inevitably brought into risk assessment processes by specialised scientists, it stipulated that the problem definition in risk assessment was not only a matter for 'scientific surveys or studies'. Instead, also non-scientific actors were explicitly invited to engage in defining problems for the FSA's risk assessment activities, for instance '[a]n enforcement officer, a food manufacturer, a retailer, or a member of the public', it was argued, could make the FSA aware of a potential risk (FSA 2001r: 2). The meta guidance document also asked FSA's risk managers to judge and decide the policy implications of risk assessments 'in consultation with those who are or could be affected' (FSA 2001r: 2) and to 'take into account both the level of risk and the public's views on whether they want to take it' and decide only after carefully weighing up the possible options (FSA 2001r: 5).

However, at several points the FSA's meta guidance documents also referred to more calculative ways of knowledge production – notably by referring to standards and procedures of formal probabilistic risk assessment or cost-benefit analysis. The frequent oscillation between social and calculative objectivation modes was enabled through meta guidance documents by means of three linguistic and material devices:

(1) Lack of linguistic precision: Meta guidance documents claim to be easily assessable for the general 'lay public' and therefore lack the linguistic and methodological precision required in more technical guidelines. This intended lack of linguistic and methodological precision released the FSA from having to clarify the relationship between social and calculative objectivation. This can well be exemplified by the agency's Approach to Risk that reflected the discourse on 'better regulation' in emphasising the importance of calculative evidence on the costs and benefits of different measures for taking 'proportionate' actions by stating:

> ‘We will not make a decision without considering the likely benefits and costs. We will aim to base our recommendations and actions on the balance of risks and benefits to everyone concerned. However, we will always attach the greatest weight to protecting the interests of consumers’ (FSA 2001r: 5).

Thus, without specifying their compatibility, passages stating the relevance of calculative objectivation modes can often be found after a series of specifications concerning socially situated objectivation. Whether the commitment to carefully ‘weigh up all possible options’ and ‘all perspectives of those concerned’ (FSA 2001r: 5) is ultimately meant in a deliberative or in a calculative sense is left open in the ‘Approach to Risk’. Remarkably, the comparative analysis across all of the FSA’s meta guidance documents showed that none of these further substantiates the relationship between social and calculative objectivation modes.

(2) Referencing: The studied meta guidance documents referenced other guidelines on risk assessment and science advice produced by strategic policy advisory units at the centre of British government as ‘allies’ attesting to their validity and legitimacy. However, they did so without further explanation of how, precisely, they related to the principles of knowledge production, which they proposed: The meta guidance documents used referencing as a material device to blackbox the epistemic tensions between different ways of objectivation and to build a ‘frontstage’ with more open and socially situated ways of objectivation and a backstage of more scientistic-calculative objectivation practices. This specific objectivation function of meta guidance documents can be well exemplified by looking at the Code of Practice of Openness. The Code argued that the FSA’s new transparent and open approach of knowledge production and decision-making was consistent with established guidance on formal quantitative risk assessment:

> ‘This is in line with the conclusions of the Review of Risk Procedures used by the Government’s Advisory Committees dealing with food safety, led by the Chief Scientific Advisor, Sir Robert May’ (FSA 2001c: paragraph 3.4)

This sentence, which popped-up in the Code’s paragraph dealing with the ‘openness’ of the agency’s scientific advisory committees, may seem inconspicuous even to the observant reader, who may be unfamiliar with the ‘guideline jungle’ and hence unaware of the friction that occurs here: namely, the friction between the chief scientific advisor’s conclusions on risk

procedures, which follow a calculative objectivation mode, and the social objectivation mode so much highlighted in the FSA's Code of Practice on Openness. Concealing this friction is achieved by simply referencing the government's chief scientific advisor's report instead of clearly setting out and explaining why and to what extent the FSA code relates to the named 'risk procedures'. Only when looking at the cited 'May report' in more detail do we begin to see through this 'concealment':

> 7. It is *sometimes, but by no means always,* appropriate for risk assessments to be highly complex exercises [i.e. exercises in which the evaluative judgment of experts also plays a central role]. The value of formal risk assessment lies in the rigour with which the hazards and the populations exposed are identified, risks are estimated and uncertainties exposed. However, the outcomes of some risk assessment exercises may appear to provide clear and precise information about the level of risk, when this is not the case. If little hard scientific data was available for the risk assessment process, then the outcome will be as imprecise as the assumptions and judgements that went into it. (May 2000b: 3-4, my emphasis and supplement)

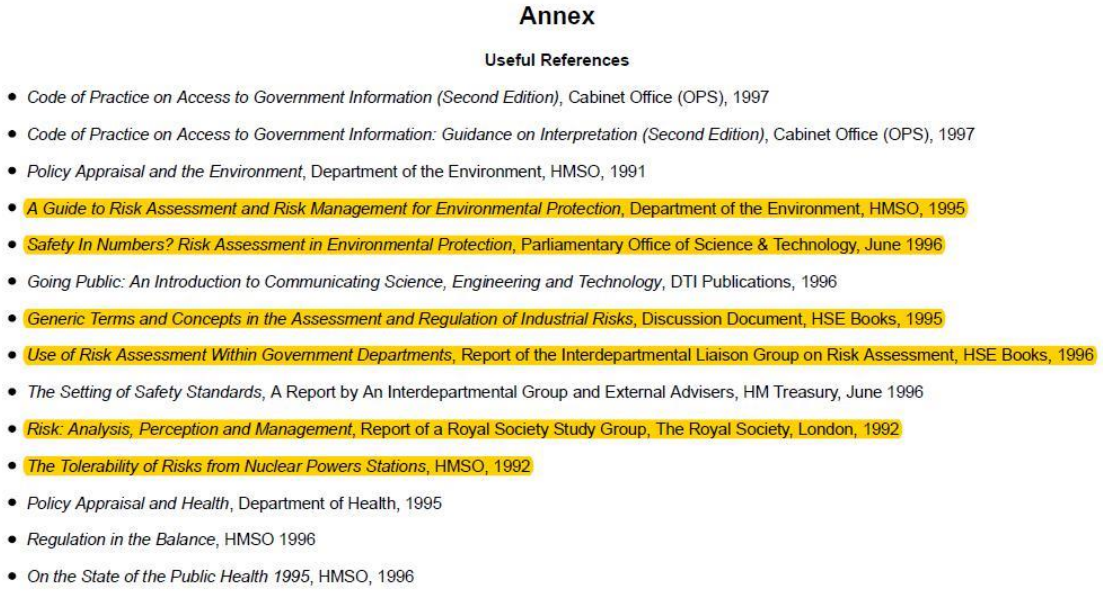
Paragraph 7 of the May report discusses the 'value' of the quantifying and probabilistic 'formal risk assessment' approach, which understands evidence as a narrow and strictly scientific undertaking based on probabilistic calculations – compared to more complex expert judgement-based approaches. The 'value' of 'formal risk assessments', it is being argued, lies in the 'rigour' of hazard and exposure assessments. Only when 'hard scientific data' are lacking – which here is framed as an exception – the value of conventional scientific risk assessment is diminished and 'more complex procedures' appropriate. Hence, this differs profoundly from what is represented as the innovative – and standard – way of knowing food risks in the agency's 'Code of Practice in Openness'.

The next paragraph in the Code of Practice in Openness' claims to provide the critical reader with some clarification, yet, once again, we are referred to a further guidance document:

> 8. When carrying out risk assessments, committees should therefore bear in mind the principles set out in the Office of Science and Technology (OST) guidelines on 'The Use of Scientific Advice in Policy Making'. These principles are particularly relevant where there is scientific uncertainty, a range of scientific opinion and/or potentially significant implications for sensitive areas of public policy. (May 2000b: 4)

Following May 2000 by conducting further research in the government's web archive, we come upon a snapshot of a two-page document, published back in 1997 – prior to the FSA's establishment – setting out principles applicable to all government departments when using and presenting scientific advice and evidence. Paragraph 9 is dedicated to risk assessment:

> 9. In practice, deliberations frequently involve a risk assessment of one type or another. Separate guidance on risk assessment is listed in the *Annex*. (May 1997: 2, my emphasis added)



Annex

Useful References

- *Code of Practice on Access to Government Information (Second Edition)*, Cabinet Office (OPS), 1997
- *Code of Practice on Access to Government Information: Guidance on Interpretation (Second Edition)*, Cabinet Office (OPS), 1997
- *Policy Appraisal and the Environment*, Department of the Environment, HMSO, 1991
- *A Guide to Risk Assessment and Risk Management for Environmental Protection*, Department of the Environment, HMSO, 1995
- *Safety In Numbers? Risk Assessment in Environmental Protection*, Parliamentary Office of Science & Technology, June 1996
- *Going Public: An Introduction to Communicating Science, Engineering and Technology*, DTI Publications, 1996
- *Generic Terms and Concepts in the Assessment and Regulation of Industrial Risks*, Discussion Document, HSE Books, 1995
- *Use of Risk Assessment Within Government Departments*, Report of the Interdepartmental Liaison Group on Risk Assessment, HSE Books, 1996
- *The Setting of Safety Standards*, A Report by An Interdepartmental Group and External Advisers, HM Treasury, June 1996
- *Risk: Analysis, Perception and Management*, Report of a Royal Society Study Group, The Royal Society, London, 1992
- *The Tolerability of Risks from Nuclear Powers Stations*, HMSO, 1992
- *Policy Appraisal and Health*, Department of Health, 1995
- *Regulation in the Balance*, HMSO 1996
- *On the State of the Public Health 1995*, HMSO, 1996

Figure 10: Useful references (May 1997)

Here we are provided with six further documents that are described as 'useful references' on risk assessment standards, some of which date back to 1992 (the yellow highlighted references in figure 9). Now it becomes very clear that the established standards, with their focus on exclusively formal-calculative risk assessment, have not been suddenly replaced by the set of guidance documents published in the early years of the FSA; rather those standards have been gradually displaced to the *backstage* via a chain of references to earlier governmental guidance documents still in effect. What this long chain of referencing meta guidance documents in fact does is that it eventually *blackboxes* the tensions and inconstancies between the two modes of objectivation without setting out how precisely they are to be coupled in a complementary way.

(3) Visualisation: Meta guidance documents manage to backstage these frictions not only linguistically but also visually. The FSA's 'Post-Phillips Framework' (FSA 2002a) is an example illustrating the importance of material devices for frontstaging the FSA's social objectivation mode. In 2001, the Board discussed how the 'lessons to be learned from the BSE Inquiry' should guide the FSA's work and decided that a 'Framework for Measuring Food Risk Management against Phillip's Lessons' should be developed (FSA 2002a). It provided the board with a ready-to-use checklist reducing the 4000-page-long Phillips Report to five stages of food risk management, each of which with specific 'control questions'. The framework was visualised by the scheme in figure 10 that immediately directs the critical reader's attention to the FSA' commitment to social objectivation.

As is evident from figure 10, one of the five 'key principles' applying to each of the five stages of risk management concerns the involvement of stakeholders – a key element of socially situated objectivation. The visualisation scheme suggests that the FSA is expected to produce objective knowledge out of both scientific risk assessment and the perspectives and experiences of those concerned by a specific issue. This is to be ensured by involving stakeholders throughout the entire process of agenda setting, risk appraisal, decision-making implementation and monitoring. However, the corresponding checklist, which provides a set of 'control questions' for each stage of risk analysis and management, puts a strong emphasis on asking the FSA staff to undertake 'formal risk assessment' and to 'rigorously' weigh up costs and benefits in management decisions. Yet, the (possible) tensions between the socially consultative approach to knowledge production as invoked in the scheme and the calculative risk assessment mode requested by the control questions remain obscured behind the attention-grabbing surface of the visualisation scheme.

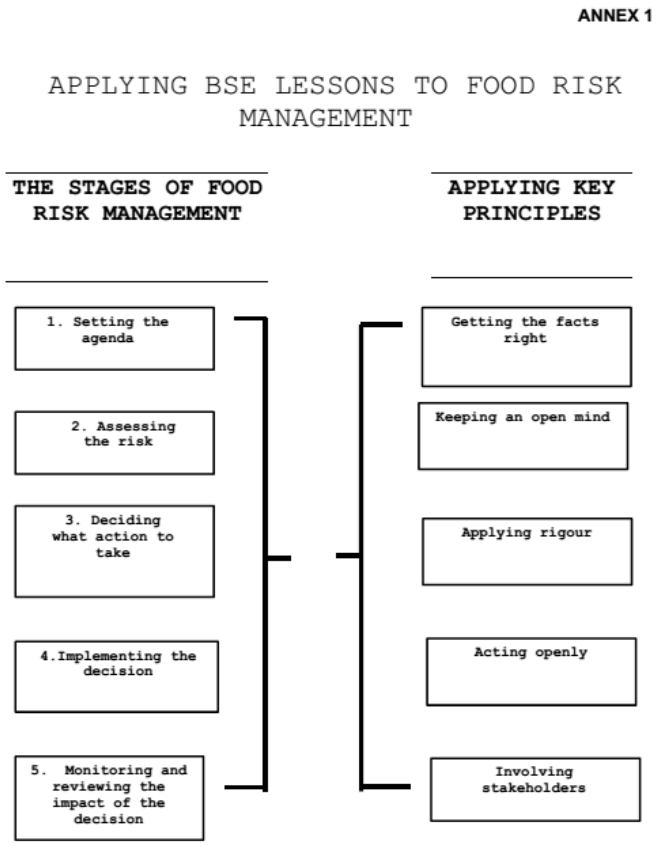


Figure 11 Applying the lessons of BSE to food risk management (FSA 2002a: 4)

Summing up, there are two interlinked ways in which meta guidance documents can be understood as a practice of objectivation. First, they formulate how the FSA should conduct its knowledge production and decision-making processes at the science-policy interface. They hence construct the FSA's principles of socially situated knowledge production as a seemingly factual norm guiding its inner workings. Second, they visualise and highlight principles of socially situated knowledge production, while conceal tensions that might emerge from parallel references to more calculative objectivation modes. They do so by deploying the linguistic-material devices of (1) lack of linguistic precision, (2) referencing and (3) visualisation. Moreover, the FSA's consultative social objectivation mode codified through meta guidance documents also constituted a representative claim on behalf of 'stakeholders'. These were deemed to have legitimate social interests and valuable perspectives to the included into knowledge production. In line with the FSA's overall main principle of 'putting the consumers first' consumers took a prominent position among these. In this sense,

objectivation through meta guidance documents was also a practice closely related to the FSA's representative claim on behalf of the 'citizen consumer'.

Establishing objectivity as something instantaneously evident and transparent to the general public's eye

A further key, if not the most important, function of the FSA's founding meta-guidance documents was, the codification of a specific notion of objectivity as something instantaneously evident and transparent to the general public's eye. While hitherto this aspect was only briefly covered in this close-up analysis, it will be illustrated in detail in what follows.

From its very beginning, the FSA used its meta guidance documents to objectivate and 'visibilise' its commitment to far reaching public transparency. The agency sought to invoke a reconfigured understanding of objectivity in regulatory science as something instantaneously evident and transparent to the general public's eye. With this, the FSA attempted to demonstrate the break with the 'old' practice of 'objective' regulatory science that had been discredited in the wake of the BSE crisis, as I have described in the introduction. According to the old practice of regulatory science, government scientists and experts were granted the authority to produce and package their work to make it 'objective' in a supposedly arcane domain of backstage bureaucracy. In contrast, the FSA's reconfigured way of establishing objectivity in response to the BSE crisis was based on three elements (1) holding open meetings of the agency's governing board and its scientific advisory committees, (2) the disclosure of all agendas, papers and minutes, and (3) public advice and 'risk communication'.

(1) Holding open meetings: The FSA's policies on holding 'open meetings', a 'revolution' within Whitehall at that time (Hajer 2009b: 138), were detailed in the agency's 'Code of Practice on Openness'. It presents how the FSA would approach its general commitment to 'operate in an open and transparent way'(FSA 2001c, para. 3). In a paragraph titled 'Public meetings', the code says that 'the Board of the Food Standards Agency will hold its decision-making meetings in public' and that it will 'also hold other open events which anyone may attend', both of which 'will be posted on the FSA's website' (FSA 2001c:para. 3.3.). Regarding the formally independent scientific advisory committees, the code holds that the FSA will likewise 'encourage our advisory committees to be open at all stages of the risk

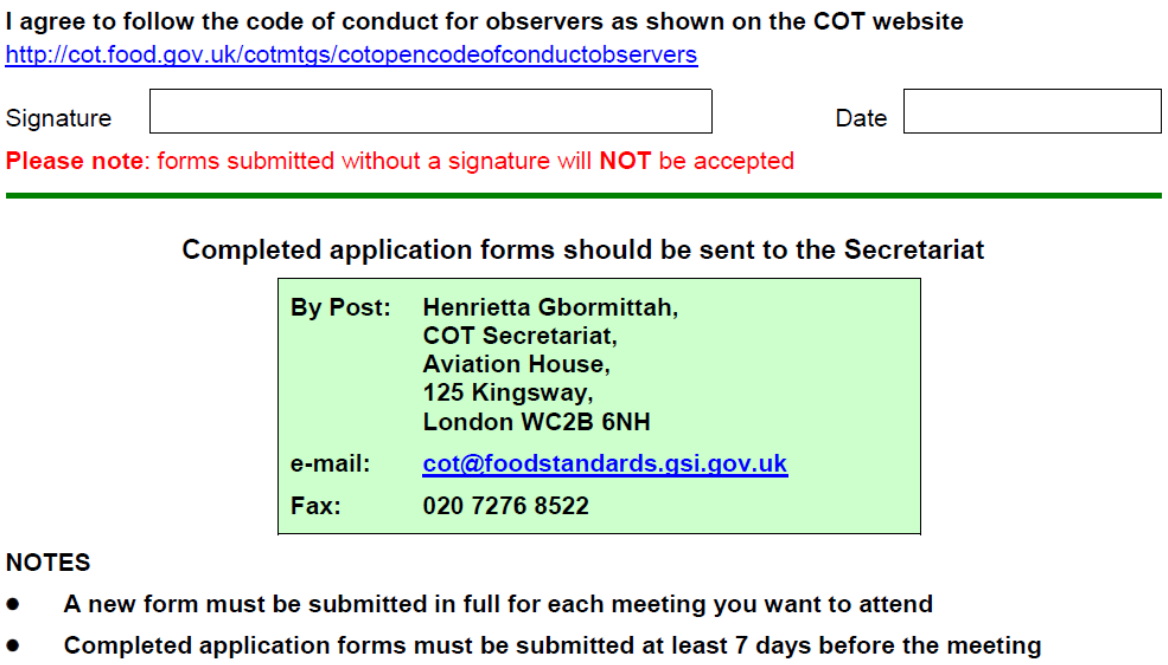
assessment process and in their consideration of options for risk management'[132] (FSA 2001c:para.3.4.). At first sight, these provisions suggest (or at least leave open) that interested actors have the possibility to attend and actively contribute to the FSA's knowledge production processes 'on the ground'.

However, the practical application of these provisions shows that this does not imply that there were no conditions attached to the participation of interested persons in the FSA's knowledge production processes. This became particularly apparent to me when I planned to attend my first open meeting of one of the FSA's scientific advisory committees. In advance of the meeting I wrote to the committee secretariat asking for the scheduled time and the agenda and papers of the meeting. In response, the committee secretariat sent me a 'letter to the procedures of attending a COT [Advisory Committee on Toxicology] meeting' which pointed out:

> 'The procedure for applying to attend a COT meeting is described at http://cot.food.gov.uk/cotmtgs/cotopenmeetingprocedures. Please note that after the closing date for applications, the Secretariat will write to you with an invitation or an explanation if attendance at this meeting is not possible. The invitation will include all necessary information on Committee procedures and admission to the building'.

Hence, interested representatives or individuals had to formally 'apply' for their attendance and respect the 'committee procedures'. The linked webpage further asked the interested observer to download and fill in the application form to attend the open meeting, which also required her/him to confirm with signature that she/he agrees to follow the 'code of conduct for observers' and to submit the form at least 7 days before the meeting. Furthermore, if their application is successful, interested representatives or individuals are invited as '*observers*' rather than active contributors as figure 12 illustrates:

[132] However, that is of course not to say that all the meetings of the agency's governing board and scientific advisory committees would be held in public; rather, the code says that 'policy decisions (…) will be taken by the Board only following discussion in Open Session' (FSA 2001c:para.2.7.). Hence, it says that there must be at least one open meeting in advance of the final decision-making, while closed meetings can be held to review complex issues involving commercially sensitive information (FSA 2001c).



I agree to follow the code of conduct for observers as shown on the COT website
http://cot.food.gov.uk/cotmtgs/cotopencodeofconductobservers

Signature Date

Please note: forms submitted without a signature will **NOT** be accepted

Completed application forms should be sent to the Secretariat

By Post: Henrietta Gbormittah,
COT Secretariat,
Aviation House,
125 Kingsway,
London WC2B 6NH

e-mail: cot@foodstandards.gsi.gov.uk

Fax: 020 7276 8522

NOTES

- **A new form must be submitted in full for each meeting you want to attend**
- **Completed application forms must be submitted at least 7 days before the meeting**

Figure 12: Snapshot from the procedure for holding COT meetings in open session (COT 2014)

The advisory committee's webpage explains the committee procedures that apply to observers in detail. It begins by stating that:

> 'The purpose of committee meetings being held in open session is to increase the visibility and transparency of the committee's work and to enable interested parties to hear the committee's discussions. The meetings **are not intended to provide a forum for independent observers or pressure groups to present their views on a subject to the committee.**
>
> If an interested party wishes to submit information relevant to a topic for consideration by the committee, they are welcome to do so but it should be submitted in writing to the secretariat at least seven working days before the meeting. The Secretariat will discuss with the Chairman the most appropriate way to present the information to the committee and the Chairman's decision will be final' (COT 2014).

This reveals two important insights into the FSA's practice of transparency-based objectivation: First, the FSA's policy on holding open meetings actively invokes an understanding of objectivity as something instantaneously evident and transparent to the general public's eye. Second, its policy on holding open meetings is simultaneously productive of a specific kind of subjectivity, namely that of passive observers who act as

'witnessing audiences' of the FSA's open and transparent approach to risk assessment. These provisions hence attempt to engender public trust in the objectivity of the FSA's workings by allowing interested audiences to directly watch how it produces its analyses and decisions regarding food-related questions. All those interested in or even mistrustful of the FSA can directly enter these processes and thereby convince themselves of the objectivity of the agency's workings.

This practice of objectivation reminds us of Shapin & Schaffer 1985, who when analysing the scientist Robert Boyle's air-pump experiments, identified the technique of 'public demonstrations' as a central device for objectifying experimental knowledge production – 'a convention of knowledge production prefiguring science-society relations in Britain for hundreds years to come' (Straßheim & Korinek 2016: 107). The public demonstration of Boyle's air-pump experiment constituted a collective act of witnessing 'the production of knowledge visible as a collective enterprise' (Shapin & Schaffer 1985: 78) and allowed for an extension of the witnessing experience beyond the laboratory 'to the many, and in principle to all men' (Shapin & Schaffer 1985: 25). In so doing, Boyle established scientific knowledge production in 17th century Britain as something transparent and objective. Just as in Shapin and Schaffer's account of the emergence of criteria of objectivity in experiments through public demonstrations at the birth of modern science, the guidance document envisages the practice of holding 'open meetings' as 'live public demonstrations' of the FSA's objectivity – at a time, when the vanished trust in the objectivity of regulatory science and governmental regulation of food safety had to be newly built from the scratch.

Of course, as indicated above, the guidance documents also provide for 'closed' and non-public meetings that may precede the open meetings. Thus, equally to Boyle's staged air-pump experiment before an audience of invited dignitaries at the newly opened Royal Society in London in 1660, the FSA's public meetings were designed as carefully staged performances of transparency. This staged demonstration of transparency required, however, a specific kind of audience: a witnessing audience that is fundamentally suspicious towards government institutions but values the transparency-based possibility to watch (and thereby witness) the staged expert deliberations right before its very eyes. It means that the witnessing audience is willing to watch and attest to the objectivity with which the FSA's advisory committees conduct risk assessment – yet without interacting with the experts during their deliberations.

In this sense, the codification of holding open meetings through meta guidance documents is also constitutive of a representative claim, according to which the FSA positions itself as the embodiment of an 'objective' source of knowledge produced in the 'public interest' right before its suspicious constituency.

(2) *Disclosure:* Moreover, the FSA's guidance documents contain far-reaching provisions that require the disclosure of all agendas, papers and minutes produced by its governing board and its advisory committees. They provide the public (both the 'general public' as well as 'stakeholders') not only with access to information but with direct access to documents (FSA 2001c, 2001n). This marks a substantial change in governmental practices. By committing itself to the right to information about its internal knowledge production and decision-making processes, the FSA demonstrates its commitment to the public's right to comprehensive information and not just carefully crafted public statements and press briefings. It is hence on the grounds of comprehensive disclosure obligations that an image of objectivity is conveyed to the newly established FSA: By disclosing information the Code of Practice on Openness argues, that citizens are enabled 'to see the basis on which decisions have been made' and 'make an informed judgement about the quality of our processes and decisions' (FSA 2001c: Annex). As this quotation shows, the FSA's disclosure policies attempt to reproduce the apparent 'immediacy of experience' given in face-to-face demonstrations via the medium of disclosed working papers. Here, objectivation through transparent demonstrations is no longer limited to directly experiencing the agency's workings. The disclosure policy allows for objectivation beyond the confines of face-to-face demonstrations, which is accomplished by using notably digital information and communication technologies. These allow citizens to virtually 'witness' the objectivity with which the agency's conducts its inner workings 'at distance', as is exemplified by the following illustration from the agency's Code of Practice on Openness:

4. How you can obtain information from the Food Standards Agency

4.1 We publish a wide range of information on our website, www.foodstandards.gov.uk. We will provide, on request, hard copies of any such information to people who do not have Internet access (please see paragraph 4.5 below).

4.2 We publish a range of free documents in paper versions, including consultation documents, proposals for European Community regulations, leaflets and factsheets for consumers and others, regular bulletins covering the range of our activities, detailed reports of individual food surveys, and our research requirements. Our organisational chart is available on the Internet.

4.3 Requests for copies of any of the above information should be made in writing, by post, fax or e-mail:

In England, to:
Food Standards Agency
Aviation House

In Wales, to:
Food Standards Agency (Wales)
1st Floor

Figure 13: Snapshot of the FSA's disclosure policy in its Code of Pratice on Openness (FSA 2001c: 4)

Thus, just as in Shapin and Schaffer's account of Boyle's airpump experiment, where the 'literary technology' of experimental reports was used to multiply the witnessing experience, objectivity here is constituted by material and virtual formats of access and disclosure that enable 'witnessing at distance'. Likewise, objectivation based on disclosure generates a particular kind of witnessing audience that attests the FSA's trustworthiness as an independent regulatory agency 'putting the consumer first'. In this case, contrary to objectivation based on holding open meetings, it is an audience that is not only interested in passively 'witnessing' the FSA's workings on the basis of disclosed information but also analysing the information and using it in order to keep the agency in check in order to question and criticise it – here without the tight framework imposed on its open meetings. Objectivation through guaranteeing access to information hence assumes an audience that is hungry for information and moreover has the capacity to use this information to monitor if the FSA works in the 'public interest' – which is, in line with the agency's main mission, working for the good of consumers.

The following passage under the subheading 'Our working practices' from the FSA's Statement on General Objectives and Practices is a prime example of this tight coupling

between disclosure-based objectivation and the evocation of both individual consumers and consumer interest groups as 'information-based accountability holders':

> 'We will be accountable to the Westminster Parliament, the Scottish Parliament, the Welsh and Northern Ireland Assemblies**, and consumers'** (FSA 2000h: 5, my emphasis).

The quoted passage simultaneously names consumers (both individuals and interest groups) as well as national and regional parliaments, i.e. with those who traditionally hold government agencies accountable within parliamentary democracies. Objectivation through public transparency and accountability hence is invoked as a form of distinguished 'consumer accountability' – consumers are seen as 'stakeholders' that should be given the opportunity 'to see and comment on the way in which we conduct our business' (FSA 2000h: 6). This quotation shows that disclosure and access to information rights are not only a device for objectifying the FSA's inner workings before relevant publics; they are also tightly bound up with the reconfiguration of state-society relations: information rights are envisaged as serving notably 'citizen consumers' who are interested in monitoring and controlling state activities as a micro-mechanism of accountability. Disclosure here allows individual citizens and stakeholders to keep in check a form of governance that relies on 'independent regulatory agencies' in order to rebuilt public trust, rather than on exclusively parliamentary-controlled government departments. At the same time, this assumes individual citizens and stakeholders being interested in receiving and capable of assessing information provided by the FSA and controlling the FSA on this basis. In this sense, the FSA's disclosure practice also invoked the 'knowledgeable consumer' side by side the 'citizen consumer'.

(3) Risk communication: The FSA's transparency-based objectivation mode relies on a third main element, namely public risk communication and consumer advice. From its very beginning the FSA committed itself to 'pioneer new approaches to communicating risk' (interviews official 23 – FSA). From the outset it was clear for the FSA that this would involve

a separate research programme[133] on risk communication. The reason behind this was that the FSA regarded it as essential that its risk communication activities were both based on scientific evidence and understandable for its constituencies:

> The reputation of the Food Standards Agency will be dependent in large measures on the *quality of the science* that it uses to inform the development of, to underpin, and to help in the implementation of, its various policies. We therefore believe that the Agency's research strategy should be to ensure that (…) *it has clear mechanisms for communicating the outcome of work that it commissions to consumers and other stakeholders and for explaining how this impacts on its policy decisions*. (FSA 2001o: 19)

Like the two other transparency-based objectivation modes, public risk communication is intended '[t]o help achieve the Agency's aim, to earn people's trust in what we do and how we do it' (FSA 2002s: 26). The FSA's 'Approach to Risk' contains a paragraph, which in this respect, says:

> 'We will inform the public as early as possible after the issue arises. We will always aim to explain clearly and in plain language what the issues are, what our opinion is, and what we propose to do. We will also explain whether there is any action which the public needs to consider' (FSA 2001r:2).

Hence, communicating about food-related risks in a manner that counts as evidence-based and transparent and is regarded of practical relevance for consumers is considered a crucial part of the FSA's work. In accordance with the Food Standards Act, this comprised a broader range of issues, beyond communicating about food safety risks. The FSA's risk communication covered all 'food-related risks to public health' and also all activities 'advising consumers to make their own choices' on different food-related issues (FSA 2001n: paragraph 5), notably providing them with 'appropriate advice on nutrition and diet' (FSA 2000g: Annex 1). Risk communication hence also involved –as I will show in detail in the next chapter (5.3.2.3) –

[133] In order to effectively carry out its functions in risk communication related to food safety and other issues, the FSA's first science strategy has a separate budget of 1.6 m pounds (out of 27 m pounds research budget in total) that is reserved for 'building consumer confidence through risk communication' and 'public information and labelling' FSA (2002s). The strategy says that the FSA's research was to be focused on two main aspects: first, on developing 'ways of communicating risk so that consumers are better able to understand the risk messages' put out by the FSA, and second, on 'determining how best to communicate those risks in a manner that inspires consumer confidence and establishes trustworthiness' FSA (2002s).

actively ‘support[ing] consumer choice through promoting accurate and meaningful labelling’ (FSA 2002q: 4).

Thus, the FSA’s mode of public risk communication assumes a specific social collective as the FSA’s main constituency: namely a constituency of knowledgeable consumers ‘that are given the information they need to make choices for themselves’ (FSA 2001r); similarly (FSA 2001c). At the same time, however, transparent risk communication is an objectivation practice that seeks to responsibilise consumers. By communicating transparently about food-related health risks and by providing consumers with independent practical advice, consumers are simultaneously expected to act as knowledgeable subjects who can make ‘informed choices’. The following quote from the FSA’s Statement of General Objectives and Practices exemplifies how transparent risk communication and the responsibilisation of consumers– are tightly intertwined within the provisions of the guidance; in this respect, paragraph 3 states:

> By being an independent voice and making public health in relation to food our top priority, we will ensure that we always put the consumer first. By giving consumers information we will enable them to make informed choices about the foods that are best suited to their needs. By making information publicly available, we will also ensure that stakeholders know why decisions are being taken, allowing them to respond constructively (FSA 2000h:4- 5).

Thus, the empowerment of consumers (‘we will ensure that we always put the consumer first’) by providing them with independent advice and information is coupled with the expectation that consumers will act rationally (‘make informed choices about the foods that are best suited to their needs’) and in a responsible way (‘respond constructively’) as a result of this sort of advice and information.

5.3.2.3 Strategic frameworks & action plans: negotiating a working consensus

In the following I will show how the FSA drew on the share- and negotiability of specific strategic frameworks and action plans in order to perform the coordination of a social working consensus and to frontstage its transparent and open social objectivation mode. I will do so by using the example of the FSA’s process towards establishing its prominent ‘traffic light labelling’.

In 2001, the FSA's governing board adopted the 'Nutrition Strategic Framework' in order to establish itself as a 'key player in the nutrition field'[134] (FSA 2001d, 2001i). The framework's starting point was a 'substantial body of evidence indicating that changes in food habits could lead to significant improvements in the health of the population' (FSA 2001d: paragraph 7). It was the first document to define the agency's objective with respect to its remit on nutrition, as follows:

> 'encouraging and facilitating the adoption by the population of a healthy, balanced diet as a means of improving the health of the UK population.'

The framework named three main strategic areas of FSA activities on nutrition. The first area related to developing a 'sound evidence base for action to promote a healthy diet', notably through setting up new research programmes and surveys on the 'health implications of dietary behaviour' (FSA 2001d: paragraph 10). The second area referred to the development of 'appropriate means of informing the general population' on 'healthy eating and nutrition'. The third area related to 'identifying and addressing barriers to changing dietary behaviour'. All activities within these three areas should identify 'risk groups' with special problems, such as 'ethnic groups, the disadvantaged children and elderly' and establish collaborative partnerships with 'a large number of stakeholders' (FSA 2001d: paragraph 5-7). Thus, with these three foci the 'Nutrition Strategic Framework' marked a shift towards the FSA's commitment to changing consumer behaviour, notably that of 'specific risk groups'.

Focusing on changing consumers' behaviour towards healthy eating, the framework emphasised that the FSA would 'need to take into account a complex mix of economic, cultural, sociological and psychological factors' (FSA 2001d: paragraph 11). Acknowledging this social and epistemic complexity, the nutrition framework proposed to set up – jointly with the UK health departments – a Nutrition Stakeholder Forum, which included 'all important stakeholders'. These were supposed to comprise consumer and public health representatives (who were partly already members of the FSA's consumer committee) and food industry representatives. Bringing all stakeholder groups in nutrition together on a regular basis, this

[134] Nutrition was a thematic area where the FSA had shared responsibilities with the national health departments, as I have described in the introduction (chapter 0).

forum was mandated to develop – in cooperation with the FSA and through additional dialogue with external stakeholders – the details of the strategic framework in the form of more issue-specific action plans (FSA 2001d: paragraph 3). Moreover, it was stressed that these action plans would explicitly still be up for further negotiation with external stakeholders from all social spheres. Thus, the framework was the FSA's first manifestation of its focus on behavioural approaches reflecting New Labour's early behavioural discourse. As indicated in the chapters 5.1.1 and 5.1.4, the New Labour government initially put a strong focus on questions of how public deliberation and consultation could be used as an input for the design of behavioural policies.

In the following, I will trace the process of developing the FSA's 'nutrient profiling model and signposting labelling scheme', which took place under the banner of the FSA's Nutrition Strategic Framework from 2001 to 2006. It aimed at introducing a nutrient profiling based on a clear 'front of pack signposting', a coding system indicating healthy and less healthy foods 'at a glance'. As such the nutrition profiling was expected to act as a prompt to consumers' behavioural change towards healthier eating.

As we will see, the process ranging from publishing the Nutrition Strategic Framework to arriving at a guidance on 'front of pack signposting' relied on a differentiated network of action plans and related board reports that were deployed to establish a working-consensus-based knowledge on how to design the FSA's nutrient profiling scheme. We will also see how difficult it was to find 'common ground' in these coordinative processes.

The Action Plan on Food Labelling and the failure to 'establish common ground'

From its very beginning, the FSA had regarded food labelling based on transparent nutrient profiling as a key tool to pursue the nutrition framework's objective of 'encouraging and facilitating the adoption by the population of a healthy, balanced diet' (FSA 2001d: paragraph 6). In 2002, it published an 18 point 'Action Plan on Food Labelling' (FSA 2002b). The Action Plan stipulated the development of a transparent nutrient profiling that would provide the definitions of 'foods high in fat, salt or sugar' and 'healthier options' (FSA 2002b:6). [135].

[135] Nutrient profiling was hence seen as a necessary precondition to implement many of the initiatives of the nutrition framework relating to food labelling (FSA 2002b).

The planned nutrient profiling model was intended to specifically apply to 'nutrition labelling and promotion of foods to children' as one of its highest priorities. This reflected the nutrition framework's emphasis on specific risk groups and the broader scientific insight that child obesity constituted a major public health problem in the UK (Edmunds et al. 2001; House of Commons Health Committee 2004; Stamatakis et al. 2005). In light of the public salience of 'childhood obesity', the action plan said that there was 'considerable concern that the way foods that are high in fat/salt are promoted to children is undermining healthy eating advice and contributing to childhood obesity and long-term health problems' (FSA 2000b: paragraph 21). However, facing immediate negative comments from the majority of the food industry, the FSA nutrition division was aware that nutrient-profiling-based labelling would be a highly controversial and complex long-term project that could only be approached gradually (interview member 24 – NGO).

In order to cope with this problem, the Action Plan on Food Labelling introduced a specific task force composed of both consumer and industry representatives from its Nutrition Stakeholder Forum, which was abolished at the same time. This task force was mandated to develop a 'code of practice on promotion of foods to children' (FSA 2002b: 9). Moreover, it required the FSA to commission consumer research on nutrition labelling 'in collaboration with consumer groups and industry' (FSA 2002b: 9). Yet, as the progress reports on implementing the food labelling action plan show, this quickly proved to be a rather challenging undertaking due to two conflicts that had rapidly emerged during the stakeholder task force's discussions (FSA 2002b, 2004e):

First, there were strongly polarised views on the actual effects of promotional activity on children's diets – and hence on the very definition of the problem. Second, the question of which measures were appropriate to cope with negative effects was controversial, too. Even among those who agreed that food promotion had negative effects on children, there were divergent views on the question of which solutions were appropriate. Against this backdrop, the first 'progress report' on the Food Labelling Action Plan admitted that 'it has *not yet been possible to establish common ground* as a basis for substantive discussions, on best practice'(FSA 2002b: 9). This illustrates the way in which the FSA attempted to use action plans as devices of social objectivation designed to cope with the epistemic and social

complexity surrounding many of its policy problems – and how difficult it was to find 'common ground' in these coordinative processes.

Notwithstanding the high contestedness of the issue among those concerned, the FSA eventually achieved to arrive at a situational working consensus among different stakeholders on a 'nutrient profiling scheme'. Coordinating and agreeing a separate Action Plan on Food Promotions and Children was instrumental in this process. This action plan functioned as a 'coordinative boundary object' (Star & Griesemer 1989). In the following, I will show how, paradoxically, the successful deployment of the FSA's mode of 'open, socially situated knowledge production' was premised upon both the selective incorporation of calculative evidence and different ways of achieving socio-epistemic closure. As we will see, closure could be legitimately made for a specific reason: The FSA successfully claimed that this closure occurred in the name of consumers and hence in the name of those whose common good the FSA claims to advocate for.

The Action Plan on Food Promotions and Children as a 'coordinative boundary object'

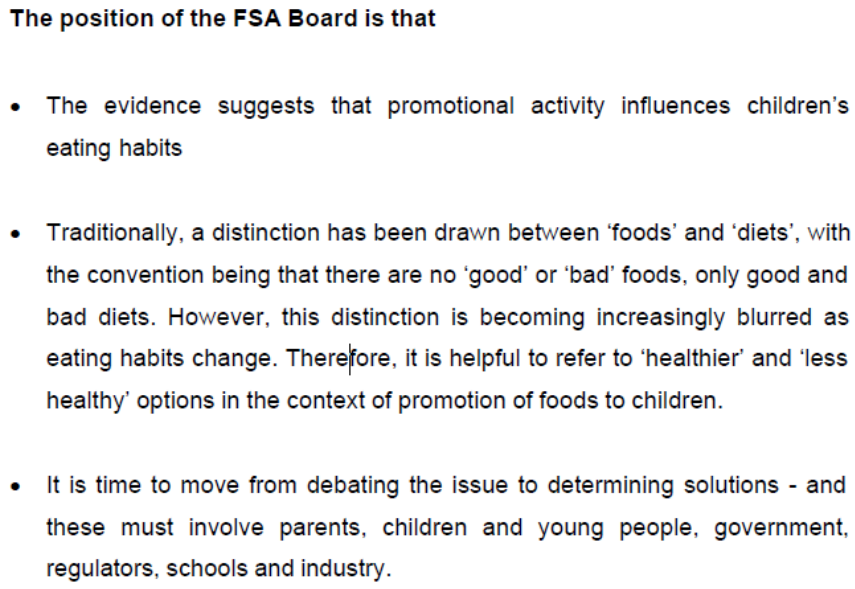
In March 2004, the FSA presented a draft of its Action Plan on Food Promotions and Children to be agreed by the governing board (FSA 2004h). This action plan was produced and deployed as a 'coordinative boundary object' in a different way than the Action Plan on Food Labelling. Unlike the FSA's previous attempt to mandate the 'Nutrition Stakeholder Forum' to develop further the agency's labelling plan, the new action plan did not aim at establishing a working consensus on nutrient profiling among *all* concerned societal stakeholder groups alike from the outset. Instead, it aimed at establishing an initial working consensus among a selected group of public health experts and a broader range of individual consumers and organised consumer representatives only. The draft action plan was attached to a so-called 'board decision paper', in which the FSA put forward its arguments for the adoption of the plan. These arguments were based on two forms of evidence that I will look at in more detail in the next sections: (1) a body of more calculative-mechanical evidence on how to define the very problem at hand – i.e. whether there were negative effects of promotional activity on children's diets and (2) a body of social evidence on concrete policy measures. The way these two bodies of evidence were incorporated into the FSA's Action Plan on Food Promotions and Children will be presented in detail in the four following steps:

(1) Establishing a working consensus: coming to terms with conflicting problem definitions based on the epistemic closure enabled through a 'systemic review'

Considering the conflicting views on the impacts of food promotion to children on their diets, the FSA's executive produced a systematic overview over this question (FSA 2002n: 10). On this basis, it drafted a 'board decision paper' on the proposed action plan. Here, it suggested to its governing board to adopt the three bullet points depicted in figure 14 as the main elements of its position on that matter[136] (FSA 2004h: annex 1). By so doing, the FSA attempted to achieve epistemic closure on the problem definition both linguistically (by formally articulating 'The position of the FSA board') and materially by virtue of the format, which consisted of a few short bullet points.

The suggested position clearly took sides with the consumer representatives and public health professional's view, namely by claiming: (1) that there was a (negative) effect of food promotions on children's dietary behaviour, (2) that there were in fact 'healthier' and 'less healthy options in the context of food promotions to children, and (3) that it was now 'time to move from debating the issue to determining solutions' (FSA 2004h: annex 1). As pointed out above, these claims were disputed on the part of the majority of industry stakeholders.

[136] In order to cope with the above described double controversy relating to both the very definition of the problem and problem-solving measures, the action plan is divided into two parts – first, a short introduction and second, eight paragraphs that define proposals and recommendations for action addressed to different actors involved in and affected by food promotions to children, such as the FSA itself, Ofcom (the UK broadcast media regulator), broadcasters, food manufacturers and retailers.



The position of the FSA Board is that

- The evidence suggests that promotional activity influences children's eating habits

- Traditionally, a distinction has been drawn between 'foods' and 'diets', with the convention being that there are no 'good' or 'bad' foods, only good and bad diets. However, this distinction is becoming increasingly blurred as eating habits change. Therefore, it is helpful to refer to 'healthier' and 'less healthy' options in the context of promotion of foods to children.

- It is time to move from debating the issue to determining solutions - and these must involve parents, children and young people, government, regulators, schools and industry.

Figure 14: Snapshot from the board decision paper on the 'Draft Action Plan on Food Promotions and Children' (FSA 2004h: annex 1).

Furthermore, the 'board decision paper' contained a one-page-long section titled in bold **'The Evidence Base'.** It was intended to provide a valid justification for the board's position. Here, three different underpinning bodies of evidence were cited: (1) a guideline-based 'systematic review of evidence', (2) statistics on TV advertising of foods, (3) written minutes of academic seminar. Each of these three bodies of evidence were explained in further detail in three annexes.

The first body of evidence was an agency-commissioned 'academic review of the available evidence on the impact of promotional activity on children's food related behaviour' led by renowned Professor Hastings ('the Hastings Review'). Here, the attached executive summary concluded that promotional activity aimed at children did in fact have a 'significant effect on their preferences, purchase behaviour and consumption, and these effects were apparent not just for different brands but also for different types of food' (FSA 2004h: 4). This finding, the FSA maintained, was reached through the *systematic review methodology*. This used both strict technical guidelines and a 'multi-disciplinary approach, drawing on nutrition, marketing, consumer behaviour, food policy, psychology, communications and economics' (Hastings et al. 2003: 23).

The second body of evidence was calculative evidence in the form of *statistics on TV advertising of foods* gathered by the FSA. Here, annex 4 showed different 'snapshots of statistics' – in the form of tables and bar charts – all showing relevant data supporting the view that food promotion, notably TV advertising, had increased and that the advertised diet consisted of the 'less healthy big five' (confectionery, soft drinks, pre-sugared cereals, fast-food and savoury snacks).

The third body of evidence was a summary of the conclusions reached by a 'highly reputable' academic review panel chaired by a renowned psychology professor from Cambridge University. It had been conducted to review conflicting research reports on the promotion of foods to children (FSA 2004h: annex 6). The board paper's annex contained the *written minutes of the review panel*. These documented that the 'independent review panel' supported the conclusions reached by the Hastings report against an industry funded review led by Professor Young. The panel's minutes concluded that: '[a]n apparent reason for the difference of opinion [between Hastings and Young] is that in reaching conclusions in this area, Hastings *took account of more studies* than Young (…)' (FSA 2004h: annex 6), my emphasis). Moreover, the review panel noted:

> 'that the two reviews are fundamentally different in approach (…) Hastings employed a systematic review methodology, seeking to ensure a comprehensive, transparent and as far as possible objective examination of evidence (…). In contrast, Young provided only a narrative review based on selected literature' (FSA 2004h: annex 6).

Thus, by invoking the Hasting study's systematic review methodology[137] that reviewed the greatest possible number of studies based on a clear protocol, the FSA was able to emphasise that the Hasting study had minimised subjectivity as a source of bias. Therefore, the FSA argued, the Hasting study profoundly differed from the weaker evidence of 'narrative reviews'[138]. Hence, as in Porter's concept of 'mechanical objectivity' (Porter 1995), the FSA

[137] This methodology was, as the likewise attached executive summary of the 'Hastings review' emphasised, 'borrowed from medical science, where great care is needed to ensure that particular treatments are really safe and effective, and ensure that every possible source of evidence is identified and rigorously evaluated' (FSA 2004h: annex 5).

[138] Narrative reviews, as used in the industry-funded study, it was argued, described and discussed the state of the science of a specific topic without systematically documenting the types of databases and methodological approaches or evaluation criteria used to conduct the review.

here used a mechanical-calculative objectivation in the form of the 'systematic review' in order to come to terms with the highly controversial problem definitions on the issue of food promotion and children's diets. It was on this basis, that justified its action plan against the critique of counter expertise, i.e. the above-mentioned industry-funded conflicting study.

Ultimately however, the guidelines-based systematic review was not portrayed to entirely 'speak for itself'. A strong emphasis was put on the role of the 'interdisciplinary research team' of the Hastings review and the judgement of the here involved experts. Far from 'being a solo effort', the minutes emphasised, the Hastings report would be based on a consensus reached within a whole interdisciplinary research team (FSA 2004h: annex 6). By so doing, it explicitly drew on the 'trained judgment' of and the consensus reached among the members of the interdisciplinary review panel. Thus, to arrive at a common problem definition the FSA embedded the mechanical-calculative objectivation mode of the systematic review method within an arrangement of socially situated objectivation. In the following section, I will show how it drew mainly on a socially situated mode of knowledge production in order to establish a working consensus on policy measures.

(2) Establishing a working consensus: up-stream consumer consultation on policy measures

The second part of the proposed 'Action Plan on Food Promotions and Children's Diets' determined what specific measures were to be taken and in what chronological order. As described above, the FSA had been confronted with conflicting views not only on the definition of the problem (the effect of food promotion on children's diets), but also on the question which problem solving measures were appropriate. To achieve a working consensus on appropriate policy measures, the original draft action plan underwent multiple public consultation and deliberation processes.

The FSA started the very first drafting process by initiating a wider range of 'up-stream consultations' with consumers on basic policy options. These were then summarised in the actual *draft* of the 'Action Plan on Food Promotions and Children's Diets', which had been prepared for the open board meeting. Three bodies of social evidence here were portrayed as the basis on which a social consensus on the action plan's provisions could be formed by involving a broad variety of consumer perspectives (see figure 14).

This presentation of the three bodies of social evidence was, however, also generative of different kinds of constituencies who at the same time acted as 'witnessing audiences' testifying the relevance of the action plan to the consumer good. As will be shown in the following, these comprised (1) interested individual consumers, (2) 'consumer representatives' and (3) 'low income consumers'.

First, as figure 15 (next page) shows, the FSA referred in paragraph 11 to a 'discussion paper' 'setting out possible policy options related to promotional activity that could affect children's diets and health'. The further details of this discussion paper were then to be found in Annex 7. Here it was said that in order 'to stimulate discussion' with the 'general public', interested individual consumers were invited to comment, vote and make further suggestions via an online comment tool on the agency's website.

Consultation on policy options

11. In November 2003 the Agency published a discussion paper (Annex 7) setting out the possible policy options in the light of the evidence outlined above.

12. The Agency's **Consumer Committee** advocated development of a package of practical measures and emphasised the need to obtain the views of less well represented groups before taking policy decisions. See Annex 8 for further details of the Consumer Committee discussions, and below (paragraph 13) for details of subsequent consultations with less well represented groups.

13. In addition, the following consultations were held:

- **Stakeholder meeting** See Annex 9
- **Various activities in Scotland, Wales and Northern Ireland** See Annex 10
- **Focus group discussions involving low income consumers, including teenagers** See Annex 11
- ***Diffusing the Diet Time Bomb* public debate, London** See Annex 12
- **Other surveys and correspondence** See Annex 13

Figure 15: Consultation on policy options, extract from the board paper 'Promotional Activity and Children's Diets (FSA 2004h: 5).

The following snapshot (figure 16) illustrates this consultation procedure using the example of policy options relating to food labelling:

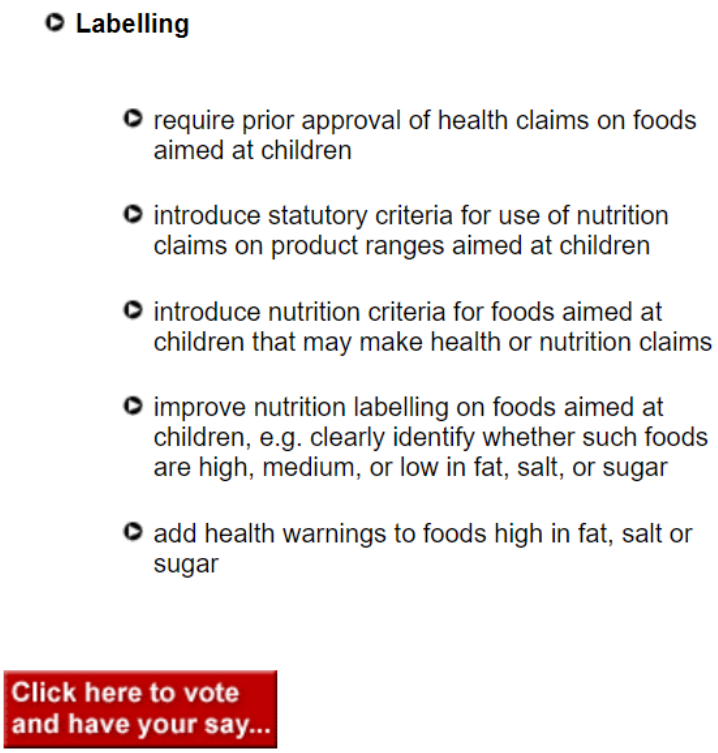


Figure 16: Online tool for commenting the policy options related to promotional activity that could affect children's diets and health (FSA 2003t)

Thus, this consultation procedure called forth 'interested consumers' who were willing to participate in the 'up-stream' consultation exercise. As figure 16 shows, these interested consumers found a 'Click-here to-vote-and have-your-say' button under each proposed policy option. This button then took the interested consumers through an electronic feedback form where they were able to make comments and not only to vote 'yes' or 'no' to each option but also to suggest an alternative option by expressing personal views. By so doing, the 'citizen consumer' was invoked. As documented in the annex, more than 300 submitted comments received from individual consumers 'informed' the proposed action plan.

Second, in addition to this, the paper presented to the board referenced a second consultation (see figure 15, paragraph 12), namely the consumer committee's discussion on possible policy options. Here, the paper provided a brief summary of the committee's position saying that it 'advocated development of a package of practical measures and emphasised the need to obtain the views of less well represented groups before taking policy decisions' (FSA 2004h: 5). This

invoked ‘institutionally recognised consumer representatives’ as subjects advocating consumers’ views on the matter at hand, while at the same time witnessing and attesting to the FSA’s socially situated objectivation mode. Thus, also this second consultation constituted a representative claim on behalf of the ‘citizen consumer’, here in the form of a collective body of consumer representatives consulted to contribute their views.

Third, the short summary then directly referred to further consultations conducted ‘with less well represented groups’ (FSA 2004h: 5), one of them being ‘[f]ocus group discussions involving low income consumers, including teenagers’ (see figure 15, paragraph 13). Reflecting the FSA nutrition framework’s overall focus on specific ‘vulnerable groups’ that were at a special risk of diet-related health problems, the focus groups conducted with low income consumers and particularly teenagers were intended to ensure – and publicly demonstrate – that the agency’s action plan was also relevant to the needs of these ‘less well represented groups’. Thus, the third consultation constituted a representative claim specifically on behalf of the ‘citizen consumer’.

Taken together, these three bodies of social evidence presented in the board paper served to objectivate the FSA’s ‘Action Plan on Food Promotions and Children’s Diets’ by demonstrating that the FSA had sought the widest possible range of views of consumers, hence those whose common good it claimed to advocate for. By integrating of consumer views into the draft action plan something that could be staged as a first working consensus was built. By so doing, the consultations also constitute a practice of representative claim-making.

These three up-stream consumer consultations were thus premised upon the socio-epistemic predetermination of involving only consumers instead of *all* social stakeholder groups. Also, we will later see that at the backstage the great epistemic openness displayed by the above analysed presentation of the consumer consultations, was in fact much more contested and subject to instrumental attempts to obtain consent to pre-defined solution frames (chapter 5.3.4.2).

(3) Establishing a 'social niche' providing room for establishing a situational working consensus and for empirical testing

Based on the joint basis of these upstream consultations, the FSA board agreed to publish the draft 'Action Plan on Food Promotions and Children's Diets'. As pointed out previously, a major point of the action plan was the development of a nutrient profiling model. Based on this nutrient profiling model, policy recommendations for the regulation of food promotions to children should be formulated and directed at Ofcom (the UK broadcast media regulator). Moreover, the proposed actions also included 'best practice advice for use by the food industry (…) on clear signposting of healthier and less healthy children's choices and of the use of high, medium, and low descriptors in nutrition labelling panels' (FSA 2004h: annex 1).

The draft action plan was supposed to undergo a further broad public consultation in order to agree the final action plan half a year later. While the above-illustrated preceding 'upstream consultations' had sought a broad range of consumer views, this subsequent consultation on the draft action plan was now about establishing a social 'working consensus' by seeking the views of *all* stakeholder groups, including the food industry, before the final action plan was to be agreed by the FSA's board (FSA 2004b). In the following I will take a closer look at how the insights gained through this consultation were incorporated into the board decision paper that suggested the FSA board to agree the final action plan.

The first part of the board decision paper included a five-page-long 'discussion of the consultation responses', which was supplemented by a 38-page-long annex documenting all the 94 received responses. The discussion began by emphasising that the FSA had succeeded in convincing all affected social stakeholder groups to participate in the written consultation: 'Ninety-four responses were received from a wide range of interests, including consumer groups, individual consumers, public health and education groups, public health professionals, food manufactures, food retailers, trade associations and advertising industry representatives' (FSA 2004b: 4). Remarkably, the paper did not evaluate the large number of received answers in a calculative form. Instead, the received consultation answers were presented to the reader in the form of a qualitative discussion weighing up the conflicting positions distilled from the multiplicity of answers. In so doing, brief summaries 'of the main general points' were given that predominantly related to the controversial nutrient profiling model:

> '(…) industry respondents disagreed in principle with differentiation of foods on the basis of nutritional criteria, arguing that distinction between foods high in fat, sugar or salt and healthier options contradicts advice based on the balance of the diet overall. On the other hand, many respondents from public health interests and consumer groups strongly supported the distinction, arguing that specific advice is necessary to achieve a rebalancing of the promotional environment for children (…).' (FSA 2004b: 6).

Small paragraphs such as this contrasted the opposing views of consumer and industry representatives on nutrient profiling. These were already well known from the FSA's initial consultations on the Nutrition Strategic Framework and the Action Plan on Food Labelling as well as from the discussions with the Nutrition Stakeholder Forum and its subgroups. However, notwithstanding the continued opposition of large parts of the industry, the FSA reinforced its view that nutrient profiling was an essential foundation of the agency's nutrition policy, which aimed at improving children's dietary behaviour.

> 'Agency-funded work on nutrient profiling is already under way to develop definitions of 'foods high in fat, salt or sugar' and 'healthier options' in the context of food promotions to children. A small ad hoc expert group of nutritionists, dietitians and stakeholder representatives is working on this project together with a team of consultants. (…) A number of signposting schemes are already in operation or planned; (…) The view is that the task, whilst difficult, is achievable. The final report is expected in August and will itself be consulted on as part of the implementation of the Action Plan.' (FSA 2004b: 6).

Remarkably, however, as indicated by this quote, the extension of the FSA's public consultation activities on its action plan to a broader spectrum of stakeholders was in parallel accompanied by the establishment of a 'small ad hoc expert group'. This group comprised selected academic experts as well as consumer and also the few 'traffic light friendly' industry stakeholders. So doing, the FSA underpinned its avowedly non-negotiable position on the need for a nutrient profiling by referring to the fact that the *'small', separately established 'ad hoc expert group'* had already agreed several concrete nutrient profiling models. So doing, the FSA made clear that, at this point, it was no longer about arguing on basic problem frames, but rather about acting and concrete questions of implementation ('The view is that the task, whilst difficult, is achievable').

The FSA's predominant socially situated objectivation mode was thus made-up of combining both extended public consultations aimed at involving an utmost breadth of social stakeholder groups and small 'social niches' of selected heterogeneous experts, which was separately convened in parallel. This 'ad hoc expert group' committed itself not just to producing shared knowledge and achieve a working consensus about the differentiation of foods based on nutritional criteria. The group also developed and tested a specific *material object,* namely a front of pack nutritional signpost labelling logo. It transformed the contestedness surrounding nutritional signpost labelling into a (temporarily) working consensus and inscribed it into an immutable object. By referring to this niche and the developed front of pack nutritional signpost labelling logo, the FSA could point not just linguistically to the consensus reached among the heterogeneous members of the expert group. Beyond this, it could also invoke the developed labelling logo as material inscription of this situational agreement.

The second part of the board's decision paper then briefly contrasted and evaluated specifically those arguments that were directly related to questions of the feasibility and implementation of individual sections of the action plan. Based on this, the paper set out proposals for smaller revisions. For instance, on the part of the industry, 'there were a number of comments on the proposed timetables' of specific measures of the action plan, suggesting 'that these timetables were unrealistic, particularly on signposting, given the difficulties likely encountered in developing nutrient profiles' (FSA 2004b: 7). The FSA responded to this criticism by noting in the board's paper: 'It is proposed that the timetables for advice on healthier signposting should be extended by three months to reflect the need to consider a wide range of options and the implications of mainstream foods' (FSA 2004b: 7). Another industry objection regarding the concrete design of the 'reduction of levels of fat and sugar in foods' (which should be triggered by the nutrient profiles according to the FSA) 'should be considered further as guidance on reductions in fat, sugar and salt is developed', the FSA argued here (FSA 2004b: 9). In this way, the FSA could perform its social objectivation mode that was responsive towards different social perspectives and concerns, and at the same time it could leave the basic consensus on nutrient profile signposting reached among the members of its ad hoc expert group unchanged.

Summing up, in keeping with its socially situated objectivation mode, the FSA attempted to cope with the continued opposition of relevant industry representatives towards its draft action

plan in a twofold manner: First, by convening the ad-hoc expert group, it attempted to create closure through a small niche of selected actors that provided the room for negotiating a working consensus and inscribed it into the immutable material objects of different variants of signpost labelling logos. Second, while treating the need and the principle feasibility of a nutrient profiling as a settled matter, the FSA limited its responsiveness towards sceptical consultation responses voiced by the industry to concrete questions on the implementation path.

(4) Couching a social working consensus in the calculative language of costs and benefits

In addition to discussing the responses received as part of the written stakeholder consultation, the decision paper on the action plan also contained a Regulatory Impact Assessment. It consisted of a 'partial impact assessment' and a "Full Regulatory Impact Assessment'. Both assessed 'the costs and benefits likely to arise to business and other stakeholders as result of the implementation of the action plan' (FSA 2004b: 10). The 'partial impact assessment', which was prepared by FSA, was subject to a 12-week public consultation[139]. Based on the consultation responses on the partial assessment, the FSA prepared a 'Full Regulatory Impact Assessment', a twenty-page-long document attached in the annex of the board decision paper. A closer look at this document reveals how the calculative logic of the cost-benefit analysis was embedded in the FSA's predominant socially situated objectivation mode. The action plan's overall objective of improving the health and wellbeing of consumers was treated as something that was inherently difficult to quantify in a straightforward way. For the most part of the FSA's Regulatory Impact Assessment, the assessment of potential costs and benefits was instead transformed into an argumentative discussion of the socially desirable objectives formulated in the action plan. For instance, in terms of the 'estimated benefits' of the voluntary use of nutrient-profile-based 'front of pack signposting' the impact assessment argues:

> 'The increased provision of consumer information about the quantity of key health-related nutrients in food products will help consumers make informed choices about the nutritional quality of the pre-packaged foods that they buy. The provision of high /

[139] The consultation package was sent to around 1000 interested parties and was available on the FSA's website.

> medium / low descriptors will help consumers relate the nutrition information to daily intakes' (FSA 2004b: 10).

This socially desirable impact associated with the proposed action plan, notably with its core element of voluntary front of pack signposting, would then 'yield benefits associated with changes in product composition', because '[i]t is also likely that manufactures will choose to reformulate products, for example in order to move from a "high" classification to a "medium"' (FSA 2004b: 12).

A similar pattern can be found in the impact assessment's estimation of the costs; regarding product labelling and consumer information costs, for instance, it states:

> The intended effect of signpost labelling is to encourage consumers to choose alternative, healthier options. If this is realised, costs will arise for manufacturers and retailers from a drop in sales of foods signposted as being high in fat, salt or sugar, although this cost is difficult to quantify. There is clear potential however for an increase in sales of foods labelled as low in these nutrients. (FSA 2004b: 7) (…) Therefore, where potential costs may arise from certain elements of the Action Plan, these will be directly offset by opportunities for businesses to meet emerging demand elsewhere. (…)' (FSA 2004b: 5).

Thus, on the one hand, the assessment argued that it was difficult to quantify the costs that the industry is likely to incur as a consequence of the action plan's mode of action, i.e. a drop in sales of foods signposted as being unhealthy. On the other hand, where some stakeholders did in fact come up with concrete monetary cost estimates, the assessment argued that such costs 'will be directly offset by opportunities to meet emerging demand elsewhere' (FSA 2004b: 5–6).

Summing up, in accordance with the FSA's primary mode of social objectivation, the impact assessment methodology was only very selectively used to assign monetary values for costs and benefits to the FSA's proposed measures. The impact assessment methodology served the FSA to couch the previously portrayed 'working consensus' on its action plan in the calculative language of costs and benefits. Thus, we here see a similar pattern of incorporating mechanical-calculative evidence into the FSA's prime frontstage performance of social objectivation as we have already observed in the 'upstream-consultations' that had been conducted prior to the development of the draft action plan.

Towards the final working consensus on 'traffic light signpost labelling'

The FSA board agreed the final Action Plan on Food Promotions and Children's Diets in July 2004. However, it took almost two more years, before it eventually decided to introduce its core element, namely the nutrient profiling model in 2005 (FSA 2006h) and a corresponding signpost logo in March 2006 (FSA 2006j: annexes). In this process the FSA again employed extensive consultative formats with all stakeholder groups as well as consumer research that was commissioned upon obtaining stakeholder advice on which options of signposting formats should be tested by this research

Based on these extensive consultations and empirical consumer research, the FSA identified 'key elements of a successful front of pack nutritional labelling scheme' Agency (FSA 2006j: 9), which represented the 100g-approach-based working consensus negotiated through the entire process. This working consensus contained two main elements: (1) 'design flexibility', which industry representatives considered important, and (2) consistency in the 100g-approach-based signpost schemes that was considered necessary to avoid consumer confusion by the consumer research and consumer representatives.

In order to achieve both the FSA proposed not promoting one particular logo but issuing 'technical guidance' on the use of these core elements[140]. Accordingly, the agency presented a range of illustrative examples of signposting formats which met the core elements of the FSA's proposed signposting scheme and thus of the established working consensus (see Figure 17 below). These signpost logo variants represent material objectifications of the working consensus on the FSA's nutrient profiling model.

[140] The key elements were: (1) 'separate information on: fat, saturated fat, sugar and salt'; (2) 'use of red, amber or green colour coding to provide at a glance information on the level (i.e. whether high, medium or low) of individual nutrients in the product'; (3) 'provision of information on the levels of nutrients present in a portion of the product'; and (4) 'use of nutritional criteria developed by an authoritative, trusted and independent body such as the Food Standards Agency' (FSA 2006j: 9).

ANNEX 5

EXAMPLES OF VARIATIONS OF SIGNPOSTING FORMATS WHICH MEET THE CORE ELEMENTS OF THE AGENCY'S PROPOSED SIGNPOSTING SCHEME

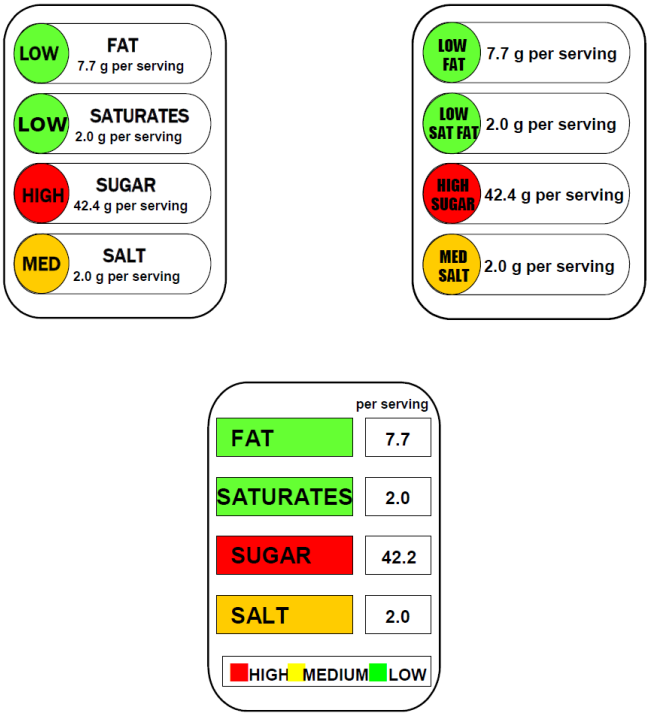


Figure 17: Examples of valid signposting logos (FSA 2006j, annex5: 69)

The basic model of the 'traffic light' signpost logo also constituted a representative claim on behalf of the FSA's consumer constituency. By introducing a 'single standardised front of pack signposting system developed and controlled by an independent and authoritative body' – the FSA itself – the agency claimed to 'help consumers see at a glance the fat, saturated fat, salt, sugars levels in foods' (FSA 2005c: 1) and to 'encourage consumers to look for and demand healthier products and provide an incentive to business to produce foods that are lower in fat, salt or sugar (FSA 2006j: 3). Hence, one representative claim inscribed into the FSA's traffic light signposting was about providing 'knowledgeable consumers' with decision-salient information making it easier for them to rationally reflect on their choices and change their behaviour towards healthier eating. This representative claim was juxtaposed with a second claim on behalf of 'citizen consumers' with legitimate social interests that were

incorporated into the longish process of developing a working consensus on the signpost labelling.

Summing up, the FSA arrived at a guidance on traffic light signpost labelling based on two main social objectivation practices: First, by gaining input from various stakeholder consultations that could be staged in the written format of action plans and papers documenting the progress made on implementing them as a social working consensus on this matter. Second, by consulting stakeholders on the design of empirical consumer research aimed at testing concrete traffic light logos, hence by generating empirical proof underpinning its own position on the issue. This consultative-social objectivation mode was hence aimed at establishing a social working consensus on traffic light signpost labelling.

The FSA begun this process with its Action Plan on Food Labelling, which was the first guidance to operationalise its overall Nutrition Strategic Framework. Here, it initially had attempted to mandate the Nutrition Stakeholder Forum – comprising both consumer and public health representatives as well as industry representatives – to jointly develop a traffic light labelling scheme. This specific mode of social objectivation hence included *all* relevant stakeholder groups right from the outset of the process. Yet, this knowledge production approach of utmost openness had quickly failed due to the essential contestedness of the issue on behalf of the vast majority of industry stakeholder members.

I have put a special focus in the preceding analysis on how the FSA used action plans as ‘coordinative boundary objects’ in its renewed attempt to establish epistemic closure with respect to nutrient-profiling-based traffic light labelling in a form that could be staged as a ‘working consensus’ negotiated among heterogeneous stakeholders. The FSA’s renewed attempt occurred under the banner of the Action Plan on Food Promotions and Children’s Diets in which a nutrient profiling model played a major role. By developing this model, the FSA aimed at establishing the grounds for re-regulating food promotions to children. In this long process of multi-faceted consultations, the FSA managed to successfully employ this action plan as a ‘boundary object’ to be shared and negotiated among stakeholders. Underlying this process was a reconfigured mode of social objectivation that was now based on specific ways of achieving socio-epistemic closure:

- commissioning a ‘systematic review’ on the question of the effects of food advertising on children’s diets;
- conducting initial ‘upstream consultations’ with consumers only;
- convening a ‘small ad hoc expert group’ that comprised selected academic, consumer representatives and some of the few ‘traffic light friendly’ industry stakeholders as a ‘social niche’ in which the first prototype of the traffic light logo was developed and tested.

First after these three steps of closure had occurred and the initial contours of a working consensus on ‘nutrient profiling’ were sketched, the FSA opened its further consultations, conducted on the regulatory impact assessment and the final traffic light logo, to all stakeholders, including the overly sceptical industry opposing any form of even voluntary traffic light scheme. As I will show in chapter 5.3.3.2, these three forms of socio-epistemic closure that enabled the final working consensus on traffic light could be legitimately and therefore (temporarily) successfully made because they were in line specific contextual discourses.

5.3.3 The contextual embeddedness of social objectivation

In what follows, I will recap the discursive and institutional-cultural contextual elements that were implicated in the previous analysis of the FSA’s social objectivation practices.

5.3.3.1 Meta guidance

By looking in detail at the FSA’s founding ‘meta guidance documents’, I have shown how the FSA used them to establish and publicly demonstrate the principles and standards of its consultative approach to knowledge production and decision-making as a factual norm guiding its inner workings. In so doing, the FSA drew on the ‘science & society discourse’ that was tightly coupled with the BSE crisis and reform discourse, as I have argued in chapter 5.1.2, and thus was of great importance to the FSA’s authorisation practices in its early years. According to the science & society discourse, knowledge production processes should open up to different social perspectives and increase the range of viewpoints considered. Thus, instead of reducing knowledge production at the science-policy interface to conventional methods of probabilistic risk assessment and mechanistic formulae of cost-benefit analysis,

the rise of the new scientific governance discourse presented itself a 'shift towards a style of scientific governance based on public dialogue, transparency and democratic engagement' (Irwin 2006: 300). Consequently, many protagonists of the move towards a 'new governance of science' in the UK strongly emphasised the development of a vast array of deliberative and participative instruments and practices (chapter 5.1.2). These were expected to create a space for the negotiation of a mutually acceptable social consensus on matters situated at the science-policy-public nexus. By so doing, 'science & society' can be understood as an invocation of the British 'communitarian' or 'public interest culture', which emphasises a consultative, negotiated mode of knowledge production and decision-making (chapter 5.1.7)

Furthermore, the FSA used meta-guidance documents to establish and publicly perform a specific notion of objectivity as something instantaneously evident and transparent to the general public's eye, which was a further central component of its social objectivation mode. The agency's founding meta guidance documents stipulated the following norms of transparency-based knowledge production: (1) holding open meetings; (2) the disclosure of information, and (3) transparent risk communication. These norms and practices reflected the discourse on transparency that was at the core of New Labours modernising government agenda, as I have argued in chapter 5.1.5. New Labour introduced a broad array of mechanisms designed to open up the policy-making process in Whitehall and to make government institutions more accountable and responsive to the needs of citizens. The rise of the transparency discourse hence came along with increasing possibilities of questioning and controlling policy-making institutions.

The FSA's pioneering institutionalisation of Labour's transparency agenda was also encouraged by the fact that various proponents of the transparency and 'freedom-of-information movement' (Worthy 2018) were directly engaged in the development of the FSA's disclosure policies in different ways[141]. From the FSA's very beginning, the board had been keen on stressing in its overall attempt to restore public trust 'that it will be very open,

[141] For example, as a member of the agency's board, Richard Ayre, a campaigner for freedom of information, was directly involved in formulating the guidance documents relating to openness and transparency (FSA 2001l: 17–19). Two further information rights activists, Andrew Puddephatt and Maurice Frankel, were taking part in the first review of the FSA's scientific advisory committees in 2002; on which the FSA's founding documents were further developed (FSA 2002q).

and significantly more open than is required by the Freedom of Information Act' (Millstone & van Zwanenberg 2002: 606). Codifying and formalising open meetings, information disclosure and transparent risk communication in guidance documents should counter the mistrust towards government institutions that was at the core of the BSE crisis discourse, as I have argued in the introductory chapter[142]. In this context, the FSA attempted from its very first days to become recognised as an objective source of knowledge for consumers. Transparency-based objectivity and its formalisation through and within meta guidance documents was hence intended to engender trust among consumers in the reliability of the FSA.

Yet, restoring public trust by institutionalising mechanisms of scrutiny and thereby enhancing the effectiveness of governing was only one aspect of this undertaking. The meta guidance documents' transparency provisions also were framed as a means of strengthening the agency's input legitimacy, which is particularly apparent when looking at the agency's ranging disclosure rights. These were portrayed as empowering citizens and stakeholder groups in their role as 'information-hungry accountability holders' who would, alongside parliament, be using disclosed information in order to keep the agency in check and ensure that it worked for its prime constituency – consumers. This chimed with New Labour's initial drive for increasing transparency as a 'democratisation of information', in which the notion of wide ranging 'freedom of information' rights for citizens via-á-vis the government formed a crucial part and was further embedded into the wider narrative of 'democratisation and reconnecting government with the people' (Worthy 2018: 6).

Last but not least, both the FSA's practice of holding open meetings and its wide-ranging disclosure of information drew on the British empiricist and experimental culture of expertise that privileges an experiential repertoire of evidence enabled through face-to-face or virtual public demonstrations as acts of 'collective witnessing' (Shapin & Schaffer 1985; Jasanoff 2005: 152–153). Through these practices the appearance of an 'immediacy of experience' was created with the intention to provide the agency's audience with solid ground to acknowledge the objectivity of the agency's workings. At a time, when the vanished trust in the objectivity

[142] Especially, the public trust in the objectivity of regulatory science was at a low after the FSA's predecessor, MAFF, which was in charge of assessing and managing food-related risks, had been discredited as biased towards industry interests.

of regulatory science and governmental regulation of food safety had to be newly built from the scratch, the FSA hence drew on this traditional British convention of validating scientific expertise – or to put it more specifically, it reinvented it as a more general mode of producing trusted policy expertise in Whitehall.

However, it has also been evident that the FSA's predominant social objectivation mode also involved an almost unnoticed oscillation between the frontstaged mode of social objectivation and the backstaged mode of calculative objectivation. This was afforded by three linguistic-material tools characteristic for the agency's 'meta guidance documents': (1) the 'genre-specific' room for abstraction provided by meta guidance documents, namely the legitimate lack of linguistic precision, (2) tools of 'loosely referencing' other seminal governmental guidance and (3) managerial visualisation charts. This oscillation reflected the 'better regulation' discourse that was pushed in the context of the modernising government agenda in parallel to 'science & society' and (see chapter 5.1). The better regulation discourse focussed on using quantification to make regulation less 'burdensome'. Regulatory measures – and even 'softer' policy measures – should only be adopted if they were based on a strict quantitative analysis i.e. in the form of cost-benefit analysis or conventional risk assessment (chapter 5.1.3). Thus, calculative modes of knowledge production were preferred as an objectivation mode for their purported ability – in terms of monetising the costs and benefits of regulations and policy measures – to enable efficient regulations and to make decisions more transparent and accountable. By placing these two diverse ways of knowing side by side within its guidance documents, the FSA could display that it had embraced both discourses and hence the input-legitimacy-oriented *and* the output-legitimacy-oriented strands of New Labour's 'modernising government agenda'.

As I will show in chapter 5.3.4, with the growing importance and institutionalisation of the better regulation discourse in the New Labour government and this with the growing focus on articulating the costs and benefits of regulations and policy proposals in a monetary language, the calculative objectivation mode became more important for the FSA as an authorisation practice.

5.3.3.2 Strategic frameworks & action plans

A second focus of my analysis of the FSA's authorisation and legitimation practices in the object dimension was on how it deployed strategic frameworks and action plans as 'coordinative objects' in its consultative mode of knowledge production with the aim of establishing a social working consensus on specific matters consumer concern.

In so doing, it relied on a specific way of establishing 'a view from everywhere' in which there was a major role for public consultations (Jasanoff 2005). By using action plans in various consultative processes, the FSA demonstrated its commitment to 'seeking to obtain the public's consent (…) for measures devised in the public interest' (Pollitt & Bouckaert 2004: 53). It hence reflected the assumption, deeply grounded in British politico-administrative culture, that it is this kind of consultative, negotiated knowledge production at the science policy nexus that ultimately renders a specific claim valid and legitimate (chapter 5.1.7).

In the above-presented example of the guidance on traffic light labelling the FSA begun developing its traffic light labelling approach with its Action Plan on Food Labelling that included *all* relevant stakeholder groups right from the outset of the process. However, due to the essential contestedness of the issue on behalf of the industry stakeholder members this attempt to establish social working consensus failed. Under the banner of the Action Plan on Food Promotions and Children's Diets the FSA undertook a renewed attempt to establish epistemic closure with respect to nutrient-profiling-based traffic light labelling. After a long process of multiple consultations on its different versions of the action plan this renewed attempt was eventually successful. In so doing, the FSA drew on three main context-specific sources of legitimation:

The first was the discourse on 'evidence-based policy making' (EBPM) which had been at that time pushed by the Labour government (chapter 5.1.4.). As part of this discourse, the New Labour government promoted the development and adoption of (evidence-based) guidelines across Whitehall. The tight coupling of EBPM and guidelines was grounded in UK's 'evidence-based medicine' movement, which dates back to the 1970s, and resulted in the Cochrane Collaboration in the 1990s. This movement established guidelines, which were developed based on strict systematic reviews, as a gold standard of evidence, arguing that such

'evidence-based guidelines' were much less susceptible to error and bias than so-called 'narrative reviews'. In the EBPM discourse, guidelines hence result from a systematic process, in which evidence mainly originating from systematic reviews is translated into specific instructions, blueprints, criteria and programmes for specific policy field. In this vein, the FSA portrayed its 'Action Plan on Food Promotions and Children's Diets' as EBPM because it was based on a specifically convened 'systematic review' that strictly applied methodological review guidelines.

Second, the FSA shifted its social objectivation mode from including all stakeholder groups from the very start of the process to consulting exclusively consumers, and notably vulnerable 'low-income consumers', in the first step. In the second step only, it also consulted business and other stakeholders. This reconfigured social objectivation mode with its special focus on a differentiated representation of heterogeneous consumer groups, including 'vulnerable consumers' was enabled by the broader discourse of social exclusion (chapter 5.1.1). Characteristic for the New Labour's social exclusion discourse was that an increasing number of 'excluded social groups', such as children and young people, were seen as '"at risk" from a range of circumstances and behaviours: 'from becoming an offender to contracting sexually transmitted infections, being unemployed or developing mental health problems' (Turnbull & Spence 2011: 949), or, as in this case, from 'unhealthy dietary behaviour' leading to obesity and related illnesses. The social exclusion discourse entailed not only an output-legitimacy-oriented claim about specific policies directed at effectively tackling social exclusion in its different facets but also an input-legitimacy-oriented claim on democratic renewal. Social exclusion was seen as both a threat to 'civic engagement and active citizenship' and a result of a lack thereof (Giddens 1998, 2000). In this context, New Labour spoke of 'democracy deserts where high-levels of social exclusion are compounded by low levels of democratic engagement' (Flinders & Curry 2008: 101). In this way, the social exclusion discourse was itself embedded into New Labour's overall drive for 'new politics' – i.e. a form of politics, 'where power is pushed down to the people instead of being hoarded centrally' (Blair 1996a: 3). Thus, when it came to produce epistemic closure and to establish a preliminary working consensus on the traffic light scheme, the discourse of social exclusion functioned as a key pillar of legitimation.

Third, in establishing a working consensus on the traffic light scheme, the FSA put a strong emphasis on the British cultural preference to empirical proof and pragmatism (chapter 5.1.7). The agency was keen on stressing that its nutrient profiling model was empirically tested to ensure both that it reflected scientific dietary recommendations and would be 'practical to implement and suitable for consumers' needs. It was by pointing to the empirical proof gained from the testing activities conducted within the 'niche' of the small ad hoc expert group that the FSA could justify its preference for the '100g approach' to labelling and counter criticism put forward by the industry that favoured a 'portion-based approach. Moreover, based on its testing activities, the small ad hoc expert group was able to agree concrete variants of signpost logos and hence to manufacture a 'material objectification' of the working consensus on the FSA's nutrient profiling model. The creation of the material objects of signposting logos embodied not just the working consensus among key stakeholders and scientific experts. It also reflected the importance attached to both pragmatism and empirical common knowledge in the British culture of expertise. The 'traffic-light' signposting logos, as the FSA used to called them in public discourse, drew on the common sense, easily assessable everyday experiential repertoire of knowledge that is so essential for the British culture of policy expertise (Jasanoff 2005).

5.3.4 The contestedness of social objectivation

Yet, as I will show in what follows, over time – with the rising institutionalisation of the better regulation discourse within Whitehall – the FSA's predominantly socially situated objectivation mode became contested. When the better regulation discourse gradually took precedence over the formerly dominant discourses of social exclusion and new scientific governance the mode of socially situated objectivation grounded in strategic frameworks and action plans came to be criticised. In this way, social objectivation based on consultative processes became devalorised and gradually replaced with calculative objectivation processes grounded in technical guidelines providing more detailed guidance on the conduct of impact assessments.

5.3.4.1 Meta guidance: shifting from social to calculative objectivation

While the FSA's transparency-based social objectivation mode was widely praised as a role model for good governance for allowing citizens and stakeholders to assess and hold the FSA to account (Science & Technology Committee 2006; Brooker & Taylor 2008), it also gained some criticism from members of its audience. As extensive as the founding meta guidance documents' provisions on transparency were, they also created spaces of secrecy: For instance, the Code of Practice on Openness detailed justifiable exceptions to the FSA's general approach to disclosure. These included 'incomplete information' emerging from ongoing scientific or enforcement projects and issues of confidentiality under different laws of privacy and data protection (FSA 2001c). According to Millstone et al. (2008), legally protected commercially-sensitive third-party information was the most common reason for nondisclosure in actual practice. It was regulated in detail in the more technical guidance documents. These technical guidelines, however, were kept at the backstage of the FSA's workings, as I have argued in chapter 5.3.2.1. Thus, the tension between the FSA's self-imposed and far-reaching imperative to information disclosure and the persistent constraints of commercial confidentiality was mediated by frontstaging transparency in the FSA's meta guidance documents, while moving a range of exceptions into 'backstage technical guidelines'.

However, some observers, like the leading UK food policy expert to whom I spoke in an informal helicopter interview, complained about a seemingly persistent tendency of the FSA and its SACs to 'disproportionately emphasise' confidentiality during backstage processes of risk assessment and management (helicopter interview 1). This expert argued that the FSA's non-disclosure exceptions were in practice sometimes used as 'shield of confidentiality' to obfuscate uncertainties in risk assessment. Hence, the tension between the far-reaching disclosure provisions that were frontstaged through the FSA's meta-guidance documents and the backstaged practices of confidentiality was in fact noticed and problematised by some observers. This indicates a possible flipside of the FSA's transparency-based objectivation mode. Paradoxically, the FSA's transparency-based objectivation mode did not unidirectionally contribute to restoring public trust but– at least partly – also involved a renewed (or at least unchanged) mistrust. Hence, some members of the FSA's audience suspected the agency's transparency-based tools of preserving the opaque texture of food

(safety) governance rather than changing it. In their role as accountability holders, these critics regularly forced the FSA to respond to these criticisms in order to maintain public trust (Lofstedt et al. 2011).

While the FSA's claim to transparency-based objectivity hence was selectively critiqued by some observers from academia and civil society, the guidance documents' overall emphasis on opening up to a social objectivation mode was increasingly called into question over time by the rising institutionalisation of the better regulation discourse within Whitehall. As I have described in chapter 5.1.3, it was from around 2005 that the government's better regulation agenda began to strongly shape the FSA's meta-guidance documents. For instance, this shift is clearly evident in the 'Framework for Regulatory Decision Making in the Food Standards Agency' (FSA 2006a). This was the first meta guidance document to specify and frontstage the FSA's responsibility to an 'proportionate' and 'evidence-based approach', which should 'improve the FSA's effectiveness as a regulator' (FSA 2005d). Accordingly, the agency's decisions were not only to be based on scientific evidence, but explicitly had also 'to consider and weigh a wide range of economic and social evidence' as was required by the Cabinet Office's 'Better Policy Making: A Guide to Regulatory Impact Assessment' (Cabinet Office 2003a).

To do so, the FSA's Framework for Regulatory Decision Making stated that the FSA should implement the government's principles of better regulation 'by delivering (…) interventions' that were 'evidence-based, proportionate, and risk-based', 'use[d] the market, where appropriate, to achieve change', and 'minimise[d] regulatory and administrative burdens' (FSA 2006a: 6). This implied that cost-benefit analysis became more relevant in the FSA's 'frontstage attempts' to objectivate its expert opinions and policy decisions. The Framework for Regulatory Decision Making thus marked a shift from the primacy of socially open objectivation to the rising importance of calculative objectivation. Its publication was followed by several workshops and initiatives aimed at further developing how the FSA was using 'regulatory impact assessments' based on cost-benefit analysis in order to comply with

the rise of better regulation within Whitehall[143]. Resulting from this process, the FSA published a second meta guidance document as part of its overall shift towards better regulation, which was titled 'Being a World Class Regulator' (FSA 2007c). Here, the agency's previous precedence of input-legitimated social objectivation was more directly contested by emphasising that a strengthened role of the FSA as a 'world class regulator' involved a stronger 'focus on outcomes, rather than inputs and processes' (FSA 2007c: 10). In this vein, this meta guidance document stated that the FSA should base its knowledge production and decision-making processes on the Better Regulation Task Force's five principles of good regulation. The principle of efficiency here was an overriding concern and cost-benefit analysis was portrayed as the central tool to realise this principle (FSA 2007c: 3). Moreover, by stressing the role of 'mathematically expressed risk assessment', the 'Being-A-World-Class-Regulator-framework' explicitly referred to and demonstrated its compliance with a governmental review programme[144] that monitored the '[e]xtent to which regulators are performing in line with the better regulation principles (FSA 2007c: 5).

These and other meta guidance documents that had been developed and published since 2005 hence reflected this shift from input-legitimacy-oriented social objectivation to more output-legitimacy-oriented calculative objectivation and dealt more directly with the question of scientific knowledge and advice production within the FSA. In 2005, the FSA underwent an independent review of its overall performance. A specific focus of this review was to what extent the FSA 'lived up to its core values' defined as 'putting consumers first', 'being open and accessible', and 'acting as an independent voice' (Dean 2005: 5). The review acknowledged that the FSA had in its first five years developed and applied different formats of stakeholder consultation and engagement. However, it criticised that the FSA did not always pay due regard to scientific evidence in its knowledge production and decision-making process. This review was followed by several more specific 'science reviews' of the FSA conducted by the Government Office for Science, (see chapter 5.2.4.). Taking up the

[143] In November 2006, the FSA board hold a 'retreat', where it discussed the 'FSA's role as a regulator' committed to 'reducing administrative burdens of food regulation', a year later it conducted a workshop on how to become 'a world class regulator', which highlighted the principles of better regulation as relevant 'criteria for excellence' (FSA 2007c).

[144] This review programme was jointly conducted by the National Audit Office and the Better Regulation Executive (BRE).

recommendations of these reviews, this second set of the FSA's meta guidance documents i.e. the Science Checklist, or the Good Practice Guidelines for Scientific Advisory Committees' – put a strong focus on enhancing the quality and effectiveness of the FSA's evidence gathering processes. This should be achieved through strengthening the role of formal scientific risk assessment and other forms of quantitative evidence, such as cost-benefit analysis and 'market research', in the FSA context[145] (FSA 2006l). The FSA should include formal statistical analysis 'whenever possible' in producing its expert opinions; each committee should 'have access to advice on quantitative analysis and modelling as needed', according to the Good Practice Guidelines (FSA 2007n: Annex, 57). Likewise, the FSA's 'Science Checklist' (FSA 2006l), though still requiring the FSA to take 'stakeholder views into account when framing risk assessment questions', put an overall strong emphasis on securing 'sound' formal scientific risk assessment.

Finally, it is important to note that this rise of calculative objectivation was explicitly related to a shifting representative claim. For instance, the Framework for Regulatory Decision Making clearly and decidedly articulated the FSA's new 'vision' of better regulation as 'of a balanced and effective market where (…) empowered consumers have the information they need to make informed choices about what they eat ' (FSA 2006a: 2). As we have seen in chapter 5.3.2.2, the FSA's founding meta guidance documents had deliberately coupled the agency's social objectivation mode with a claim to represent consumers as social actors with legitimate social interests to be incorporated into the FSA's knowledge production and decision-making processes. The rise of calculative objectivation was, by contrast, clearly tight to empowering what I call the 'knowledgeable consumer' in the marketplace.

5.3.4.2 Strategic frameworks & action plans: from coordination devices to templates for 'simplification'

Taking a closer look at the many annexes attached to the FSA's action plans and their corresponding board decision papers revealed the important role that the short format of the 'board paper' played in enabling the FSA to frontstage the purportedly great openness of its

[145] As I have shown in chapter 1.2.2.2, this implied moving the judgment competences from the FSA's in-house experts to the FSA's SACs.

objectivation mode. For instance, as I have shown in 5.3.2.3, in developing and objectivating its Action Plan on Food Promotions and Children the FSA casted its different 'upstream consumer consultations' as clear proof of its drive to open up to a social objectivation mode. In fact, however, the agency's actual practices of consumer consultation had been much more pre-structured by the FSA's executive than portrayed in the brief summary presented to the board.

Upon closer examination of the minutes on the FSA's discussion of the draft action plan, we see that the upstream consultation with agency's consumer committee had in fact been open only to a limited extent. Major elements, such as that the desired traffic light labelling was introduced only as a voluntary code, were preselected as givens by the FSA's executive. And it was precisely the preselection of fundamental elements of the proposed policy measures that became contested during the committee's discussions.

When comparing the slightly shortened and adapted version of the committee meeting minutes (which was attached to the board paper) with the original ones (which were not submitted to the open board meeting), this becomes particularly evident. The latter contained a separate and rather long paragraph documenting the committee's discussion on the issue of having 'a self-regulating voluntary code of practice' on food promotion to children (as proposed by the FSA). As the original minutes document, the committee argued that '[o]n the basis of experience with voluntary codes in a number of policy areas this was most unlikely to work' and its hence 'agreed unanimously that voluntary codes do not work' (FSA 2003n: paragraph 17). Yet this very paragraph cannot be found in the second version of the minutes attached to the paper presented to the board. Here, we find it reduced to one short sentence: 'The issue of having a self-regulating voluntary code was discussed and while in an ideal world it would work, there was a scepticism that without string levers the situation would not improve quickly enough' (FSA 2004h: annex 8, paragraph 6).

Thus, while the paper presented to the board portrayed the consultation with the consumer committee as a process characterised by a great epistemic openness, the original minutes testified to the FSA's deliberate attempts to predefine fundamental elements of the discussion on the policy solutions rather than to openly negotiate them. This predefinition reflected the discursive context of reducing regulatory burdens and relying on voluntary self-regulation (chapter 5.1.3). The translation of the 'better regulation' discourse into the FSA's

objectivation practices resulted into the agency's 'backstage attempt' to achieve epistemic closure with the aim of inciting the consumer committee to adopt a more calculative objectivation mode– albeit in a rather unsuccessful way as the example of the 'upstream' consultation with the consumer committee shows: When consulted on the FSA's discussion paper, the consumer committee was faced with a specific task to 'think about and write down' the pros and cons of various policies considering different criteria, notably in the form of 'costs and benefits'. Hence, the committee members were urged to provide calculative evidence on the advantages and disadvantages of specific policy options. However, the committee members resisted this calculative form of objectivation; they felt that making cost-benefit calculations was difficult and that it was important to focus more on the 'nonfinancial effects' such as 'improved consumer confidence' (FSA 2004h: annex 8, paragraph 10). In this vein, one interviewed former member of the consumer committee criticised that the FSA's action plans were often much more pre-structured and less open to negotiation than suggested by the FSA. To put it pointedly: Here, the FSA's consultative social objectivation mode, while designed to generate consumer trust, came to be criticised for mobilising stakeholders and citizens in pursuit of a non-negotiable policy of 'voluntary self-regulation'.

The FSA's mode of socially situated objectivation hence was in fact more contested than it appeared in the agency's frontstage performances, in which the agency's guidance documents were publicly presented, circulated and negotiated. Despite such conflicts and tensions, social objectivation – as a practice materially anchored in 'strategic frameworks' and in operationalising 'action plans' – had precedence over calculative objectivation modes in the

FSA's first five years[146]. However, as I have argued with respect to the development of its meta guidance documents over time, the agency's operationalising strategic frameworks and action plans changed towards a much stronger emphasis on 'calculative-mechanical' objectivation with the growing importance institutionalisation with the better regulation agenda across Whitehall (5.1.3).

For instance, under the title 'Our core values' the FSA's Strategic Plan 2005–2010, contained a separate section on 'Better Regulation', where it committed itself to following the 'principles of better regulation', notably to assessing the 'costs and benefits' of regulation as well as 'the impact of non-regulatory approaches' (FSA 2004i: 32–33). More than two years later, in 2007, it published an updated 'Strategic Plan to 2010' (FSA 2007r), which even reinforced the calculative modes of objectivation in two ways: first by defining concrete 'administrative burden' reduction targets (FSA 2007r: 5, 26) and second by stressing the overall strategic importance of 'being a capable and efficient organisation' that was 'seeking more economic, efficient and effective ways of protecting consumers and encouraging healthier eating' (FSA 2007r: 28). It was also this plan that first articulated the commitment to 'simplification' of regulation (FSA 2007r: 25). Remarkably, instead of involving stakeholders in open debates, the plan stressed its aim of 'track[ing] stakeholder views (…) to understand how attitudes, habits and behaviours are changing' by using an 'annual survey to track consumer attitudes to

[146] This was the case at least in its publicly displayed knowledge production and decision-making processes. In addition to the objectivation practices presented in chapter 5.3.2, the FSA's initial focus on socially situated objectivation mode is excellently illustrated by the FSA's Strategic Plan 2001 to 2006. The plan dedicated a separate section on the question of 'how we will put our core value of openness into practice' and (…) our [commitment to] democratic accountability' (FSA 2001p: 4). In this section, the FSA reinforced its 'commitment to decide on policy issues in public and after an open debate' i.e.'[w]henever possible, the Agency seeks people's views before reaching conclusions and always explains the reasons for its decisions and advice' (FSA 2001p: 5). Thus, there was a strong emphasis on justifying this socially situated objectivation mode by referring to input legitimacy – involving 'consumers and other stakeholders' into such open debates enabled the FSA, it is argued, to 'understand and address consumer needs' (FSA 2001p: 24). This does not mean that the plan contained any references to output-oriented legitimation; for instance, it argued that it had 'found that by being open and by listening' it could 'improve the quality of the decisions' made (FSA 2001p: 24). However, the strategic plan's main emphasis was on the importance of such open debate and consultative approaches to knowledge production and decision-making ('take the views of consumers and other stakeholders into account') both a general principle and in relation to securing that concrete areas of work in food safety and nutrition were responsive towards consumer interests. For instance, in relation to the 'chemical safety of food', it stated that in order to achieve reductions in pesticide use, the FSA was going to employ various measures; one key measure named in the paper was 'hav[ing] a proper debate of the issue amongst stakeholders' (FSA 2001p: 13). In terms of nutrition, it said that the FSA was 'leading the movement for improvements in food labelling, (FSA 2001p: 17) and to do so it was 'working together with stakeholders' and 'involv[ing] them in the development of nutrition policy' (FSA 2001p: 20).

food' (FSA 2007r: 10). Finally, the FSA's 'Strategic Plan 2010 – 2015' (FSA 2011d), which was reduced to just one third of the average length of the preceding plans, defined 'effective, risk-based and proportionate' regulation – i.e. regulation that takes into account the monetised assessment of costs – as one key 'strategic outcome' (out of only four strategic outcomes in total) (FSA 2011d: 4).

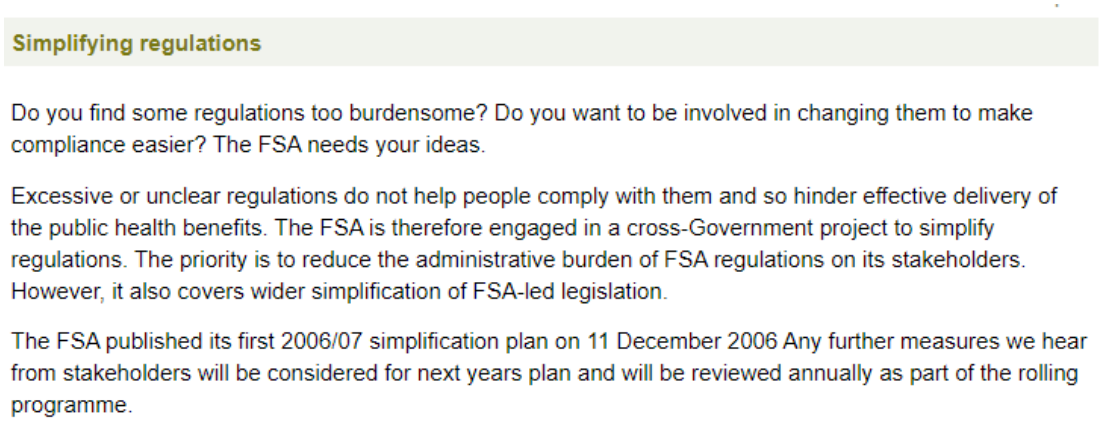
This shift from socially situated to calculative reasoning is also reflected in the quantity of the FSA's action plans, as in chapter 5.3.2.1 shows. From 2000–2015 the FSA developed, consulted and published 23 action plans. Around two-thirds of these action plans (n = 15) were published in the FSA's *first four years* (2000–2004), while only one-third (n= 8) was published from 2005–2015. As was shown in chapter 5.3.2.3, which looked in detail at the example of the FSA's Action Plan on Food Promotions and Children's Diets, the FSA used action plans as 'coordinative boundary objects' in order to establish objectivity by frontstaging a negotiated social working consensus on controversial issues. In so doing, the agency strongly drew on the action plans' material affordances of shareability and negotiability. Thus, the decrease of the number of action plans indicates the declining importance of this 'action-plan-based' practice of social objectivation.

However, it is not only the decreasing number of action plans from 2005 to 2015 that suggests the decline of the FSA's social objectivation mode as a frontstage practice from around 2006. Likewise, there was a significant *qualitative* shift that is evident by looking at the development of the FSA's action plans over time. Four of the eight action plans published from 2005–2015 were directly related to the then government's 'better regulation' agenda. These action plans were employed by the FSA to strengthen 'calculative-mechanical' practices of knowledge production. Based on a rigorous application of quantitative cost assessment tools (FSA 2006b), notably the cross-governmental UK 'Standard Cost Model (SCM) Manual', these action plans were designed to assess the costs of the FSA's 'administrative burdens' and regulations and hence the potential for reducing these costs by engaging in various deregulation activities. For instance, the above-described Framework on Regulatory Decision Making was supplemented by the FSA's 'Simplification Plan' (FSA 2006f), which required the FSA to produce 'impact assessments' right at the start of the policy process for any proposal that was likely to attract political or media interest. As part of these impact assessments, specific 'impact tests' helped the FSA staff to 'monetise costs and benefits in

relation to particular groups/sectors' (FSA 2008j: 12). These practices were increasingly formalised in the meta guidance documents, strategic frameworks and action plans published after 2006 and explicitly portrayed as complying with the obligations of the then government's better regulation agenda. To ensure that the 'burdens' – the monetised costs – imposed by regulations were reduced, the new regulations that introduced such new burdens on businesses or the third sector could be brought in only by ensuring savings of at least an equivalent burden being made. This was New Labour's 'One In One Out' policy (OIOO policy), which was first introduced in 'Less Is More: Reducing Burdens, Improving Outcomes' published by the Cabinet Office's Better Regulation Task Force in 2005[147] (BRTF 2005).

This shift from social to calculative objectivation was tightly coupled with how the FSA saw its own role in the multilevel European regulatory networks. Whereas, in its early years, the FSA had put a strong emphasis on its transparency-based objectivation mode when it came to demonstrating its approach to risk assessment in EU-level front stage areas (Atkins & Norman 2009: 5), it increasingly began to display cost-benefit calculations as evidence of too burdensome EU regulations. In 2006, the FSA set up a separate Better Regulation Advisory Group (BRAG), which comprised both industry and consumer representatives and was tasked with undertaking 'independent external scrutiny and to challenge of the Food Standard Agency's better regulation initiatives' (FSA 2007d). In contrast to the FSA's policy-issue-oriented action plans of the past, the public consultation exercises conducted in relation to these 'better regulation' action plans remained limited to asking primarily businesses (but also consumer representatives and other public authorities) to estimate costs and suggest potential for deregulation or to review its deregulation activities. For instance, the FSA's 'Simplification Plan' (FSA 2006f), which laid the ground for the agency's 'rolling simplification programme' from 2005 to 2010 was underpinned by a separate 'better regulation initiative' navigation point at the FSA's website, which directly addressed an imagined 'administrative burden calculating' stakeholder subject, as is illustrated by the following snapshot:

[147] The recommendations of these reports were subsequently implemented in the Legislative and Regulatory Reform Act, whose aim was to 'enable delivery of swift and efficient regulatory reform to cut red tape' (Cabinet Office 2006). From January 2013, under the Coalition Government, the 'One in, One out' (OIOO) policy was even replaced by a 'One in, Two out' (OITO) policy. In order to comply with this even more radical deregulation policy, the FSA adjusted its internal impact assessment policy (FSA 2013e).



Simplifying regulations

Do you find some regulations too burdensome? Do you want to be involved in changing them to make compliance easier? The FSA needs your ideas.

Excessive or unclear regulations do not help people comply with them and so hinder effective delivery of the public health benefits. The FSA is therefore engaged in a cross-Government project to simplify regulations. The priority is to reduce the administrative burden of FSA regulations on its stakeholders. However, it also covers wider simplification of FSA-led legislation.

The FSA published its first 2006/07 simplification plan on 11 December 2006 Any further measures we hear from stakeholders will be considered for next years plan and will be reviewed annually as part of the rolling programme.

Figure 18: Simplifying regulations (FSA 2007d)

Under the coalition government's even stronger focus on better regulation as a form of deregulation (chapter 5.1.3), the FSA issued further technical guidelines, such as the 'Guidance For Policy Makers on Managing the Introduction of Legislation' (FSA 2012e). This guideline instructed FSA staff 'to consider better regulation throughout the EU negotiation process' as laid out in the 'Practical Guide to EU Negotiations' developed by Whitehall's cross-departmental 'Better EU Law Group' (FSA 2012e: 4). According to the guidance, one of the key 'fitness check questions' on better regulation that FSA staff should ask in reviewing 'pre-Commission' policy proposal concerned whether there was 'a less burdensome approach for businesses and the public sector' (FSA 2012e: 4).

Summing up, as is evident from the previous analysis, the shift from social to calculative objectivation was not only accompanied by a redefinition of how the FSA's defined and performed its own role in the European multi-level governance context, but also came along with a changed representative claim on behalf of the FSA's prime constituency. As we have seen, the prime representative claim of the rising calculative objectivation mode was made on behalf of domestic business interests. These were portrayed as needing protection from overly burdensome European regulation. Evidently, this claim differs considerably from the FSA's social objectivation mode. As previously shown, the FSA's social objectivation mode explicitly involved a representative claim on behalf of domestic consumers as individuals or organised consumer stakeholder groups that were acknowledged to have separate legitimate social interests and valuable insights, which should be included in the knowledge production process.

5.3.5 Conclusion

In the previous analysis, I showed that the FSA's attempt to successfully claim politico-epistemic authority involved using various sorts of guidance documents that embody and transmit the FSA's particular understanding of what constitutes an objective mode of knowing at the science-policy nexus. Based on the preceding analysis, I made five main observations in this respect:

	FSA
mode of objectivation	• socially situated • *meta guidance establish and frontstage public consultation, openness and far-reaching transparency as de facto action-guiding norms* • *action plans function as coordinative 'boundary objects' that facilitate negotiating a social working consensus among heterogeneous actors*
representative claims	• rather heterogeneous consumer constituencies • *'consumer citizen'* • *'knowledgeable consumer'* • *'socially-included consumer'*
legitimation mode	• primarily input-legitimacy-oriented
contextual embeddedness institutional-cultural discursive	• British public interest and communitarian culture • *consultative and negotiated knowledge production* • *empiricist and experiential notion of objectivity* • 'science and society' and 'social exclusion'
contestation and change	• contestation of social objectivation mode • *tension between disclosure provisions (frontstage) and practices of confidentiality (backstage)* • *backstage attempts to preselect (rather than openly negotiating) key aspects and adopt calculative objectivation* ⇨ *reframing emphasising effectiveness and efficiency* ⇨ *shift towards mechanical-calculative objectivation*

Table 15: Summary of the FSA's social mode of objectivation, my compilation

Mode of objectivation: First, the FSA pursued a 'socially situated mode of knowing' that invoked objectivity as something based on two elements: being instantaneously evident and transparent to the general public's eye and on a negotiated social working consensus. For this, to begin with, *meta guidance* documents were of central importance, since they enabled the FSA to carefully juxtapose and productively oscillate between social and calculative modes of objectivation. Different means of organising words on digital and physical paper that led the readers' eyes in specific ways were at play herein, particularly three linguistic-material devices: (1) exploiting the legitimate lack of linguistic precision, (2) referencing and (3) visualisation. In this way, the FSA attempted to establish and frontstage a set of principles ensuring the 'openness' of its knowledge production as a seemingly factual action-guiding norm. The FSA's *action plans* enabled the agency to frame a specific 'reality' as a problem and to simulate and test solutions by materially representing and circulating them among relevant audiences. I illustrated this power to materially represent problem frames and 'test' solutions in empirical detail studying the traffic light example. Here, the more operational 'action plans' were used to sustain the FSA's claim to socially situated objectivation in a threefold sense: (1) As textual representations embodied in the form of physical or digital paper, action plans transformed contested issues into a written juxtaposition of different bodies of evidence that could be displayed in frontstage performances. These bodies of predominantly social (but also calculative) evidence could be portrayed as a (temporarily) stable negotiated working consensus reached among heterogeneous stakeholders. (2) As material embodiments of 'inscribed knowledge' the FSA's action plans and linked documents served as 'boundary objects' enabling the coordination among the heterogeneous interests of actors from different worlds. They were ready to be used and could be circulated among different actors for discussion, comment and revision. In this way, the FSA's problem frames and proposed solutions were made tangible and could be 'tried out' before relevant audiences. (3) Action plans enabled the FSA to achieve socio-epistemic closure in different ways. At a discursive level, action plans enabled the FSA to legitimately prefigure specific courses of action by claiming that this prefiguration was made 'in the name of consumers' – hence in the name of those the FSA claims to advocate for. On material grounds, the ability to successfully make these prefiguring claims was based on the use of small inscription devices such as bullet point lists and various visual tools, and documentary objects, such as annexes, 'progress reports' and digital applications.

Representative claims: Second, the FSA's consultative and transparency-based objectivation mode also prompted specific representative claims on behalf of consumers. Its meta guidance documents served to enact, imagine and to 'construe' consumers as a constituency of (1) 'consumer citizens' (individuals and stakeholders) with legitimate social interests and views to be included in forming a working consensus, (2) 'knowledgeable consumers' in the marketplace in need of decision-relevant information facilitating rational reflection on choices and behaviour change towards healthier eating, and (3) 'socially excluded consumers', such as 'low-income consumers', children and teenagers whose special needs were to be taken into account in forming a shared perception of problems despite being 'hard to reach'. The constituency of the 'consumer citizen' was most clear in the FSA's founding meta guidance documents and the 'upstream consumer consultations' it conducted as part of its 'Action Plan on Food Promotions and Children's Diets'. Here, the FSA sought the widest possible range of consumer views from the 'interested general public' and representatives of the consumer committee. The claim on behalf of the 'knowledgeable consumer' was particularly evident in the meta guidance on the FSA's risk communication and in the agency's more concrete action plans on traffic light signpost labelling. These aimed at providing individual consumers with independent advice and decision-relevant information to better rationally reflect on their choices and change their behaviour towards healthier eating. A specific characteristic of these upstream consumer consultations was that they included focus groups discussions with 'low-income consumers' in order to ensure – and publicly demonstrate – that the agency's policies were also relevant to the needs of 'less well represented groups', which was a claim on behalf of the 'socially excluded consumers'. Furthermore, the FSA's meta guidance documents had far-reaching provisions on transparency that engendered two kinds of *'witnessing audience'* attesting to the FSA's claim of being a trustworthy source of knowledge that acted in the public interest. Anyone interested in the FSA's workings could act as a 'passive observer' of the FSA's knowledge production and decision-making processes. While observers were allowed to watch the FSA's expert deliberation right before their very eyes, opportunities to speak up and disagree with the representative claims made during open meetings were, however, very limited. At the same time, consumers (individuals and interest organisations) were constituted as 'information-based accountability holders', i.e. as both subjects that were empowered to keep in check the FSA and as 'knowledgeable consumers', i.e. subjects that were interested in and capable of assessing reasoned explanations provided by the FSA.

Legitimation mode: Third, the FSA's mode of social objectivation can be understood as a practice of advocatory authorisation in that it was primarily legitimised in terms of input legitimacy. Chiming with the British input-legitimacy-oriented 'science and society' discourse that gained momentum in the aftermath of the BSE crisis, the agency justified its consultative approach to knowledge production by referring to the important role of its different formats of public dialogue and engagement aimed at 'putting the consumer first'. Moreover, the special emphasis placed on the differentiated inclusion of heterogeneous consumer groups, including 'vulnerable consumers', into the process of establishing a working consensus was legitimised with reference the broader 'social exclusion' discourse. Specifically, in the beginning of the first Blair government, this discourse entailed an input-legitimacy-oriented claim regarding the importance of 'democratic renewal' through including less well represented groups. Furthermore, in line with the input-legitimacy-oriented variant of New Labour's public transparency discourse, the FSA's far-reaching transparency provisions were likewise also framed as means of empowering citizens and stakeholder groups in their role as 'information-hungry accountability holders', who would, alongside parliament, be using disclosed information in order to keep the agency under close scrutiny.

Contextual Embeddedness: Fourth, the FSA's social objectivation mode drew on different cultural-institutional and discursive elements of the British context in which the agency operated. We have seen that the consultative social objectivation mode was primarily fostered by the discourses of 'science and society', and 'social exclusion'. These were, in turn, again entangled with the British communitarian and public interest culture that is strongly committed to consultative, negotiated mode of establishing knowledge claims at the science-policy nexus. The FSA's far-reaching transparency provisions – holding open meetings and wide-ranging disclosure of information – reflected a central tenet of the Labour government's 'modernising government agenda', namely the strong focus it put on the provision of societal transparency-based opportunities for questioning and controlling policy-making institutions. Moreover, the agency's transparency-based objectivation mode with its experiential notion of objectivity, established through face-to-face or virtual public demonstrations as acts of 'collective witnessing', drew on the general British predilection for empiricism and experimentalism. The great importance attached to empirical proof in its social mode of objectivation was also apparent in how the FSA sought to stabilise the working consensus on

the nutrient profiling model. It underpinned its nutrient profiling model with evidence gained from empirical testing and developed the testing design was developed following a renewed stakeholder consultation.

Contestation: Fifth, over time the FSA's advocatory mode of objectivation and legitimation was increasingly contested. Paradoxically, the FSA's transparency-based objectivation mode did not unidirectionally contribute to restoring public trust but – at least partly – also involved a renewed (or at least unchanged) mistrust. This was the case because the tension between the far-reaching disclosure provisions that were frontstaged through the FSA's meta-guidance documents and the backstaged practices of confidentiality were criticised by academic and consumer organisations. Likewise, the minutes of committee discussions revealed that the appearance of openness, which formed a central element of the FSA's socially situated mode of knowledge production, was partly the result of skilful staging. This was enabled by the short format of the board decision papers in which much of the consumer committee's controversial discussions could be easily concealed. The actual practice of consulting consumers was much more pre-structured by the FSA's executive than portrayed in the brief summary presented to the board. The FSA's backstage attempts to produce epistemic closure by preselecting (rather than openly negotiating) key aspects and by trying to incite the consumer committee to adopt a more calculative objectivation mode reflected the discourse on reducing regulatory burdens and voluntary self-regulation. While in the agency's early years, these attempts to restrain social objectivation in practice had failed, the FSA gradually shifted towards a more mechanical-calculative objectivation mode with the better regulation discourse that set out to foster the efficiency and effectiveness of public services becoming the most dominant discourse in Whitehall. This shift was reflected in FSA's guidance documents published after 2005 that increasingly stipulated prioritising quantitative forms of evidence such as formal statistical analysis and risk assessment, cost-benefit analysis and market research.

5.4 Opening up to Advocatory Authority: Temporal Dimension

In this chapter, I will show how the FSA attempted to develop politico-epistemic authority by making temporal claims, which both recalled and distanced the FSA from a specific past and anticipated a specific future. These temporal authorisation practices can be understood as

predominantly following a recursive mode of temporal ordering. This did not exclude some selective combinations of recursive with more linear temporal ordering modes, as we will see later when looking at the linear trajectorial narrative of a 'growing obesity epidemic'. The recursiveness of the FSA's predominant mode of temporal ordering was reflected in the fact that it recognised – in contrast to linear modes – that temporal practices are ineluctably situated within specific social contexts; both were seen as mutually interdependent and as co-producing a more radical form of 'incertitude' (Stirling & Gee 2002). As pointed out in chapter 3.3, adopting this more radical view on uncertainty implies politics acknowledging that 'incertitude' is no longer reducible to simpler and controllable forms of uncertainty but nevertheless is in need of being dealt with. There were various ways in which the FSA attempted to build politico-epistemic authority by predominantly relying on recursive temporality. The two most prominent of these were *precaution* and *pre-emption*.

The first way – precaution – was about re-reading and 'going back over' the 'dark past' of the BSE crisis to move on into a brighter, i.e. precautionary 'post-BSE' era. Here, the FSA demarcated itself from its predecessor's practices of linear probabilistic risk assessment and communication, which did not adequately address uncertainty during the BSE crisis. From its beginning, the FSA, by contrast, was keen on emphasising that it would adopt a more recursive temporal paradigm of the precautionary principle, which would acknowledge uncertainties involved in risk assessment and address them through stakeholder deliberation. In the following, this 'precautionary' mode of knowing the future, which can be understood as a form of recursive temporal ordering, will be shown using the three illustrative examples of 'BSE in sheep', 'pesticide residues in food and of mixtures of pesticides', and 'food colours'.

The second way in which the FSA attempted to build politico-epistemic authority through recursive temporal ordering practices can be understood as a 'pre-emptive temporality' (Anderson 2010). The FSA's pre-emptive temporal practices of authorisation were characterised by their acknowledgement of the future as a possible threat that must be acted upon in the present. Such pre-emptive ordering is based on a recursive temporality, because it claims that – in light of the future threat – immediate action must be taken in spite of the essential uncertainty attached to both the possibility of the specific threat and the effectiveness of specific interventions aimed at preventing it from happening. This form of 'pre-emptive' recursive temporal ordering will be analysed in this chapter using the illustrative example of

the FSA's pre-emptive practices aimed at influencing the dietary behaviour of vulnerable at risk groups – children and young people from low income families in particular.

5.4.1 Close-up: zooming in on Sir J. Krebs' Westminster Diet and Health seminar speech

As an entry point to the FSA's temporal authorisation practices of precaution and pre-emption, I will first zoom in on a speech held in 2003 by then FSA Chair Sir John Krebs. At the inaugural Westminster Diet and Health Seminar in London, Krebs stated that the FSA would in future increase its focus on diet and health.

Krebs begins his speech by reflecting 'on the achievements of the FSA (…) in its first three years' (FSA 2003s):

> 'As you know, we were set up against a background in which public trust in Government handling of food safety was at a low ebb – because of the BSE crisis in particular, and, for example, other issues such as salmonella in eggs. So, we had the very difficult task from day one, of setting out to rebuild public trust. That's a very difficult thing to do as trust is intangible. You can't demand it, you have to, somehow, earn it as a result of what you do and how you do it' (FSA 2003s).

As is evident from this quote, Krebs presents the loss of 'public trust in Government handling of food safety' caused by BSE and other food scandals as a major challenge for the FSA, which set out to 'rebuild trust'. He also emphasises that rebuilding trust is about *doing* and requires great efforts*:* 'you have to (…) earn it as a result of what you do and how you do it'. He proceeds as follows:

> 'What we've tried to do over our three years is to set ourselves out to be rather different to the previous organisations in Government for handling food safety, being independent, being open and transparent, and clearly putting the interests of consumers first' (FSA 2003s).

Thus, in order to rebuild public trust in its first three years, Krebs says, the FSA was keen on demarcating itself from its predecessors through demonstrating it was 'independent', 'open' and 'transparent', and 'clearly putting the interests of consumers first'. Krebs then explains how this was ensured, namely through the FSA's innovative practices of holding

its open board and scientific committee meetings in public, acknowledging the uncertainty associated with risk assessment, and involving stakeholders:

> 'And, while now many of the things that we do seem quite commonplace, if you think back to three years ago, the notion of the relevant part of Government meeting in public to discuss issues of food safety policy, rather than behind closed doors; the notion of that part of Government being open and honest about uncertainty, involving stakeholders in developing policy rather than deciding and defending. If you think about these changes, what now seems commonplace, actually, when we started out, was relatively unusual' (FSA 2003s).

Among these innovative practices aimed at rebuilding trust, Krebs highlights the FSA's way of coping with uncertainty in risk assessment:

> 'I can think back, for example, to when we first mentioned the uncertainty in relation to the possible risk of BSE in sheep. We said, honestly, that the scientists don't know, and that there may be a small risk but that we can't really tell, and that we were not advising people to stop eating lamb and mutton, but they did need to be aware that there might be a small risk' (FSA 2003s).

Krebs here refers to the so-called 'BSE in sheep' case that figured prominently as an exemplary way of dealing with risks in a precautionary way in the agency's first years. While this focus on publicly acknowledging uncertainty when assessing risks to food safety had been vital for the young FSA, Krebs further argues, the agency would be paying more attention to 'issues of diet and health' in the future:

> 'Over the past three years we have focused very much on what might be described as "traditional" issues of food safety: chemical contaminants, BSE, food poisoning, and so on. In the future, I don't think that we will relax our attention to these food safety and consumer choice issues, but I think we will pay more attention than we have in the past to the issues of diet and health' (FSA 2003s).

Thus, a significant focus of the agency's work would go beyond the 'traditional issues of food safety' towards 'issues of diet and health'. Krebs further elaborates that issues of obesity would be a new and even more serious 'food risk' than the traditional food safety risks. Nevertheless, obesity would be that however would be underestimated by the general population:

> ‘This is because although in people’s perceptions diet and health doesn’t actually figure very high on the agenda, compared to issues such as food poisoning, BSE, pesticides and additives, the medical statistics tell a different picture. There is also the growing epidemic of obesity, which has increased by a factor of three since 1980 in the country, but which is a worldwide threat, and is a new and growing food risk. Obesity is not simply about diet, but what we eat clearly has an influence’ (FSA 2003s).

Krebs justifies the relevance of ‘diet and health’ as a future focal point in the FSA’s work by pointing to a looming future of an obesity epidemic – i.e. statistical evidence showing the threat of a rapidly ‘growing epidemic of obesity’ in the UK and worldwide. Although Krebs admits that the link between diet and obesity is not that clear-cut (‘obesity is not simply about diet’), he emphasises that diet had clearly have an influence. Krebs then makes clear that the relationship between structural and individual responsibilities in coping with the obesity problem would be central to the FSA’s approach to ‘diet and health’:

> ‘So, what can the FSA do in the area of diet and health? First, it must be recognised that there is a fundamental question about how much of this area is down to individual choice, how much is down to the responsibility of industry and how much of it is down to the government to legislate’ (FSA 2003s).

Hence, in asking ‘how much is down to individual choice’ Krebs attributes the FSA a role beyond initiating legislative measures aimed at structural factors causing obesity. According to his subsequent remarks, he sees a specific role for the FSA in developing measures to educate children in individual ‘food skills’, which he sees as forming the basis for the ‘habits of the future’:

> (…) I think that one of the keys is work with children. (…) We are (…) working with (…) other departments over the next few months to identify the key food skills that every child should have when he or she leaves school. When I talk to teachers, they bemoan the fact that food skills have been lost. (…) What children eat at school is not only a source of dietary balance but forms habits for the future (…) Further, we are also going to look particularly at food ranges targeted at children, as people are especially worried about children’s diets, and many of the retailers have food ranges targeted at children. (…) In the longer term we will be working with others across Government (…) to educate the next generation, to improve their dietary health (FSA 2003s).

In a nutshell, John Krebs' speech contains two temporal narrative elements on which the FSA's authorisation and legitimation practices are based in the temporal dimension. Especially in its first three years, the FSA put a strong emphasis on the BSE failure ' as a failure of overconfidence in safety claims', just to demonstrate that it was determined to move on to an era of 'precautionary' risk assessment that would properly acknowledge the many uncertainties involved in assessing food safety risks and in this way to rebuild public trust. Over time, this precautionary narrative came to be increasingly supplanted by a narrative centred around the threat of an obese future that required immediate pre-emptive action. As is evident from the speech of John Krebs, the fact that this shift from a focus on the *precautionary* assessment of *food safety risks* to a focus on *pre-emptive action to improve nutrition health and wellbeing* was a deliberate strategy of the FSA. The agency was determined to become an authority in food policy beyond questions of safety.

In the following, I will show how building on this temporal narrative, the FSA attempted to build politico-epistemic authority in practice. As we shall see, some of the central elements of Krebs' speech play an important role here: on the one hand, the FSA's precautionary approach to risk assessment, which was first publicly demonstrated in the wake of the 'BSE in sheep' debate; second, the FSA's later pre-emptive approach to the obesity epidemic, which, despite unclear causal mechanisms, relies on the narrative of a growing obesity epidemic caused by poor diet and requiring immediate action aimed at improving dietary behaviour of children who represent 'the next generation' of eating habits, in particular.

5.4.2 Practices of precautionary temporal ordering

Going back over the past years of failure on BSE to move towards a 'precautionary approach'

> 'The Government was preoccupied with preventing an alarmist over-reaction to BSE because it believed that the risk was remote. It is now clear that this campaign of reassurance was a mistake. When on 20 March 1996 the Government announced that BSE had probably been transmitted to humans, the public felt that they had been betrayed' (Philips et al. 2000: xviii)

In his official inquiry into the BSE crisis, Lord Phillips concluded that 'at the heart of the BSE story, lie the questions of how to handle hazard – a known hazard to cattle and an unknown

hazard to humans' (Philips et al. 2000: xviii). The 'question whether BSE was transmissible to humans was unlikely to be answered with any certainty for many years', Lord Phillips concluded (Philips et al. 2000: xx). Thus, the Phillips Inquiry further argued, restoring public trust in the aftermath of the BSE would be premised upon having government institutions that responsibly manged the uncertainties of risk assessment in the post-BSE era. One of the main lessons to be learned by the newly established FSA, which saw its own creation as 'the result of the Government's recognition of the need for change in the wake of the BSE story' (FSA 2001g: paragraph 6), should therefore concern the institutionalisation of the precautionary principle when dealing with uncertainties and ignorance.

In this context, Lord Phillips' recommendations to improve science advice highlighted the limitations of scientific knowledge making in areas with a high degree of uncertainty, i.e. where there are (currently) unknown risks or hazards resulting from the high complexity of the socio-technical interdependencies that characterise modern industrial agriculture (Jones 2004). Accordingly, in order to avoid making overconfident claims about risks, the Phillips report suggested recognising that government regulators always operate in a context of uncertain scientific knowledge. It hence recommended adopting elements of a more recursive way of knowing that favours precautionary action in the case of unknown risks (Philips et al. 2000: 261–266).

Half a year after the 4000 page-long BSE inquiry report was given to the government, the newly established FSA published a paper, titled 'Lessons to be learned from the report of the BSE Inquiry' (FSA 2001g). The declared purpose of this paper was to underline the FSA's commitment to a radical shift away from the previous status quo which had just been unmasked as a culture of overconfidence in safety claims towards more precaution. However, the discussion held during an open board meeting in 2001 shows that while the FSA board members recognised that 'the FSA (…) had already gone a long way toward addressing the procedural failures identified by the Phillips Inquiry', they also pointed to difficulties posed by the implementation of its new guidance principles [.i.e. the so-called 'Post-Phillips Framework' (chapter 5.3.2.2)]' (FSA 2001k: item 4).

The 'real problems' they argued, 'arose in dealing with uncertainty' in practice. '[R]ather than putting the formal procedures in place', the board members further argued, the aspect which

'constituted the major on-going challenge for the FSA' was putting its precautionary approach to uncertainty into practice (FSA 2001k: item 4). While the implementation of the precautionary principle, a legal principle in international and European law (European Commission 2000), was being discussed both in the UK and internationally in relation to food safety, the FSA argued that, 'it has not yet been translated into an agreed operational form' (FSA 2000c: annex 8, paragraph 15). '[A]s there were many different interpretations of the principle', the FSA preferred to use the more pragmatic formulation 'taking a precautionary approach' (FSA 2000f: 5).

The FSA thus drew on the characteristic British pragmatic 'learn by doing' approach (Rothstein et al. 1999) to adapt the precautionary principle in the light of practical experience. In this vein, its governing board suggested that the FSA's 'responses to short, medium and long-term uncertainty' should be practically tested against the Phillip's report. This 'should generally include consideration of the "what if?" aspects' suggested by Lord Phillips (FSA 2001g: paragraph 23).

> 'This should enhance a culture of continuous questioning and challenge within the Agency itself and its supporting advisory committees, and which recognised the potential contribution of dissenting voices. Groups outside government should also be able to bring to the Agency's attention areas where information was not available (…)[148]' (FSA 2001g: paragraph 29).

Accordingly, the FSA, when speaking of the 'lessons learned' from the Phillips report, pointed to the '[g]ood examples' which empirically proved that the FSA in fact did follow such a self-challenging, precautionary approach to dealing with scientific uncertainty from its very beginning (FSA 2001g). In particular, the paper highlighted the importance of the FSA's handling of the so-called 'BSE-in-sheep case' for putting its precautionary approach into practice. The issue of BSE in sheep made its way into the public spotlight in 2001 and received for the following three years a great deal of public attention. It was indeed 'one of the first

[148] In this context, the board members also pointed to the upcoming review of its scientific committees, to be conducted by the Government Office of Science and Technology (GOS). For the first time in its history, the GOS had met with a wide range of stakeholders to discuss the draft review report; consequently, the final report recommended the public documentation of the uncertainties and ambiguities of risk assessment findings by spelling out the framing assumptions that underlie any specific risk assessment (FSA 2002q: 2).

conflicts to have arisen in the FSA's early life' over the question how to deal with scientific uncertainties and as such 'an important test case' for the agency's commitment to a precautionary approach (Rothstein 2004: 862):

> 'Although it was possible to infect sheep with BSE under experimental conditions so far no naturally occurring case had been found. The numbers of sheep examined did not, however, offer any guarantee that such cases could not or did not exist' (FSA 2002m: 7).

When speaking of having adopted a 'precautionary approach' to BSE in sheep, which the FSA was keen on publicly emphasising in its first three years, the agency was specifically referring to a participative stakeholder process it had established in late 2001. This stakeholder process was designed to explore how the FSA should handle 'the possibility of BSE being found in sheep' in order to protect public health from the associated potential risk. At a meeting of over 100 consumers and agri-food business stakeholders and a subsequent series of four meetings of a smaller 'core stakeholder group', the participants were presented with 'two conflicting risk assessments[149]' (Rothstein 2004: 864). The FSA had to consider these conflicting risk assessments, which together showed 'a wide range of uncertainty from zero risk to worst case' (FSA 2001j: 7). Facing these conflicting risk assessments, the core stakeholder group, which also included FSA staff and was chaired by the FSA chairman John Krebs, assumed 'the worst-case scenario for natural casings and recommended a precautionary ban on the use of intestines (Rothstein 2004: 864). Upon public consultation of the scenario report produced by the core stakeholder group (FSA 2002f), the FSA eventually followed the stakeholder group's advice and recommended a precautionary ban, a piece of advice which it forwarded to the then European Commission's Scientific Steering Committee (SSC)[150]. In its risk assessment, the SSC came, based on studies implying minimal risk, to a different conclusion, namely 'that no more action should be taken until what is a theoretically possible risk becomes a probable risk' (Rothstein 2004: 864). Yet, after the SSC's initial dismissal, the FSA eventually

[149] The first study showed 'that the use of intestines could contribute up to a third of the total exposure to potential BSE risks', while second study 'concluded that approximately 9 per cent of total potential exposure to humans would come from intestines used in natural casings for sausages, while more than 80 per cent would come from lymph nodes, which are found throughout the carcass' (Rothstein 2004: 864).

[150] The SSC was the European Food Safety Authority's (EFSA) predecessor, which was established in 2002.

'persuaded the Commission to introduce a ban on the use of sheep ileum', which had been considered 'a particularly potentially infective part of the small intestine (Rothstein 2004: 864).

The FSA used the BSE in Sheep case, which was discussed 'under the spotlight of public opinion' (Rothstein 2004: 865), to publicly demonstrate that – through its open mode of participatory knowledge production – the agency was more apt to take precautionary action than its European counterpart. The FSA, being aware that '[t]he issue of BSE and sheep was being monitored closely in Europe', invited a wide range of domestic consumer, agri-food business stakeholders and scientific experts to one of its stakeholder meetings (FSA 2001j: paragraph 15). It also explicitly invited representatives of the European Commission and other EU member states to its stakeholder meeting (FSA 2001j: paragraph 15). Thus, from the very beginning, the risk assessment process for BSE in sheep was designed to testify to the agency's 'precautionary approach', both domestically and at the European level. The agency's precautionary approach was shown to acknowledge both the possibility of unknown risks attached to the highly complex BSE in sheep issue and the necessity of consulting heterogeneous stakeholders in order to cope with this uncertainty.

Moreover, the FSA's handling of the BSE in sheep case was explicitly intended to function as a 'case study' for 'measuring the performance of the Agency against the Phillips lessons' (FSA 2001i: 2). To do so, the FSA mandated an external expert from Cambridge University to review its policy making process with respect to BSE (FSA 2002l: annex 1; Rubery 2002). The way in which the FSA presented its approach to BSE in sheep in the course of this external review illustrates how it can be understood as a manifestation of recursive-precautionary temporal ordering work: In the review process, the FSA portrayed its stakeholder process as an empirical proof of the agency's precautionary approach, which acknowledged 'that, depending on different assumptions, a wide range of conclusions about the size of the risk can be drawn' and hence relied on heterogenous perspectives (FSA 2002e: 1). In doing so, the FSA demonstrated that it was highly aware of the more radical forms of uncertainty characterising the BSE-in-sheep issue. During this external review, the FSA emphasised its view that questions concerning the uncertain risks BSE in sheep may pose to consumers' health where definitive statements could not be made (epistemic authority) and the implications this had on specific policy measures (political authority), could and should not

be purely answered based on probabilistic risk assessments. Due to the uncertainty manifest in the BSE in sheep case there would an additional need of deliberation and negotiation among heterogeneous stakeholders, especially consumers.

What was closely intertwined with the FSA's recursive-precautionary authorisation mode was thus a representative claim on behalf of the 'consumer citizen'. One interviewee of a consumer organisation representative described the FSA's precautionary approach developed based on the agency's practical experience with the BSE in sheep case as follows:

> '[O]ccasionally we would get drawn into that [risk assessment of food safety issues] just as a matter of general principle. This had something to do with consumers' right to know and the precautionary principle or, or that kind of thing. So not so much because we knew about the particular issue, but because it raised *common issues*, like the *consumer right to know* and the *precautionary principle*' (interview member 24 – NGO, own emphasis).

As is evident from this quote, consumer stakeholders were consulted during risk assessment processes not due to their expertise, but because they were attributed both a kind of civic 'right to know' and the capacity to represent the consumer views and concerns in matters of risk uncertainty. The interviewee's explanation of the FSA's consultative precautionary approach thus illustrates how this practice of authorisation was based on a representative claim on behalf of consumers as collective subjects with legitimate social interests. These were granted the possibility to put forward their views in processes of deliberating and negotiating the FSA's precautionary measures. Thus, this representative claim went beyond a mere claim on the 'knowledgeable consumer' whose role was limited to weighing evidence and making 'informed choices':

> 'So, it [the FSA's precautionary approach] wasn't: "Oh, what does the evidence say?" Because evidence is always: on the one hand, on the other hand. There's some doubt, terribly difficult. Our view is: Yep, that's almost always the case. The question is: Who benefits? And what's the risk? And who to? And what happens if you do it? What happens if you don't do it? Usually, if you don't do it, there's not much risk. Nothing is risk free, obviously, but, or, or very often our response would be: Ok, so what's the problem this thing is trying to address? A: Is it a real problem? B: Is there another way to solve it? That doesn't involve something that looks a bit risky. So, our, our role was almost never to say: Ah, well what we need to do is weigh the available evidence and see which is the, the heaviest. You could spend forever doing that. It was to take a different approach' (interview member 24 – NGO).

As the interviewee here explains, the FSA's consultative-precautionary approach to handling uncertain risks was not simply about weighing the available evidence but involved deliberation on the question of how the potential benefits and harms of an uncertain issue were to be distributed in society.

BSE in sheep was thus the FSA's first publicly visible case of stakeholder-consultation-based precautionary action that covered the best part of the FSA's first three years. As such the FSA's handling of BSE in sheep and notably the uncertainties involved in this matter marked a period in which the FSA had been keen on demonstrating precautionary action to ensure food safety. A second example is the FSA's review of the so-called 'Over-Thirty Month Rule' (OTM rule) in regard to BSE-infected beef.[151] The review of the OTM rule represented a further publicly salient issue in the FSA's early years. Here, a stakeholder group comprising heterogeneous interests 'decided the requirements of the quantitative risk assessment' and hence framed 'upstream' risk assessment questions (FSA & The Royal Society 2005: 3). After the respective scientific advisory committee had conducted the risk assessment on the OTM rule, the stakeholder group discussed the results of the risk assessment as well as those of an additional cost-benefit analysis with a view to providing a recommendation to the FSA board on changes to the OTM rule. Eventually, the FSA board agreed 'to advise government Ministers that replacing the OTM rule by testing cattle that were born after the 1996 feed ban for BSE would be justified' (FSA & The Royal Society 2005:3). Although the FSA – based on this stakeholder process – recommended a relaxation of the current stringent rules, it publicly portrayed this recommendation as a further 'case study' that testified to its precautionary approach, as the documentation of a workshop held by the FSA and the Royal Society in 2005 shows[152] (FSA & The Royal Society 2005). The FSA here portrayed its approach to dealing with the OTM-rule as being precautionary, because it here likewise attempted to cope with the uncertainty attached to risk assessments on the issue by deliberation among stakeholders.

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[151] Following the outbreak of BSE, the Over Thirty Months Rule was one of the measures introduced to minimise the risk of humans consuming BSE-infected beef. According to the rule, cattle could not be sold for food if they were aged over 30 months.

[152] The FSA and the UK's academy for science, Royal Society, held a workshop titled 'Risk Assessment – Social Science Insights' in 2005 to discuss the influence of societal and institutional assumptions in risk assessment and management, particularly in cases with a high degree of uncertainty.

Beyond BSE-related issues, a further important topic, which was frontstaged as an empirical proof of the FSA's consultative precautionary approach, was the issue of pesticide residues in food and specifically so-called 'mixtures of pesticides'. Like the BSE-in-sheep case, the agency's precautionary approach here involved consumer and other stakeholder views in an area where a high degree of scientific uncertainty existed. As one of its first actions, the newly established FSA consulted consumer groups and groups with a special interest in pesticide residues in food. This extensive consultation showed that most stakeholders wanted the FSA to 'press for lower residues in food' and to investigate 'the cocktail effect' and long-term effects of exposure to low levels of these substances (FSA 2000i: paragraph 8). Based on this consultative 'up-stream framing' of risk assessment questions, the FSA consequently asked its Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment (COT) to establish a 'Working Group on the Risk Assessment of Mixtures of Pesticides' to publish a report on the issue (FSA 2002k). Moreover, it not just commissioned an independent academic literature review investigating minimising strategies. It also consulted a wide range of stakeholders 'to capture opinions, discover initiatives already underway and highlight where the agency could provide the most effective lead to drive down residues' (FSA 2002c: 3). In so doing, it attempted to be seen as acknowledging and addressing the many 'areas of uncertainty in assessing the risks from mixtures of chemicals' (FSA 2005a: 1). It therefore supported the COT in developing 'more robust horizon scanning mechanisms' that would enable the FSA 'to identify presently unknown contaminants that might become important in the future' (FSA 2005a: 6) and 'to respond promptly to emerging issues' (FSA 2005a: 1).

In this context, the FSA commissioned 'research to investigate whether combined exposure to different chemical contaminants in the diet could lead to harmful effects not predicted by the risk assessment of single substances' (FSA 2005a: 4). The COT's working group concluded that, based on the available knowledge, 'the probability of any health hazard due to exposure to mixtures of chemicals (…) is likely to be small'. It explicitly pointed to the fact that 'the body of evidence is nonetheless limited and it is possible that some interactions are not readily predictable' (FSA 2005a: 7). Consequently, the FSA decided to commission further research and 'horizon scanning', i.e. the proactive anticipation and monitoring of emerging risks. In so doing, it also acknowledged that a more detailed understanding of 'all exposure sources' was necessary, because it constituted a fundamental factor in safety

assessments. Hence, research on exposure sources was commissioned as a result of the preceding consultation process, which also included many consumer groups and the FSA's own consumer committee (FSA 2003n: 8). In particular, the consumer committee argued that:

> '[D]espite the safety-based controls that apply to pesticides there remained a degree of scientific uncertainty. This uncertainty, plus unexplained increases in certain diseases might be a real concern for some consumers' (FSA 2004g: 16).

Thus, 'mixtures of pesticides' was a further issue on which the FSA was committed to demonstrating its consultative precautionary approach which involved a representative claim on behalf of consumers as actors with legitimate social interests to be heard, hence of the 'citizen consumer'. Similarly to the BSE in sheep case, the FSA's precautionary approach here involved to address the intractable complexities and uncertainties of food safety issues by actively integrating consumer perspectives into the process of both framing risk assessment questions and deliberating on the respective policy implications. The FSA's precautionary approach hence included broad-based knowledge gathered through scientific risk assessment and at the same time deliberation around consumer preferences and values associated with the risk under consideration.

Resulting from these processes of deliberation on 'mixtures of pesticides' by involving specifically consumer perspectives, the FSA adopted a specific understanding of what coping with 'mixtures of pesticides' and the associated uncertainties in a precautionary way was about – i.e. ensuring the 'promotion of consumer choice'. Even though 'the current risk-based approval system' showed 'that there are no likely health effects', the FSA admitted that there was uncertainty about the long-term effects of exposure to mixtures of pesticides and therefore 'recognised that consumer preference is for food that does not contain pesticide residues' (FSA 2002k: 7, 2003e).

To secure consumer's choice the FSA launched an 'Action Plan to Reduce Pesticide Residues in Food', which primarily 'stemmed not from safety concerns but a desire to promote consumer choice' (FSA 2003e). The plan made provisions for '[a] case by case approach to pesticide minimisation that might start with a focus on those foods (…) making up a high proportion of children's diets (FSA 2002c: 13). According to the FSA, this was the case, because consumer research had shown that mothers, who generally shopped for their families,

were the group most concerned about pesticides and would 'take some special precautions in respect of preparation of food for young children' (FSA 2003n: 10–11). Moreover, the FSA's action plan was not limited to initiating voluntary reductions of pesticides but aimed to encourage retailers to provide consumers with transparent information 'to enable them to identify foods (…) which are likely to have lower residues' (FSA 2002c: 7). This was a necessary measure, the FSA argued, since it was a clearly stated consumer preference ('this is what consumers want' (FSA 2002k: 5)).

The agency's precautionary approach to risk assessment manifested in this action plan was hence based on claiming the relevance of this approach to achieving the good of two sorts of constituencies. First, this was a community of caring mothers who were interested in protecting their children potential risks from pesticides in children's food and a more general community of consumers, likewise with a legitimate interest for 'pesticides-free' products. Both were hence invoked as 'citizen consumers' with legitimate social interests relating to the issue of pesticides in foods and hence granted the possibility to articulate their views in developing the FSA's precautionary approach to pesticides. Second, this was a community of knowledgeable consumers in the marketplace who were empowered to make informed choices according to their preferences on the basis of improved labelling standards.

A further example, which was likewise very much in the public spotlight concerns the FSA's precautionary approach to assessing the impact of food colours on children (FSA 2007l). Already before the FSA's establishment in 2000, there were longstanding public concerns over the use of some additives in food, such as food colours, which were ongoing in the FSA's first years[153]. Against this background, the FSA had asked the COT to review the results of a study investigating the relation between six artificial food colours and hyperactivity in children in 2003. The COT had 'concluded it was not possible to reach firm conclusions about the clinical significance of the observed effects in this study[154]' (FSA 2007l: 4). In response

[153] In the FSA's annual Consumer Attitudes Survey, food additives, and colourings in particular, 'were the most mentioned spontaneous response to a question on food issues of concern' (FSA 2007l: 2).

[154] The COT 'considered that the findings were inconclusive as the effects that had been observed were only evident in the parental reports of behaviour and were not confirmed by the independent assessments made in a clinical setting. A further limitation was the observed "placebo effect" seen in some children when they were given the control drink not containing the test additives' (FSA 2007l: 4).

to this review, the FSA commissioned a follow-up study in 2004, which addressed 'the limitations of the design of the first study' (FSA 2007l: 4).

The study showed that different mixtures of colourings and other additives tested 'had a small and statistically significant effect on activity and children selected from the general population' (FSA 2008e: 4). However, the FSA's 'Committee of Toxicity' (COT), which also reviewed this follow-up study, again saw itself 'unable to draw conclusions of the observed behavioural changes' in children's behaviour. The committee arrived at the judgement 'that it was not possible to attribute causality to the association nor could the observed effects be ascribed to any of the individual compounds' (FSA 2008e: 4). At the same time, the study 'became front page news' with pressure groups immediately attacking the FSA for adopting the COT's risk assessment for not going far enough (Lofstedt et al. 2011: 417).

Against this background, the FSA board however argued that the agency had not the competence to unilaterally ban food colour additives, since the criterion to suspend the use of an additive, namely 'that the use of an additive endangers human health', which was required by EU harmonised legislation on food additives[155] was 'not met' according to the scientific COT assessment (FSA 2007l: 5). Therefore, the board pointed out that 'any action regarding the future use of the colours (…) would be needed at a European level (FSA 2008e: 2). Thus, all the FSA could do to adopt a precautionary approach was to send the FSA-commissioned study to the EFSA for being considered 'as a matter of urgency' in need for an EFSA expert opinion. It hence publicly presented the act of forwarding the evidence to the EFSA 'as the first step in initiating appropriate pan-EU risk management measures[156]' (FSA 2007l: 5). Eventually however, the competent EFSA panel agreed with the COT's statement and 'concluded that the results of the study could not be used as a basis for changing its current policy on food additives' (FSA 2008e: 4).

Nevertheless, the FSA subsequently pursued what it presented as precautionary measures to food colourings in order to secure consumer choice. On the one hand, it initiated a stakeholder

[155] According to the EU harmonised legislation on food additives, (including colours), at that time, the Council Directive 89/107/EEC, a Member State can take unilateral action to suspend the use of an additive only when permitted to do so by EU law.

[156] In so doing, the FSA also committed itself to 'encourage action to phase them [food colours] out in food and drink in the European Union' (FSA 2008m: 47).

process including both consumer and industry representatives. This stakeholder process aimed at agreeing 'voluntary action by manufactures in the UK to remove these colours' (FSA 2008m: 47), so that consumers could also choose colour-free products, which would then be labelled by respective 'front of pack flashes' (FSA 2007l: 6). On the other hand, the FSA directly targeted individual parents by advising them on its 'eatwell' website, which provided parents with information about which companies had begun to reformulate their products, so that concerned parents could follow the FSA's advice:

> 'if a child shows signs of hyperactivity or Attention Deficit Hyperactivity Disorder, then eliminating the colours used in the Southampton study from their diet might help improve their behaviour' (FSA 2008m: 50).

This final example shows in a particularly illustrative manner that the FSA's 'precautionary approach' did not just entail regulative precautionary measures addressing food safety. It also involved negotiating non-enforceable 'voluntary initiatives' with food producers as well as providing individual consumers with advice aimed at enabling 'consumer choice', i.e. enabling parents to choose food products according to their preferences and special needs (be it in the form of labels or other information tools). Operating between the different worlds of scientific risk assessment and food policy, the FSA's attempt to build politico-epistemic authority hence relied on two claims: The first is a temporal claim on the necessity to publicly acknowledge and document the more radical and not simply reducible uncertainties and ambiguities involved in assessing food risks (epistemic authority). The second is a representative claim stating that addressing these uncertainties is a matter of deliberation and negotiation with heterogeneous stakeholders because such uncertainties cannot be resolved scientifically but must be approached in a way that meets the needs of both individual consumers who strive for 'free choice' and industry actors who prefer the flexibility of 'voluntary regulation' (political authority).

While in the previous analysis the contextual embeddedness of the FSA's precautionary practices has been selectively evident, I will separately elaborate on the FSA's invocation of different contextual elements in and through these practices.

5.4.2.1 The contextual embeddedness of precautionary authorisation

The FSA's claim to precautionary action drew on several institutional-cultural and discursive context elements. In so doing, the agency enacted and reproduced certain contextual elements, whereas it renewed and reconfigured other ones. It is evident from the previous analysis that the FSA's consultative precautionary approach relied on New Labour's discourse on renewing or reviving the British 'public interest' culture through a more socially inclusive and transparent governance style than the traditional British opaque style dominated by 'closed-door settings' (Jasanoff 2005). As I have argued in chapter 5.1 New Labour's modernising government agenda was to a large extent also a consequence of the BSE crisis discourse. In this discourse, the failure on BSE was predominantly framed as a direct result of Britain's opaque style of science advice and policy-making, which led to an overall overconfidence in unjustified safety claims and eventually to the FSA's establishment. The traditional British style of policy making, it was argued, tended to be 'closed to all but a select inner circle of participants', which resolved disputes 'as far as possible through negotiation within this socially bounded space', as a result of which British risk assessment and management tended to be averse to 'admitting of uncertainty' (Jasanoff 1995: 325–326). This is exactly where the FSA and its precautionary approach came in to reconfigure this traditionally rather socially closed style of expertise-based policy-making:

First, the FSA's precautionary approach had been designed to involve both formal scientific risk assessment and extensive stakeholder consultation on the problem of scientific uncertainties, unknown unknowns and ambiguities underlying in risk assessment. This consultative precautionary approach was developed from the practical experience gained through the case-by-case application of the 'Phillips lessons' on the BSE crisis to a series of issues debated in the public spotlight in the FSA's first years – namely 'BSE in sheep', 'mixtures of pesticides', and 'food colourings'. These were employed as 'test cases' that constituted a frontstage in which the FSA could present 'empirical proof ' showing that its precautionary consultative approach to handling risks was well suited to cope with the unknown factors of complex food risks 'in the public interest'.

The public demonstration of its precautionary approach occurred not only in front of domestic actors, but also vis-à-vis the European actors. The FSA used the tensions arising from its

stakeholder-based precautionary approach with EFSA's exclusive focus on probabilistic risk assessment in order to raise its profile as an institution that had wholeheartedly adopted the lessons learned from the BSE crisis. This lesson was about distinguishing itself as a pioneer of 'putting consumers first' in handling knowledge uncertainties. The FSA's drive to demonstrate its stakeholder-based precautionary approach vis-à-vis their sister agencies taking part in EFSA's horizontal coordination networks was also explicitly emphasised in one of the interviews I conducted with FSA staff. In explaining the FSA's view on different activities of the EFSA' heads of national agencies network and the FSA's participation therein, the interviewee argued that despite these network activities aimed at harmonising risk assessment members should acknowledge the legitimate need of national food agencies to be responsive towards domestic stakeholders, 'consumer groups' in particular:

> 'It might still be at the end that you still have a different opinion – especially where there is uncertainty – but everybody understands why. And I think, for me, that's the important thing (…) in *the real world* there are often factors that will be particularly pertinent to one or more of the areas, and you have to bear that in mind. And the fact that ultimately, *each of the national agencies is responsible for their national consumer groups'* (interview official 33 – FSA).

As is evident from this quote, the FSA viewed the 'real world' politics shaped by national consumer groups and EFSA's risk harmonisation efforts as two different matters, each with its own premises and implications that have to be carefully reconciled when dealing with uncertainties in risk assessment. Thus, framed in this way, the FSA's consultative precautionary approach, although embedded with the context of the European food safety risk assessment regime, strongly relied on a representative claim on behalf of the 'domestic consumer' whose legitimate social interests were to be considered in dealing with uncertainty, as this was the only means to ensure input legitimacy. By so doing, the FSA's precautionary approach specifically reflected the British 'public interest culture' that strongly values acts of 'seeking to obtain the public's consent in order to demonstrate that any policy measure is devised in the public interest (Pollitt & Bouckaert 2004: 53).

Second, FSA's consultative precautionary approach at the same tame also reflected New Labour's focus on voluntary regulation and 'consumer-oriented' public services as discussed in chapter 5.1.3. As we have seen, the FSA's precautionary approach relied on the common

good of 'consumer choice' as a reference point. This implied not only the idea of empowering consumers in their choices but also required consumers to take rational action for themselves. In this way, the FSA's precautionary approach chimed with New Labour's emphasis on the value of consumer freedom and choice. For instance, as we have seen, parents were supposed to avoid food products with specific additives if their children showed symptoms of hyperactive behaviour. In this vein, the FSA over time became increasingly keen on emphasising that its precautionary approach did 'not aim to eliminate all risks but to take action to reduce risks to the level that would be acceptable to the *reasonable consumer'* (FSA 2005e: 10, my emphasis). As the FSA's chief executive expressed it in an open board meeting discussing the agency's approach to food incidents, 'the critical factor determining the action to be taken would first and foremost be the impact on the consumer'; here '[t]he FSA would take into account what a reasonable consumer would expect' (FSA 2006h: 17). Thus, framed in this way the FSA's consultative precautionary approach relied on a representative claim on behalf of the 'knowledgeable consumer'.

5.4.2.2 The contestedness of precautionary authorisation

However, the FSA's invocation of the value of individual consumer choice and the linked individualised responsibilisation of consumers in the FSA's precautionary authorisation attempts was partly contested. The responsibilisation of consumers in terms of a 'rational' approach to deal with the uncertainties attached to risk assessments encountered resistance among consumer groups and the FSA's own advisory committees. Consumer groups criticised that 'it was unreasonable to place the burden of avoiding (…) artificial colours on consumers' (FSA 2007l: 6). These groups therefore argued that food colours should either be banned or the FSA should at least extend its advice to all children and not only to those who demonstrated 'hyperactive behaviour' – a term that unsettled many parents who did not see themselves as capable of assessing whether it applied to their children, as the FSA's own consumer research revealed (FSA 2007l: 6). In the same vein, the Welsh Food Advisory Committee, the FSA's advisory committee on food policy relating to Wales, argued 'that it is unreasonable to expect parents to be monitoring their children for signs, or scales, of hyperactivity and that the FSA advice should recommend a general avoidance by all children of the colours' (FSA 2008e: 5).

Moreover, the agency's strong public emphasis on its precautionary approach in its early years was not uncontroversial. From FSA's beginning, the better regulation agenda was reflected in its mandate, according to which, any precautionary action had to be balanced against proportionality[157]. While this formal provision first had not been given particular attention in the FSA's frontstage performances, since around 2004 the principle of proportionality increasingly became a key element of the Labour government agenda and a few years later also of the FSA's authorisation practices, as I have already shown in chapters 5.2 and 5.3. According to the then Cabinet Office's Better Regulation Unit, the principle of proportionality meant that '[r]egulators should only intervene when necessary' and '[r]emedies should be appropriate to the risk posed, and costs identified and minimised' (BRTF 1998: 4). Looking more closely at the FSA's handling of the 'BSE in sheep case', Henry Rothstein has argued that the FSA's purportedly precautionary opinion on the risks posed by sausage casings were – 'far from being a precautionary ban' – 'picked on because the FSA needed to be seen to be doing something' and sausage casings were easy to deal with and had only limited impact on the UK sheep farm industry' (Rothstein 2004: 868). In this sense, one could argue that, while frontstaging its precautionary approach, especially in its early years, the FSA somewhat obscured the fact that it had to reconcile its precautionary action with the principle of proportionality required by the Better Regulation agenda.

In any case, there are several indications that, after an initial 'precautionary phase', the FSA's precautionary approach began increasingly to be seen as being in tension with the principle of proportionality. First, the analysis of the FSA's open board meeting discussions reveals that since 2004 the FSA's public demonstrations of taking precautionary action became increasingly rare. Second, the rising importance of the principle of proportionality and the overall better regulation agenda was explicitly reflected in several important documents published in the course of the FSA's development of its Strategic Plan 2005–2010 and the internal discussions around these papers (see chapter 5.3.2.1). This shift was most evident in the FSA's paper 'The Food Standards Agency and Regulation' which was submitted to an open board meeting in 2005. In this paper the precautionary approach underwent several

[157] The Food Standards Agency Act 1999, c. 28. Available at: http://www.legislation.gov.uk/ukpga/1999/28/contents

remarkable semantic displacements culminating in its replacement by the term 'taking *proportionate* action': The paper first emphasised – without naming precautionary action in the same breath as in previous papers – that the FSA has 'a statutory responsibility to take into account the costs and benefits when considering whether and how to exercise its powers' (FSA 2005e: 4). The paper then stated that the FSA should 'reach decisions that are proportionate to the risk, cost and benefit, where these can be quantified, (…) and incorporate the proportionate use of a precautionary approach, where the risk, costs and benefits are unknown (FSA 2005e: 7). Thus, the paper was not just much more careful in defining the role of the FSA's precautionary approach in its risk assessment and management activities; it even states that the FSA should 'incorporate the *proportionate* use of a precautionary approach' (FSA 2005e: 7). What this precisely meant was specified as follows:

> 'Often, the evidence underpinning the decision will be incomplete; different types of evidence may point in different directions; the data may be uncertain; or the underlying science may still be developing and the issues not yet fully understood. When scientific uncertainty is established, the FSA is open about the uncertainty, and does not allow the absence of certainty to delay it from taking proportionate action' (FSA 2005e: 10).

Thus, in this quote, the precautionary approach ultimately disappears entirely and is replaced by the principle of 'proportionate action'. A situation that (in the FSA's first years) had been defined as a situation requiring a precautionary approach, namely a situation of a fundamental form of uncertainty, is reframed here to reflect the Better Regulation Agenda's concept of proportionate action.

During my interviews with FSA members, I asked some of them what 'proportionate' meant for the FSA's practice in this regard. One interviewee's response illustrates that the logic of 'proportionate impact assessment' almost inverted the idea of a precautionary handling of uncertainties attached to risk assessment:

> 'One of the ways to try to be proportionate is to base what you do on the risk (…) We have a saying, you don't use a hammer to crack a nut, you know. So, you try to balance, say, the burdens that you put on the businesses with the degree of risk that is involved. And that's the approach we try to take (interview official 30 – FSA).

As is evident from this quote, the principle of being proportionate was meant to push for balancing any risk management action against the costs this incurred for businesses. Although

the interviewee here casts weighing the costs of potential burdens placed on businesses only as *one* possible way of understanding 'being proportionate', this remained the sole specification of the 'proportionality principle' in the entire interview.

As such, the principle of proportionality was clearly in tension with the FSA's initial precautionary approach which aimed at coping with food risks and the uncertainties attached to them in a way that particularly included the views and concerns of consumers. Thus, also in the temporal dimension the shift away from advocatory authorisation practices is evident: While in the FSA's first years, the discourse on post-BSE reforms and New Labour's strong focus on 'social exclusion' and 'new scientific governance' proved to be particularly powerful discursive legitimatory resources for the FSA's precautionary practices of assessing and managing food safety risks, this changed over time.

The FSA's focus on the input-oriented post-BSE and new scientific governance discourses, shifted towards the managerial and output-oriented institutional discourse on 'better regulation'. With the latter becoming more and more important as a legitimatory resource for the FSA's risk assessment practices, more linear notions of temporality, such as formal scientific risk assessment and ex ante regulatory impact assessments, which explicitly require the estimation of costs and benefits in order to avoid 'overregulation', gained importance. This shift from precautionary to 'proportionate' approaches to risk regulation unfolded first as part of the FSA's frontstage policy (which was also reflected in its guidance documents (see chapter 5.3.2.1)) and then gradually also included the FSA's actual backstage coordination: The FSA established – as all government departments did – a Better Regulation division whose role was to regularly meet with staff from other governmental Better Regulation units to discuss 'new ideas on risk-based and proportionate regulation that ministers would have had and how they can be implemented' within the FSA (interview official 30 – FSA). Moreover, this interviewee emphasised the important role that assisting the FSA's policy staff in doing impact assessments and preparing monitoring and performance reports played in the work of this unit:

> 'So, we sort of develop the policy on how we're going to do it [impact assessments aimed at 'better regulation'] here and we make sure that all of our staff know about it and that they do it and we help them to do it. (…) And then we also have a monitoring and reporting role because usually if ministers say they want something doing, they'll also want it

> monitored and reported back to say how we're doing to make sure that we are doing what they expect us to do (interview official 30 – FSA).

Yet, in parallel to the increasing importance of the better regulation agenda, which favoured linear regulatory impact and risk assessment methodologies over the FSA's initial consultative and decidedly consumer-oriented precautionary approach, the FSA had begun to focus on another form of recursive temporal ordering, i.e. pre-emption as a frontstage authorisation practice, which will be presented in the next sections.

5.4.2.3 Practices of pre-emptive temporal ordering

In this chapter I will show how the agency increasingly engaged in pre-emptive temporal ordering practices of knowing and acting on an (uncertain) future. I will do so using the example of the FSA's work on nutrition and especially 'obesity', which since around 2004 has been its most visible frontstage policy. The agency's work on obesity can be understood as pre-emption, because it sought to anticipate and imagine an unknown threatening future and to provide the effective means designed to avoid it from happening despite that data on and the relation between the two are uncertain (see chapter 3.3).

The FSA's pre-emptive practices, in turn, can be understood as a form of recursive temporal ordering because, like its consultative precautionary approach, they were premised upon the assumption that practices of knowing the future are ineluctably situated within specific social contexts that co-constitute a world full of interdependencies that yield a more radical form of incalculable uncertainty. However, as I will show in the following section, the FSA's pre-emptive temporal ordering mode selectively invoked the linear trajectorial narrative of a 'growing obesity epidemic'.

'Changing Times, Changing Risks' – using the narrative the 'obesity epidemic' and the emergency imaginary of the 'time bomb' to justify pre-emption

As I briefly indicated above when zooming in on the FSA chairman's speech at the Westminster Diet and Health Forum, the FSA's attempts to build politico-epistemic authority over time became increasingly grounded in a narrative about the linear trajectory of 'the growing epidemic of obesity'. Thus, although the FSA had initially been set up with a prime

focus on food safety, nutrition and dietary health quickly became one of the key issues in the FSA's attempts to build politico-epistemic authority, as we have already seen in the previous analysis of the FSA's attempt to establish the traffic light signposting logo[158] (chapter 5.3.2.3). The FSA's authorisation attempts through temporal ordering work hence shifted towards what I call 'pre-emptive authorisation', i.e. a successful claim on action aimed at avoiding a future 'obese nation', as outlined by John Krebs' speech. This pre-emptive authorisation practice will be presented in more detail in the subsequent sections as a specific form of recursive temporalisation. Before doing so, I will first briefly present the key elements making up a specific trajectorial narrative of the 'rising threat of an obesity epidemic' to which pre-emptive practices responded.

In building politico-epistemic authority through a pre-emptive mode of temporal ordering, the FSA relied on different statistics that all pointed to a threatening trajectory of rapidly increasing obesity. For instance, to justify the urgency of the agency's 'Action Plan on Food Promotions and Children's Diets' (chapter 5.3.2.3), the FSA referred to different official reports and statistics which predicted the threat of an 'obese nation'. In its 'Strategic Plan 2005 – 2010', a sort of broad five-year working programme, the FSA argued, referring to statistics of the Royal College of Physicians, that '[o]besity in 6-to 15-year-olds trebled (5% to 16%) in 11 years (1990-2001) (FSA 2004i: 8). Against this background, the FSA warned that '[i]f current trends continue, by 2020, one fifth of boys and a third of girls will be obese' (FSA 2004i: 16). To justify the Action Plan on Food Promotions and Children's Diets', the FSA painted an even gloomier vision of the future of rising obesity rates:

> 'On present trends, obesity will soon surpass smoking as the greatest cause of premature loss of life. It will bring levels of sickness that will put enormous strains on the health service, perhaps even making a publicly funded health service unsustainable (…) If immediate action is not taken, millions will suffer from an array of serious health disorders' (FSA 2004b: 3–4).

As this quote shows, the claim of the threatening obese future not only pertained to the health and mortality of UK's future population but also to the costs obesity-induced illnesses would

[158] As I have argued in the introduction, nutrition was from the beginning part of the FSA's remit but not a focus of its frontstage policies and an issue where it shared responsibilities with the Department for Health.

pose on the public services. It is the resulting monetised health costs that make obesity – predominantly defined as an individual physiological problem of children – society's problem:

> 'Many children have diets that contain too much fat, sugar and salt and too little starchy foods, fruit and vegetables. Poor diet may have a range of adverse health consequences. The total caloric intake, together with energy expenditure, influences body mass. Therefore, diet plays a part in the rising levels of obesity in children. It is predicted that by 2010 obesity may cost the nation some £3.6 billion a year' (FSA 2004h: 3) .

> 'In October 2007, the UK Foresight report: Tackling Obesities: Future Choices- Project Report was published (…) It contained the prediction that by 2050, 60% of men and 50% of women could be clinically obese. This prediction implies significant impact not only on individuals, but on the NHS and society as a whole' (FSA 2008m:30).

In addition to citing various statistical numbers to underline the FSA's trajectorial narrative of growing obesity rates and their negative societal effects, the FSA's reports and public presentations often used statistical line graphs. These allowed for an immediate understanding of how dramatic this 'obesity trajectory' was. The statistical line graphs in figure 19 was used in the 2008 annual report of the FSA's chief scientist to visualise in an easily graspable way the rising rates in childhood obesity from 1993 to 2005, while this was directly followed by a second line graph showing the forecasted rate of adult and children obesity up to 2050:

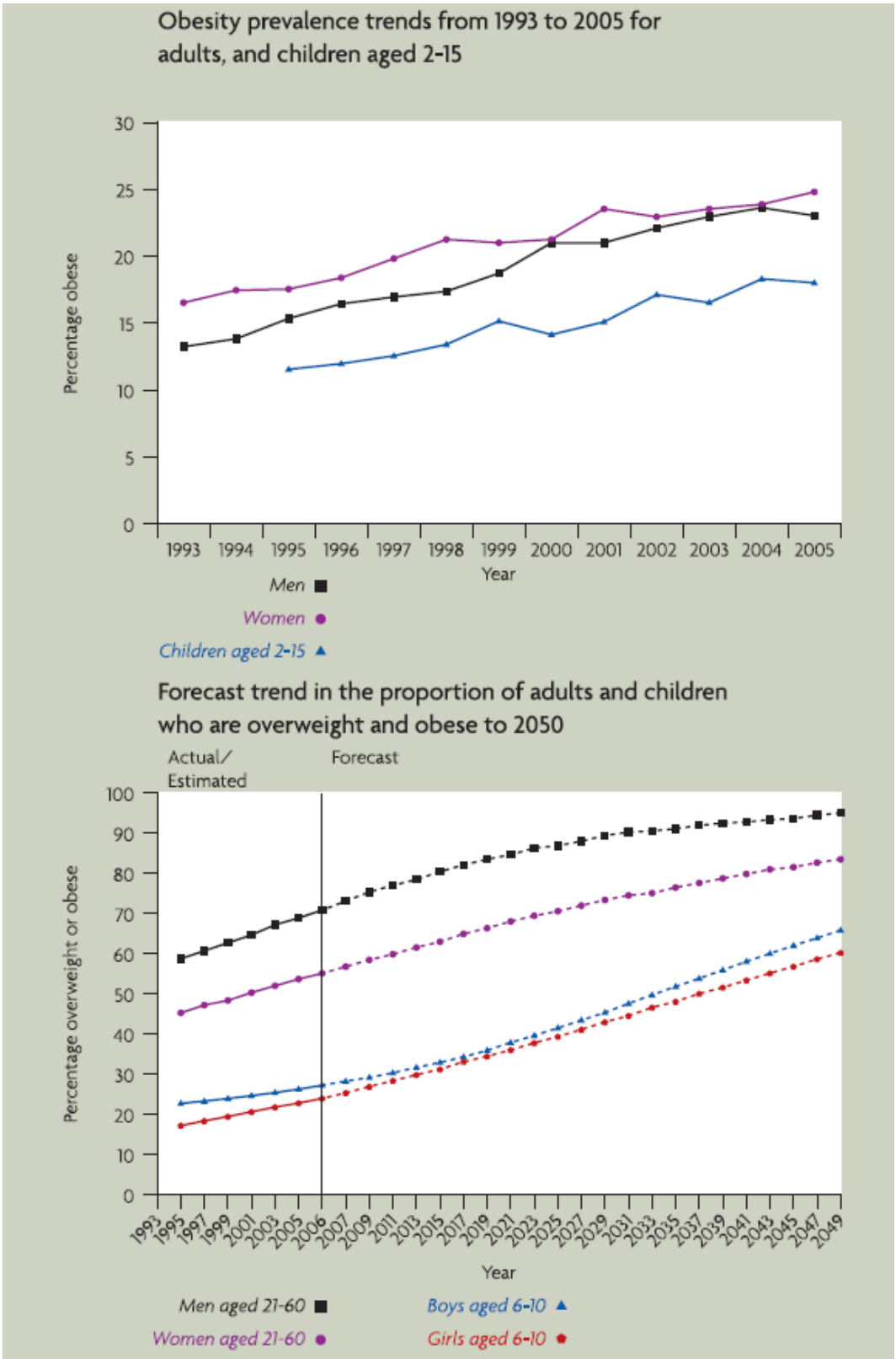


Figure 19: Obesity trends from 1993 to 2005 and forecast trend to 2050 (FSA 2008m: 40)

Thus, in viewing the previous illustrative quotations and visualisations together it becomes evident that the FSA drew on the trajectorial narrative of rising obesity rates – measured based on epidemiological statistical data on adults and children having a 'body mass index over 25' – in multiple ways (FSA 2004l). As shown in the two graphs, the FSA argued that 'obesity in the UK had increased since 1993 with nearly a quarter of adults and about 17% of children now classed as obese' and states that 'this trend is predicted to continue (…)' (FSA 2008m: 31). Moreover, the FSA's trajectorial narrative assumed a linear relationship between rising body mass scores and rising obesity rates, rising morbidity rates, as well as rising economic costs, even though this relation was discussed with caution in the scientific literature (Evans et al. 2004; Campos et al. 2006; Oliver 2006). In so doing, it construed an image of a clearly foreseeable 'obese future': strongly increased obesity rates will negatively affect the health and wellbeing of future generations of children (e.g. 'maturity onset diabetes in obese children' (FSA 2004h: annex 1,3) and impose burdens on society at large, which will have to cover increasing public health costs.

The FSA's linear trajectorial narrative also had a stratification dimension that pointed at obesity prevalence trends in specific social classes, as is illustrated by figure 20 likewise taken from the 2008 annual report of the FSA's chief scientist. The graph in figure 20 shows the trends in obesity prevalence between people in 'social class I' – i.e. the higher managerial and professional occupations – and 'social class V' – the lower supervisory and technical occupations' as defined by Office for National Statistics. As the graph unambiguously shows, those in 'social class V' 'are particularly susceptible to becoming obese, especially women' (FSA 2008m: 41). As we will see later in this chapter, this stratification dimension served as a ground for justifying the FSA's pre-emptive behavioural approaches to changing the behaviour of especially children from low-income families.

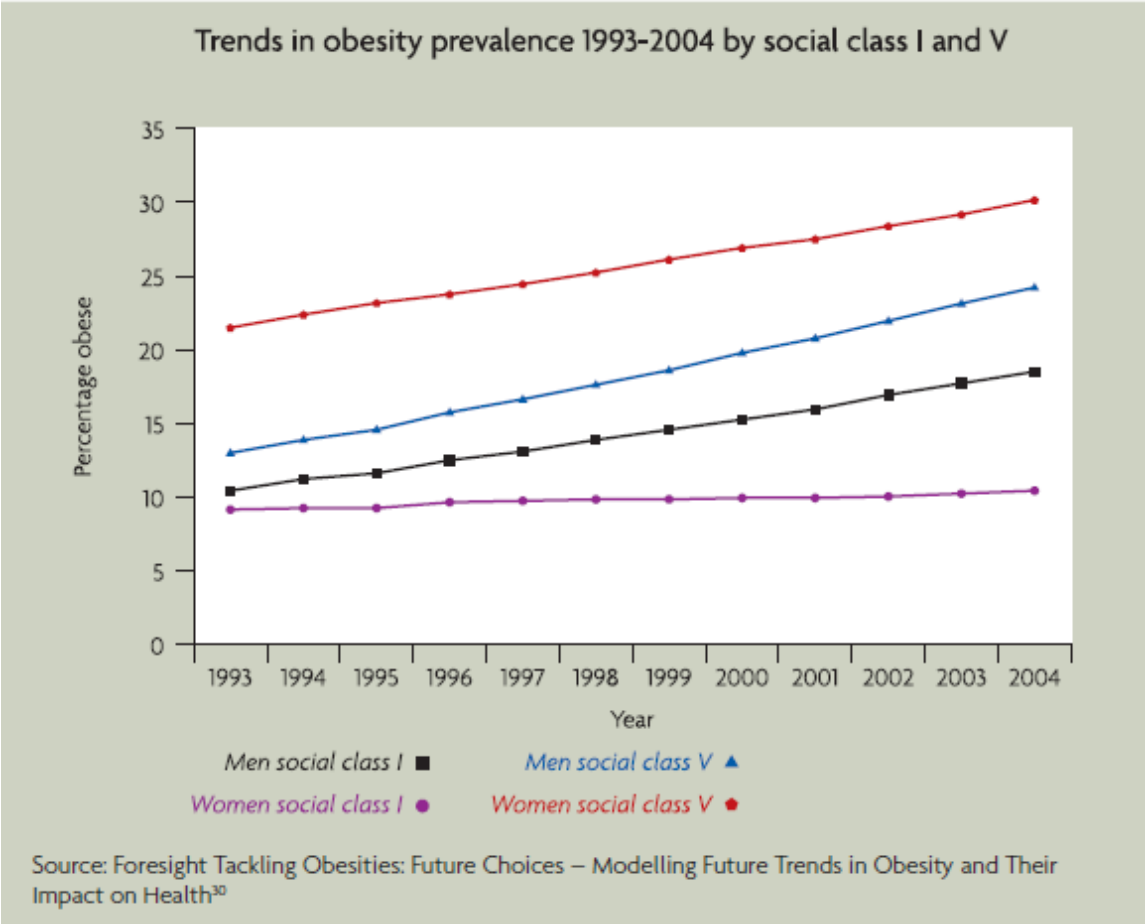


Figure 20: Obesity trends from 1993 to 2005 and forecast trend to 2050 (FSA 2008m: 41)

Another factor that played an important role in constituting 'childhood obesity' as a threatening future requiring immediate action was the FSA's framing of obesity as a 'time bomb'. The timebomb emergency imaginary can be understood as a device of 'temporal manipulation' in the sense that it is a powerful temporal trope, which gives momentum to collective action on a specific matter (Straßheim 2016: 156). Taking a closer look at the FSA hosted public debate titled 'Defusing the Diet Timebomb' shows how the metaphor was used to set a frame, according to which there is a consensus that obesity constitutes an urgent policy problem that requires immediate action. The following images in figure 21 illustrate how the FSA employed the time bomb imaginary as a force that ordered and framed the debate.

Figure 21: Promotion of food and children debate QEII Conference Centre 27 January 2004 (FSA 2004h)

As the previous pictures show, above the debate's panel of experts[159], a projector beams the title 'Defusing the Diet Timebomb' onto the wall and thereby sets the discursive framework within which the debate should take place. The purpose of the debate was – as clearly expressed by its title – to publicly articulate and justify the urgent need for political action aimed at intervening into an obese future in spite of the essential uncertainty and contestedness of these interventions. This becomes especially evident when looking more closely at how the 'defusing the diet timebomb' debate was portrayed by the FSA: Shortly after the debate took place, the FSA issued a press release stating that, notwithstanding the controversial debate that had taken place, '[n]o-one claimed that the description of childhood obesity as a "timebomb waiting to explode" was an exaggeration' (FSA 2004c). In the words of the FSA's chair Sir John Krebs, the 'packed' conference centre[160] attested to the fact that the problem of childhood obesity had generated enormous public concern: 'The participation of a wide range of experts in the debate, and the attendance of many members of the public, as well as representatives from consumer groups, the education sector and the food and advertising industries, shows how seriously the problem is now being viewed' (FSA 2004c). It was now clear, Krebs said, 'that doing nothing is not an option'.

However, the debate actually had revealed how controversial possible political interventions in fact were: The debate covered a range of controversial questions relating to the responsibilities different actor groups had for the increase in childhood obesity. Unsurprisingly, industry-oriented participants, such as the Institute of Economic Affairs fellow Richard North, contended that 'individual consumers were responsible' and 'that parents must take full responsibility' (J R SOC PROMO HEALTH 2004: 54); 'society had to "educate parents to say no"' (FSA 2004c). In contrast, many members of the public agreed with celebrity TV chef Antony Worrall Thompson, who emphasised that 'the problem is societal, and is not just about nutritional ignorance or parental responsibility alone' (J R SOC PROMO HEALTH 2004: 54). A number

[159] The debate comprised a panel of experts including celebrity chef Antony Worrall Thompson, youth activist Kierra Box, the head of nutrition and health research at the Medical Research Council's Resource Centre for Human Nutrition Research, Cambridge, Dr Susan Jebb, a fellow of the 'free-market-think tank' Institute of Economic Affairs, Richard D North, writer and analyst Richard Reeves, and Andrew Brown, Director General of the Advertising Association. The panel was chaired by broadcaster Jeremy Vine FSA (2004c).

[160] The audience comprised almost 500 people from all parts of the country. Moreover, the debate was also broadcast live on the Sky TV digital channel and on the internet. A third of the audience was made up of members of the public, which included many parents and grandparents as well as young people. The other two thirds comprised the FSA's stakeholder groups, including representatives from consumer bodies, physical activity and nutritional schemes, the catering sector, academia, and the food manufacturing and advertising industries.

of panel members, including nutrition and public health experts as well as consumer representatives, believed that both government and the food industry had an important role to play in tackling childhood obesity. They argued 'that government-led public education campaigns will be necessary to encourage people to change their lifestyles' (FSA 2004c). Nutrition scientist Susan Jebb of the Medical Research Centre for Human Nutrition Research highlighted the government's responsibilities regarding nutritional education: 'That's the crux of the issue', she argued, 'teaching consumers to make the right choice, and when they do, the industry will respond' (J R SOC PROMO HEALTH 2004: 54). Others, notably consumer representatives and members of the public, went even further in arguing that 'food advertising should be banned during children's TV programmes' (FSA 2004c).

Thus, by using the emergency imaginary of the time bomb and the time pressure it brings about the FSA managed to 'tame' the initial disagreement over how to tackle the obesity problem to a certain extent: Although, as the debate showed, there was disagreement over individual measures and interventions, the FSA had managed to establish a 'working consensus' about the urgency of the 'diet time bomb' that required immediate political action, which even the attendant industry representatives agreed to. To put it differently, the time bomb imaginary enabled the FSA to successfully claim that there would be a future 'external reality' of an obese nation and to assert the relevance of this future reality for the common good of future generations of British citizens. While specific correlations and interventions might have remained contested and uncertain, the imaginary of Britain confronting a time bomb in the 'near future' and of the danger this posed to society was enacted as shared knowledge and hence as a non-negotiable frame for any future debate on obesity.

Summing up by drawing on the linear trajectorial narrative on the dramatically rising 'childhood obesity' rates, the FSA constituted 'an obese population' as a clearly predictable future reality (epistemic authority), which (purportedly) would have direct negative effects on the British citizens' health and wellbeing as well as on the costs for the welfare state (political authority). The specific representative claim underlying the alarmist time bomb imaginary considerably reinforced this specific mode of invoking the future: Using the time-bomb imaginary the FSA was able to position itself as a spokesperson for both all those who were affected by the obesity trend (specifically children from low social classes) and all those who are concerned by this 'race against time' and do not want to just wait for this threatening future but to act 'now' to avoid the undesired future. At the same time, the FSA was able to constitute the audience of its debate as a witnessing audience that shares the fear of the 'ticking bomb' of

an obese future. This undesired obese future would unfold if politics waited until it was 'too late'.

In the following, I will show that the FSA's pre-emptive authorisation practices, while drawing on the linear trajectorial obesity narrative, were fundamentally based on recursive temporal ordering practices. The FSA's reliance on a more recursive mode of temporal ordering involved acknowledging the high degree of uncertainty and complexity attached to anticipating and pre-empting an obese future.

Beyond reducing uncertainty and complexity, beyond causal mechanisms: pre-emptive anticipation of an obese future

In this section, I will present the key findings gathered from my analysis of the FSA's pre-emptive authorisation practices relating to its work on obesity. Characteristic for the FSA's pre-emptive temporal authorisation was a specific approach to cope with what was seen as an ineluctable form of uncertainty and complexity underlying the anticipation and prevention of an obese future. This approach can be understood as a specific version of recursive temporality, because it acknowledged the political, social, and economical multi-contextual embeddedness of obesity. Accordingly, instead of trying to reduce and control the uncertainty of the obesity problem by employing formal scientific risk assessment, the FSA actively engaged with this uncertainty through a broader range of what it called 'horizon scanning and foresight' practices. These went beyond the usual attempts of linear probabilistic formal risk assessment to reduce the uncertainties and complexities attached to the problem of rising obesity rates and their societal implications.

The analysis of the FSA's temporal authorisation practices showed that the FSA's own 'horizon scanning programme'[161] and its participation in the cross-governmental 'foresight programme' were particularly important in this respect. These can be understood as 'anticipatory' in that they aimed at identifying 'emerging risks' (FSA 2006g: 77) in order to 'ensure effective strategies now' (Butland et al. 2007: 146). In the framework of the FSA's horizon scanning and foresight activities, emerging risks, such as obesity, were examined 'within a broad context of

[161] The FSA horizon scanning programme included two types of horizons work: First, this included scanning the next 5-10 years horizon to develop further the FSA's overall strategy that was codified within its five-year 'strategic plans' (see chapter 5.3.2.1). Second, this included considering specific emerging risks that may affect the FSA's work in the near future of one to three years and which the agency will have to be ready to deal with (FSA 2009b: 113).

socio-cultural, economic, environmental, political and regulatory trends and developments' and on the basis of 'different perspectives on the future' (FSA 2006g: 77–78). To do so, the FSA had identified staff who would act as the 'Horizon Scanning Centre', mandated to engage with 'external organisations and stakeholder groups to scope their perspectives on possible futures' (FSA 2006g: 79). Moreover, the then FSA chair participated in the 'tackling obesity' foresight project, which was run by the Government Office for Science under the direction of the UK's Chief Scientific Advisor. This foresight project was designed to explore the above presented trajectorial narrative on 'obesity trends' as well as the interventions to effectively ward off this anticipated trend.

The project was based on two sets of anticipatory practices: on the one hand, 'quantitative assessment of possible future levels of obesity and the implications for (…) health consequences and costs' (Butland et al. 2007: 148) and, on the other hand, qualitative scenarios and systems mapping. What distinguished the way in which these assessments and scenarios were used from linear modes of knowing the future, was that they were explicitly 'not designed to predict the future nor to represent a desired future', but to 'explore uncertainty and identify underlying assumptions' and 'to explore the complexity of the determinants of obesity, how these determinants interact and the implications for key points of intervention' (Butland et al. 2007: 147). Thus, these horizon scanning and foresight practices represented a recursive mode of anticipating the future in that they acknowledged the need of including heterogeneous stakeholder perspectives in the process of deliberating on both the underlying assumptions of different imagined futures and interventions into these futures.

Overall, three elements were characteristic for the FSA's pre-emptive temporal authorisation work – (1) its focus on 'relations of association' instead of 'causal mechanisms' (2) its engagement with fundamental forms of uncertainty, and (3) its claim to the possibility of reversing a threatening trend through taking immediate pre-emptive action.

First, while the linear mode of probabilistic risk assessment aims at determining *causal mechanisms*, the FSA's pre-emptive anticipation *associated* several otherwise isolated elements with each other; it drew together multiple risk elements in 'relations of association' (Amoore 2013: 58). The FSA thereby acknowledged that in the case of complex problems, causation-based explanations may become difficult. The analysis of the FSA's temporal authorisation practice has revealed that it was precisely this kind of pre-emptive temporality that was used by the FSA to underpin its activities in 'encourag[ing] consumers to choose a healthy diet' and 'mak[ing] healthy eating an easier option' (FSA 2004i: 16).

This characteristic of pre-emptive temporal ordering can be illustrated by an extract taken from the FSA's Strategic Plan 2005-2010, in which the juxtaposition of multiple, otherwise isolated, risk factors and statistical data in relations of association was suffice to set out 'new strategic targets for improvements in [the area of] 'eating for health'. The presentation of these strategic targets here was preceded by the following 'fact box':

Figure 22:Fact box showing risk factors and statistical data on obesity prevalence underpinning the FSA's 'eating for Health Programme' (FSA 2004i: Annex 1, 8)

As we can see here, this fact box juxtaposing disparate statistical data, which are integrated in relations of association, is intended to provide an 'at a glance' justification for the FSA's activities on tackling childhood obesity. This way of justifying immediate action on obesity based on relations of association is likewise particularly evident when looking in more detail at the FSA chief scientist's annual reports from 2007 and 2008, which outlined the scientific insights that informed the FSA's measures and initiatives against the obesity trend[162]:

[162] These included the previously described nutrient-profile-based advice on restricting food promotions to children and its 'traffic light labelling scheme' as well as a number of interventions aimed at influencing childrens' dietary behaviour at the local level, which will be described in further detail later.

> 'Measuring and defining what makes us healthy or ill can be a complex task. For example, various medical conditions are known to be associated (or correlated), to a greater or lesser degree, with a range of factors – social, physical, genetic. Similarly, each one of these factors is often associated with a number of medical conditions. But correlation is not the same as showing causation – there may not be a straightforward "cause and effect" relationship. Proving causality remains difficult, but there is an increasing scientific literature improving our understanding of the relationship between diet and disease and providing further evidence for the importance of a healthy balanced diet. However, the complexities within these relationships make it hard to be precise about the exact degree to which specific factors are responsible for particular health outcomes' (FSA 2007b: 31).

As is evident from this quote, the FSA acknowledged the complexity of the relationships or, more precisely, the 'associations' between various medical conditions and a range of social, physical and genetic factors, which made it 'hard to be precise about the exact degree to which specific factors are responsible for particular health outcomes'. Due to the high complexity of these relationships, the FSA acknowledged that 'there may not be a straightforward "cause and effect" relationship'.

Thus, while in the 2007 annual report the chief scientist focused on the correlation between diets, other factors and illness acknowledging that the difficulties of proving a causal relationships, the 2008 report went one step further in treating the mere association between obesity, increased risk of illness and rising public health costs as a sufficient basis for urgent 'action on obesity' (FSA 2008m: 45):

> 'An association has been demonstrated between obesity and the increased risk of illness. This has serious consequences, both for the individual and the government. In 2002 the monetary cost of people being overweight and obese in England was £7 billion (includes cost of treatment, state benefits, loss of earnings, reduced efficiency through higher absenteeism and lower productivity) (…)' (FSA 2008m: 43).

> 'Ninety percent of people with type 2 diabetes have a body mass index of >23kg/m². It has been estimated that between 2001 and 2010 diabetes in the UK could rise by 15%, 9% of which may be attributed to obesity (…). At present, diabetes is estimated to account for 5% of overall NHS expenditure or 9% of hospital costs[40] so an increase in incidence of diabetes has implications for the NHS' (FSA 2008m: 43).

It was on grounds of these stated relations of association that the FSA's chief scientist justified the FSA's wide range of activities on obesity that will be presented in more detail below.

Second, in contrast to probabilistic risk assessment and risk management 'that seeks out knowledge in order to reduce uncertainty' (Amoore 2013: 58), the FSA's pre-emptive modes

of temporal ordering engaged with uncertainty in a specific way. Pre-emptive anticipation of the future not only acknowledges that data on complex future phenomena are incomplete and fragmented, but also that complex futures are fundamentally uncertain. Despite such fundamental uncertainty as to the probability of occurrence, pre-emptive anticipation can 'infer possible futures' in ways that are 'indifferent to probabilities' (Amoore 2013: 61). Pre-emptive modes of anticipation hence focus on 'action under conditions of uncertainty about a future event' and 'on emergent threat in a world of interdependencies and circulations' (Anderson 2010: 790). This mode of temporal ordering is very evident in the FSA's practices directed at pre-empting an obese future: The FSA justified its various pre-emptive policies relating to obesity (see below) by assuming obesity 'to be raising at a rate of around 1% per year', although this projection is based only on 'limited trend data', as they agency acknowledged. Thus, in its reports and policy papers, the FSA quite openly pointed out the uncertainties associated with the trajectorial narrative on rising obesity rates and of its negative societal effects. In justifying its wide-ranging Action Plan on Food Promotion and Children's Diets, for instance, it cautioned that:

> '(…) the lack of conclusive evidence for action should not, where there is a serious risk to the nation's health, block proportionate action to that risk (…) The Agency considers that the risk to public health posed by the current balance of children's diets is *sufficient to warrant immediate action*' (FSA 2004h: annex, 3).

Along the same lines, the FSA justified its attempts to 'promote eating for health' particularly addressed at specific 'communities', i.e. children and their families in deprived areas, which will be analysed in more detail in the next sections below. Drawing on a report of the Royal College of Physicians (Royal College of Physicians 2004: 43), it argued that there was only 'inconclusive evidence regarding the effectiveness' of such 'community-based interventions'. Notwithstanding this 'lack of evidence', it however recommended adopting 'a pragmatic approach' based on a 'range of complementary interventions' (FSA 2004i: 9–11). Thus, despite there was uncertainty about the effectiveness of interventions aimed at preventing obesity, the FSA argued for adopting a 'pragmatic' approach of immediate action. In light of the uncertainty surrounding 'community-based interventions', it further argued, it was particularly important 'that we continue to work with community organisations that represent their interests and who understand the complex lives that children and young people lead' (FSA 2004i: 9–11).

The claim to politico-epistemic authority here was thus based on a claim that action is urgently needed despite uncertain knowledge. This pre-emptive mode of coping with what is anticipated

as an 'obese future' by the trajectorial narrative hence does not rely on a claim of certainty but instead acknowledges the ineluctable 'blind spots' of such trajectories and their difficulties with incorporating unknowns that might shape ontologically uncertain futures. In contrast to linear temporality, such as probabilistic risk assessment, which is organised around a narrow concept of 'calculable uncertainty' (Knight 1921), the FSA here did not attempt to control the uncertainty attached to the trajectorial narrative of an increasingly obese future. Instead it engaged with uncertainty by working together with stakeholder organisations.

Third, the FSA's pre-emptive mode of temporal ordering is about a anticipating a threatening future as much as about anticipating a future of possibilities, notably to the possibility of reversing the obesity trend and its negative effects through immediate pre-emptive action. The FSA was keen to emphasise that it was strongly committed to the goal formulated in a cross-government strategy titled 'Healthy Weight, Healthy Lives', namely that of becoming 'the first major nation to reverse the trend of obesity and by 2020 reduce the proportion of overweight children back to 2000 levels' (FSA 2008m: 30). Accordingly, the FSA put forward the argument that, notwithstanding the fact that there is 'no way to know which factor or factors are ultimately responsible, (…) by following health advice on diet, exercise and other lifestyle factors, many premature deaths can be avoided' (FSA 2007b: 31). '[B]y eating a sensible diet and following other healthy living advice', the FSA argued, 'the number of deaths, especially premature deaths, could be reduced and a great deal of ill health avoided' (FSA 2007b: 32). It further estimated that 'a reduction in average saturated fat intakes from current levels to the recommended level would equate to approximately 3,500 annual UK deaths averted, or yield an aggregate potential benefit of more than £2.4 billion' (FSA 2007b: 34). With regard to cancer, it argued that '[a] healthy diet can help to reduce the risk of cancer' and points to its 'eatwell' website which provides advice on healthy eating based on 'the best available scientific evidence' to individual consumers (FSA 2007b: 35). Similarly, with regard to type 2 diabetes, it advised consumers to change their individual 'lifestyles': 'Type 2 diabetes is best prevented with lifestyle changes such as eating a healthier diet, weight loss and increased levels of physical activity. (…) Adopting these lifestyle changes can help protect those with diabetes against the progressive nature of the illness which can result in long-term damage to the eyes, kidneys, nerves, heart and major arteries' (FSA 2007b: 36).

Thus, so far we have seen that the FSA's pre-emptive temporal authorisation work built on a two-fold claim: first, an epistemic claim about specific 'associations' between obesity and health (notwithstanding the uncertainty of these associations and a lack of causation), and

second, a political claim about a future threat of an obese British nation that will have significant negative societal effects (notwithstanding limited trend data), which could however be turned into a desirable healthy future by reversing the obesity trend and its negative effects through taking immediate pre-emptive action. We have also seen in the previous examples that the FSA's claim to pre-emptive authorisation also drew on, and at the same time engendered two kinds of consumer constituencies: First, the citizen consumers that were attributed a right to be included into the pre-emptive mode of anticipating the future and designing preventative measures. Second, knowledgeable consumers who were attributed the capacity and the responsibility to 'follow health advice on diet, exercise and other lifestyle factors', hence, to behave in a way that improves their health and wellbeing and prevents 'many premature deaths'. I will show in further detail in the next section how the FSA's pre-emptive approach to obesity was predominantly directed at and at the same time productive of very specific social groups 'at risk' of obesity.

Pre-emptive authorisation: Speaking in the name of children and other vulnerable 'at risk groups'

In this section, I will explore the FSA's pre-emptive temporal ordering mode specifically with regard to how it drew on the specifically vulnerable risk group of children and 'young adults' to reinforce its claim to politico-epistemic authority. As I have shown in chapter 5.3.2.3, the FSA attempted to legitimise its Action Plan on Food Promotions and Children's Diets by referring to children – specifically those from low income families – as a vulnerable group at risk of obesity ('action was necessary because many children have poor diets and this has a range of adverse health consequences', notably 'childhood obesity' (FSA 2004b: 2). As part of this action plan, the FSA developed a nutrition profiling model, based on which it issued advice to Ofcom to introduce restrictions on advertising aimed at children and develop a general voluntary 'traffic light signpost labelling'.

Viewed from a temporal perspective, relating claims to politico-epistemic authority to the common good of 'children's future health and wellbeing' – which was also part and parcel of the FSA's above-presented trajectorial narrative and use of the 'time bomb' trope – was a particularly powerful device in the FSA's broader pre-emptive authorisation practice. While the future is ultimately unknowable, we can be certain that children will age and become adults. Hence, children are in a unique position to embody the future generation of 'their' social group – be it demarcated by gender, economic status, or ethnicity. Children are usually characterised

as authentically representing 'the next generation' of the social group they belong to, as the FSA put it (FSA 2004i: 19). At the same time, children form a social collective that is seen as being especially vulnerable, both physiologically and socially. Accordingly, the FSA could draw on the notion of children as being incapable or only partially capable of acting in rational and responsible ways and, in turn, as being dependent on representatives who speak and act in their 'best interests'. As such, as I will show in the following, children were well suited to figure as constituency for the representative claims on behalf of the 'socially excluded consumer' that was closely intertwined with the FSA's pre-emptive authorisation attempts.

But children functioned as a point of reference in the FSA's pre-emptive authorisation practices not just because they represent a specifically vulnerable group at risk of obesity. Referring to children in pre-emptive authorisation worked particularly well due to their capability to elicit emotional reaction in terms of both fear and hope (Evans 2010: 22). Put more specifically: By invoking children, the FSA mobilised a collective fear of an obese future and at the same time turned this threatening imaginary into hope of a better future brought about by the pre-emptive measures it proposes.

This aspect can be illustrated by a series of public statements made by then FSA chairman John Krebs with regard to the need for action to pre-empt an obese future in Great Britain. For instance, in a press conference organised by the FSA, Krebs said that the UK was 'faced with a situation where, if nothing is done, for the first time in 1000 years life expectancy will go down (…) We are all looking forward to a longer and healthier old age, and that could be reversed (…) So that's what we are staring at, a public health timebomb (…) doing nothing is not an option' (Culliford 2003). Some months later, the FSA then presented its Strategic Plan 2005-10, where in the foreword Krebs explains the FSA's future focus on its 'eating for health' programme, which constitutes of the plan's main strategic elements:

> 'It [the aim of halting the rise of obesity] is no simple challenge. But success will mean that many people who would otherwise die before their time will live longer lives, that we will improve the wellbeing for many more, and that with a healthier diet our children will get the best possible start in life we can give them' (FSA 2004i: 4).

A few pages later, this strategic plan contains a quote from the Chief Medical Officer for Scotland. It is shown in a black frame that precedes the presentation of the FSA's eating for health programme, one of the plan's main strategic elements:

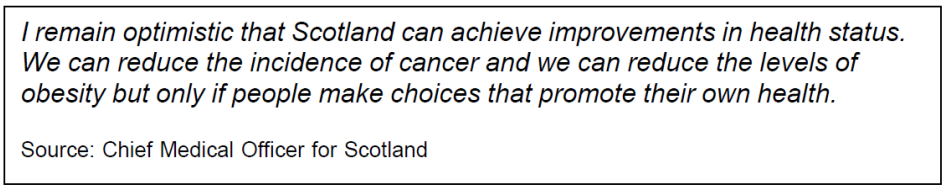


Figure 23: Snapshot of the Chief Medical Officer for Scotland's quote taken from FSA's Strategic Plan 2005-10 (FSA 2004i: 18)

These quotes illustrate that the FSA framed its pre-emptive measures not only in terms of threat and fear, but also in a decidedly 'optimistic' manner, as a means of improving the 'wellbeing' of future generations and giving children the 'best possible start in life'. At the same time, specifically the quote from Scotland's Chief Medical Officer indicates that the FSA linked this optimism and hope for a better future for generations to come (i.e. a future of good health and wellbeing) also to a clear appeal to individual responsibility. Following up on the Chief Medical Officer's line of argumentation and drawing on insights from behavioural theories the agency argued in its 'Strategic Plan 2005-10': 'The incidence of diet-related disease is affected by the choices people are able to make, and *by the choices they actually make*. Diet, lifestyle, and exercise can each have an impact' (FSA 2004i: 18).

Pre-emptive practices targeted at children's individual behaviour – and specifically at those from low-income families

In what follows, I will explore the FSA's pre-emptive temporal ordering mode specifically with regard to how it divided consumers into 'risk' clusters that were defined by their 'vulnerability' (e.g. their age or 'vulnerable lifestyle') and show how the emphasis placed on such vulnerable risk groups – notably children, 'young adults' from low-income families and those belonging to ethnic minority groups – underpinned the FSA's pre-emptive claim to politico-epistemic authority. The practice of pre-emptive temporalisation was thus based on invoking the 'socially excluded consumer'.

Drawing on the insights of behavioural theories on the important role of social context and peer-group norms in unhealthy diet and lifestyles, which at that time had been discussed within the government's Strategy Unit (see chapter 5.1.4), the FSA established a number of pre-emptive initiatives targeted at changing children's and their family's individual behaviour notably those

on low-income [163]. The plethora of the FSA's pre-emptive initiatives[164] drew upon two sorts of temporal claims: first, 'evidence that eating patterns established in childhood and adolescence are likely to remain through adult life' (FSA 2001i: 8), and second, 'theories of behavioural change', which see the greatest potential for behavioural changes in interventions 'involving personal contact, small groups or family members' (FSA 2001i: 30).

A closer look at these pre-emptive approaches reveals that the FSA's capacity to speak in the name of vulnerable 'at risk groups' was central to its pre-emptive authorisation attempts aimed at 'influencing attitude and changing behaviour' (FSA 2007m). A wide range of initiatives and interventions were targeted at children, their parents and schoolteachers who were understood as 'gatekeepers' of children's diets. More specifically, however, – drawing on the above-presented stratification dimension of the trajectorial narrative on obesity trends (figure 20) – these initiatives and interventions addressed low-income consumers who were deemed 'particularly susceptible to becoming obese' (FSA 2008m: 33). Low-income consumers were viewed as facing specific 'barriers to dietary change' and investigated in a 'Low Income Diet and Nutrition Survey'[165] (FSA 2002o: 6). The FSA furthermore issued a comprehensive review of the evidence on the 'psychological basis upon which specific target groups of the population make food choices' (FSA 2002o: Annex B, paragraph 1) and later asked its Social Science Research Committee (SSRC) to identify psychological and other 'barriers to dietary change'.

[163] These made up a large portion of the FSA's pre-emptive measures in addition to regulatory measures aimed at improving children's health. As I have argued above, the FSA's regulatory pre-emptive measures concerned first and foremost its advice to Ofcom to restrict advertising aimed at children or its advice on improving nutritional standards for public procurement, especially the nutritional quality of school meals (FSA 2006e: 10).

[164] The pre-emptive initiatives aimed at individual behavioural changes included advice and interventions for parents with regard to children's diets, a promotional campaign targeted at 'young adults' and schools initiatives aimed at school children. For instance, one of the FSA's activities was the launch of a separate 'school lunchbox survey' and, based on this, different practical tips and suggestions 'helping parents give their children varied and balanced lunchboxes'. Parents were 'encouraged' to do so, for instance, through educational leaflets, websites and media reports that provided lunchbox recipes and nutritional guidelines for their home-packed lunchboxes (FSA 2004k). Similarly, the FSA developed teaching materials to help primary school teachers in the UK to teach pupils about healthy eating. Moreover, it established media partnerships with a view to specifically target teens and young adults with 'mini campaigns', such as 'two healthy eating messages in Sugar magazine and sponsorship of celebrity Soccer Six girls football matches' (FSA 2006e: 4). Another initiative was the launch of the 'strictly yum dancing show' at the 2006 BBC Good Food Show, which was also recorded as a TV advertisement and showed a rap on healthy diet with some 'crazy dancing foods' that 'step their way through 8 tips for eating well' (FSA 2006m). Other pre-emptive activities aimed more directly at intervening in children's dietary behaviour. These included, for instance, the 'Food Standards Agency Cooking Bus', which aimed to communicate healthy eating messages to school children. For 42 weeks per year and for a period of three years, this school bus, which had a fully equipped kitchen, went to different destinations around the UK to inspire children with health messages (FSA 2005b: 16).

[165] This was UK's first comprehensive survey to investigate food consumption and social factors impacting on diet for this group providing additional valuable information on barriers to dietary change for this group and how they may be addressed.

These were deemed 'more prevalent among certain population groups', particularly those on low-income but also those belonging to ethnic minorities (FSA 2007i: 5).

These social groups, the FSA argued already in one of its very first reports on nutrition[166], showed 'negative beliefs and attitudes towards healthy eating' including a 'lack of time to prepare a healthy meal, a lack of interest in healthy eating, and 'a lack of healthy eating recipes' (FSA Wales 2003: 29). Moreover, these groups deemed to face '[c]ultural barriers' which included 'the cooking and eating of new dishes that do not conform to the cultural norm' of their group (FSA Wales 2003: 29). Likewise, they were seen as tending to have 'more sedentary lifestyles' resulting from 'an "obesogenic environment" in which people exercise less, consume less fruit and vegetables and eat more sugars and saturated fat' (FSA 2008m: 33). In this line of argumentation, low-income 'at risk groups' were thus deprived of the capacity to act in a way that would halt the rise of obesity. Because they were deemed to lack the capacities to improve their health on their own, they were seen as being in the need of specifically targeted education and intervention measures, which I will present in the following: the 'Food Choice Inequalities Programme', the 'Small Steps 4 Life' programme and website, the 'Middlesbrough on the Move' project, and the 'Cookwell' programme.

In 2007, the FSA convened its 'Food Choice Inequalities Programme' as part of its 'Food Choice Research Programme'. The aim of this programme was 'to determine the factors which may inhibit healthier dietary choices and find out how these barriers may be overcome in these target groups which are characterised by 'poor diet and low levels of physical activity' (FSA 2009b: 108). Hence, based on the assumption that specific 'lifestyles' impact 'children and young people's health and wellbeing, both when they are young as well as later in life', the FSA launched the Health Challenge project as part of its 'Food Choice Research Programme' (FSA 2009b: 108). This was a two-year project to implement and evaluate a 'structured intervention delivered over 4 weeks where participants are invited to choose at least 2 and up to 3 "pledges" that they would like to work towards to improve their health and wellbeing' (FSA 2007h). The assumption here was that supporting not only children and young people but also 'their families and the wider school community' was an effective measure as these groups would 'instigate behaviour changes to make their lifestyles healthier' (…) they make sustain positive lifestyle changes', the FSA argued (FSA 2007h). Participants, including low-income families and their children, chose at least one 'challenge' or 'pledge' from 'the themes of healthy eating getting

[166] Here, the FSA Wales that was a frontrunner in publishing the first nutrition strategy already in 2003.

active and feeling good inside' and kept a written diary throughout the intervention, which they then brought with them to the subsequent 6-month evaluation process (FSA 2007h). Based on this evaluation research, the FSA developed the 'Small Steps 4 Life' programme and website with the aim to 'help schools and young people across the UK grasp the opportunities to take small and fun steps towards a healthier lifestyle' (FSA 2007q). This website provided primary and secondary school children with an interactive platform where they could share their experiences with their self-created 'health challenge' on the 'challengers hall of fame' and even virtually meet individuals or groups belonging to the group of 'Small Steps 4 Life Champions' (FSA 2007q). Another intervention conducted under the FSA's 'Food Choice Inequalities Programme' was the project 'Middlesbrough on the Move'. Middlesbrough, a town in North-East England known as England's 'childhood obesity capital' due to its high childhood obesity rates, aimed at 'developing community support for individuals to adopt healthier lifestyles' (FSA 2007j). A similar intervention developed in this framework was the 'Cookwell' programme whose aim 'was to increase cooking confidence and food preparation methods, and promote increases in consumption of healthy foods' and decreases in 'consumption of fat in adults living in areas of deprivation' (Wrieden et al. 2007: 204).

Thus, from these examples it becomes evident that the FSA in designing these initiatives drew on a number of insights from behavioural sciences as they were discussed by the New Labour government's strategy unit (5.1.4), including the important role of social contexts, community and peer-group norms as well as of emotional stimuli of fun and competition. As the following figure taken from the FSA's report on its 'Eating for Health' programme illustrates, these were just a few examples within a larger range of projects which, beyond structural measures (aiming at improving *access*[167] to healthy food and *product*[168] standards, such as portion size), also included measures targeting individual behavioural change and hence involve schools, families and communities as 'facilitators'.

[167] The FSA's Food deserts project, for instance, aimed at addressing the needs of low- income consumers who were interested in eating healthily but in their local neighbourhoods find it hard to get access to a healthy and affordable diet.

[168] On product reformulation, the FSA established a programme 'working with the UK's government and stakeholders to reduce average adult population intakes of salt to 6g per day (from the current 9.5g per day) by 2010' through 'supporting the reformulation of processed and prepared foods. to reduce their salt contents through the development of salt targets for key products and the publication of individual organisations' salt reduction plans' (Hallsworth & Ling 2007: 9).

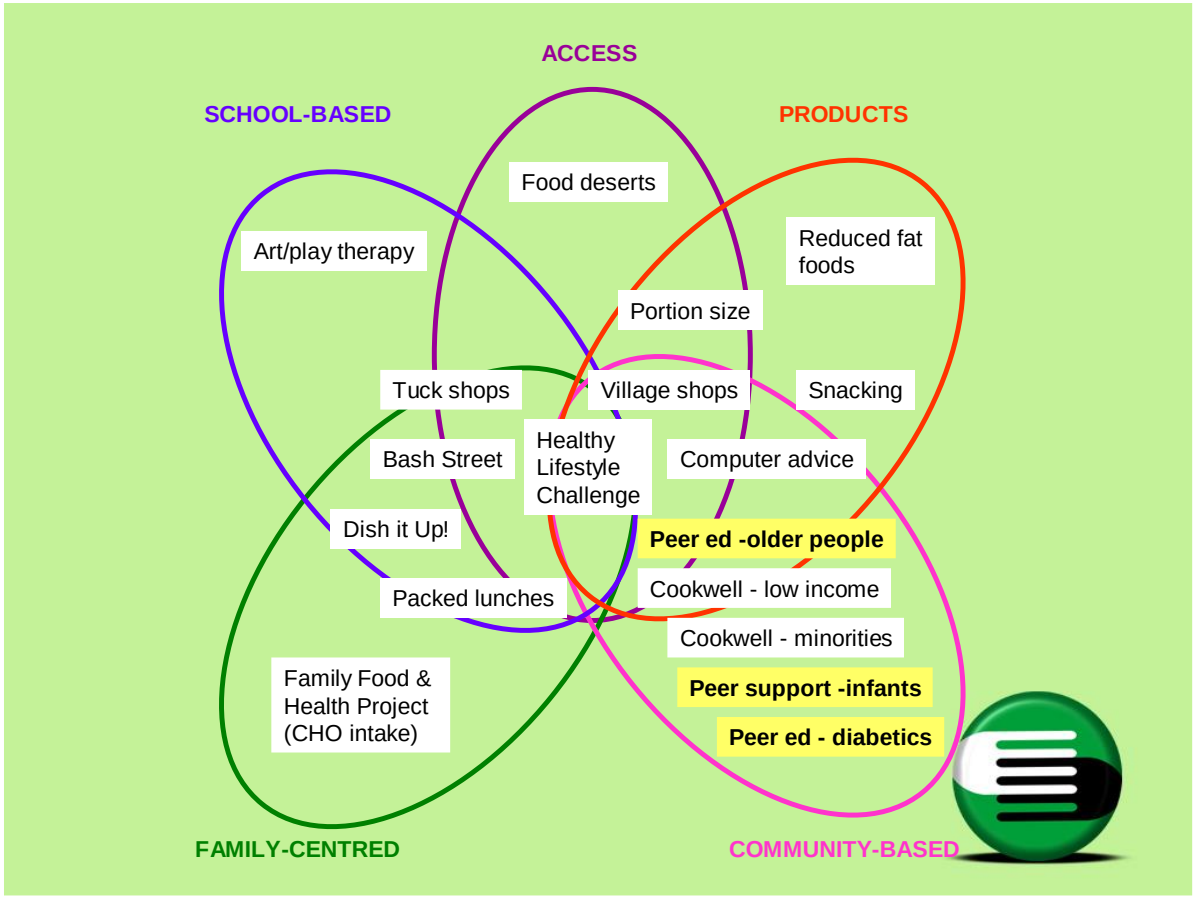


Figure 24: Overview of research areas funded under the 'Eating for Health' Food Choice R&D Programmes (FSA 2006i).

In this way, the FSA's pre-emptive practices which draw authority by claiming that they were relevant to realising the good and wellbeing of those categorised as 'at risk' groups reproduce structural social inequalities anew. It is these low-income at-risk groups that are sought not to be capable of halting the rise of obesity by improving their health on their own and that are portrayed as being in the need of specifically targeted education and 'small steps' measures to pre-empt their threatening unhealthy future. Thus, as can be clearly seen from the above presented examples, which construe obesity as an individual failure to cope with sedentary and other unhealthy lifestyles through rational choices, the FSA's practice of pre-empting the future glosses over more structural inequalities. Although these were addressed in some projects on so-called 'food deserts' in low income areas without adequate access to healthy foods, projects and interventions aiming at changing children's and their low-income families' individual behaviour formed the major part of the FSA's pre-emptive practices. Nevertheless, the FSA framed its justification for this strong focus behavioural interventions aiming low-income families and communities by pointing to the fact that it had developed these measure by 'listening to vulnerable and "hard to hear" consumers' – hence in terms of input legitimacy (FSA 2004i: 9–11).

Establishing the FSA's pre-emptive policies on tackling obesity as 'best practice examples' at the European and international level

The FSA also pursued its approaches to pre-empt an obese nation at the European and international level. The agency was a member of the 'European Platform for Action on Diet, Physical Activity and Health'. The platform was launched by the Commission in early 2005 as a major initiative aimed at 'stimulating non-regulatory actions to tackle obesity' (FSA 2005d: 5). Since its inception, the FSA had been very actively engaged in the EU platform' activities. Together with the DoH, it even hosted the third meeting of the platform bringing together industry stakeholders as well as consumer groups and public health NGOs. This platform pursued the aim of urging all stakeholders and government institutions 'to make commitments for action' in order to ward off the trend of rising obesity rates. These commitments were 'made public in an online database which was intended to allow stakeholders to share examples of good practice and to monitor progress made by individual platform members'(FSA 2005d: 5).

In the context of this platform the FSA was able to cast its nutrition-related activities designed to prevent obesity as best practice in Europe. The practices presented on the platform included the FSA's voluntary initiatives on reducing saturated fats in food products that was developed and implemented 'in partnership' with stakeholders, including businesses and trade associations (FSA 2006e). Likewise, these included the FSA's collaborative development of its voluntary 'front-of-pack' traffic-light signpost labelling which gave consumers 'at a glance' information on unhealthy food content to help consumers make healthier food choices (FSA 2010b). But also the FSA's extensive work on developing behavioural interventions aimed at changing consumers' dietary behaviour, including its above-described local-level interventions and campaigns, was represented on the platform's on-line database (FSA 2007k: 15).

Taking a closer look at its open board meeting in September 2005 reveals that the FSA was keen to present its involvement in the platform's activities as an important tool to build its European and international reputation as a frontrunner in adopting 'collaborative approaches' to pre-empting the emerging obesity risk. On this occasion, the agency stressed that the '[r]epresentatives of the European Commission had been impressed' due to the 'collaborative approach the FSA had taken with industry' to achieve voluntary reductions in the levels of fat, salt, and sugar in processed foods (FSA 2005d: 5). Vice versa, the FSA presented the collaborative approach of the 'European Platform for Action on Diet, Physical Activity and Health', which 'underlined that the multi-causal character of the obesity epidemic calls for multi-stakeholder approaches' (CEC 2005: 3) as a proof of its pioneering domestic approach

adopted in its own Eating for Health' programme. Here, the FSA had argued that the objectives related to preventing an obese nation could only be achieved 'in partnership with others, including other Government departments across the UK (particularly health and education), local authorities, others in the public and the voluntary sectors, consumer organisations, schools, the NHS, and the food industry' (FSA 2008k: annex 1).

In 2007, building on the platform's database, the EU Commission published a 'White Paper on Nutrition, Overweight and Obesity' (European Commission 2007), which established a 'High Level Group' of member state representatives 'to facilitate the exchange of policy ideas and practices between Member States, and to assess national and regional actions' (FSA 2007k: 15). In this process too, the FSA was very actively involved and issued input drawn from its domestic activities on obesity pre-emption during the consultation process conducted on the white paper. As a result of this, the paper proposed EU-wide action in areas in which the FSA had been actively involved – i.e. product reformulation, signposting, and controls on advertising to children – and where the agency argued vis-a-vis its European sister agencies and departments that it had 'clearly delivered consumer benefits' by adopting its collaborative approach (FSA 2007k: 16).

Finally, also the agency's annual 'progress reports' on its 'Eating for Health' work programme were deliberately used to document the 'continuing growing interest' in the FSA's 'front of pack' traffic light system as an effective measure to pre-empt obesity across Europe and beyond (FSA 2007k: 6). The fact that the FSA was gradually attributed a 'leading role' also beyond the European diet platform, namely in the context of an 'action network' on behalf of the WHO Europe's 'Charter on Counteracting Obesity', here was portrayed as a proof to the growing international reputation of the FSA's obesity-related pre-emptive work (FSA 2007k: 16). The action areas contained in the charter, the FSA argued, were well aligned with its own work and would complement the work proposed by the Commissions Platform for Action on Diet, Physical Activity and Health'. The WHO action network involved eleven members of which eight were EU member states. The network was intended to function as a 'centre of expertise to share more widely information' on nutrition-related activities, 'which have been shown to be successful' (FSA 2007k: 15). Referring to the FSA's collaborative pre-emptive approaches as an example of best practice, the WHO charter recommended 'Governments, NGOs and the industry to engage in partnership-based work in areas including product reformulation, front of pack nutrition labelling and evidence gathering' (FSA 2007k: 16).

Thus, the FSA drew authority from its international and European efforts by claiming that its EU Platform and WHO action network activities attested to its internationally recognised expertise on pre-empting obesity (epistemic authority) and that this international expert reputation was essential to securing the good of British consumers (political authority).

5.4.2.4 The contextual embeddedness of pre-emptive authorisation

So far, I have shown how the FSA invoked a recursive temporality, which I have, concurring with Amoore (2013: 58), called a pre-emptive approach to building politico-epistemic authority. It did so by frontstaging the trajectorial narrative on strongly rising 'childhood obesity' rates and the temporal trope of the 'diet timebomb', which it associated with the threatening imaginary of a future obese nation with all its negative societal effects. At the same time, the FSA attempted to position itself as a spokesperson for all those who shared the fear of (or who are likely to be affected by) the 'ticking bomb' of an obese future and hence demanded immediate action to avoid this undesired future and to ensure 'health and wellbeing'. What was characteristic for the FSA's pre-emptive temporal authorisation work was that it focused on three aspects of pre-emptive temporal ordering: (1)'relations of association', (2) the engagement with fundamental forms of uncertainty and (3) the claim that immediate action was needed to reverse the threatening obesity trend despite these uncertainties. Moreover, I have shown that what was essential for the success of this pre-emptive claim was the agency's ability to speak in the name of children from low-income families as an especially vulnerable group at risk of obesity which drew on the discourse of social exclusion. Children are in the unique position of embodying both the hopes and fears for 'the next generation' and they are viewed as being particularly dependent on representatives who speak in their 'best interests'. Finally, we have seen that by placing a strong emphasis on behavioural interventions to pre-empt an obese future, the FSA attempted to demonstrate the relevance of its nutritional expertise (which increasingly also involved social-behavioural research[169]) for ensuring the health and wellbeing of vulnerable consumers in an direct and commonplace way.

With the British culture of expertise discussed in chapter 5.1.7 in mind it is evident from the previous analysis that the FSA's pre-emptive authorisation practices relied on several of the contextual elements. Specifically, the FSA drew in a twofold sense on the British 'predilection for common-sense and empirical proof ', which, in principle, should be evident to everyone,

[169] See the analysis of the establishment of the Social Science Research Committee (SSRC) and the 'behavioural turn' associated with this (chapter 5.2.4.5).

and hence count as common knowledge' (Jasanoff 2013: 141): first, by placing such importance on addressing vulnerable consumers at risk of obesity in their daily life and common lifeworld environments (families, schools local communities) and second, by systematically evaluating these interventions in terms of their impact. To put it differently, the FSA's pre-emptive practices relied on what counts as epistemically and politically authoritative in the context of the British culture: empirical proof that can be understood without specialised knowledge (i.e. evidence on behavioural interventions aimed at on-the-ground communities) and a common-sense vision of the relevance of this evidence to the public interest (i.e. 'health and wellbeing of local communities and families').

In the following, I will in a separate step illustrate how the FSA's appeal to immediately understandable empirical proof and common-sense reason and its reflection of the social exclusion discourse were involved in producing specific visions of the agency's role both at the local level of communities, schools and family homes as well as at the European level. I will specifically show how the FSA in its attempts to pre-empting the threatening future of an obese nation drew on very specific elements of the 'postnational constellation' made-up of intertwined local, national and supra- and international governance levels. It relied on those elements that could be easily coupled with and translated into dominant domestic policy discourses and institutional-cultural features.

As we have seen from the previous examples, which are only but a few[170], the FSA constructed obesity as a problem that needed to be addressed specifically at the local level. Using 'everyday locales' – at home, in schools and at local communities – played an important role in the FSA's pre-emptive interventions, as I have shown above. It was here that behavioural changes aimed at bringing about a future of 'healthier lifestyles', particularly of children from low income families in less-favoured areas could be most effectively initiated according to the FSA's view.

[170] A further major local-level activity was the FSA's 'Food Vision. Improving community health and wellbeing' website, which was set up in 2004 and regularly relaunched until 2010. This website aimed at promoting 'safe, sustainable and nutritious food to improve local community health and well-being' (Hallsworth & Ling 2007: 9). Food Vision was designed to act as an information portal for local authorities and community members, informing them about 'health and wellbeing' initiatives and programmes within their own area. These food initiatives mainly 'worked with children and young people, both in schools and in other settings, such as youth clubs, because it was hoped that by encouraging young people to have healthier habits that these will be continued when they get older' (FSA 2007t). Several of these local initiatives, in particular those addressing obesity, were funded as research projects by the FSA, such as 'healthy lifestyle projects' that sought to encourage 'healthy eating' and increased physical activity (FSA 2007t), or the 'out of school hours cooking clubs' in secondary schools across North East England that sought to explore 'local mechanisms for helping young people work towards the defined food competences' (Hallsworth & Ling 2007: 72). Food Vision explicitly framed the majority of its local food initiatives as a part of the governments' broader 'Wellbeing and Social Inclusion' agenda, which called on local government and authorities be 'responsive to the concerns and needs of local communities' (FSA 2007t).

Hence, here too, the FSA drew on the Labour government's social exclusion discourse (chapter 5.1.1) to justify its practices, in this case, practices aimed at pre-empting obesity. It was in these local settings of vulnerable consumers' common life worlds that the FSA sought to address 'a number of professionals, local authority staff and community groups who (…) could be used to deliver messages on diet and nutrition to the local community' – specifically to those considered 'hard-to-reach groups' (FSA 2001i: 9).

We have seen that the social inclusion discourse was invoked in terms of both input and output legitimacy. On the one hand, to cope with the uncertainty about the effectiveness of its 'community-based interventions' aimed at preventing obesity, the FSA collaborated with community organisations who were invited to share their local knowledge on excluded consumer groups in deprived areas. On the other hand, drawing on the social exclusion discourse was closely intertwined with the more output-legitimacy-oriented evidence-based policy making discourse (5.1.4), which – specifically by referring to behavioural sciences – was used to justify the FSA's pre-emptive behavioural interventions using local social contexts and peer-group norms in terms of their effectiveness.

Yet, beyond these local behavioural interventions the FSA's pre-emptive authorisation practice also involved EU-level and international efforts. Nutrition-related issues gradually came to represent also the most publicly visible example of the agency's EU-related activities. These reflected the New Labour 'modernising government' agenda's focus on networks of private governance and voluntary regulation with little state involvement (chapter 5.1.3). Chiming with these network governance ideas, the FSA envisioned its own role at EU level as a 'network manager' who attempted to get heterogeneous actors to collaborate in order to solve problems. In a report on a programme of collaboration between the FSA and the Dutch Food and Consumer Product Safety Authority (VWA)[171], Jacqui Webster, the then FSA's Head of Consumer Branch, wrote with regard to the FSA's engagement in the Heads of EU Food Agencies network's 'secondment programme[172]' :

> 'Diet and nutrition in general, and obesity in particular, have increasingly become key policy issues for most EU member states. Yet thinking on the best way to address the issues (…) varies from country to country'. (…) Whilst Member States have different priorities and

[171] The VWA is an acronym for the 'Nederlandse Voedsel-en Warenautoriteit'

[172] In 2005 the Heads of EU Food Agencies agreed to launch a secondment programme as good way of exchanging experience between different member states on food issues, which started with a secondment from the UK FSA to the Dutch VWA (Webster 2006).

> approaches to addressing the issues, many private food companies are transnational, which suggests it might be more effective to co-ordinate thinking on how we work with them' (Webster 2006: 1).

As this quote shows, the FSA's network manager role involved coordinating the exchange of information and sharing of experiences at EU level in order to identify 'best practice'. This specific role perception reflects a specific vision of what European integration in the area of food policy is about. EU food policy appears here as a practice of building a collaborative platform providing room for coordinating pre-emptive nutrition policies – a vision that is particularly evident in the above-described FSA's active involvement in the 'European Platform for Action on Diet, Physical Activity and Health'. As argued above, the FSA was keen to present its involvement in the platform's activities as an important tool to build its European and international reputation as a frontrunner in adopting 'collaborative approaches' to tackle the emerging obesity risk. Collaborative approaches, such as the FSA's pre-emptive initiatives aimed at tackling on obesity, had been proposed by the EU Commission's 2001 White Paper on European Governance as a new style of politics that would open up political processes to actors from different social spheres – a vision of governance that was partly inspired by New Labour's modernising government agenda (European Commission 2001; Pfister 2015). New Labour's 'third way' understanding of collaborative, network governance hence also informed the FSA's conceptualisation of European governance.

Moreover, as shown above, the platform's approach was to collect 'best practice' policies on pre-empting obesity in an online database and to organise network events for mutual exchange. The fact that the FSA's various pre-emptive initiatives on obesity were officially acknowledged as 'best practice examples' in this platform served as a point of reference in the FSA's performances as a successful manager of networks assembled around pre-emptive approaches to tackle obesity at the domestic level.

This network manager role, which was confined to defining the incentive structures of its collaborative, private-governance approach in such a way that it effectively tackled obesity, was in line with the New Labour's focus on network and private governance with little state involvement. Tightly related to it was a representative claim on behalf of the 'knowledgeable consumer'. It portrayed its leading involvement in this network co-ordinating action as one which eventually 'deliver[ed] consumer benefits' (FSA 2007k: 15). This was according to the FSA the case, because these European and international efforts provided 'additional incentives for action by UK based companies operating in other markets, and for multinational companies

that import into the UK' to participate in the FSA's voluntary measures aimed at enabling consumers to make 'healthier food choices' (FSA 2007k: 15). 'Importantly', the FSA further argued, these European and WHO platforms and action networks could 'also help to ensure a level playing field between UK and overseas businesses, thus reducing the risk that trade issues would impede progress on FSA initiatives' (FSA 2007k: 15). It therefore was eager to engage 'with international partners to showcase its work, and to seek to influence the development of policy approaches abroad' (FSA 2007k: 15).

Thus, the FSA drew specifically on those elements of the multi-level governance system it was operating in that chimed with dominant domestic discourses and cultural-institutional traditions. Underlying these authority claims was not only the agency's commitment to the empirical proof of 'best practice examples', but related to this also a specific dominant vision of the EU as a 'free-market project, rather than a greater political project' that is linked to the traditional Anglo-Saxon predominantly noninterventionist understanding of the state and the nation (Larsen 1999: 459). New Labour continued to view the EU primarily as such a 'free-market' project, although in a reconfigured way that resembled its domestic 'modernising government agenda'. In this view, 'EU governance' represented way of governing that was open and inclusive to incorporating the heterogeneous actors from multiple levels in policy-making processes and which evolved through coordination networks and partnerships. Simultaneously, like in the modernising government agenda's focus on EBPM (chapter 5.1.4), major EU policy issues were re-casted as 'technical' matters to be decided based on scientific evidence, benchmarking, and best practice and peer-review In this vein, the previous analysis was indicative of how this has shaped and informed the FSA's EU-level engagement: the agency here was most actively involved in more indirect governance practices of benchmarking, exchanging experiences and negotiating common purposes with other member states and stakeholders alike as it argued that these heterogeneous actors needed to be coordinated to work for the good of both British businesses and consumers.

5.4.2.5 The contestedness of pre-emptive authorisation

The FSA's approach to pre-empting obesity was likewise criticised for being almost entirely directed at inducing individual behavioural changes among 'at risk' consumers and at obtaining voluntary self-commitments from the food industry. In particular, the reliance on consumers' individual responsibility in the FSA's family-based and school-based approaches was met with scepticism by some major consumer organisations, which criticised that 'health is affected by

many factors and not just lifestyle issues' (FSA 2004j: 12). Likewise, some academic food policy experts took issue with the FSA about their individualist pre-emptive obesity-related measures (Dowler et al. 2007; Lang & Rayner 2007). Moreover, some board members criticised that a sole reliance on measures aimed at promoting individual 'healthy lifestyles' would have little effect in tackling obesity, because they failed to address the more structural causes of 'widening health inequalities' (FSA 2009c: 9). In addition, the members of the consumer committee repeatedly complained that, even when the FSA went beyond such individualistic approaches directed at changing consumer behaviour, it largely relied only on voluntary self-commitments (FSA 2003e, 2003n, 2003o). The following quote from a consumer representative I interviewed gets to the heart of the criticism of the FSA's approach to nutrition. With its approach to pre-empt obesity, the FSA was seen to privilege 'lifestyle-focused', behavioural interventions and voluntary agreements over setting a common framework aimed at changing the structural causes for nutrition-related illnesses. This individual who had participated in various FSA committees, panels and other consultative arrangements stated:

> 'The problem is that there are very powerful political and economic vested interests who don't want us to do that, because they're making a lot of money out of doing it this way. So, so the idea that kind of voluntarily, kind of giving a little nudge here and a nudge there, so for example the salt thing – oh for heaven's sake – I used to work on salt when (…) so this is more than twenty years ago. (…) So here we are, thirty years on, and we're still trying to get tiny, tiny reductions in salt by nudging and working with industry- it's rubbish! It's much too late, it's much too slow and we're not even there yet. It's, and so that's how desperate we are to show that sometimes something works. And I say: oh, well, what the Food Standards Agency did on salt, is good only in comparison to everything else which is worse. (…) It's a fashionable smokescreen to say government doesn't have to do what it really should do. But, yeah, I very often made the point to the Food Standards Agency (interview member 24 – NGO).

Thus, the criticism here centred on the claim that the FSA's pre-emptive interventions (exemplified by the FSA's voluntary salt reduction strategy) were mere frontstage activities ('smokescreen') employed to shield the public's eye from the too-long-neglected nutrition and health effects of broader socio-economic structures. Against this background, several important consumer organisations and academics 'suggested that the agency should have a broader focus', which would not only include social inequalities, but also questions of 'sustainable food production and consumption' (FSA 2004j: 4). Referring to consumer research showing that consumers increasingly wished 'to consider sustainability issues when making food choices' (FSA 2004j: 4), this group of actors regularly pressed the FSA to go beyond its mainly obesity-

focused horizon scanning and foresight activities 'to look at sustainability in its broadest sense' (FSA 2004j: 12). As the importance of this sustainability discourse grew among the FSA's consumer stakeholders, questions of sustainability eventually also found expression in the FSA's work (Paul 2009: 138). In 2004, the FSA board agreed the following paragraph describing its organisational mission in relation to sustainability, which should be included in its 'Strategic Plan 2005 – 2010:

> 'The Food Standards Agency will seek to run its business in a sustainable manner. The Agency will ensure, so far as possible, that its policies, decisions and advice take into account sustainable development. The priority for the Agency will be to protect the interests of consumers in relation to food, both now and in the future' (FSA 2004j: 5).

In doing this, the FSA had implicitly made a first step towards opening up its pre-emptive approach to include not only interventions aimed at healthier consumer food choices but also those aimed at broader food sustainability goals. The inclusion of sustainability within the FSA's organisational mission was, however, immediately met with resistance. It quickly became evident that there were controversial interpretations of what 'taking sustainable development into account' meant in the agency's actual practice. In the view of the FSA executive, the challenge of including sustainability into its institutional role related to 'how much weight to give to the future as opposed to the present' concerns and interests of consumers (FSA 2004j: 3). Likewise, agency stakeholders who participated in a public consultation on this question 'were divided on this issue' (FSA 2004j: 3). The revolving controversy centred on the question whether a stronger focus on sustainability implied a reinforced consideration of the 'citizen consumer' who was also interested more broadly in a sustainable future as opposed to the knowledgeable consumer in the marketplace who was predominantly interested in being able to 'choose safe food' and 'the right food':

On the one hand, some stakeholders, notably Sue Dibb from National Consumer Council and Jeanette Longfield from Sustain (both members of the consumer committee) argued that the FSA's protection and promotion of sustainability-related consumer concerns should also include 'sustainable development issues', which 'impacted on all parts of the food production chain including transportation, energy consumption, food miles, cultivation of the land and sea, and others' (FSA 2004j: 15). The FSA's behavioural pre-emptive interventions therefore should 'make environmentally friendly eating an easier option and encourage consumers to choose environmentally friendly food products' (FSA 2004j: 13). On the other hand, several industry trade associations were very critical of this kind of interpretation of the term 'taking into account

sustainable development', which they considered to be an improper extension of the FSA's remit. This should remain 'focused on hygiene and food safety initiatives' (FSA 2004j: 12). In the view of these industry stakeholders, the FSA had already gone too far by placing a focus on pre-emptive practices to promote healthier food choices; they argued that the 'FSA's position on sustainability should reflect the agency's primary objective of protecting consumers' as participants in the marketplace who 'have available a wide range of safe, wholesome and high quality products at a price they are prepared to pay' (FSA 2004j: 12).

Thus, while consumer organisations advocated for reframing the FSA's approach to pre-emptive governance so that it excluded consumers' diverse values and interest – notably also environmental sustainability – industry stakeholders, who were already wary of the FSA's growing focus on pre-empting obesity, urged the FSA to continue to focus on optimising the efficiency and effectiveness of consumer policy. By so doing, they argued, the FSA would ensure consumers' 'freedom of choice', which they viewed as dependent on their 'willingness to pay'. Thus, the industry saw the reframing of the FSA's temporal authorisation practices in terms of different values related to sustainability advocated by consumer organisations as an undesired politicisation of the agency's workings.

Despite the contestedness of extending the FSA's interventions to include pre-emptive measures to avoid (environmentally) unsustainable food consumption patterns, the FSA continued 'to embed sustainable development into (…) its policymaking' as it acknowledged that 'sustainable development was an interesting area which was gaining momentum within many sectors of society' (FSA 2007f: 14). However, it did not put the same weight on sustainability-related pre-emptive action as it put on nutrition. Compared with its multiple frontstaged initiatives on nutrition, the FSA's work here remained limited to producing anticipatory knowledge on the nexus between environmental sustainability and food. For instance, the FSA assigned its own 'Horizon Scanning Centre' and the General Advisory Committee to jointly co-ordinate a foresight project 'on the effects of climate change in food safety and quality' (FSA 2009b: 114). Reflecting the rise of the 'better regulation discourse', the FSA's 'Better Regulation and Sustainability' division developed a guidance document that should help its staff to 'undertake sustainability assessments' as part of the FSA's general 'regulatory impact assessments'; in the assessment practice, however, the aspect of environmental sustainability remained widely ignored (FSA 2006k). Thus, here sustainability also became partly framed in a more linear way rather than as a nondeterministic, recursive temporal phenomenon.

However, with the publication of the Cabinet Office's 'Food Matters' report in 2008 (Cabinet Office 2008), the issue of 'food and sustainability' regained political momentum in the UK and moved from impact assessments toward a broader societal discourse. In response, the FSA again reinforced its focus on sustainability as part of its frontstage activities. The agency consulted widely on how to further develop its approach to sustainability and conducted a series of workshops, one of which involved a broad number of external stakeholders (FSA 2008c).

Out of this process emerged the FSA's 'clear recognition that sustainability involves consideration of all three pillars of sustainable development' i.e. social, economic and environmental (FSA 2008c: 7). While it insisted that its own 'priorities should be around food safety and nutrition' (FSA 2008c: 7), it did commit itself to work 'with other departments and organisations (…) to mitigate any adverse sustainability impacts' of its policies that fell outside its own remit (FSA 2008c: 7). These included issues such as meat and dairy consumption and their 'significant impacts on climate change', as well as the environment and biodiversity (FSA 2008c: 7). Hence, in light of the Food Matters report, the FSA again rebalanced its approach pre-empt an unsustainable future from the linear mode of impact assessment, which was previously narrowed down to safety and consumer choice questions, to a more complex and recursive mode of anticipating the future that involved negotiating and coordinating between different policy fields and institutional interests.

Paradoxically, however, not only industry representatives, but also stakeholders who represented consumer concerns with respect to environmental sustainability issues remained dissatisfied with the FSA's approach to sustainability, as the following interview sequence shows:

> 'I hoped [the FSA] would expand its remit to where it should have been from the beginning in my view, *to include all food issues, including sustainability food issues*. (…) [I]n my view, it would have been much more sensible for the Agency from the beginning to have that role *right across all sustainable food and farming issues*. But instead they said: "No, no, no. We just do safety and nutrition. All those other things are somebody else's problem." So. But that got them into really stupid problems. With fish: One of the things I tried to push and failed, including through the consumer committee, was on sustainable production and consumption of fish. I think it probably still is official government advice that everybody should eat at least two portions of fish a week, one portion of that should be oily fish, because that's very good for your health. My view is: please stop telling people to eat more fish. There's not enough fish in the sea. Nobody needs to eat white fish for their health. Ok, it's a low-fat protein source. There are plenty of other low-fat protein sources, like beans and pulses, for example, which aren't endangered. Please stop telling people to eat white fish. Oily fish, there's some good evidence, but it has to be sustainably caught. Otherwise there

> won't be any left. And I *simply could not get the Food Standards Agency to incorporate sustainability considerations into the advice that they were giving the public about fish consumption.* They just kept saying the environment is nothing to do with us. (…) *So, in so far as the food industry didn't like them doing nutrition, they would have really hated them with an even bigger remit, but I think that that's what they should have had'* (interview member 24 – NGO).

This quote illustrates the dilemma inherent in the FSA's pre-emptive authorisation mode. By committing itself to pre-empting the undesired future of an obese nation, the FSA opened up the discursive space for further demands and imaginaries on pre-emption beyond nutrition-related health and wellbeing. So, while the industry was against any pre-emptive mode of knowledge and decision-making, which was in their view too political, consumer representatives saw pre-emption as a 'door-opener' to making the FSA a spokesperson of the 'consumer citizen' with broader value preferences on sustainability. Thus, we have seen in this chapter that while the pre-emptive mode of temporal ordering work was essential for the FSA's attempts to gain advocatory politico-epistemic authority in the context of 'childhood obesity', in the view of the industry it also came with a specific flipside, namely that of a politicisation of the FSA that had gone too far. This was also the case with the agency's activities on nutrition in general and its 'traffic light signpost labelling' in particular which, although voluntarily adopted by some businesses, attracted continued strong criticism from the industry. As one interviewee put it:

> '(…) most of them [i.e. the industry stakeholders], I think, were probably unhappy (…). I think quite a lot of them were unhappy about the work that, the really good work I think, that the Agency did on nutrition, on, on traffic light labelling, on junk food advertising in kids, on salt reduction. Most of the industries didn't like that at all' (interview member 24 – NGO).

As a result of this contestation on behalf of the industry the entire remit for nutrition was eventually removed from the FSA to the Department of Health by the Conservative-Liberal coalition government in 2010.

Thus, summing up, be it preventing obesity or anticipating problematic relations between food consumption and environmental sustainability, by acknowledging the recursive interdependencies between different policy fields, social norms psychological factors and social environments underlying this complex problem the FSA opened up the room for political interventions to ward off undesired futures. Yet, the FSA's pre-emptive approach to issues beyond food safety was criticised as being too political on behalf of the industry.

5.4.3 Conclusion

In this chapter, I showed that the FSA's attempt to successfully claim politico-epistemic authority also involved specific practices of temporal ordering. In the preceding analysis, I made five main observations:

	FSA
mode of objectivation	• recursive • *precautionary approach: coping with uncertainty by integrating heterogenous perspectives in processes of problem framing and deliberating on policy implications* • *pre-emptive approach: coping with uncertainty by focusing on relations of associations and taking action despite uncertainty, while integrating heterogenous perspectives in horizon scanning activities*
representative claims	• rather heterogeneous consumer constituencies • *'consumer citizen'* • *'knowledgeable consumer'* • *'socially included consumer'*
legitimation mode	• primarily input-legitimacy-oriented
contextual embeddedness institutional-cultural discursive	• British public interest and communitarian culture • *negotiated-consultative mode of knowing* • *predilection for common-sense knowledge and empirical proof* • *British vision of Europe as 'free-trade-project' and 'European governance' as non-enforceable voluntary regulation* • 'science and society', 'social exclusion', 'evidence-based policy making'
contestation and change	• contestation of recursive temporal ordering mode • *tension between precautionary/pre-emptive approach and 'better regulation'* ⇨ *reframing emphasising effectiveness and efficiency* ⇨ *shift towards a more linear temporal ordering mode*

Table 16: Summary of the FSA's social mode of objectivation, my compilation

Mode of temporal ordering: First, the FSA adopted two forms of recursive temporal ordering – precaution and pre-emption. Precaution was about 'going back over' the scandalous past of

the BSE crisis to move on into a 'brighter era' characterised by a precautionary approach to uncertainty that surrounds the assessment of food risks. This involved addressing the intractable complexities and uncertainties of particular food safety issues – e.g. BSE in sheep', 'pesticide residues and mixtures of pesticides', and 'food colours' – by actively integrating stakeholders and notably consumers into the process of both framing risk assessment questions and deliberating on the respective policy implications. Pre-emption was based on the assumption that – in light of a threatening future of obesity – immediate action must be taken. This was despite the fact that both the occurrence of an 'obese future' and the effectiveness of specific interventions aimed at preventing it from happening were uncertain. Using the example of the FSA's activities on nutrition, I have shown which major elements characterised the FSA's pre-emptive approach: It was focused on 'relations of associations' instead of 'causal mechanisms'. It aimed at coping with the irreducible uncertainty that was inherent in anticipating obesity and assessing the measures to pre-empting it through multi-actor horizon scanning activities that acknowledged the political, social, and economical multi-contextual embeddedness of obesity. Moreover, it claimed that it was possible to reverse this threatening trend by taking immediate pre-emptive action aimed at changing consumers' individual behaviour towards healthy eating – notably that of children from low-income-families.

Representative claim: Second, like in the social and object dimension, the FSA's authorisation practices contained a representative claim on behalf of different consumer constituencies: (1) the 'consumer citizen', (2) the 'knowledgeable consumer' and the (3) 'socially included consumer'. Specifically, in the FSA's precautionary approach consumer representatives were consulted because they were attributed the right to represent their views and concerns in matters of risk uncertainty, not primarily due to their expertise. They were thus invoked as 'consumer citizens'. Underlying this claim was the assumption that handling uncertain risks was not simply about weighing the available evidence but involved deliberation on how the potential benefits and harms of an uncertain issue were to be distributed in society. Likewise, the FSA actively engaged with consumer organisations in its pre-emptive 'horizon scanning activities' on obesity and other emerging threats. They were involved as representatives of 'consumer citizens' with a legitimate stake in and valuable perspectives on future threats and the subsequent development of pre-emptive policies. However, I have also shown that the FSA's precautionary and its pre-emptive approaches were simultaneously based on a representative claim on behalf of 'knowledgeable consumers'. In this vein, consumers were conceived of as (bounded) rational individuals operating in the marketplace who were empowered to make informed choices according to their preferences on the basis of improved labelling standards as well as

educational and behavioural interventions. Specifically, vulnerable 'at risk groups' – primarily children from low-income families – were viewed as facing specific psychological and cultural 'barriers to dietary change' and as being in need of specifically targeted education and 'small step' measures to pre-empt their threatening, unhealthy future. Thus, they were thought of as 'bounded-rationals', but still in principle knowledgeable consumers in the marketplace. At the same time, the FSA's pre-emptive interventions were also based on a claim on behalf of the 'socially excluded consumer'. They aimed primarily at targeting children and families on low income, and the needs of this 'hard to reach' and often-neglected group constituted a major point of reference in designing and performing pre-emptive action.

Legitimation mode: Third, the FSA's precautionary approach can be understood as a practice of advocatory authorisation in that it was primarily legitimised in terms of input legitimacy. The FSA explicitly agreed with the those in the BSE crisis discourse who regarded the traditional British opaque style of 'experts-only-settings' as the main culprit for an overall overconfidence in unjustified safety claims. The FSA's precautionary approach, by contrast, drew on New Labour's rhetoric of renewing the British 'public interest' culture through a more socially inclusive and transparent governance style. This orientation towards input legitimacy was particularly obvious when looking at how the FSA defined its own role in EFSA's horizontal coordination networks. Although these network activities aimed at harmonising risk assessment, the FSA argued that all participants should acknowledge the legitimate need of national food agencies to be responsive towards domestic stakeholders, particularly consumer groups. However, the FSA's precautionary approach not only empowered consumers in their choices but also required consumers to take rational and responsible action for themselves. Hence, the FSA's precautionary approach also reflected more output-legitimacy-oriented managerial styles of governance promoting voluntary regulation and 'consumer-oriented' public services, which characterised the New Labour government's agenda on new public management. Likewise, with its aim of effectively bringing about a future of 'healthier lifestyles', the FSA's pre-emptive approach entailed elements of both input and output legitimation. The FSA did not merely justify its pre-emptive behavioural interventions, which used local social contexts and peer-group norms to bring about 'healthier lifestyles', in terms of consumers' articulated preferences for urgent pre-emptive action on nutrition. At the same time, it justified using behavioural interventions to change consumer behaviour by referring to the particular effectiveness of such behavioural interventions.

Contextual embeddedness: Fourth, the FSA's recursive temporal ordering mode was contextually embedded in multiple ways. Its consultative-precautionary approach chimed with

the broader 'science and society' discourse. Moreover, it can be understood as an expression of the British communitarian 'public interest culture', in which obtaining the public's consent and demonstrating that any policy measure is devised in the public interest are key elements. Likewise, in line with the British predilection for pragmatism and empirical proof, the FSA's precautionary approach was developed from practical experience gained through the case-by-case application of the 'Phillips lessons' to a series of food safety issues in the FSA's first years. The analysed 'test cases' of BSE in sheep, pesticides and food colourings constituted a frontstage in which the FSA could present 'empirical proof' for the validity and legitimacy of its precautionary approach. Its pre-emptive approach to obesity yet relied more strongly on New Labour's social exclusion discourse in that it claimed to specifically contribute to the good of children from low-income families. It placed great importance on addressing children at risk of obesity in their daily life and environments (families, schools, local communities) to change their dietary behaviours and systematically evaluated these interventions in terms of their impact. By so doing, the FSA drew on the British culture of 'common-sense knowledge' and on New Labour's discourse on evidence-based policy making that was increasingly informed by behavioural science over the years alike. Finally, the FSA's pre-emptive approach to obesity was also indicative of how the agency sought of its own role in the European multilevel governance system and how this was informed by domestic visions of Europe. The FSA was actively involved in the 'European Platform for Action on Diet, Physical Activity and Health', where it presented itself as a 'network manager' and reputable forerunner of pre-emptive approaches aimed at tackling obesity. The EU was invoked as a sort of 'collaborative platform' providing room for exchanging knowledge on 'best practice examples' and for coordinating voluntary pre-emptive nutrition policies among different stakeholders. This was a vision of 'European governance' that chimed with New Labour's domestic focus on network and private governance with little state involvement aimed at non-enforceable voluntary regulation. It likewise reflected Britain's longstanding tradition of seeing the EU not as a political project but predominantly as a free-market project where seemingly 'technical' questions were to be decided based on expertise.

Contestedness: Fifth, the FSA's recursive mode of temporal ordering eventually shifted towards a more linear mode. While in the FSA's first years the discourse on post-BSE reforms and New Labour's strong focus on 'social exclusion' and 'new scientific governance' proved to be particularly powerful discursive legitimatory resources for the FSA's precautionary approach, this changed over time with the overall rise of the managerial and output-oriented institutional discourse on 'better regulation'. Since around 2004, the 'principle of

proportionality' increasingly became a key element of the 'better regulation' agenda within the Labour government and soon also of the FSA's authorisation practices. With better regulation becoming more and more important as a legitimatory resource for the FSA, more linear temporal ordering practices, such as formal scientific risk assessment and ex ante regulatory impact assessments gained importance in the agency's frontstage activities. However, this development was viewed critically by consumer groups and academic observers alike. The FSA's pre-emptive approach to obesity was criticised for being almost entirely directed at inducing individual behavioural changes and obtaining voluntary self-commitments from the food industry. Also, the reliance on family-based and school-based approaches was met with scepticism by some major consumer organisations, which criticised their focus on lifestyle issues and neglect of more structural causes of obesity. At the same time, some consumer groups pushed the FSA to broaden its pre-emptive approach to include more diverse values and interest – notably questions of (environmental) sustainability. However, the FSA's first careful steps towards doing so were immediately met with resistance. In contrast to consumer groups who saw the FSA's pre-emptive approach to obesity as a 'door-opener' to making the agency a spokesperson for the 'consumer citizen' with broader value preferences on sustainability, the industry was against any pre-emptive mode of knowledge and decision-making, since it was, in their view, too political. The industry was, on the contrary, already very wary of the FSA's growing focus on pre-empting obesity; it urged it to continue to focus more narrowly on food-safety-related consumer policy and – in line with the 'better regulation agenda' – to optimise its efficiency and effectiveness in this area. In response, the FSA's entire nutrition remit was removed to the department of health with the Conservative-Liberal Coalition coming into power in 2010. As the FSA's pre-emptive practices were as I have shown above anchored within its nutrition remit this also meant an end to the agency's pre-emptive temporal ordering mode.

5.5 Synopsis: The Case of the FSA in a Nutshell

While the previous chapters have analysed the FSA's mode of building and cultivating advocatory politico-epistemic authority by focusing separately on the social, object and temporal dimension, I will conclude the case study on the FSA by a short synopsis illustrated by the figure below. In so doing, I will specifically focus on the contextual embeddedness of the FSA's authorisation and legitimation practices and the dynamic change that occurred over the studied time period from 2000 to 2015. Across all three dimensions, there were two basic phases of the FSA's attempts to claim expert authority.

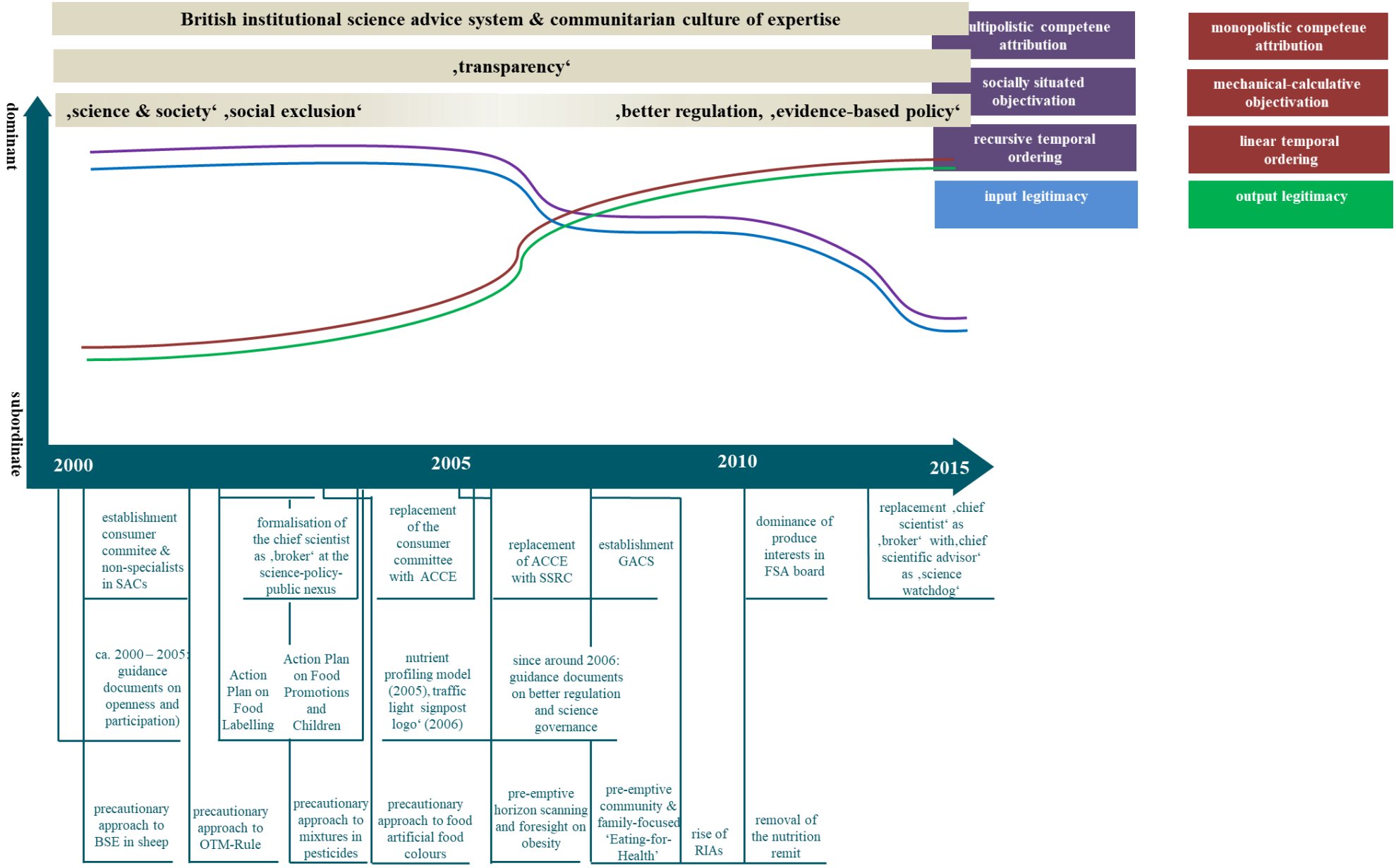


Figure: The case of the FSA in a nutshell, my compilation

In the first phase, which roughly reached from the agency's establishment in 2000 to around 2005/06, the FSA pursued a predominantly *advocatory* mode of authorisation and legitimation: a *multipolistic* mode of competence attribution, a *socially situated* way of objectivation and practices of *recursive* temporal ordering, all of which were predominantly justified on grounds of *input legitimacy*. In so doing, the FSA drew on and (re)combined elements of the British communitarian culture of expertise and the then dominant discourses on 'social exclusion' and 'science & society'. In the social dimension, these institutional-cultural and discursive elements were reflected in the multiple grounds on which competence was attributed to the FSA's stakeholder-based board, non-specialists members in SACs, the consumer committee and the chief scientist. In the object dimension, the British communitarian culture and the dominant 'science & society' and 'social exclusion' discourses were reflected in a series of meta guidance documents, strategic frameworks and action plans that put a strong focus on establishing transparency, openness and participation as action-guiding. Specifically, this was shown by using the prominent example of the 'Nutrition Strategic Framework' and its various operationalising action plans that eventually led to the establishment of a nutrient profiling model in 2005 and based on this a voluntary traffic light signposting logo in 2006. Here, the FSA included heterogeneous consumer groups and specifically 'vulnerable' and 'hard-to-reach' consumer groups into establishing a working consensus, which was legitimised with reference the broader 'social exclusion' discourse. In the temporal dimension, both the FSA's precautionary approach on BSE in sheep, OTM-rule, mixtures in pesticides and artificial food colours as well as its pre-emptive obesity-horizon-scanning-activities and interventions aimed at tackling consumers' eating behaviour likewise drew on these institutional-cultural and discursive elements.

However, over time, the FSA's advocatory mode of politico-epistemic authority was multiply contested not only due to the fact that its overall openness came along with an increased complexity in daily practice but also on the grounds of the gradual rise of the discourses on 'better regulation' and 'evidence-based policy making'. This changing discursive context soon came to manifest itself in the growing institutionalisation of cross-departmental science reviews, the broader 'behavioural turn' in British policy-making, and the increasing emphasis put on reducing 'regulatory burdens'. In this changed discursive and institutional setting, the FSA's attempt to open up to advocatory politico-epistemic authority came to be reframed on the ground of output legitimacy since around 2006. This changing context has brought the FSA to gradually shift towards a more rationalistic mode of expert authority. In so doing, it recombined existing institutional-cultural elements and the rising discourses on 'better

regulation' and 'evidence-based policy making'. In the social dimension, the mode of competence attribution shifted from a pronounced multipolistic to a more monopolistic one. This was most evident in the replacement of the consumer committee with the ACCE in 2005, which was again replaced just 3 years later with the SSRC. This shift away from direct consumer representation to making 'ordinary consumers' an object of social science reflected the growing importance the behavioural turn in policy-making linked to EBPM. In this vein, also the composition of the board changed, i.e. from a dominance of consumer to a dominance of industry representatives who were expected to have an eye on effective and efficient policies. Moreover, in response to the growing Whitehall science reviews, FSA changed the role of the chief scientist from a multicompetent broker at the science-policy-public nexus to a 'science watchdog'. These implied that formal scientific qualification and merit gained in importance as criteria of competence attribution. In the object dimension, the FSA gradually shifted towards a more mechanical-calculative objectivation mode to comply with 'better regulation'. Its FSA's guidance documents published after 2005 increasingly prioritised quantitative forms of evidence such as probabilistic statistical analysis, cost-benefit analysis and market research. In the temporal dimension, the 'principle of proportionality' likewise increasingly became a key point of reference in the FSA's authorisation practices. This implied that more linear temporal ordering practices, such as formal scientific risk assessment and notably ex ante regulatory impact assessments (RIAs), which were rather operated at the backstage in the agency's early years, gained importance in its frontstage activities. With the growing importance of better regulation, also the FSA's pre-emptive approach to tackling obesity came to be contested and reframed as being 'too political' and 'too little evidence-based'. Finally, with the removal of the FSA's nutrition remit with the power in 2010, the agency's pre-emptive temporal ordering mode that was tightly linked to its nutrition remit came to an end.

6 Focused Comparison: The German BfR

> 'Science to serve humanity' is the guiding principle of BfR. Through our independent scientific assessment, research and the transparent communication of health risks, we make an impartial contribution to the safety of foods and feeds, products and chemicals. (…) The results of our work promote a factual and social discourse, thus providing decision-makers with a scientifically well-founded basis. (…) On this basis, we set scientific standards in consumer health protection so that the world becomes a safer place for people to live.

In this chapter, I will take a further step in demonstrating the contextual embeddedness of the politics of politico-epistemic authority by comparing the case of the British FSA with the German Federal Institute for Risk Assessment (Bundesinstitut für Risikobewertung, (BfR)). As the quote above, taken from the BfR's official 'mission statement', already indicates, the German BfR's prime authorisation and legitimation strategy considerably differs from that of the British FSA. As I have shown in the previous chapter, the FSA pursued a strategy of what can be understood as an advocatory mode of authorisation – which is exemplified in its slogan of 'putting the consumers first'. As we will see in the following, the BfR's commitment to 'science to serve humanity' is an expression of a strategy aimed at what can be understood as a technocratic authorisation and legitimation mode. This technocratic authorisation mode is based on a monopolistic mode of attributing judgement competence (social dimension), a 'mechanical-calculative objectivation mode' (object dimension) and a linear temporal ordering mode (temporal dimension) and on an overall output-legitimacy-oriented justification of authority.

6.1 Practices of Monopolistic Competence Attribution

In contrast to the FSA, the BfR represents a monopolistic mode of competence attribution. Attributing judgement competences exclusively on grounds of formal scientific qualification and reputation is an essential element of the FSA's attempt to build and cultivate politico-epistemic authority. This attempt is fundamentally based on claiming that the agency is the only actor in Germany and one of the very few actors in Europe that is capable of providing 'scientifically sound assessments' of food safety risks. Around 50% of the BfR staff are scientists. The agency's senior management positions are recruited based on 'academic excellence'. Furthermore, over the time period studied, the BfR's monopolistic competence attribution mode came to be institutionalised by four organisational arrangements with specific

judgement competences: (1) 'national reference laboratories' (2) the agency's scientific advisory board in 2005, (3) the BfR's expert committees in 2008, and last but not least, (4) from the agency's very beginning, risk communication research.

First, the BfR understands itself as a 'research intensive authority' (interview official 10 – BfR). Since its inception, the BfR has been keen on stressing that – together with the French Agency for Food, Environmental and Occupational Health & Safety (ANSES) – it is one of the food agencies in Europe that maintains its own primary research capacities. Notably, it operates 17 so-called 'national reference laboratories' (NRLs), in which not only risk assessment research is conducted, but also new reference methods for the detection of certain contaminants are developed and validated (interviews official 7 – BVL; official 11 – BfR).

When asked if the BfR pursued a specific plan of action to establish itself as a renowned and accepted institution after it had been set up in response to the BSE crisis, one interviewee explained the strategy that had been adopted by the agency's president as follows:

> 'He [the BfR's president] did have room of manoeuvre in regard to the actual development of the BfR, which he also used especially when it came to, and this might be important for you to know or to understand that originally it was once thought to turn the BfR into a solely evaluative institution, while [the president] always wanted us to be a researching institution as well (…) his philosophy is basically that only with functioning (…) research one can react quickly to problems and establish know-how through research which is not the case for institutions that is solely an evaluative institution, just like the FSA for instance. When they [the FSA] encounter a problem, they have a massive budget for commissioning universities or other research institutions with research. We do have third-party funding as well, however proportionately we conduct a lot of our own research which is clustered around the 17 national reference laboratories. So, we did have such a big percentage [of own primary research] (…) and I think this is one aspect that [the BfR's president] had a strong influence on' (interview official 10 – BfR, own translation and emphasis).

As this quote shows, the BfR's claim to judgement competence on food risks builds on the agency's distinguishing feature of operating NRLs which sets it apart from 'solely evaluative institutions' that conduct only meta reviews of risk assessment studies, such as the British FSA, which here is explicitly mentioned as a counterexample[173]. In this context, the interviewee clearly states, there was a clear preference of the leadership to transfer all NRLs to the BfR in

[173] However, the fact that the interviewee here distinguishes the BfR from the FSA was also due to the introductory presentation of the research project by the interviewer.

the agency's founding period. By attaching highly qualified NRLs to the BfR, which as the quote shows initially had been politically unwanted by the BfR's parent ministry, the then German Federal Ministry for Consumer Protection, Food and Agriculture (BMVEL), the agency's president pursued its strategy of becoming a 'reference authority' when it comes to harmonising the field of laboratory diagnostics throughout Europe (BfR 2004; Henning 2005). In this vein, the BfR explicitly states as part of its official strategy that operating NRLs that 'are involved in the definition of standards for food monitoring in order to ensure the safety of food throughout the EU' and that 'play a watchdog role in the early detection of emerging risks' form an essential element of its broader institutional strategy (BfR 2014f).

Moreover, as part of its official institutional strategy, the BfR from its very beginning has pursued an expansion of its 'research-based approach through intensified research activities and establishing the BfR as a national and international cooperation partner' (BfR 2014f). However, the strategic necessity of extending capacities in primary research has only been acknowledged by the BMVEL since around 2005/6, after the German Council of Science and Humanities ('Wissenschaftsrat'; hereafter: science council) evaluated the BfR. It was the first time in the long history of German departmental research agencies (DRAs) that the science council undertook a scientific evaluation of these institutions, which hitherto were understood as 'multiple purpose organisations' performing various administrative and regulatory tasks in addition to conducting research and giving scientific policy advice (Döhler & Bach 2012: 6). As a consequence of the German constitutional 'departmental principle' ('Ressortprinzip') and the doctrine of ministerial responsibility ('Ministerverantwortlichkeit'), DRAs are usually considered being subject to full ministerial oversight just like almost all German federal agencies. Against this background, DRAs were traditionally not viewed as scientific institutions subject to the science council's evaluations, but rather as politico-administrative agencies that also fulfilled research and science advice functions. Yet, this understanding began to change during the science council's evaluations of German DRAs. In its evaluation report on the BfR, the science council had 'emphasised the impressive scientific orientation of the BfR and recommended that its research operations be expanded', upon which the ministry increased the agency's research budget (BfR 2014f). Thus, in its attempt to extending capacities in primary research, the BfR was able to directly refer to this concrete statement and in more general to the science council's overall move to 'scientise' German DRAs.

Second, as a next step of enhancing and – publicly demonstrating – its outstanding scientific competences, the BfR established a scientific advisory board in 2005. The idea of a scientific

advisory board was likewise initially dismissed by the BMVEL, as this would have enhanced the – at that time – suspiciously eyed de facto autonomy of the BfR. Hence, in the first years after the BfR's establishment, there were conflicts between the ministry and the BfR on the question whether maintaining a separate scientific advisory board providing both input and challenge to the BfR's research activities would be in line with the agency's mandate. This was due to the fact that the ministry feared that a too scientised BfR would strengthen the agency's autonomy beyond the politically desired level (Korinek & Veit 2015). Yet, eventually the BfR managed to enforce its position that a scientific advisory council was a necessary element in building national and above all international reputation. The reason for the ministry's final agreement was that the above-mentioned evaluation of the DRAs conducted by the German science council had recommended to establish a scientific advisory council at the BfR. Again, the ministry was at first also critical towards the idea of evaluating the BfR according to scientific criteria of 'excellent research' and hence in general of any attempt to 'scientise' the BfR. Yet, it became increasingly convinced in the course of this evaluation as the following quote shows:

> 'From the moment on when the science council was in the departmental research agencies [i.e. was visiting them in the course of the evaluation process], it was *the* science council which said that (…) this kind of research, which is so close to the citizen like that conducted by departmental research agencies, doesn't exist otherwise. *And this is correct, since (…) we, as you can see, are indeed conducting excellent research, which all has directly to do with consumer behaviour or consumer exposure. (…) These are all things that immediately are implemented in effective laws and act once something is found out in that area.* Yes, in that regard we were happy that the science council came and said "scientific advisory council" and we knew from the beginning as well that we wanted something like that. We then established it, which was terrific because there were different members from different sectors which were so to speak supposed to look at us and scrutinise us' (interview official 10 – BfR, own translation and emphasis).

As this quote shows, the BfR saw the science council's evaluation reports as an argumentative resource in particular vis-à-vis its initially critical 'parent ministry'[174]. Having the science council's evaluation reports at hand, which recommended further institutionalised mechanisms of scientific input and scrutiny, enabled the agency's president to gain acceptance for the establishment of a scientific advisory board in 2005. The science council's evaluations hence were a useful means for sustaining the BfR's scientific expert authority; they constituted a

[174] One can well speak of a 'parent ministry' here, because in contrast to the British Department of Health, the BMELV still had legal supervision over the BfR. This is also the reason why the BfR is, although independent in matters of scientific advice and communication, located in the business area of the BMELV.

'public documentation of the agency's scientific soundness' (interview official 11 – BfR) and thus were highly valued by the agency's leadership[175]. The science council is one of the most authoritative science policy institutions in Germany and hence its judgement has a specific weight in science policy discourses.

According to the formal description of the board's mandate, commenting on and ensuring the scientific quality of the agency's scientific work constitutes one of its key tasks, in addition to giving scientific advice (Wissenschaftsrat 2006: 66). In line with this mandate, the BfR's scientific advisory board has been advising the agency on its research planning, recruitment of heads of divisions and regarding scientific cooperation since its establishment in 2005. It is composed of twelve scientists from various university-based and non-university research institutes. Compared to the FSA's arrangements of scientific accountability, judgmental competence here is thus attributed exclusively based on formal scientific qualifications and specialised knowledge, which is justified with reference to output legitimacy ('effective laws and acts'). A further striking contrast to the FSA's various science advice arrangements characterised by transparency and openness is that the BfR's scientific advisory board's mandate entails only little provisions for public transparency[176]. It is primarily constructed as a 'closed-shop-style' expert committee consisting of 'excellent scientists' (BfR 2008a).

The interview quote above (interview official 10 – BfR) is moreover a prime example of the way in which the BfR's monopolistic of competence attribution comes with a specific representative claim on behalf of the consumer and is justified in terms of output legitimation. As the interviewee above explains, the science council attested the BfR not just the scientific validity of its research activities – which should be further sustained by the scientific advisory council – but also the relevance of its research to the good of consumers. The interviewee claims that the BfR was 'conducting excellent research' which is not just scientifically valid, but also 'has directly to do with consumer behaviour or consumer exposure and as such is 'immediately (…) implemented in effective laws and acts'. The consumer constituency here is imagined as follows: First, as a community of human bodies and measurable patterns of human behaviour, and as such ultimately a mere variable in formal probabilistic risk assessment that is based on a sound analysis of consumer exposure to risk. This construction of consumers is closely

[175] The BfR's leadership even asked the science council for a second round of evaluation in 2012.

[176] In addition to the names of the committee members and the obligatory declarations of interest, it also publishes the brief minutes of the committee meetings, which are, however, undetailed and much shorter in comparison to the average of the FSA's minutes.

attached to the above-presented BfR's slogan of 'science to serve humanity'; the science conducted by the BfR ensures the good of consumers understood as members of humanity – i.e. a population of bodies that has to be wary of its lifelong exposure to all sorts of contaminants. Second, the consumer is imagined as a 'health-rights-bearing' subject whose right to safe food is effectively protected through valid risk assessments conducted by the BfR. As bearers of health rights and thus of the right to safe food, consumers are best represented through the BfR's scientifically excellent risk assessments that would be directly implemented in effective consumer protection laws. It is thus through the BfR's excellent scientific competences alone that effective consumer protection law is ensured and thus the good of consumers as 'health-rights bearing subjects'. In this vein, attributing judgemental competence based on scientific criteria alone here is justified in terms of output legitimacy.

Third, in 2008, the BfR further established fourteen 'BfR-Committees', i.e. scientific committees mirroring EFSA's expert panel structure[177]. Yet, in contrast to the EFSA, where such committees carry out risk assessments, the BfR's expert committees are appointed to advise the BfR on questions of food safety in conjunction with the agency's scientific work for the German government and European bodies. Each committee comprised about ten 'independent scientific experts' (BfR 2008a). According to the formal committee rules, the members are recruited exclusively based on 'scientific excellence and professional competence and expertise' (BT-Drs. 17/10373 2012: 8).

The BfR-Committees serve as 'expert networks' which 'bundle scientific expertise on the highest scientific level' that can be used for the BfR's risk assessment activities in the context of international bodies (BfR 2008a). In so doing, the commissions were intended to serve as a means of external quality control to advise the BfR on food and feed, chemical safety and product safety: 'The scientific quality of the Institute's [i.e. the BfR's] expert opinions will thus be raised and external quality assurance guaranteed' (BfR 2008a).

Akin to the Scientific Advisory Board, the BfR commissions were hence designed as bodies of closed collegial deliberation, set up to discuss notably 'prototypical cases' of emerging risks, as one interviewee put it (interview official 11 - BfR). In contrast to the FSA's scientific advisory committees with their non-specialist consumer representatives who were attributed judgement competence – at least initially– on the basis of their representativeness for

consumers, here judgement competence is attributed only on the basis of specialised scientific knowledge and merit:

> 'The committees have a purely advising function. However, they have the task to depict those people who are really competent with it [i.e. with the respective area of the committee]. We deliberately choose public tenders and then *based on excellence* someone is chosen together with the DFG [i.e. the German Research Foundation], with the respective heads of the German Research Foundation, the respective senate commission, our senate of the government research agencies, our president and our scientific advisory board, they choose those people who will join the commission. However, we have about twice as many applications as we have openings in the commission later on' (interview official 10 – BfR, my translation).

Nevertheless, the BfR was keen on emphasising the purported openness of the committee's recruitment policy: 'The procedure is designed openly and explicitly addresses not only experts from universities and non-university research institutes, but also representatives from consumer and environmental organizations, from industry and from other authorities (…)' (BT-Drs. 17/10373 2012: 8, my translation). As exemplified by this quote, the BfR's understanding of openness remarkably differs from what is understood and publicly portrayed as being 'open' in the FSA context. According to the BfR's view 'if the criterion of scientific excellence is fulfilled, also consumer representatives are welcomed, and if the criterion of scientific excellence is fulfilled, also scientists from industry are no problem' (interview official 11 - BfR). Therefore, the often-criticised fact that only two out of the in total 188 members (of the fourteen expert commissions) are consumer representatives, whereas 39 are representatives of the industry, is rather unproblematic (BT-Drs. 17/10373 2012: 8). The way in which the BfR justified this mode of monopolistic mode of competence attribution in the interviews once more reveals the technocratic representative claim that underlies the agency's competence claim.

> 'Every NGO-representative can apply and if he meets the requirements, he will be appointed. When he doesn't meet them, so it is not about, *we haven't been set up as a body where for example political questions and problems are the focus*. This also *isn't our job*. Therefore, we *are not the transmission belt into civil society* (…) *Our task is essentially to depict the state of the art in science and technology, for which including our customers or some of our customers and asking them what their needs are is of no value for us because the needs are clearly defined by the law*. Therefore, there is no need to say "I am not completely content with your research point or your choice of focus". In fact, we say on our own that even if we have NGO-representatives they are welcome to participate in the discussions, *but not on general policy questions, because we are not mandated for it. So, the question of civil society participation is simply a clear definition of our own mandate* (interview official 10 – BfR, my translation and emphasis).

As is most evident from this quote, the BfR explicitly does understand its own role as a purely scientific one – its 'task is essentially to depict the state of the art in science and technology'. The interviewee explicitly emphasises here that for the BfR's prime role as a 'scientific authority' there would be no need to include 'customers'. Remarkably, the notion of 'customer' here is used instead of *stake*holder. In the BfR's view, its customers, and among these consumer NGOs, have no 'stake' in the BfR's advising commissions ('asking them what their needs are is of no value for us'), because the only consumer need the BfR is expected to take into account according to its legal mandate is assessing food safety risks that might pose a harm to consumers' health. In this sense, the BfR here argues that consumer 'needs are clearly defined by the law'. Attached to this is a representative claim on behalf of the 'health-rights-bearing' consumer whose right to safe food, a fundamental factor in ensuring the general right to health, is to be protected through valid risk assessments conducted by the BfR. The technocratic rationale that underlies this representative claim is hence that maintaining scientific competences for assessing food safety risks according to the highest scientific standards, as it is postulated in the agency's legal mandate, suffices to represent consumers' needs, because it is in this way that consumers' legal entitlement to freedom from severe food safety risks can be most effectively ensured.

Fourth, like in the FSA's case, the BfR's strategy of becoming a publicly trusted expert authority also involved providing 'evidence-based' risk communication. However, while the FSA's risk communication activities (like all its activities) went beyond mere food safety issues, the BfR's risk communication activities were limited to food safety risks. At this, it was a declared goal of the BfR, to 'address the problem of perceived risks' from the agency's very beginning (interview official 4 - BfR). To this end, the BfR came to define its own role as relating not only to the assessment of 'objective' food risks, but also to the assessment and targeting of consumers' subjective risk perceptions. The agency therefore maintains a separate division for risk communication that conducts research in the area of 'risk perception and early risk detection'. In this division, experts from various disciplinary backgrounds, including not only science, but also psychology, sociology and communication studies, work to make risk communication comprehensible and in this way to 'render science visible and usable for the consumer', as one interviewed BfR official put it (interview official 4 - BfR). Thus, judgement competence here is again attributed exclusively based on specialised scientific qualification and knowledge, although the spectrum of scientific disciplines goes well beyond the usual risk assessment sciences (e.g. toxicology), to include also social and human sciences. By maintaining specialised competences in risk communication, the BfR attempted to 'return

perceived risks to their rational, i.e. scientifically justified nucleus' (BfR 2007).

In keeping with this self-set role attribution in relation to risk communication, the agency has been increasingly conducting own research on consumers' risk perceptions (BfR 2007). This included for instance conducting focus groups research on risk perception (BfR 2010e), media- and internet discourse analysis (BfR 2008b) and representative surveys on risk perception (BfR 2015a, 2016b). This type of 'risk communication research' is primarily conducted with the aim of taking the results research' as the basis of the agency's public risk communication.

As I have shown, the previously presented manifestations of the BfR's monopolistic mode of competence attribution – its 'national reference laboratories and scientific advisory board as well as the 'BfR-Committees' – were primarily attached to a representative claim on behalf of the 'health-rights-bearing consumer'. In addition to this, the mode of competence attribution underlying the BfR's risk communication activities was more closely intertwined with a representative claim on behalf of the 'knowledgeable consumer' who is to be educated to rationally reflect and act upon receiving advice from the BfR. The following quote from a speech of the BfR president illustrates how the agency's risk communication activities were used to representative claim-making on behalf of the knowledgeable consumer; here it is argued with regard to the value of the BfR's risk communication activities:

> 'The Institute works (…) also directly for the consumer. (…) Consumers are to be (…) supplied with comprehensive information. Only an informed consumer has the freedom to decide for himself which risks he wishes to take and which he does not' (BfR 2003b).

The BfR was thus keen on portraying its risk communication activities as something that enabled consumers to act as 'individual risk managers', making free and responsible choices related to food safety risks. It was in this rationalising and educatory sense, that the BfR defined risk communication as an important component of its mandate to independently conduct and disseminate food-safety-related risk assessment. The goal here was 'to enable the people concerned through information (…) to decide for themselves in an informed manner about the risk in question' and in this way to 'actively contribute to consumer protection' (BfR 2005c). In the German version of the agency's publications, the BfR even speaks of risk communication as an activity that puts consumers 'in the position to meet their demand for risk maturity' (Verbraucher sollen 'in die Lage versetzt werden, ihren Anspruch auf Risikomündigkeit einzulösen') (BfR 2005b). In this vein, a guiding question for the agency's risk communication activities is not only to provide consumers with valid information on food safety risks, but also

the question of 'how can consumers be encouraged to become more responsible citizens?' (BfR 2005c).

Remarkably, the narrow, purely scientific framing of the risk communication division's activities as conducting risk communication research to educate consumers had developed first over time. Initially, the BfR was much more open to experimenting with different procedures of stakeholder deliberation and public engagements as a series of the BfR's official statements and projects on risk communication produced and conducted in the agency's early years indicates (Böschen et al. 2002; BfR 2003a, 2005a). However, once the agency had begun to internally settle what risk communication should be about in more concrete terms, these more open deliberative formats soon dwindled in importance and the agency's public assurances that it would actively engage the public in true 'two-way dialogue' almost entirely disappeared. Thus, after a short initial period in which the BfR was more open to ideas of engaging stakeholders and public in more deliberative formats, a dominant view according to which such formats were not in line with the agency's (prime) mandate, i.e. conducting purely scientific risk assessment and risk communication research in order to rationalise policy-making and the public discourse alike, came to be sedimented across the agency (interviews official 4 -BfR; official 10 – BfR; official 11 – BfR).

In this vein, the BfR's risk communication division carefully employed all sorts of dramaturgical elements in order to enact the monopolistic mode of competence attribution also in its – at least rhetorically – more deliberative formats, such as the conferences series called 'BfR-Forum Consumer Protection' or its 'Stakeholder Fora'. These are public two-day events taking place annually and sometimes bi-annually. Each of them addresses a particular topic of consumer concern, such as 'nanotechnology' (BfR 2006), endocrine disruptors (BfR 2010a) 'hygiene of foodstuffs' (BfR 2012b) or 'food supplements' (BfR 2012c). These events take place in the BfR's large lecture hall, i.e. within a spatial frame that is typical for academic education. Moreover, they entail a procedural separation between scientific talks and stakeholder discussions. As one BfR official explained to me, the first day always is the 'expert day', that is, mainly scientists from the BfR or other authorities dealing with issues of consumer health concern, give lectures on a certain issue followed by a consensual and factual debate. The second day then is the 'stakeholder day' where different policy recommendations are discussed (interview official 4 - BfR). This stakeholder day is designed in a way that

> ‘multiple stakeholder can tell their side of the story, e.g. with people that had just been suing one another (…) and then they were standing in the front, they really were angry at each other (…) and we [the BfR communication division] are allowed to present constructive dissent, so to say, as a podium, as a platform’ (interview official 4 - BfR).

What is illustrated by this quotation is how through the procedural separation between the apparently consensual expert discussion and the conflictual stakeholder debate the image of objective, valid and consensual science is reified and contrasted with the ‘antagonistic’ and interest-driven policy debate among stakeholders. At this, the competence to make valid judgements on questions relating to food safety is preserved for scientific experts as well as the competence to judge what is ‘constructive dissent’ and what not (i.e. where people are ‘angry at each other’ for different reasons). Thus, these events were aimed ‘at creating publicity’ and an audience before which the BfR could regularly perform its competence as a scientific risk assessment body (BfR 2008c). Simultaneously, however, they were portrayed as a means of implementing the increasingly prevailing norm of public accountability that with the BSE crisis and subsequent reforms of food safety governance also in Germany had gained momentum (Korinek & Veit 2015).

Summing up, in the previous analysis I have shown that the BfR relied on a monopolistic mode of competence attribution that was closely related to a claim to output legitimacy. The agency put a lot of effort into developing scientifically reputable internal capacities and into justifying its monopolistic competence mode. According to its monopolistic mode, judgement competence was exclusively to be based on formal scientific qualification and reputation. Essential in this justification was a representative claim on behalf of the ‘health-rights-bearing consumer’, whose right to safe food, the FSA argued, was to be effectively protected by maintaining excellent scientific competences. It was by means of these excellent scientific competences that valid risk assessments would be conducted and implemented in effective laws. Moreover, the BfR explicitly referred to the science council’s scientific evaluations and the institution’s more general move towards ‘scientising departmental research agencies’ in its attempt to legitimise its role as a ‘scientific authority’. Being a ‘scientised agency’ it seemed legitimate that the BfR, conducted primary research and maintained expert committees staffed with external reputed experts. Its monopolistic competence mode was thus embedded within this specific German context.

The following table captures the findings:

	BfR
mode of competence attribution	• monopolistic • *formal scientific qualification and reputation*
representative claims	• rather homogeneous consumer constituency • *health-rights-bearing consumer* • *knowledgeable consumer*
legitimation mode	• primarily output-legitimacy-oriented
contextual embeddedness institutional-cultural discursive	• German tradition of 'departmental research agencies' • Scientising Departmental Research Agencies' pushed by the German science council since around 2004

Table 17: Summary of the BfR's monopolistic mode of competence attribution, my compilation

6.2 Practices of Mechanical-Calculative Objectivation[178]

When I started my desk research on the FSA's and the BfR's websites, it quickly became clear that the two cases differed greatly not only in terms of competence attribution, but also in terms of how the two agencies manufactured and used guidance documents in their attempts to objectivation. At first sight, I could identify three important differences in the use of guidance documents in the objectivation practices of the FSA and the BfR: First, visiting the FSA's website, I immediately came across a seemingly unmanageable number of all types of guidance documents that, as I have previously shown, predominantly frontstaged a social objectivation mode (chapter 5.3). In contrast, the BfR's much smaller number of guidance documents – which were however much more detailed – clearly manifested a mechanical-calculative objectivation mode. Second, in the FSA's case, technical guidelines did not figure as an element of the agency's frontstage objectivation performances but largely remained concealed at the backstage area, while two – very detailed – technical guidelines regulating the coordination of risk assessment processes formed a key pillar of the BfR's frontstage performances. Third, whereas the FSA's Code of Practice on Openness called for online publication of not only the minutes

[178] Parts of this chapter are based on (Korinek 2017).

but also all agendas and papers of the meetings of scientific advisory committees, I could only find some very short minutes for the BfR advisory committees. I thus decided to make these initial observations the starting point of the first expert interviews with BfR members:

I: How is risk assessment coordinated here, internally?

R: We have, it sounds terribly boring on the one hand, nonetheless it's deemed useful and accepted by the people on the other hand; we follow a certain guideline. This guideline lays out exactly what to write where under which section, just like a DFG [German Research Foundation] proposal. There we introduced the wording of how to define a risk since it simply cannot depend on whether Person X or Y from division A or B thinks that the risk is high, semi-high, very likely or predictable. We came up with categories in a rough analogy to package leaflets of medications in order to assess when to label a risk in a certain way and how to compose a risk assessment with the help of a grey box, which is an understandable text written by us.

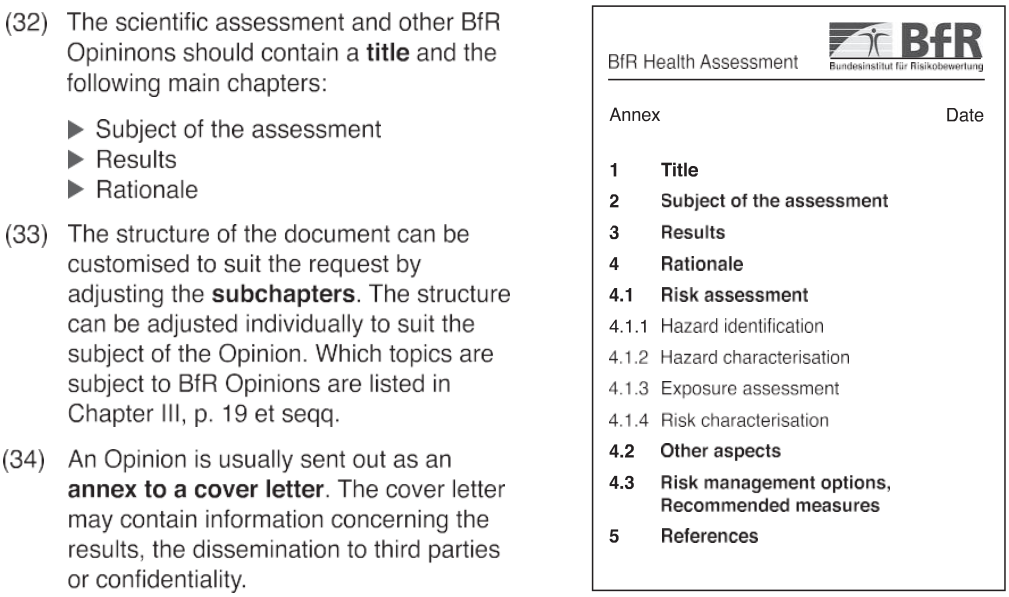
I: And do the risk assessors follow the guideline?

R: This is a still an ongoing process with everlasting problems, for instance when new people arrive. (...) So, I made a gentleman's agreement and came up with a 'no-go list' that contains typical wordings. (…) They follow it strictly to avoid my bad mood when I continuously have to correct the exact same mistakes (laughs). For example, we apparently always find certain measurements here to which I respond that you can find mushrooms in the forest, however, measurements are not to be found but verified. Therefore, it sometimes appears to be forced due to the repeated use of the correction mode, not to use find but verify. So, this, for example, isn't in the guideline, (…) these no-go lists are such small things that would appear a little bit strange. If we put that in the guideline, one would think 'okay', what are these people actually worrying about?

I: Okay this is very interesting, and the guidance document –

R: –It reads terribly boring. In the beginning my first thought was 'yikes!' Do we really want to publish it? And then we noticed that there was a big interest in it! There was a real excitement which surprised me! Also, I think they finally recognised that there is a certain strategy of the house behind it! Then I thought all right, they want to know how to structure it [the risk assessment report] strategically and we subsequently had it translated into English! We also issue it as a small handbook since there is always a demand for it. In this exact moment and next week, we are hosting a summer school and there the people, there are about 40 internationals right now after receiving hundreds of applications, here to learn about how we, how Germany conducts risk assessment and (…) how to describe what to do at first and what is important about a categorisation and classification of risks which they find to be very exciting. I found it relatively dull; however, the benefits of its application are noticeable, even though it looks boring at first sight (interview official 4 – BfR, my translation).

As this sequence shows, when asked about the coordination of internal processes of risk assessment inside the BfR, my interview partner immediately pointed out the 'BfR Guideline for Health Assessments' (BfR 2010d) to me. This guidance document is a technical guideline that defines a 'standard for the depiction of BfR health assessments' (BfR 2010d: 5). On the one hand, it regulates how to carefully structure risk assessments reports; 'just like a DFG proposal', it has to be strictly structured in compliance with the proposal preparation instructions of the DFG, as the following snapshot from the 'BfR Guideline for Health Assessments' illustrates:



(32) The scientific assessment and other BfR Opininons should contain a **title** and the following main chapters:

- Subject of the assessment
- Results
- Rationale

(33) The structure of the document can be customised to suit the request by adjusting the **subchapters**. The structure can be adjusted individually to suit the subject of the Opinion. Which topics are subject to BfR Opinions are listed in Chapter III, p. 19 et seqq.

(34) An Opinion is usually sent out as an **annex to a cover letter**. The cover letter may contain information concerning the results, the dissemination to third parties or confidentiality.

BfR Health Assessment

Annex Date

1	**Title**
2	**Subject of the assessment**
3	**Results**
4	**Rationale**
4.1	**Risk assessment**
4.1.1	Hazard identification
4.1.2	Hazard characterisation
4.1.3	Exposure assessment
4.1.4	Risk characterisation
4.2	**Other aspects**
4.3	**Risk management options, Recommended measures**
5	**References**

Figure 25: BfR Guideline for Health Assessments (snapshot) (BfR 2010d: 11)

Moreover, the guideline stipulates that the BfR's risk assessment reports should start with a small grey box, not longer than one paragraph, including an unambiguously formulated 'take home message' for stakeholders and the general public (BfR 2010d: 12). As a ministerial official explained to me, the grey box is much appreciated, since it provides a very 'brief and concise summary' of the most important information, which makes the report comprehensible and practicable (interview official 18 – BMELV).

Neue Daten zu gesundheitlichen Aspekten von Glyphosat? Eine aktuelle, vorläufige Facheinschätzung des BfR (in Englisch)

New data on health aspects of Glyphosate? A current, preliminary assessment by BfR

Stellungnahme Nr. 035/2011 des Bfr vom 7. Juli 2011

Glyphosat ist ein herbizider Wirkstoff, der in verschiedenen Pflanzenschutzmitteln eingesetzt wird. Das Bundesinstitut für Risikobewertung (BfR) wurde vom Bundesministerium für Ernährung, Landwirtschaft und Verbraucherschutz gebeten, aus der Sicht der Bewertung des Risikos von Pflanzenschutzmitteln zu den gesundheitlichen Aspekten Stellung zu nehmen. Grundlage dessen bildeten die Publikation einer Nichtregierungsorganisation (NGO) und die Bitte der Europäischen Kommission, dass Deutschland als Berichterstatter für den Wirkstoff Glyphosat im Rahmen der europäischen Pflanzenschutzmittelzulassung den Bericht kommentieren möge.

Das BfR Kommt zum Schluss, dass der in Frage stehende Bericht der NGO nur wenige neue Fakten enthält und daß dessen relevante Aspekte in der gesundheitlichen Bewertung des Wirkstoffes Glyphosat durch verschiedene internationale Gremien bereits Berücksichtigung fanden. Der wesentliche fachliche Dissens besteht dagegen in einem grundlegend unterschiedlichen wissenschaftlichen Ansatz zu der Bewertung gesundheitlicher Risiken von Chemikalien. Solche Paradigmenwechsel sollten nach Ansicht des BfR erst von der Fachwelt geprüft und auch in internationalen Gremien auf ihre Notwendigkeit hin diskutiert werden.

Die vorliegende Stellungnahme diente der Information der Europäischen Kommission und wurde auf Englisch verfasst. Sie wird deshalb nur in englischer Sprache auf der BFR-Homepage veröffentlicht.

1. Subject of the assessment

In its responsibility as Rapporteur Member State for glyphosate in preparation of Annex I inclusion in 2002, Germany was asked by the Commission to express its preliminary opinion on the facts listed in the recently published report "Roundup and birth defects. Is the public

Figure 26: Illustration of the standard sumamrising 'grey box' in BfR's risk assessment reports (BfR 2011)

Besides the structure of the assessment reports, the guideline also standardises the use of terminology in a number of respects: risk characterisation, codifying scientific uncertainties, the concordant use of legal terms and recommended management options (BfR 2010d: 6–24). To create forceful wording that suggests objectivity, primarily numerical descriptions should be used for risk probability ('occurred in x out of y cases' instead of 'occurs often'). Such harmonisation of the terminology used in risk assessments is seen as a challenge, since the different disciplines within the BfR traditionally use varying terms for explaining their methodological approach, results and recommendations. Against this background, the guideline is meant to guarantee 'unambiguous and coherent' reports, which should be based preferably on 'internationally recognised nomenclature' (BfR 2010d: 7). Hence, the guideline presents ambiguity in risk assessment as something to be 'reduced' by the standardisation of termini technici and something to be 'resolved' exclusively by scientific experts:

> If there are different scientific views on a point critical to the result of an opinion, these are to be indicated transparently. (…) Other scientists are then able to form their own opinion on the issue based on the explication. (BfR 2010d: 7)

This kind of microregulation of documentation practices as it is envisaged by the BfR technical guidelines is a rather precarious undertaking, though. As the above-presented sequence shows, it has to be carefully decided which documentary microregulations can indeed qualify as standardisations of termini technici and therefore be allowed to be included in more formal and publicly available guidance documents and which ones have better to be concealed from the 'witnessing audiences' in internal documents, such as the BfR's 'no-go list' mentioned by the interviewed BfR official.

Overall, this brief presentation of the BfR's guidelines-based mechanical-calculative mode of objectivation shows how the BfR deliberately uses technical guidelines to invoke a specific understanding of what knowing risks related to the production and consumption of food is about. Knowing food risks here is a matter of determining – in the narrowest scientistic sense through probabilistic calculation – whether food is safe or whether it poses a harm to consumers' health. Accordingly, the severity of adverse effects is to be categorised, the document stipulates, as 'mild', 'slight', 'moderate' or 'serious', and the probability of the occurrence as 'practically impossible', 'improbable', 'possible', 'probable' or 'certain' (BfR 2010d: 8). It also shows that the BfR's guidelines-based mechanical-calculative mode of objectivation is closely intertwined with a representative claim on behalf of the 'health-rights-bearing consumer' who is at best protected through the rigid application of probabilistic risk assessment.

Remarkably, the BfR's Guideline for Health Assessments entails no reference to the critics of mechanical-calculative probabilistic risk assessment, who in Germany and the UK alike, had used the BSE crisis as an occasion to point to the epistemic incommensurabilities and nonpredictabilities inherent in complex, dynamic and interdependent fields, such as the food-agriculture-ecosystem nexus (Böschen et al. 2002). The guideline ignores such complexities for the benefit of framing food risks as rather unproblematic, requiring only the 'sound' application of established methods of guideline-based probabilistic risk assessment ('package leaflets of medications'). By adopting this calculative view of food risks, the BfR's guideline envisages a role for stakeholder participation as being limited to 'the purpose-specific exchange of risk information and opinions between stakeholders', which 'should follow the key basic rules of transparent, comprehensible and useful risk communication' (BfR 2010d: 6–7). This

representation knowing food risks is further sustained by the BfR's 56-page 'Guideline on Uncertainty Analysis in Exposure Assessments', published in 2015. According to the guidelines, uncertainty in exposure assessments are to be reduced by 'simple sensitivity analysis' that supports the identification of important (sensitive) parts of the model to perform a detailed modelling (BfR 2015e: 10).

Hence, the BfR's technical guidelines serve to construe a specific way of knowing risks as both scientifically valid and politically relevant. The strict structure and terminology defined in the 'BfR Guideline for Health Assessments' makes the risk assessment reports appear objective and sound, and relevant at the same time for political decision-making and consumers' need for comprehensible and valid information alike (e.g. through placing a simple and clear 'take home message' in the 'grey box' at the beginning of the reports). The BfR's practice of using its 'Guideline in Health Risk Assessments' is thus also involved in 'making the consumer' in a specific way: consumers here are construed as a collective of individuals who are not only 'health-rights-bearing' subjects whose right to health is to be protected through the BfR's guidelines-based risk assessments that inform food safety regulation, but at the same time also 'knowledgeable individuals' who require comprehensible information on food risks to make their own rational decisions in relation to a specific risk.

The way how the BfR's mechanical-calculative guideline-based objectivation mode is closely intertwined with a representative claim on behalf of not only the 'health-rights-bearing consumer' but also the 'knowledgeable consumer' becomes most evident in the template of the agency's so-called 'risk profile'. Since 2010, the BfR has started to develop the 'BfR-Risk Profile' (BfR 2013a) that is intended to supplement the agency's overall attempt to standardise the language of risk communication through the 'Guideline for Health Assessments'. The risk profile illustrated in figure 27 was developed by the BfR in order to have a practical tool that graphically summarises the key statements in its risk assessment reports and visualises the identified risk. As shown by figure 27, the risk profile is a simplified graphic diagram structured as a table containing five characteristics: (1) affected groups of persons, (2) probability and (3) severity of impaired health in the event of exposure, (4) validity of the available data and (5) possibilities for consumers to control the risk through such measures as avoidance or caution. Each of these five parameters is specified on a scale with three to five levels.

Figure 27: The BfR's Risk Profile (BfR 2013a)

Thereby, the BfR claims to provide both policy-makers and consumers with valid and comprehensible information about food safety risks. The risk profile enables policy-makers, the BfR argues, to effectively protect consumers' health through issuing consumer protection regulation. At the same time, the risk profile's 'standardised terminology' is claimed to directly empower the 'knowledgeable consumer' as the following two quotes from the head of the BfR's risk communication division and the BfR's president indicate:

> 'Consumers expect understandable information and tips for their everyday life. For this reason, (…) a so-called risk profile was developed that graphically summarises the key statements in the statement and visualises the risk described (…) Readers can use the risk profile to quickly identify the facts and key features of the risk assessed' (Böl 2014: 88).

> 'The BfR risk profile increases the transparency of scientific risk assessment even for non-specialists. (…) In this way, the readers and affected consumer groups will be able to grasp the severity of possible health impairments, the data basis and the controllability of the risk quickly and easily (…) The graphic presentation of the risk characteristics increases the transparency of BfR risk assessments through standardised terminology (…) (BfR 2013a).

As is evident from these two quotes, the risk profile is claimed to empower consumers to inform themselves and assess an identified food safety risk in a rational way. Moreover, the risk profile is claimed to enable consumers to respond to the provided information in a responsible way. Specifically, this responsibilisation of consumers is performed through the risk profile's last category, i.e. the 'controllability-by-consumers-category'. In this category, the BfR gives

recommendations on how consumers can protect themselves from risks, for instance, by avoiding risky foods or by handling risky foods carefully. What underlies the 'controllability-by-consumers-category' is a rationale according to which '[a] risk is often perceived by consumers as being more significant if they do not have any control over it'; it is for this reason that '[i]nformation on the controllability of risks plays an important role in risk perception' (BfR 2013a). In this vein, one interviewed BfR official argued that '[i]nformation about how to control a health risk yourself is (…) of particular interest', because 'laypersons are not only taken seriously as a passive victim, but also as an active decision-maker of their own risk position' (interview official 4 – BfR).

However, the strength of the BfR's guidelines and its risk profile as devices for mechanical-calculative objectivation and as a tool to make representative claims on behalf of both 'health-rights-bearing' and 'knowledgeable' consumers depends on the extent to which key actors ascribe validity and legitimacy to them. The development of the 'BfR Guideline for Health Assessments' took several years and was compiled by the inter-divisional working group on 'internal coordination' (interviews official 4 – BfR; official 11 – BfR). This enabled a discussion of the draft guideline first on staff level before it passed upward to the heads of divisions. While the document was compiled internally without involvement of external experts, the 59-page and hence extremely detailed 'Guidelines on Uncertainty Analysis in Exposure Assessment' were developed with the participation of the 'scientist-only' BfR-Committee for exposure assessment and exposure standardisation. This enabled, on the one hand, the mobilisation of external peers for the BfR's attempt to standardise uncertainty analysis, which was increasingly debated among international risk assessment experts (interviews official 4 – BfR; official 8 – BfR). On the other hand, the involvement of its external advisors also allowed the BfR to publish these much more detailed guidelines as a 'recommendation' issued by its external advisory committee. This had one important advantage: By involving a group of reputed scientific experts into developing the guideline, the BfR lend epistemic authority to the guideline, while avoiding establishing the far-reaching guideline as a standard against which the BfR was to be evaluated in future science reviews. Likewise, the BfR's risk profile 'was developed by the BfR in various internal and external test phases in cooperation with scientists from various disciplines', as the BfR stressed when presenting the risk profile (BfR 2013b). This shows that also the process of manufacturing the BfR guidelines fundamentally differed from the FSA. In line with its social objectivation mode, the FSA conducted various public consultations on the vast majority of its many guidance documents – involving consumers also in their role as 'consumer citizens' – and used these

publicly consulted guidance documents explicitly as a self-set standard for internal and external reviews that often likewise involved consumer representatives as stakeholders.

The BfR's guidelines differ in a further aspect from the FSA's guidance-document-based objectivation practices: In contrast to the FSA's guidance documents – which reference almost exclusively documents published by strategic policy advisory units at the centre of British government – they include multiple references to other guidelines from international organisations such as the European Chemicals Agency (ECHA), the European Food Safety Authority (EFSA), the World Health Organization (WHO), the World Trade Organization (WTO) and the Organisation for Economic Co-operation and Development (OECD). By doing so, the BfR not only acknowledges these institutions as authoritative sources; it also draws on them as sources lending authority to its own guideline-based approach to mechanical-calculative objectivation. At this, the BfR does not merely reproduce what is said in other international guidelines and regulations; through its guidelines, the agency also interprets and channels the international guidelines jungle in a way that supports its own approach to risk assessment, which puts a strong emphasis on legal-bureaucratic formalisation and standardisation. For instance, according to its 'BfR Guideline for Health Assessments', the phrase 'health risks cannot be excluded' should be avoided as it has no merit in a court of law (BfR 2010d: 8). The concordant use of legal terms as stipulated in the guidance documents are meant to support the coherence of the BfR's reports. Therefore, the document entails a list with the most important legal terms and specifications and their legal sources, e.g., the 'precautionary principle' as defined by the European Commission (European Commission 2000).

This illustrates that the BfR in its attempt to practice of mechanical-calculative objectivation – despite all claims that it was primarily a scientific institution – acted as a traditional departmental research agency that explicitly drew on both the German legalistic bureaucratic culture, in which legal-bureaucratic formalisation and standardisation are the expression of a strong belief in the Weberian model of classical formalised bureaucracy (Derlien 2004).

The legal-bureaucratic character of the BfR's guideline-based objectivation practices and its focus on demonstrating its compliance with internationally recognised standards, finds a further expression in the fact that the agency's internal decision-making processes have been certified by the International Standards Organization (ISO) for its quality management system, since

2010[179]. The certification marked the conclusion of a long and costly procedure involving the meticulous documentation of all knowledge production and decision-making processes in a 'quality management handbook' and further 'procedure instructions' (interviews official 10 – BfR; official 11 – BfR). These documents were meant to ensure that risk assessment results 'can be retraced and critically evaluated at any time' (BfR 2014e). The guideline's and certification's strategic use is seen in their function to be quality management tools, which in turn safeguard the BfR's scientists in disputes with other experts as well as to demonstrate the transparency of its risk assessment. As a ministerial official explained to me, 'everyone interested can go and see in detail how risk assessments are conducted by the BfR' (interview official 18 – BMELV). Thus, while in the case of the FSA transparency was invoked by holding open meetings that all interested could attend directly on site or via livestream and by far-reaching disclosure policies regulating the publishing of all agendas, papers and longish minutes of meetings, the BfR framed the meticulous documentation of its bureaucratic coordination processes in risk assessment as a transparency. The difference between a more socially situated (FSA) and a mechanical-calculative (BfR) notion of transparency-based objectivation here is most obvious.

Throughout the interviews, the BfR's legal-bureaucratic approach to risk assessment was seen as a crucial tool, assisting it on its path to becoming a 'reference authority' that can provide rules for resolving dissent among experts both nationally and internationally, which is the agency's declared strategy (BfR 2012a; Korinek & Veit 2015). Today, the BfR is the only federal agency and even the only agency worldwide with an ISO certification for risk assessment processes, as several interviewees, who saw the BfR as a setter of national and international benchmarks, were keen on emphasising (interviews official 4 – BfR; official 8 – BfR; official 10 – BfR; official 11 – BfR).

Moreover, as we have seen in the interview sequence taken as an entry point into this chapter, the BfR guidelines soon also became recognised as a forceful instrument to provide traces and vocabulary to enrol the reader into the agency's 'mechanical-calculative' objectivation mode, not only by the BfR members themselves but also by other risk assessment agencies from other countries participating in the agency's yearly summer school. The guidelines finally became 'an export hit', the interviewee here explained. 'In this way', the BfR argued on the occasion

[179] The BfR's scientific laboratories, the NRLs, have been accredited according to DIN EN ISO/IEC 17025 already since 2002 in order to demonstrate that 'all organisational and technical criteria for quality verification are met and that all findings and results are painstakingly documented' (BfR 2014f).

of the publication of its guidance document, 'risk assessments can be internationally harmonised in the medium term and duplication of work can be in future avoided in many institutions in Europe and throughout the world' (BfR 2011b) – a vision that expresses the BfR's technocratic mode of authorisation, as I will highlight in detail by taking a look at the BfR's temporal ordering work in chapter 6.3.

The way the BfR presents its ISO-certified quality management system on its webpage is another illustrative example of how the BfR's technical-guideline-based mechanical-calculative objectivation mode is based on a representative claim on behalf of its primary consumer constituency – the 'health-rights-bearing consumer':

> 'The BfR is the first federal authority that employs a certified quality management system in all areas. This underlines the importance the BfR attaches to the job of consumer health protection and is a further area in which the institute sets an international benchmark' (BfR 2014f).

This shows that quality management system is not only closely attached to a claim to the validity of the agency's risk assessments, but also to a representative claim on behalf of the 'health-rights-bearing consumer' whose health is to be protected by legal-bureaucratic standardisation.

Summing up, in the previous analysis I have shown that the BfR relied on a mechanical-calculative objectivation mode. The BfR's very technical guidelines and its elaborated 'risk profile' were essential materials in the agency's attempt to this objectivation mode. The agency put a lot of effort into developing, circulating and monitoring the application of its technical guidelines, which regulated in detail how probabilistic risk assessment should be conducted and communicated. The BfR's technical guidelines hence served as 'coordinative boundary objects' that made the agency's mechanical-calculative mode of knowing tangible and shareable among different internal and external actors. Like its monopolistic mode of competence attribution, the agency justified its mechanical-calculative objectivation mode with regard to output legitimacy: only the rigid application of standardised risk assessment communication would ensure effective consumer protection and enable knowledgeable consumers to cope with food risks in a responsible way. Thus, the BfR's mechanical-calculative objectivation mode was closely related to both a claim to output legitimacy as well as to a representative claim on behalf of the 'health-rights-bearing consumer' and, as the analysis of the 'BfR risk-profile' showed, also of the 'knowledgeable consumer'. Finally, the analysis in this chapter at several pointed illustrated the contextual embeddedness of practices to build politico-epistemic authority. Specifically, it

showed how the BfR's guidelines-based objectivation mode reflected what is known as Germany's legalistic bureaucratic culture.

The following table summarises these findings:

	BfR
mode of objectivation	• mechanical-calculative • *based on technical guidelines that standardise the risk assessment process and the use of terminology in risk communication* • *frames the meticulous documentation of bureaucratic coordination processes in risk assessment as transparency*
representative claims	• rather homogeneous consumer constituency • *health-rights-bearing consumer* • *knowledgeable consumer*
legitimation mode	• primarily output-legitimacy-oriented
contextual embeddedness institutional-cultural discursive	• German tradition of 'departmental research agencies' & legalistic bureaucratic culture • 'Scientising Departmental Research Agencies'; 'Harmonising Risk Assessment in Europe and Globally'

Table 18: Summary of the BfR's mechanical-calculative mode of objectivation, my compilation

6.3 Practices of Linear Temporal Ordering

Likewise, the BfR's temporal ordering mode differs from that of the FSA. In the following, I will comparatively illustrate the BfR's authorisation practices focusing on the BfR's primarily linear mode of temporal ordering. This linear mode of temporal ordering is based on the practice of (1) drawing up and circulating technical guidelines in order to harmonise disparate risk assessment approaches in Europe and globally, (2) establishing formal cooperation agreements with European 'sister agencies' and international organisations and institutions in the area of food safety, and (3) conducting expert workshops and summer schools promoting the agency's guideline-based harmonisation approach.

A first important comparative observation between the FSA and the BfR I made in this respect was that the BfR's technical guidelines were not only a manifestation of its mechanical-calculative objectivation mode but simultaneously also of a linear mode of temporal ordering. Specifically, the way the BfR construes and uses its technical guidelines is aimed at harmonising European and international risk assessment in food safety policy. According to the BfR's line of argumentation, it is through guideline-based harmonisation that the incongruities between national standards in risk assessment, which generate vast amounts of uncertainty, would be ironed out. As a result, a common, single standard that unties all national regulatory approaches and is accepted by all participants in the multiple transnational regulatory regimes in food safety would emerge and facilitate the 'global flow of goods', while 'making globally traded products safer' (BfR 2013c). Thus, according to this line of argumentation, guideline-based technical harmonisation would enable regulatory agencies to reduce the uncertainties and ambiguities that surround risk assessment in the postnational constellation. This invokes a linear temporal ordering mode that implies controllable forms of uncertainty based on 'sound' evidence-based procedures. This linear temporal ordering mode relies on the belief that there is a cumulative, almost natural journey from a situation dominated by disparities among national standards, and consequently by uncertainty over what constitutes a valid risk assessment, to a situation in which these disparities and uncertainties can be considerably reduced by applying standard procedures of knowledge production.

In its attempt to harmonise risk assessment standards across national food agencies, the BfR's technical guidelines play a key role. As I have described in chapter 6.2 they were not only designed to be comprehensible for decisionmakers and consumers alike but also to be 'highly regarded at the international level'. Based on the BfR's guidelines and other guidelines published by transnational bodies, notably the EU Commission but also the Codex Alimentarius Commission and the OECD, national risk assessors should be provided with 'interpretation aid' regarding harmonised risk assessment standards. This should help achieve a higher degree of procedural harmonisation (interviews official 4 – BfR; official 10 – BfR; official 11 – BfR). Along these lines, the BfR was keen in its frontstage performances to emphasise the importance of a guideline-based approach to be applied by national risk assessors from other EU member states. Specifically, the interviewed agency officials emphasised that the 'BfR Guideline for Health Assessments' (see chapter 6.2) serves as an important reference in EFSA's 'Scientific Opinion on Risk Assessment Terminology', i.e. a guidance on standardising and 'improving the expression and communication of risk and/or uncertainties' issued by EFSA's Scientific Committee (EFSA 2012). In this opinion, EFSA's Scientific Committee examined definitions

of risk and uncertainty, expressing uncertainty and different levels of risk in order 'to adopt more harmonised use'.

The necessity of 'harmonised concepts which are used by all involved agencies in transnational risk assessment processes is something that the BfR's risk assessors regularly point out in their national and international journal articles, which are regarded as essential for the agency's reputation building (Stein et al. 2014: 369). As one interviewed BfR official explained, the BfR has been increasingly committed to 'supporting the progress towards a harmonised human health risk assessment specifically of plant protection products' (interview official 10 – BfR). In the same vein, the BfR has been actively engaged for several years in the development of a harmonised model for so-called 'exposure estimates'. These models estimate the amount particular groups of people – not only ordinary consumers but also operators, workers, residents and bystanders – are exposed to a specific plant protection product. In terms of the harmonisation of these exposure models the BfR argued in one of its press releases:

> '(…) EU competent authorities currently still use differing strategies and models. This may result in different outcomes of the assessment. (…) With the new document "Guidance on the Assessment of Exposure for Operators, Workers, Residents and Bystanders in Risk Assessment of Plant Protection Products", EFSA presented a harmonised guidance for all Member States. This guidance also contains a new model for exposure estimation for the use of plant protection products, which is based on extensive and current study results and *to which the BfR made a major contribution.* (BfR 2014c: 1).

This quote notably illustrates the strategic role the BfR attaches to guideline-based harmonisation processes in Europe and its own prominent position in these harmonisation efforts. The BfR's linear temporal ordering mode, which is revealed in the practice of guideline-based harmonisation assumes that cross-national divergences in risk assessment are not grounded in differing values, cultures or relationships between governments and major interest groups but solely in the lack of technical standardisation. From this perspective, cross-national divergences in risk assessment can be considerably reduced by gradually replacing national with transnationally harmonised risk assessment models. Likewise, experts from two of the BfR's specialist departments actively participated in the EFSA's efforts on cumulative risk assessment of pesticides and other chemicals that have been intensified since around 2006 (EFSA 2007). These activities eventually led to the development of a new technical guideline on the risk assessment of chemical mixtures from 2008 onwards (Glass et al. 2010). Finally, the so called 'MixTox-Guidance' was developed in cooperation between the EFSA and the BfR – a technical guideline that proposes harmonised risk assessment methodologies for combined

exposure to multiple chemicals. The development of this guideline was supported by the 'EuroMix' project (European Test and Risk Assessment Strategies for Mixtures), funded by the EU research programme Horizon 2020. (BfR 2016a). Based on these testing results, existing laws and the technical guidelines on substance assessment were reviewed in order to make 'recommendations for improved legislation (…) with the aim of harmonising them not only within Europe but also with third-party states' as well as the EU, Codex Alimentarius, and WHO (BfR 2016a).

This guidelines-based linear temporal ordering work is closely intertwined with a specific representative claim as is clearly illustrated by the following quote taken from the BfR's self-presentation of its harmonisation efforts on exposure models in Europe. Here, the BfR invokes the 'health-rights-bearing consumer' under the title: 'More safety for users of plant protection products':

> 'Plant protection products are not allowed to have any damaging effects on human health, otherwise they will not be authorised. *This entitlement to protection* also applies to people who work with plant protection products or live close to areas that have been treated with them. Whether the *health of these groups is sufficiently protected along with that of consumers* is checked prior to every approval of a plant protection product (BfR 2014d: my emphasis).

Thus, the claim here is that consumers and 'people who work with plant protection products' alike have a right to health and thus to be protected against possible health harms from pesticides – they are attributed an *'entitlement to protection'*. This 'right to protection', the BfR continues in its website presentation, can best to be ensured through harmonisation efforts in Europe and beyond – in which the BfR is an important actor:

> 'To do so, the assessment authorities – the BfR in Germany – estimate the maximum expected intake quantity by means of model calculations. Until a few years ago, different models and obsolete concepts were used for these so-called exposure estimates in Europe. Diverging protection levels in the various countries and a complicated mutual recognition system for products were the result. A work group around the BfR examined the existing concepts for users of plant protection products and developed a suitable model. As part of a technical guideline issued by the European Food Safety Authority (EFSA), the model has had to be used since 2014 for all authorisation applications for plant protection products. It is a milestone for harmonised risk assessment in Europe' (BfR 2014d: my emphasis).

Second, another practice illustrating the BfR's linear temporal ordering mode is the agency's multiple strategic efforts to establish formal cooperation relationships with foreign and

international organisations and institutions in the area of food safety and consumer health protection. In this respect, the 'Strategy of the BfR' is described as follows on the agency's webpage:

> 'The BfR attaches particular importance to closer national cooperation and international networking (…) Joint research strategies are developed and also proposed to the European Food Safety Authority (EFSA). (…) The long-term objective is to harmonise risk assessment methodology in order to permit greater use of arising synergies for assessment work and the communication of risks. This also includes the mutual recognition of the findings of risk assessments' (BfR 2014b).

Specifically, the BfR established a comprehensive cooperation agreement with the French Agency for Food, Environmental and Occupational Health & Safety (ANSES)[180] and the Technical University of Denmark (DTU)[181] in 2010 (BfR 2010b). Likewise, the BfR signed a cooperation agreement with its Portuguese sister agency, the Portuguese Authority for Economic and Food Safety (ASAE). Even prior to these much-promoted cooperation with ANSES , DTU and ASAE (BfR 2015d, 2017a), the BfR has been maintaining official cooperation relationships – in the form of so-called 'Twinning Projects' – with sister agencies from EU candidate countries[182], such as its cooperation Lithuania's National Food and Veterinary Risk Assessment Institute since 2008 (NMVRVI) (BfR 2014b; for the general importance of twinning projects in European food safety governance see: Abels & Kobusch 2010; Träsch 2011).

Beyond this series of cooperation agreements with European and neighbouring sister agencies, the BfR is keen on stressing that it likewise maintains close cooperative relationships with institutions at the European level. These include, in addition to EFSA, the Joint Research Centres of the European Commission (JRC), the European Centre for the Validation of Alternative Methods (ECVAM), the Institute for Health and Consumer Protection (IHCP), the Interagency Coordinating Committee for the Validation of Alternative Methods (ICVAM), and the European College of Veterinary Public Health (ECVPH). More recently, the BfR signed a further series of cooperation agreements with Asian sister institutions, notably with the Chinese

[180] The Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail is the French sister agency of the BfR.

[181] The Food Institute of the Danish Tekniske Universitet is the BfR's Danish counterpart.

[182] In the Twinning Projects, the BfR provided advice to a candidate country on how to reform its institutional structures and in adapting to European requirements in food safety risk governance. Further twinning projects have been established with the sister agencies from the Slovak Republic, Poland, Hungary, Latvia, and even Iceland.

Academy of Inspection and Quarantine (CAIQ) and the South Korean National Institute of Food and Drug Safety Evaluation (NIFDS) 'with the aim of promoting food safety throughout Europe and worldwide' (BfR 2010c, 2015b). Likewise, it initiated an official cooperation with the food safety agencies of the Community of Portuguese Language Countries (Comunidade dos Países de Língua Portuguesa, CPLP)[183] (BfR 2017b). The stated strategic goal of this cooperation beyond Europe 'is to exchange information on standards in the area of food safety – particularly with a view to globalisation – and risk assessment in Europe and Asia' (BfR 2014f).

Third, the great importance the BfR placed on attempts to harmonise risk assessment standards across national food agencies was also evident at several international expert workshops and summer schools conducted by the BfR. The BfR considers them a further fundamental element of its harmonisation efforts in human health risk assessment. At these expert workshops and summer schools, the BfR regularly promotes its view that 'peer-reviewed scientific studies performed by academia or authorities and regulatory studies following OECD Test Guidelines (…) and according to GLP [good laboratory practice] (…) both need to be considered adequately in (…) risk assessment' (BfR 2017c: 4). Since 2012, the BfR has established an annual internationally attended two-week 'BfR Summer School' which in 2015 was renamed 'BfR Academy'. With the institutionalisation of the BfR Summer School/Academy, the BfR aimed at 'improv[ing] the worldwide standards in the field of food and product safety and pool[ing] the numerous enquiries from institutions and authorities regarding food safety to promote the transfer of know-how' (BfR 2014b). The academy's target group 'are scientists from government organisations active in the field of food and feed safety' covering themes around risk assessment and risk communication. The participants usually come from both European countries and beyond, including China, South Korea, Indonesia, Saudi Arabia and Brazil. At the BfR's academies, the agency argues, participants can 'learn more about the European system of risk assessment and risk communication' (BfR 2013c):

> 'The high European standards, our regulations and our knowledge in the areas of food quality, safety and hygiene are therefore of particular interest when it comes to making globally traded products safer. The BfR Summer School is designed to make the authorities worldwide more aware of the European system of risk assessment and to harmonise the standards in this area' (BfR 2014a).

[183] These include Angola, Brazil, Cabo Verde, Guinea-Bissau, Mozambique, Portugal, São Tomé and Principe, East Timor and Equatorial Guinea.

Thus, the idea behind these two-week events is 'to enable participants not only to conduct risk assessments themselves but also to pass on the required knowledge in their home country' (BfR 2014a). This shows how the BfR designs and frames its summer schools in terms of what I understand as a linear temporal ordering mode: The BfR summer School/Academy serves as a device in its strategic aim to spread its guideline-based approach to harmonised risk assessment. The agency does not only emphasise its outstanding role in setting standards in risk assessment in Europe that form the basis for EFSA's development of technical guidelines, but also its role in diffusing these guidelines across the world in an attempt to harmonise risk assessment beyond Europe. In this way, it tries to reduce the conflicts and uncertainties surrounding risk assessment in the postnational constellation.

Last but not least, the BfR's understanding of 'precaution' is particularly indicative of its linear mode of temporal ordering. The BfR's understanding of precaution differs considerably from the FSA's initially more recursive 'precautionary approach' as well as from the more precautionary approaches adopted by other European sister agencies, some of which prevail up to the present day. The following quote taken from a speech held by the BfR's president shows that the BfR is well aware of the fundamentally different 'risk assessment philosophies' between agencies both at the European and the national level that imply disparate understandings of how to deal with uncertainty in a responsible way:

> 'Bisphenol A is (...) highly controversial and caught in the crossfire of the political debate. There are governments that prohibit its use in certain areas based on risk assessment, including baby bottles. What can be seen here, is that there are disparate risk assessment philosophies: (…) we have evaluated the latest data and have come to the conclusion that based on the current toxicological data there is no need for further regulation. (…) Although EFSA came to the same conclusion, the European Commission banned the use of bisphenol A in baby bottles. (…) This shows that it causes real difficulties if two (…) authorities (...) follow different risk assessment philosophies' (Hensel 2012: 52–53).

In this quote, the BfR's president refers to the fiercely debated issue of Bisphenol A, an industrial chemical used in drinking bottles, tableware and thermal paper. In January 2011, the EU Commission issued a regulation banning the use of bisphenol A in baby bottles in all EU countries. This occurred after many national food agencies (e.g. in France, Denmark, Sweden and the Netherlands) had issued cautionary recommendations in terms of using Bisphenol A in products consumed by vulnerable groups, young children in particular. In contrast, EFSA itself, like the BfR, came to a different conclusion, namely that there was no scientifically justified reason to change the current risk assessment opinion on Bisphenol A, including its use in baby bottles. While the BfR regarded the ban not as a measure of justified precaution but as an

'overreaction' (interview official 4 – BfR), the BfR was criticised for its approach, not only by many of its European sister agencies, but also by the German Environment Agency (Umweltbundesamt UBA) and many NGOs, which called for a precautionary ban. However, the BfR, unperturbed by this criticism, stuck to its opinion. In fact, even in the aftermath of the ban, the agency often used the case of Bisphenol A to promote its guidelines-based approach to harmonise the risk assessment methodologies across Europe that would also enable a unified concept of 'precaution' (Hensel 2012: 52–53).

The BfR's concept of precaution is premised on the idea that – despite the variability inherent in risk assessment – uncertainty can, in principle, be calculated and controlled. It assumes a simple form of uncertainty – i.e. the lack of secured knowledge – which does not exceed the limits of probabilistic reasoning and cannot be 'tamed' by introducing 'precautionary principles' in the form of additional safety factors to quantitative, probabilistic risk assessment. At one of its 'BfR-Stakeholder Conferences' (see chapter 6.1), held in 2011 on the topic 'More precaution, more security? Necessity, feasibility and limits of the precautionary principle', the BfR's president argued:

'(…) we often deal with areas that are not yet fully developed scientifically. For example, sometimes it is necessary to bring biometrics, human medicine, and food chemists together and, in this combination, we have to come to a conclusion that leads to specific policy advice on behalf of the BfR. (…) We hence have to deal with *precautionary principles* every day in our work, especially in internal or inter-agency communication. (…) *And this raises the question of whether and to what extent regulators follow the same approach.* This is an extremely important question, and not least it was the decisive factor for organising this event. *Clarifying terminology is a necessary prerequisite for constructive cooperation'* (BfR 2011a: 51–52).

According to this statement, the uncertainty surrounding risk assessment and necessitating specific 'precautionary principles' does not result from a basically unresolvable form of uncertainty but from inconsistencies in applying risk assessment methodologies among unharmonised regulatory approaches. As we have seen in chapter 5.4.2, the FSA – specifically in its early years – developed and performed its own 'precautionary approach' that was premised upon acknowledging a more radical, non-probabilistic form of uncertainty that provides for 'unknown unknowns' that require stakeholder deliberation in addition to formal risk assessment. The BfR, in contrast, explicitly demarcated itself from such a more deliberative understanding of the precautionary principle, because it does not see itself to be 'mandated' to conduct such deliberative procedures, as one of the interviewed BfR officials explained:

> 'I always say, the precautionary principle is the political answer to nonknowledge, but also nonknowledge has different dimensions. We usually work on normal nonknowledge where we know how to access that knowledge, conduct our studies and so we can give answers. However, there are also questions from the BfR's view, for example, new toxicological questions or new technologies, where the questions is, there is also 'non-secured nonknowledge' [in German 'nichtgesichertes Nichtwissen'] which comes into effect in that moment when you don't know or aren't able to know the questions which you could in fact ask. So, this means that you anticipate questions where you don't even know whether they have to be asked later on and this is very hard because you enter a field where then risk assessment has to be completed by policy. In such usually socially divided situations, (…) there are issues where science doesn't have an answer, but where it asks how a situation should be handled, but we aren't mandated for that' (interview official 10 – BfR).

Thus, as this quote shows, the BfR acknowledges that more fundamental forms of uncertainty, – the interviewee here speaks of 'non-secured nonknowledge' – surround risk assessment in food safety that indeed do exceed the limits of probabilistic ways of reducing uncertainty, yet the agency does not see itself as mandated to deal with these forms of nonknowledge. Rather than engaging stakeholders in discussing concrete issues of nonknowledge of consumer concern, the BfR only allows such deliberations within specifically convened yearly 'consumer fora' at which stakeholder deliberation is performed as being something completely separated from scientific debate. As the same BfR official continued to explain, these consumer fora were

> 'intentionally set up with one complete day of science, summaries of science, held by us (…) and on the following second day (…) members of the press, *'attack dogs'*, and all the stakeholders ranging from NGOs, such as Greenpeace, to the industry and the like, and everybody can comment on the scientific status quo. Everyone is free to make their position clear and explain why they agree or disagree, so, for instance, the Stiftung Warentest comments on these talking points and in the end, it is discussed by all participants. We find it to be quite important that the public acknowledges that (…) those who conduct science are interest-driven as well (…) *but we apply sufficient corrective measures*' (interview official 10 – BfR, own translation and emphasis).

Thus, in line with the BfR's linear approach to precaution and uncertainty in risk assessment, the agency's consumer fora serve first and foremost to reveal how interest-driven stakeholder deliberation on matters of uncertainty in risk assessment are in contrast to the BfR's scientific risk assessment approach. The latter, although not completely free of interests per se, does possess 'sufficient corrective measures' to rationally and objectively deal with the uncertainties surrounding the assessment of food risks.

Summing up, following table captures the findings of the previous analysis:

	BfR
mode of temporal ordering	• linear • *guidelines-based harmonisation of European and international risk assessment designed to iron out uncertainty that emerges from disparate risk assessment approaches* • *controllable forms of uncertainty based on 'sound' evidence-based procedures*
representative claims	• rather homogeneous consumer constituency • *health-rights-bearing consumer*
legitimation mode	• primarily output-legitimacy-oriented
contextual embeddedness institutional-cultural discursive	• German legalistic 'Rechtsstaat culture' • 'Scientising Departmental Research Agencies'; 'Harmonising Risk Assessment in Europe and Globally'

Table 19: Summary of the BfR's linear mode of temporal ordering, my compilation

In the previous analysis I have shown that the BfR pursued a linear mode of temporal ordering. Its technical guidelines, its multiple formal cooperation agreements with European 'sister agencies' and international food safety organisations as well as its expert workshops were all designed to serve the goal of harmonising European and international risk assessment in food safety policy. By playing a role of a standard setter in European and international risk assessment harmonisation, the BfR attempted to iron out uncertainty that it believes to emerge from disparate risk assessment approaches. This reflects a linear temporal ordering mode that implies controllable forms of uncertainty based on 'sound' evidence-based procedures. This mode of linear temporal ordering was likewise justified on grounds of output legitimacy and closely related to the BfR's prime representative claim on behalf of the 'health-rights bearing consumer': only by establishing a common, single standard that would unite disparate national regulatory approaches would globally traded food products be made safer and the consumer's right to health ensured. So doing, the BfR explicitly relied on Germany's longstanding legalistic and rule-bound politico-administrative tradition and Rechtsstaat culture, while simultaneously relating this directly to the rising discourse on 'harmonising risk assessment' in Europe and across the world. The transnational harmonisation discourse and the German legalistic

administrative tradition were thus jointly used to underpin the FSA's technocratic authorisation mode.

6.4 The Contextual Embeddedness of Technocratic Authorisation

In the previous chapter, I showed that the BfR's technocratic authorisation mode was based on three authorisation practices – the monopolistic mode of competence attribution, the calculative-mechanical objectivation mode, the linear mode of temporal ordering – and a primarily output-legitimacy-oriented justification. While presenting the most evidentiary examples taken from the data illustrating these practices, I have already selectively pointed to the way in which specific elements of the German context shaped the BfR's mode of building technocratic politico-epistemic authority. I will now take a closer and more synoptic look at the contextual embeddedness of these practices. Specifically, I will focus on three institutional-cultural and discursive contextual elements on which the BfR drew on its technocratic mode of authorisation and legitimation: (1) the German tradition of 'departmental research agencies' (DRAs) and the 'scientised' reframing of their role by the German science council since around 2004, (2) the German Rechtstaat tradition and (3) the vision of European integration as a project of shared sovereignty and harmonised rules that is regarded as a prerequisite for pursuing Germany's own interests in the postnational constellation. As already briefly indicated in the previous analysis, the BfR's authorisation practice of monopolistic competence attribution and its output-oriented legitimation was shaped in important ways by the German Council's comprehensive evaluation of all DRAs, which was conducted in 2004 and in 2010. Having a large number of federal agencies that conduct research and provide research-based policy advice is a typical feature of the German politico-administrative system. This tradition of DRAs goes back in the late 19th century. The science council's first evaluation, however, ignited a heated debate about the role of DRAs in Germany. As Eva Barlösius has shown, up until the first evaluation in 2004, research conducted by DRAs was a 'terra incognita' that did no move into the spotlight of the science-policy discourse in Germany until the science council's evaluation activities (Barlösius 2015: 588). Specifically, the question of how much autonomy those agencies should be granted to conduct independent research and their overall role within the hierarchical context of German ministerial bureaucracy was at the centre of this debate (Döhler & Bach 2012). This debate was rather new in Germany, given its long tradition of delegating public tasks to agencies that are separate from ministries, since ministers usually have full oversight over those agencies (Bach & Jann 2010). In the course of its evaluation of

DRA's, the science council recommended, among other things, to strengthen the scientific competences and capacities of DRAs. Specifically, these recommendations aimed at 'scientising' DRAs through establishing scientific advisory councils attached to DRA's and recruiting new personal based on academic merit and excellence. In other words, the science council recommended attributing judgemental competence to DRAs primarily based on scientific criteria. As the previous analysis of the BfR's authorisation practices has shown, the science council's recommendations were quite important for the BfR's successful attempt to establish a scientific advisory council and seventeen 'BfR expert committees'. Both were staffed with renowned external scientific experts and designed to assist the agency on its path in positioning itself as a reputed scientifically excellent independent institution. Initially, this move to 'scientise' the BfR was viewed very critically by the agency's parent ministry since it was regarded as reducing the ministries de facto influence on the BfR (although it was formally already independent). Yet, with the science council's evaluation, the ministry gradually changed its view and came to believe that the BfR's scientisation was a prerequisite for being able to provide high quality and credible policy advice and through this to restore public trust in food safety governance in general (Korinek & Veit 2015). Thus, the BfR's mode of monopolistic competence attribution directly drew on the scientising departmental-research agencies discourse prompted by the science council as a legitimatory resource.

The previous analysis of the object dimension moreover showed that the BfR's authorisation practices were characterised by a technical-guidelines-based approach. This approach can be understood as a manifestation of a 'mechanical-calculative' knowledge production mode that puts a strong emphasis not only on calculative-probabilistic reasoning, but also on legal-bureaucratic formalisation and standardisation. By so doing, this approach hence invokes the traditional German 'rule-bound execution of public tasks' (Derlien 2004: 114). In Germany, this rule-bound approach to policy-making is an expression of both a constant belief in the Weberian model of classical formalised bureaucracy and of the specific theory of the state. In the German 'Rechtsstaat tradition' (Painter & Peters 2010; Pollitt & Bouckaert 2011), the internal procedures of public administration are tightly regulated by law, because any file may in principle be reviewed by administrative court. German agencies traditionally 'see their main function as the application of rules to cases in the quasi-judicial legal-rational manner of Weber's classic bureaucracy (Ridley 2000: 136). This legalistic German administrative tradition comes with an administrative culture stipulating to 'legally programming administrative activities' (Knill 1999: 124) and puts a strong emphasis on formalised systems of procedural knowledge in policy-making (van Waarden 1995). This tradition is clearly

reflected in the BfR's technical guidelines and its ISO-certified quality management system, which regulate the nitty-gritty details of internal knowledge production and coordination among the agency's different divisions and disciplines. Thus, operating within the broader context of the German administrative tradition with its strong legal orientation, the BfR understands and performs its tasks of producing and communicating risk assessments as a quintessentially formalised activity. In this specific conception of the German 'Rechtsstaat', the accountability of public servants is ensured less through public disclosure rights or other forms of transparency that allow the public to 'witness' the conduct of policy-making. Instead, accountability is ensured mainly through constitutionally and legally mandated rules governing every administrative sphere. Accordingly, once the rules for a German advisory body have been formally put in place, regulatory science is carried out in a relatively 'invisible sphere of expert decision-making', as Jasanoff puts it (Jasanoff 2005: 261). This legalistic notion of transparency is, as is clearly obvious from the previous analysis, reflected in the BfR's meticulous documentation of its bureaucratic coordination processes in risk assessment. This strict mechanical documentation of the agency's knowledge production processes was framed as a proof of transparency – although, as we have seen, the agency's mechanical-calculative objectivation mode was related to drawing up legal-scientific risk assessment standards 'backstage' without any form of public involvement.

Finally, in its linear temporal ordering mode, the BfR draws on Germany's longstanding legalist Rechtsstaat culture and the way in which it informs the dominant German vision of European integration. European integration here is understood as a political project of shared sovereignty and harmonised rules that is regarded as a prerequisite for pursuing Germany's own interests in the postnational constellation. With progressive Europeanisation, Germany has increasingly interpreted its legalist approach to policy-making as a 'categorial imperative' to act as the 'Musterschüler' of European integration (i.e. the 'best pupil in the class'). German leaders understood the country's readiness to share sovereignty and adopt harmonised rules as a fundamental prerequisite to pursue its own national interests; 'Germanness and Europeanness' were thus 'firmly enmeshed'[184] (Risse 2002: 83; see also Keßler et al. 2002). With the rise of the postnational constellation and the global regulatory competition characterising it, the dominant German discourse on Europe shifted towards a more instrumental discourse to

[184] It is almost a truism in the European studies literature that the main reason for that German identity has evolved into a European identity in the Post-World War II era was that it was seen by both itself and by its neighbours as necessary to overcome the country's nationalist and militarist past (Risse 2002).

European integration that focused on 'more hard-nosed calculations of cost and benefit' (Hyde-Price & Jeffery 2001: 701). In this more pragmatic approach, European integration increasingly came to be defined in terms of 'EU power', i.e. the EU's quest to become a prime ruler exporter and standard setter on the global scale, which would benefit Germany as an export oriented country (Bradford 2012; Falkner & Müller 2014). Thus, drawing on the German legalist culture and its overall export-oriented economic strategy, the German discourse on European integration was apt to match with the rising discourse on the EU's 'normative power' (Manners 2015), which claims that 'EU power' is about the EU's unique 'ability to define what passes for "normal" in world politics' (Manners 2002: 253). When recalling the BfR's linear temporal ordering mode as described above, it is evidently grounded in these two institutional-cultural elements of the postnational context it operates in – Germany's legalistic culture and its vision of European integration. As I have shown, one of the BfR's main strategic aims is to play a central role in the harmonisation of European and international risk assessment in food safety policy. Through the agency's guideline-based harmonisation efforts the incongruities between national standards in risk assessment shall be settled, as these were seen as the main reason for the conflicts and uncertainty surrounding transnational food safety governance. By introducing common standards and uniting national regulatory approaches in Europe as well as exporting these rules to third countries, the FSA aims at ensuring the efficient global trading of safe food products and consumers' health rights around the globe alike.

6.5 The Contestedness of Technocratic Authorisation

The contestation of the BfR's authorisation mode differed considerably from that of the FSA. As I have shown, the FSA's attempt to open up to advocatory authorisation came to be questioned and gradually changed towards a more rationalist mode in the course of the growing importance of better regulation' and 'evidence-based policy-making' since around 2005. In the BfR's case, by contrast, a comparably broad discursive reframing and change of the agency's technocratic authorisation and legitimation practices cannot be observed. However, this does not mean that the BfR's technocratic authorisation mode has been undisputed. On the contrary, German NGOs regularly called on 'counter expertise' and allied themselves with scientists that were critical of the BfR's technocratic authorisation claim – i.e. that it conducted excellent independent scientific risk assessment and strictly stuck to the highest methodological standards. These NGOs and experts questioned the BfR's credibility and trustworthiness with regard to the agency's de facto independence from industry interests, the validity of its risk assessment approach and the actual transparency of its processes.

Specifically, the BfR came under criticism for conflicts of interest on behalf of some members in its 'expert commissions'. As I have shown above, the BfR deliberately established 17 expert committees to demonstrate the agency's scientific excellence. An often-voiced criticism on behalf of NGOs, such as Lobbypedia, BUND or Testbiotech, concerned the close contacts several commission members maintained with the food industry lobby organisation International Life Sciences Institute (ILSI). Notably, they criticised the fact that employees of pesticide manufacturers were members of the BfR commission dealing with plant protection products and residues as highly problematic. Likewise, they criticised that nine of the 13 members of the expert commission advising the BfR on the safety of genetically modified food and feed products were 'biased' due to their personal connections to industry (Then & Bauer-Panskus 2012; Lobbypedia 2013). While this critique was reported by the media (Balassa & Loven 2012; Kwasniewski 2012) and led to an inquiry in the Bundestag on behalf of Bündnis 90/Die Grünen (BT-Drs. 17/10373 2012), neither the BfR nor its parent ministry accepted any consequences despite the fact that EFSA tightened its rules regarding conflicts of interests after it was criticised on similar grounds (BT-Drs. 17/10373 2012: 8).

Moreover, in recent years, the herbicide glyphosate has been at the centre of a heated public controversy on whether glyphosate is carcinogenic to humans. This question was controversial because different institutions released contradictory risk assessments. In 2015, the International Agency for Research on Cancer (IARC), an agency in the remit of the World Health Organization, concluded that glyphosate was 'probably carcinogenic' (IARC 2015). In contrast, other institutions, notably the BfR, saw no real risk of cancer for humans due to the use of glyphosate (BfR 2015c, 2015g). Almost any of the risk assessment conducted on glyphosate was, regardless from which side, criticised in terms of the adequacy of the experimental approach and the representativeness of the examined cases (Chang & Delzell 2016). In Germany, the conflicting assessments received considerable media attention (e.g. Charisius 2015; Hannover 2015; Liebrich & Rummel 2015; Odenwald 2015). In assessing glyphosate, Germany was the so called 'rapporteur Member State' and hence the BfR was the competent authority to conduct the risk assessment. On the basis of the BfR's risk assessment report EFSA came in 2015 to its conclusion that glyphosate was unlikely to be carcinogenic to humans (EFSA 2015). In response, 98 international scientists, a group formed around the former director of the US National Center for Environmental Health and the US Agency for Toxic Substances and Disease Registry, Christopher Portier, expressed their 'deep concern' about EFSAs and BfR's conclusion in an open letter directed at the European Health Commissioner Andriukaitis (Portier et al. 2015). These scientists argued that, compared to the evaluation by

the EFSA and the German BfR, the risk assessment conducted by the IARC was ‘by far more credible’, because it was based on an open and transparent process and ensured the independence of the involved experts concerned from the industry. The BfR’s risk assessment, they argued, was not credible, because it did not met criteria of transparency and independence. This accusation of incredibility was taken up by a broad network of German NGOs, which accused the BfR’s risk assessment report of serious shortcomings. Notably, the agency was criticised for its claim that it had utilized the highest risk assessment standards – the so-called comprehensive ‘weight of evidence approach’ – while in fact it had firmly avoided undertaking a weighted assessment of the evidence on the possible carcinogenicity of glyphosate (Burtscher-Schaden et al. 2017). Moreover, the Bündnis90/Die Grünen publicly questioned the BfR’s independence from the industry by pointing to the fact that the head of the agency’s pesticide safety department had cooperated with the lobby organisation ILSI earlier in his career in 2006 (BT-Drs. 18/8408 2016).

Thus, this brief look at the glyphosate controversy, which had gained momentum since around 2014 and 2015 and has lasted well beyond the studied time period, is just one example indicative of how the BfR’s credibility came to be questioned on the grounds of technocratic reasoning – i.e. on the assumption that legitimate expert authority requires a clear distance from non-scientific criteria of knowledge production and the rigorous application of the highest standards of probabilistic risk assessment. Yet, up to the present day, the BfR has managed to resist the pressures of this criticism by putting forward two main arguments that were entirely in line with its technocratic approach to claiming expert authority: First, the BfR claimed – despite accusations by several reputed experts and professional scientists that it had not applied the basic scientific standards of transparency and thoroughness – that its critics were NGOs or scientists who were aligned with NGOs and thus ‘tainted’ by social concerns and not politically neutral (interviews official 10 – BfR; official 14 – BfR). It thus attempted to portray its critics as engaged in interest politics rather than in scientific debate. Second, the BfR managed to successfully argue that the entire glyphosate controversy was just due to disparate risk assessment methodologies between different institutions, notably between itself and IARC (BfR 2015f). It thus attempted to counter this critique by sticking to its technocratic claim to politico-epistemic authority that was fundamentally based on the agency’s previously analysed efforts to harmonising risk assessment procedures globally. The fact that, to date, this argumentative line has been successful in warding off any pressure to become more open and transparent in its risk assessment work shows that the BfR could draw on technocratic

knowledge order in developing its authorisation and legitimation practices over the years, from which it benefitted in its attempt to immunise itself against criticism.

Finally, the BfR was also partly critiqued based on more political premises, such as in the often-voiced criticism of the fact that in its 'expert commissions' members with a background in consumer representation were extremely underrepresented in relation to those members that had relations with the industry (chapter 6.1). Thus, here the critique was based on a more political, advocatory notion of expertise: The participation of experts in the BfR 'expert commissions' was seen as involving also interest politics to a certain degree and therefore should be balanced between experts with consumer and industry backgrounds. However, as I have shown above, even when being questioned on grounds beyond sheer technocratic reasoning, the BfR managed to successfully ward off this criticism by sticking to its technocratic mode of justification. In so doing, it took refuge in the argument that more industry than consumer representatives fulfilled the criterion of 'scientific excellence', which was portrayed to be the only recruiting criterion that counted for the BfR.

6.6 Synopsis: The Case of the BfR in a Nutshell

In the previous chapters I have analysed the BfR's mode of building and cultivating technocratic politico-epistemic authority by focusing separately on the social, object and temporal dimension. In what follows, I will conclude the focused comparative case study of the BfR by presenting a short synopsis illustrated by the figure below. In so doing, I will specifically focus on the contextual embeddedness of the BfR's authorisation and legitimation practices and their development over the studied time period from 2000 to 2015.

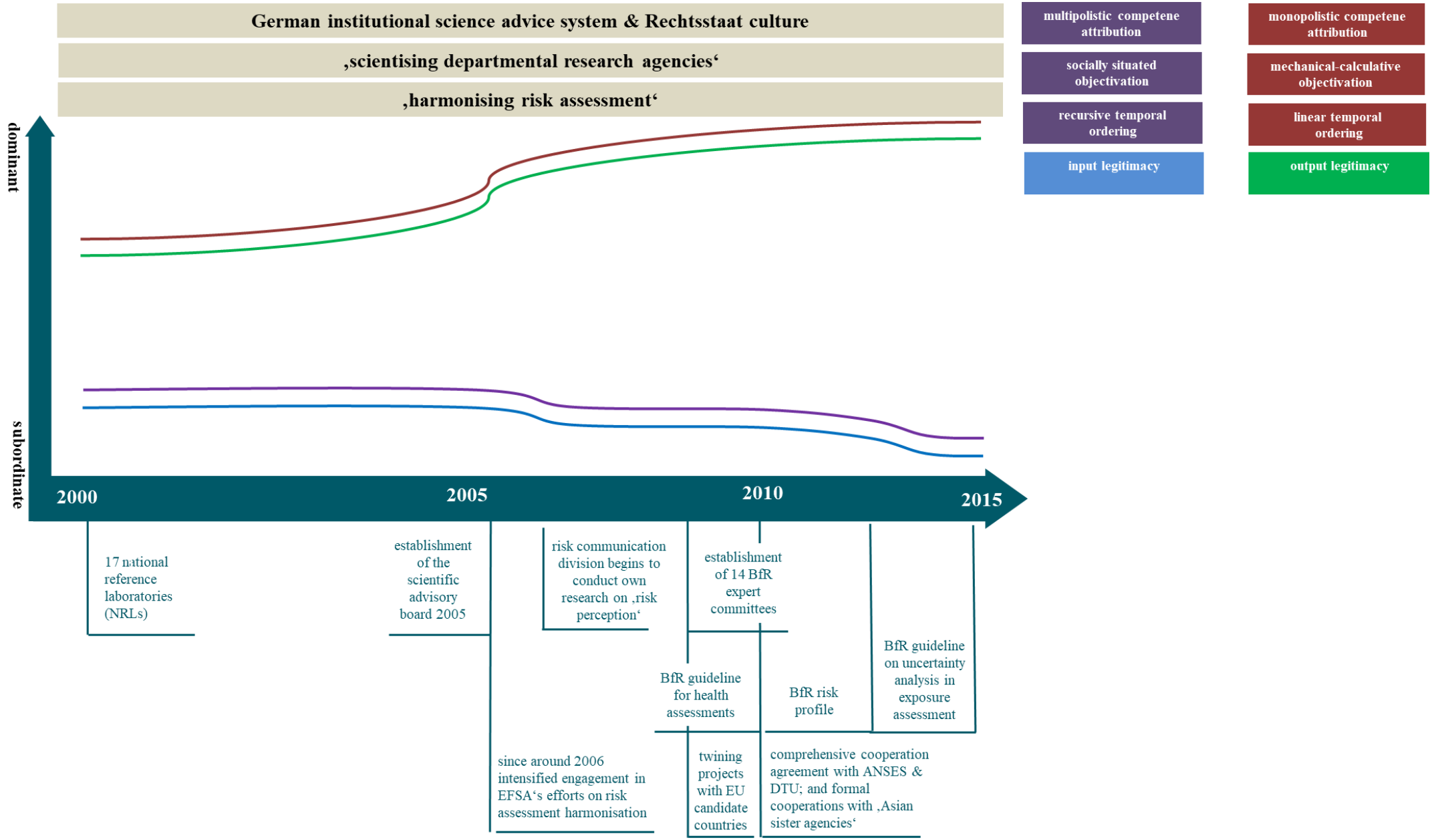


Figure: The case of the BfR in a nutshell, my compilation

From the outset of its establishment, the BfR continuously developed further its *technocratic* mode of expert authority: a *multipolistic* mode of competence attribution, a *mechanical-calculative* way of objectivation and practices of *linear* temporal ordering, all of which were predominantly justified on grounds of *output legitimacy*. In so doing, the BfR relied on and (re)combined elements of the German Rechtsstaat culture and the dominant discourse on 'scientising departmental research agencies' prompted by the science council and the transnational discourse on 'harmonising risk assessment' in Europe and beyond. In the social dimension, the BfR's great effort put into developing scientifically reputed internal capacities specifically drew on and were enabled by the 'scientising departmental research agencies' discourse. This was manifested in the 17 national reference laboratories (NRLs), in the scientific advisory board established in 2005, in the increased risk communication research on 'risk perceptions' since around 2006, and ultimately in the establishment of 15 BfR expert committees in 2008. It took the BfR its first years from 2000 to 2005 to gain the support for building these scientific capacities on behalf of its initially sceptical parent ministry. These arrangements were legitimised with regard to the output-legitimacy-oriented argument that by maintaining excellent scientific competences, valid scientific risk assessment would be conducted and through this consumer health effectively protected. In the object dimension, the BfR combined elements of the German Rechtsstaat culture and the discourse on 'harmonising risk assessment' in its mechanical-calculative objectivation mode that mainly relied on the 'BfR Guideline for Health Assessments', the BfR risk profile and the 'BfR Guideline on Uncertainty Analysis in Exposure Assessment'. The BfR's guidelines-based objectivation mode reflected Germany's legalistic bureaucratic culture in that it put a lot of effort into developing, circulating and monitoring the application of its technical guidelines, which constituted microregulations of how probabilistic risk assessment should be conducted and communicated. The BfR likewise justified its mechanical-calculative objectivation mode with regard to output legitimacy: through the rigid application of standardised risk assessment communication effective consumer protection would be ensured and consumers empowered to cope with food risks in a responsible way. In the temporal dimension, the BfR's linear mode of temporal ordering likewise reflected German Rechtsstaat culture and here specifically how it shaped Germany's vision of Europe as a political project of shared sovereignty and harmonised rules, as well as the transnational discourse on 'harmonising risk assessment'. It drew up and circulated its technical guidelines to harmonise disparate risk assessment approaches that were believed to cause conflicts and a great deal of uncertainty surrounding risk assessment in Europe and globally. In the same attempt to control and reduce the uncertainties surrounding disparate risk

assessment approaches it hence relied on formalised ‘sound’, evidence-based procedural rules. In this vein, it also intensified its engagement in EFSA’s efforts on risk harmonisation since around 2006, established several ‘twinning projects’ with sister agencies from EU candidate countries, and since around 2010 it established a comprehensive formal cooperation agreement with its French sister agency ANSES and its Danish sister agency DTU, as well as with a number of Asian sister agencies. With regard to legitimation, it claimed that these efforts to harmonise risk assessment in Europe and globally would over time enable a gradual reduction disparities among national standards, and consequently of the uncertainty over what constitutes a valid risk assessment. In this way, risk assessment and consumer health protection would be effectively ensured in a situation of a rapidly increasing amount of globally traded food products.

6.7 Conclusion: Authorisation Practices Compared

In this chapter, I have set out the results of my empirical analysis of the BfR’s practices aimed at building and cultivating politico-epistemic authority. I presented this analysis in a much more condensed form than the preceding analysis of the FSA in chapter 5 . The dense analysis of the FSA, which formed the empirical centre piece of this study, examined the nitty-gritty details of authorisation practices in order to grasp the complexity of the doings and sayings by which the agency attempted to successfully claim and perform expert authority. In this way, I was able to map out how the FSA’s authorisation and legitimation practices were enmeshed with specific institutional-cultural and discursive contexts. Moreover, this close-up analysis allowed me to examine how, through the tight intertwinement of the agency’s micro-authorisation-practices and broader contexts, the FSA ascribed specific meanings to both its own role as an ‘independent food agency’ and the ‘consumer constituencies’ it claimed to represent alike, and how this invoked an ‘advocatory knowledge order’. By so doing, I developed in a constant dialogue with the theoretical literature the main elements of the analytical framework presented in this thesis. In addition, this chapter’s more condensed analysis of the German BfR was designed to enable me to do a well-focused comparison of those selected aspects that proved to be particularly fruitful elements of the theoretical framework and to further validate my contextualised understanding of the politics of politico-epistemic authority that emerged out of this analysis.

In the concluding paragraph, I will now recap the main similarities and differences between the British FSA and the German BfR and compare them more systematically.

	FSA: claiming advocatory politico-epistemic authority	BfR: claiming technocratic politico-epistemic authority
authorisation practices		
competence attribution	multipolistic	monopolistic
objectivation	socially situated	mechanical-calculative
temporal ordering	recursive	linear
representative claims	rather heterogeneous:	rather homogeneous:
epistemic	food safety nutrition (environmental sustainability)	food safety
political	consumer citizen knowledgeable consumer socially included consumer	health-rights-bearing consumer knowledgeable consumer
Legitimation mode	primarily input-legitimacy-oriented	primarily output-legitimacy-oriented
contextual embeddedness	British 'public interest' and 'communitarian culture' Discourses: 'Social Exclusion', 'Science & Society', 'Evidence-Based Policy-Making', 'transparency' British vision of Europe as 'free-trade-project' and 'European governance' as non-enforceable voluntary regulation	German legalistic 'Rechtsstaats culture' Discourses: 'Scientising Departmental Research Agencies'; 'Harmonising Risk Assessment in Europe and Globally' German vision of Europe as a political project of shared sovereignty and harmonised rules that is regarded as a prerequisite for pursuing Germany's own interests in the postnational constellation.
Contestation	reframing of advocatory authorisation by emphasising effectiveness and efficiency shift towards a more rationalistic authorisation mode	critique of the actual exercise of technocratic authority immunising technocratic authorisation mode against critique by casting critics as being tainted by social concerns

Table 20: Authorisation practcies compared, my compilation

To begin with, I shall briefly sketch the character of the comparison of the FSA's and the BfR's practices of building and cultivating politico-epistemic authority, with which I will conclude this chapter. The two cases of the British FSA and the German BfR were institutional responses to the BSE crisis and other food scandals in the 1990s that prompted a fundamental loss of public trust in the capacity of policy-making institutions to adequately produce and use 'regulatory science' in order to protect consumer health. Moreover, these scandals also opened up the hitherto technically framed field of food safety to a range of connected policy issues and areas such as consumer health and nutrition as well as environmental and climate policy and thus engendered a more general politicisation of food (safety) policy (see chapter 0). Institutionally, as a result of the food scares in the 1990s, national regulatory competences in food safety were delegated to the EU, where consumer protection and public health were incorporated into food safety policy. In 2002 EFSA was established, mainly as an independent risk assessment body on food safety risks that). increasingly took over competencies in the field of nutrition (Friant-Perrot & Garde 2014). These developments hence created a situation shaped by a parallel development: on the one hand, there was the politicisation of the formerly technical field of food safety and on the other hand, there was the expertisation of food (safety) policy through the creation of 'independent food agencies' both at the domestic and European level. In this situation of 'institutional void' (Hajer 2003), the newly established FSA and the BfR formed part of an emerging field in which there was a multiplicity of governance arrangements 'in the making' with ambiguous expectations regarding the nature of the issue at stake and the rules, norms and legitimatory criteria at play. It is against this background that both agencies invested great efforts in building and cultivating what I call politico-epistemic authority.

The main aim of studying these two agencies from a comparative perspective, particularly by zooming in on the nitty-gritty micropractices of the FSA and comparing it with the BfR as a contrasting case, has been to establish an analytical framework on the basis of which (1) varieties of knowledge orders and their (re)production in practices of ascribing and legitimating political and epistemic authority can be distinguished and contextualised and (2) non-majoritarian institutions (NMIs), such as independent regulatory agencies, and their practices can be studied as embodiments of such context-bound knowledge orders. As a result of this analysis, I was able to designate five constitutive and interrelated analytic dimensions of such context-bound practices of ascribing and legitimating political and epistemic authority. Comparing the two studied cases allowed me to identify differences in these dimensions and to make the 'embeddedness' of politico-epistemic authority that emerged as a key component of the in-depth analysis of the FSA even more apparent and valid.

A first lesson that can hence be learned from the following more systematic comparative analysis is that there are a variety of authorisation and legitimation strategies that NMIs can pursue, each with its own underlying knowledge orders, representative claims and dynamics:

In the overall picture, the British FSA can be understood as pursuing, especially in its early years but all in all until 2010, a strategy of building and cultivating what I call 'advocatory politico-epistemic authority'. The German BfR, by contrast, pursued from the outset, a strategy of building and cultivating what I call *'technocratic politico-epistemic authority'.*

Authorisation

Let me briefly recap the general pattern of advocatory authority that was manifest in the FSA's practices across all dimensions of *authorisation*: In the social dimension, the FSA relied on a strategy of combining judgement and decision-making competences relating to food safety risks and other, notably nutrition-related, matters of consumer concern (epistemic authority) and their implications for food policy (political authority). Competence was attributed based on specialised and formally certified scientific knowledge and reputation, professional experience in policy-making, public communication skills and, last but not least, representativeness of social interests, primarily consumer interests and views (multipolistic mode of competence attribution). In the *object dimension*, the FSA pursued a socially situated mode of knowing that aimed to establish objectivity by negotiating a social working consensus. In this, a multiplicity of different genres of guidance documents played an essential role: Meta guidance documents established and frontstaged public consultation, openness and far-reaching transparency as de facto action-guiding norms, while the more operational action plans functioned as coordinative 'boundary objects' that facilitated negotiating a social working consensus among heterogeneous actors. In the *temporal dimension*, the FSA adopted two ways of recursive temporal ordering – precaution and pre-emption. Its 'precautionary approach' involved coping with uncertainty by integrating the heterogenous perspectives of local stakeholders in processes of problem framing and in policy formation. Its 'pre-emptive approach' involved coping with uncertainty in two ways: first, by focusing on relations of associations and taking action despite uncertainty in order to ward off a threatening future and second, by integrating heterogenous perspectives in horizon scanning activities that anticipate the future threats and instruments to pre-empt them.

The BfR in contrast, relied in the *social dimension* on a strategy of strictly separating judgement from decision-making competence. Not only was the agency mandated to conduct scientific

risk assessment and to issue policy advice and risk communication, it also meticulously stuck to this mandate in practice. The BfR took great care in positioning itself as limited to conducting scientific risk assessment and communication. It even sought to bring about further scientisation through building primary research capacities, as we have seen in the previous analysis. In this vein, in contrast to the multicompetent FSA, judgement competence here was exclusively attributed based on specialised and formally certified scientific knowledge and reputation (monopolistic mode of competence attribution). In the *object dimension*, the BfR pursued a strictly mechanical-calculative mode of knowing that aimed to establish objectivity through developing, circulating and applying technical guidelines regulating probabilistic risk assessment and communication. In the *temporal dimension*, the BfR adopted a linear mode of temporal ordering by drawing up and circulating technical guidelines in order to harmonise disparate risk assessment approaches that were believed to cause conflicts and a great deal of uncertainty surrounding risk assessment in Europe and globally. The BfR's linear temporal ordering mode hence implied controllable forms of uncertainty based on 'sound' evidence-based procedures and relies on the belief that there is a cumulative, almost natural journey from a situation dominated by disparities among national standards, and consequently by uncertainties over what constitutes a valid risk assessment, to a situation in which these disparities and uncertainties can be considerably reduced by applying standard procedures of knowledge production.

Representative claims

Across all three dimensions of authorisation, the FSA made multiple epistemic and political representative claims. These were claims in terms of more broadly framed questions of food policy – involving issues of safety and nutrition alike and partly even of environmental sustainability (epistemic claim). At the same time, it invoked the different consumer constituencies (political claim): (1) the 'consumer citizen', (2) the 'knowledgeable consumer' in the marketplace and (3) the 'socially-included consumer' (political claim). When construed as 'consumer citizens', consumers were constituted as active subjects in their own right who were deemed capable of articulating consumer interests and perspectives in knowledge production and policy formation. When invoked as 'knowledgeable consumers' in the marketplace, consumers were expected to put their trust in the FSA's competences, follow its advice, reflect on choices and changing undesired behaviours and hence to generally behave in a rational and responsible way. Finally, when enacted as 'socially included consumers', they were, in an attempt to counter the socially fragmenting impacts of markets, attributed a right to

be equally treated and included in policy formation on the grounds of equal citizenship. Thus, having these multiple representative claims on behalf of consumer constituencies was a central to the FSA's advocatory mode of authorisation and legitimation. Being a 'non-elected', independent expert body thus did not mean being unrepresentative. The FSA's advocatory expert authority rests on more or less explicit claims on behalf of a rather heterogeneous consumer constituency.

In contrast, in the BfR's case, both the epistemic and political representative claims were deliberately more uniform. In terms of claiming epistemic representativeness, the BfR strictly limited its knowledge claims to narrowly framed questions of food safety. In terms of claiming political representativeness, the BfR primarily positioned itself as a spokesperson on behalf of the (1) 'health-rights-bearing consumer' and, as its risk communication activities gradually increased, also on behalf of the (2) 'knowledgeable consumer'. When described as 'health-rights-bearing consumers', consumers were construed as subjects whose legal entitlement to safe food is effectively protected through the rigid application of probabilistic risk assessment and primary risk research. According to this claim, consumers are hence best represented through 'sound science' informing consumer protection regulation. In addition, the BfR also described consumers as 'knowledgeable consumers'. Similar to the FSA's invocation of 'knowledgeable consumers', consumers here were expected to put trust in the BfR's competences and, in line with its advice, cope with risk communication in a rational and responsible way. Thus, the BfR's technocratic mode of claiming expert authority was based on claims on behalf of just these two consumer constituencies that both were claimed to be subjects interested in the quality of the BfR's risk assessment and communication activities (output legitimacy), whereas the FSA's advocatory mode also included the 'citizen consumer' who was claimed to be interested in eth agency's input legitimacy.

Legitimation

The FSA's mode of multipolistic competence attribution, socially situated knowledge production and recursive temporal ordering was primarily justified in terms of input legitimacy – which was most apparent in the FSA's oft-cited official slogan of 'putting consumers first'. The FSA's claim to advocatory expert authority was an input-legitimacy-oriented claim about a renewed mode of governing that involved those who were regarded as having a legitimate stake in a specific matter. The advocatory mode of authorisation was considered the legitimate way in which the tense science-policy relationship could be reconciled, since it allowed for integrating considerations other than scientific ones into knowledge production and decision-

making. Last but not least, the FSA's claim to advocatory expert authority was a claim about opening up regulatory science and science-based decision-making to incorporate legitimate societal needs, views and interests into these processes.

In contrast, the BfR's mode of monopolistic competence attribution, mechanical-calculative knowledge production and linear temporal ordering was primarily justified in terms of output legitimacy. Its claim to technocratic expert authority was an output-legitimacy-oriented claim about how the agency's excellent and world-class risk assessment standards would enable effective, evidence-based food safety regulation that could be exported on a global scale.

Contextual embeddedness

In performing its advocatory authorisation practices, the FSA drew on different cultural-institutional and discursive elements of the discrete British context in which it operated. Specifically, it relied on several elements characterising what is commonly understood as the British 'public interest culture' or 'communitarian culture', particularly by emphasising the following elements: negotiating a shared perception of problems and measures devised in the public interest, attributing competence to individuals with a demonstrated record of selfless service to society, conducting public consultations, and valuing empirical proof and common-sense knowledge. Moreover, the FSA legitimised its advocatory claims to expert authority with regard to the then dominant 'modernising government discourse', notably the input-legitimacy-oriented strands on 'social exclusion' and 'science & society'. Its embeddedness in domestic cultural-institutional and discursive contexts also informed the way the FSA thought of its own role in European multi-level governance. It envisioned itself as a 'network manager' that would take a leading role in coordinating the European exchange of information and sharing of experiences to identify 'best practice' in relation to collaborative policy approaches designed to tackle obesity. Thus, the prevailing British vision of Europe as a 'free-trade project' and New Labour's version thereof – i.e. collaborative 'best-practice governance' – informed its most visibly performed engagement at the European level.

While the FSA's advocatory authorisation mode was hence predominantly drew on the British public interest and communitarian culture and on dominant policy discourses that aimed at enhancing the input legitimation of governing and a general democratic renewal, the BfR's technocratic authorisation mode was based on cultural-institutional and discursive contextual elements at play within the German setting. In institutional-cultural terms the BfR strongly drew on the German legalistic 'Rechtsstaats culture' in promoting its guidelines-based approach to

mechanical-calculative knowledge production and its efforts to harmonise risk assessment procedures across EU member states and beyond. Likewise, its attempts to position itself as a spokesperson primarily on behalf of consumers as 'health-rights-bearing subjects' invoked Germany's Rechtsstaats culture. Moreover, its technocratic approach to building and cultivating expert authority was enabled by actively relating it to the then important discourse of 'scientising' departmental research agencies, which was promoted by the science council. Especially, however, the BfR's technocratic mode of authorisation and its own role definition as a transnational 'standard setter' was shaped by the dominant German vision of Europe as a political project of shared sovereignty and harmonised rules that is regarded as a prerequisite for Germany's own interests in the postnational constellation. It was this vision, which itself is informed by Germany's historic past and its Rechtsstaats tradition grounded therein, that informed the BfR's strategy of transnational risk assessment harmonisation.

Contestation

The FSA's advocatory mode of building and cultivating politico-epistemic authority was multiply contested and as a result it eventually shifted towards a more rationalistic mode. As I have shown, it was the rise of the discourses of 'evidence-based policy making' and 'better regulation', manifested in the growing institutionalisation of cross-departmental science reviews, the broader 'behavioural turn' in British policy-making, and the increasing emphasis put on reducing 'regulatory burdens', that played an important role in this shift. Across all three dimensions of authorisation, the FSA's attempt to open up to advocatory modes of claiming and legitimating expert authority was contested and reframed by emphasising effectiveness and efficiency. Thus, the case of the FSA is indicative of how an advocatory mode of politico-epistemic authority that was mainly concerned with how to reconcile different social views and interests with scientific risk assessment and management was reframed with regard to the potentials to optimise the effectiveness and efficiency of risk assessment and management.

In contrast, the critique of the BfR did not aim at reframing its technocratic authorisation mode and shifting towards a more rationalist or advocatory mode but at questioning the agency's actual exercise of technocratic authority. The BfR was critiqued because it was, in the view of its critics, not acting according to its self-proclaimed criteria of conducting excellent independent risk assessment research on the basis of which consumers could be effectively protected. However, this critique of the BfR's actual exercise of technocratic expert authority was not successful in the sense that it did not lead to a change of its practices of attributing competence, knowledge production and coping with uncertainty so far. This was partly due to

the agency's strategy of immunising itself against critique by casting its critics as being tainted by social concerns and thus not politically neutral.

With regard to more general theoretical arguments these comparative observations suggest that the way in which national independent agencies build expert authority – despite being even formally part of a European regulatory networks – cannot be assessed without taking into account the specific domestic discursive and institutional-cultural context in which they are embedded. It seems, however, that independently of their specific contextually-embedded mode of building and cultivating politico-epistemic authority, their ability to claim and legitimise expert authority critically depends on what can be understood as 'reflexive practices' of authorisation that invoked specific issues at stake (epistemic authority) and specific consumer constituencies (political authority): practices of attributing competences, of using guidance documents in objectivation and temporal ordering. Thus, while the specific practices of authorisation and legitimation observed in the two cases studied in this thesis are strongly conditioned by the described contextual features, I argue that my analysis of these two cases nonetheless allows generalising about the engagement of independent regulatory agencies and nonmajoritarian institutions in what I have described as 'the politics of politico-epistemic authority'. In the concluding chapter, I will therefore now proceed to discuss some general conclusions from the previous focused-comparative case study.

7 Discussion and Conclusion

The existing political science literature dealing with non-majoritarian institutions (NMIs) and particularly 'independent regulatory agencies' (IRAs) has sought to explain the impact of this relatively new type of institutions on regulatory politics in the postnational constellation. In this attempt it has referred to the expertise of NMIs as something that confers authority to them as 'credible' and 'trustworthy' actors (see chapter 2). Both rationalist delegation approaches and norm-based epistemic communities approaches on NMIs presuppose the authority of NMIs, respectively their 'authoritative expertise', as given. However, as I have argued in this thesis, what appears obvious and unproblematic in this literature – the expert authority of NMIs – turns out, on closer inspection, to be an interesting phenomenon and explanatory problem.

What lay at the heart of this study was a specific dilemma facing expert bodies 'at arm's length' from government. When I began researching independent food safety agencies in the UK and in Germany, I made the following paradoxical observation: On the one hand, the independent food agencies were established in response to a crisis of trust in the political institutions regulating food (safety) and were designed as independent institutions in order to restore public trust by relying on expertise and 'sound science'. On the other hand, from the outset, these institutions were under public scrutiny and confronted with demands for greater transparency and openness towards public participation and control. This dilemma chimed with a more recent strand in science & technology studies (STS), which emphasises the essential contestedness of expert authority in late modern politics; it views expert authority as being torn between an 'expertisation' or 'scientisation' of politics and a politicisation or democratisation of expertise (see chapter 2.4). This strand, however, has received little attention in political science to date.

These observations gave me some initial insights into what I term the 'politics of politico-epistemic authority'. Rather than exercising straightforward influence on regulatory policy-making due to their expertise and independence, IRAs are involved in an ongoing process of making and justifying authorisation claims. Thus, by turning the analytical attention to the question of how – in light of this paradoxical observation – NMIs build and cultivate expert authority, I unveiled a central literature blind spot: If, as most of the existing literature claims, it is their embodiment of authoritative expertise and insulation from representative-parliamentary politics that explains the growing influence of NMIs, how is then their expert authority established? How do NMIs attempt to establish expert authority in light of the dilemma of a growing demand of 'scientising policy-making' on the one hand, and

‘democratising science advice’ on the other hand? And why do the ways of coping with this dilemma differ across contexts?

Starting from these questions, the aim of this thesis was to develop and apply a framework for conceptualising NMIs as being involved in an ongoing process of building and establishing expert authority, in which they have to reconcile competing scientific and political demands and legitimatory standards. In line with an interpretive grounded-theory-based methodological approach, I elaborated the framework presented in chapter 3 based on an ‘iterative dialogue’ with a qualitative in-depth analysis of the British FSA and the German BfR. By so doing, this thesis moved away from a focus on NMIs as unquestioned expert bodies and their causal influence on policy-making toward a focus on the (contested) practices by which expert authority is build and on their contextual embeddedness.

Thus, what I term the ‘politics of politico-epistemic authority’ relates to the practices that NMIs perform in order to build and cultivate expert authority while facing the above described dilemma of expert authority in the postnational constellation. The five key findings that contribute to the research on NMIs relate to the terms of (1) reflexive expert authority, (2) knowledge orders, (3) authorisation as representational practice, (4) contextual embeddedness and (5) contestedness.

I have specified these terms theoretically and shed light on their empirical manifestation in this study. In what follows, I provide a concluding discussion by setting out the theoretical arguments made and link them to the empirical findings of my comparative case study.

7.1 Reflexive Expert Authority

Contributing to the growing literature on the ‘expert authority’ of NMIs in the postnational constellation (see chapters 2 and 3), I have argued that we need to specify the hitherto undertheorised concept of expert authority. If we understand expert authority as something endogenous to discourse and to actors’ performative practices, what kind of sayings and doings are we precisely looking for? To address this problem, I drew on Max Weber and Hannah Arendt. I used their seminal writings on authority as ‘sensitising concepts’ in further developing a culturalist-praxeological analytical framework for studying the politics of expert authority based on a dialogue with qualitative in-depth case study analysis. Referring to Max Weber, we can understand authority as something that constantly requires legitimation in order to be stabilised, i.e. it requires successful claims to the correctness of the actual exercise of authority.

Hannah Arendt is even more insistent in arguing that an overall decline of authority characterises modernity. According to Arendt the reason for this is that the claims to 'transcendent outsides' that are key legitimatory sources of authority can no longer be made in an unquestioned and uncontested manner in modernity, which, as I have argued in chapter 3.1, particularly applies in the postnational constellation.

Inspired by these thoughts, my overarching argument regarding 'reflexive expert authority' is the following: NMIs who seek expert authority in the postnational constellation cannot simply rely on 'independent expertise' qua their mandate. They have to reflexively engage with the politics of politico-epistemic authority. In the light of the simultaneous politicisation and scientisation of 'regulatory expertise', NMIs make the way in which they produce knowledge at the science policy-nexus an object of observation and problematisation. They develop and publicly perform reflexive practices of self-authorisation and self-legitimation to become accepted as 'spokespersons' on two 'transcendent outsides': a specific reality and its relevance for the good of a specific constituency. Their authorisation and legitimation efforts are grounded in scientific practice and at the same time oriented towards establishing a recognised political representative claim on behalf of a specific political constituency.

What is hence characteristic for NMIs' engagement in the politics of politico-epistemic authority is that they do not just invest a lot of effort into lending authority to their knowledge claims on concrete issues. They must also put the same effort into in the articulation and performance of authoritative claims on the governance of knowledge production. This was the case for both FSA and BfR across all three dimensions of authorisation. Reflexively engaging in the politics of politico-epistemic authority in both cases involved problematising and justifying the very criteria for ascribing judgment competence (social dimension), for establishing objective knowledge (object dimension) and for dealing with uncertainty (temporal dimension). In the social dimension, both agencies reflected and justified the criteria based on which they attributed judgment competences. They did so notably in their frontstage performances, where they presented themselves as 'reflexive experts' before relevant audiences. As I have shown in chapter 5.2, the FSA was keen on stressing that its commitment to 'open up' and 'put consumers first' required a multipolistic mode of competence. This involved ascribing judgement competence based on multiple criteria that included, among others, individual professional experience and a 'demonstrated service to society' as well as the representativeness of social interests (professional and 'ordinary' consumer representatives). Although, as shown in chapter 6.1, the BfR ascribed judgement competence in quite different ways, it was likewise eager to reflect on and justify its mode of monopolistic competence

attribution as a deliberate and necessary choice made in order to live up to its mission to be a strictly science-based agency committed to produce ‘excellent science to serve humanity’.

In the object dimension, both agencies developed and circulated different forms of ‘guidance documents’ intended to provide their members with norms and standards of knowledge production. The guidance documents were the final result of a chain of small and careful displacements, transforming what were once challenged and contested assumptions on the nature and scope of valid and relevant knowledge on food (safety) policy into apparently uncontested ways of knowing food risks. Guidance documents allowed both agencies, although in quite different ways, to select, order and homogenise heterogeneous elements of discourses on knowledge production in the context of food risk governance, a field that had become salient and contested in the wake of the BSE crisis and other public controversies on food-related matters. These guidance documents were not just presented as devices for establishing specific standards and norms as de facto action-guiding norms in knowledge production. Both agencies also deployed guidance documents as devices designed to lead the agencies’ members towards self-monitoring and to encourage public scrutiny alike. While, as I have shown in chapter 5.3, ‘meta guidance documents’ and ‘action plans’ were essential to the FSA’s attempt to open up to a more socially situated way of establishing objective knowledge, it was the very detailed ‘technical guidelines’ that were key to the BfR’s performances of its ‘mechanical-calculative’ mode of objectivation (chapter 6.2). Notwithstanding these differences, both agencies used guidance documents deliberately to establish and perform their respective mode of claiming and legitimising ‘politico-epistemic authority’.

In the temporal dimension, both agencies put a great effort into making specific temporal ordering practices a matter of problematisation and justification. The FSA constantly emphasised that it had learned the lessons from the BSE crisis (chapter 5.4). As a visible proof of these ‘lessons learned’, the FSA pointed to its stakeholder-based ‘precautionary approach’, which was invoked as a radical shift away from the previous status quo. This status quo was criticised by a culture of overconfidence in the safety claims that had caused the BSE crisis. Likewise, FSA’s horizon scanning activities and development of pre-emptive measures involved the participation of heterogeneous experts and stakeholders to cope with uncertainty. They were designed to systematically collect different assessments of future medium- and long-term developments and focussed on ‘relations of association’ instead of causal mechanisms to make future threats actionable. Analogous to this, the BfR’s linear mode of temporal ordering resulted from a specific problematisation of uncertainty – namely the uncertainty surrounding the assessment of food risks as a matter of insufficient international harmonisation. Disparate

risk assessment approaches were seen as having cause of a great deal of uncertainty surrounding risk assessment in Europe and globally. The BfR's linear temporal ordering aimed at controlling uncertainty through 'sound' evidence-based procedures that, if deployed on a global scale, would pave the way for a future in which these disparities and uncertainties would be considerably reduced (chapter 6.3).

Thus, the comparative account that I adopted shows that, while both food agencies were under permanent public scrutiny and thus in need to build and cultivate 'reasoned-based expert authority' (Zürn 2017), they attempted to build 'reflexive politico-epistemic authority' in quite different ways.

7.2 Knowledge Orders

Building on this insight, my second overarching argument is the following: The varieties of NMIs' authorisation and legitimation practices can be understood as reflecting the different '*varieties of knowledge orders'* at the science-policy nexus – i.e. a deeper layer of symbolic rules and structures of knowledge that guide the way in which epistemic and political authority is ascribed. To become recognised as an authoritative expert, NMIs must prove themselves among competing discourses and demands pertaining to – decisionistic, advocatory, technocratic, or rationalist – knowledge orders. Building on this, the thesis's empirical part provided a dense 'focused comparative analysis' of how both food agencies managed to jointly produce and reconcile political and epistemic authority and how their specific modes of doing so can be understood as concrete manifestations of knowledge orders. Specifically, this analysis allowed me to understand the role of actors not as passive entities shaped by knowledge orders but as entities that actively participate in interpreting and enacting them in concrete settings.

The case study of the FSA showed how 'advocatory premises' evidently formed the basis of its attempts to build and cultivate politico-epistemic authority in the context of the politicisation of regulatory science prompted by the BSE crisis discourse. Instead of a hierarchical 'primacy model', an 'advocatory knowledge order' presupposes a more heterarchical, dialogical relationship between science and policy (chapter 5). The assumption here is that the tense relationship between epistemic authority and political authority can be reconciled by expanding boundary interactions at the science-policy-public nexus, which is justified on the grounds of input legitimacy. I was able to show that the FSA enacted an advocatory knowledge order across all three dimensions of authorisation:

Notably in its first years, the FSA experimented with different modes of multipolistic competence attribution (social dimension; chapter 5.2). This was evident particularly in the FSA's consumer committee and in the non-specialist consumer representatives in its scientific advisory committees. The members of these organisational arrangements were attributed judgement competence based on multiple, extra-scientific criteria, including the representativeness of social interests, 'demonstrated service to society' as well as different forms of non-scientific expertise. However, the day-to-day enactment of their roles and competences were inextricably tied up with uncertainty and ambiguity about which specific social actors should actually be attributed judgment competence and on what grounds. Likewise, the question of how the distinction between the roles of experts, laypersons, and social interest representatives should be made and how they were related to each other was not uncontested in the agency's day-to-day practice. Thus, multipolistic competence that is characteristic for advocatory claims to expert authority is less a property of actors' seeking advocatory expert authority than it is a constant process of coping with the interplay of multiple criteria of competence attribution and the interpretive conflicts resulting from this.

My analysis of the FSA's 'social objectivation mode' allowed me to explore the central role that different sorts of guidance documents played in the FSA's attempt to establish frontstage public consultation, openness and far-reaching transparency as de facto action-guiding norms of its knowledge production (object dimension; chapter 5.3). Documenting the FSA's social objectivation approach in guidance documents made the agency's claim to a socially situated mode of knowing also tangible and objectified. Moreover, the FSA used specifically 'action plans' to share them with different actors and to involve them in establishing a working consensus on the issue at stake. In this sense, the FSA's action plans and linked documents served as 'boundary objects' facilitating the coordination among the heterogeneous interests of actors from different worlds participating in the FSA's consultative socially situated mode of knowing. They were objects designed to test and 'try out' a specific problem frame and proposed solutions before relevant audiences – a key element of advocatory authorisation and legitimation strategies.

Finally, contributing to the emerging literature on the temporal dimension of expert authority (Straßheim 2016), I have shown how knowledge orders are involved in shaping different modes of temporal ordering that, in turn, determine how actors seeking politico-epistemic authority cope with uncertainty (chapter 5.4). The FSA's advocatory authorisation mode went along with two forms of recursive temporal ordering: precaution and pre-emption. The former involved addressing the intractable complexities and uncertainties of particular food safety issues by

actively integrating stakeholders, especially consumers, into the process of framing risk assessment questions and deliberating on the respective policy implications. In a similar vein, the FSA's pre-emptive practices on obesity attempted to cope with the irreducible uncertainty that was inherent in anticipating obesity and assessing the measures to prevent it through multi-actor horizon scanning activities. These acknowledged the political, social and economic multi-contextual embeddedness of obesity and aimed at changing consumers' individual behaviour towards healthy eating – notably that of children from low-income-families in their local, daily life contexts. The assumption underlying its pre-emptive practices was that immediate action must be taken to ward off the threatening future of an obese nation – despite the fact that both the occurrence of the threatening future and the effectiveness of specific interventions aimed at preventing it from happening were uncertain.

The FSA's advocatory mode of authorisation stood out all the more clearly when I compared it with the German BfR whose attempt to build and cultivate politico-epistemic authority clearly followed a technocratic knowledge order that assumes a hierarchical relation between science and policy, which are conceived as two separate and incompatible worlds (chapter 6). The assumption here is that the tense relationship between epistemic authority and political authority can only be reconciled in a rational way if science has a primacy over politics. Accordingly, in the social dimension, the BfR relied on a strategy of strictly separating judgement competence from decision-making competence. In practice, the agency meticulously stuck to its mandate to conduct scientific risk assessment and communication and, with the help of building primary research capacities, even sought to position itself as a 'scientised agency'. In this vein, in contrast to the multicompetent FSA, the BfR adopted a monopolistic mode of competence attribution; competence here was exclusively attributed based on formally certified 'scientific excellence' and reputation. In the object dimension, the BfR pursued a strictly mechanical-calculative mode of knowing that aimed to establish objectivity through developing, circulating and applying technical guidelines regulating probabilistic risk assessment and communication. Like the FSA, the BfR hence used guidance documents as 'coordinative boundary objects' to make its calculative mode of knowing tangible and shareable among different actors. However, in accordance with the agency's technocratic authorisation mode, they were not used to establish a working consensus on specific matters but to transfer and diffuse its mechanical-calculative approach among EU member states and on a global scale in an attempt to harmonise risk assessment. Technocratic premises of claiming politico-epistemic authority were also reflected in the temporal dimension. The main claim underlying the BfR's linear mode of temporal ordering was the following: By drawing up and circulating technical guidelines aimed

at harmonising disparate risk assessment approaches, a great deal of uncertainty surrounding risk assessment in Europe and globally would be reduced, which constituted the essential precondition for effective consumer protection. Thus, in contrast to the FSA's mode of recursive temporal ordering, which involved different experts and stakeholders in deliberating on what was perceived as more fundamental forms of 'incertitude', the BfR's linear temporal ordering mode assumed technically controllable forms of uncertainty. It envisioned a trajectory from a situation dominated by disparities among national standards to a situation in which these disparities were minimised by applying standard procedures of evidence-based guidelines of harmonised risk assessment – hence to a situation in which uncertainties over what constitutes a valid risk assessment would be considerably reduced.

As this analysis showed the ways in which NMIs manage to co-produce political and epistemic authority on the microlevel of attributing roles and competences, using guidance documents in objectivation processes and coping with uncertainty can be understood as concrete manifestations of knowledge orders. This thesis thus contributes to the emerging strand of culturalist 'knowledge order approaches' on expert institutions (Litfin 1994; Hajer 1995; Barnett & Finnemore 2004; Sending 2015; Zürn 2018; chapter 2.4). Particularly the praxeological variant of knowledge order approaches adopted in this thesis lets us to focus on what enables NMIs to be deemed experts. However, hitherto there has been little in-depth comparative empirical research on the actual micropractices deployed by NMIs who seek expert authority and on the ways in which these practices reflect a specific knowledge order. Addressing this gap, the in-depth analysis of the British FSA and the 'focused comparison' with the BfR have provided a detailed and illuminating account of how the authorisation and legitimation practices of both agencies were shaped by and produced a specific knowledge order.

7.3 Representational Practice

My third overarching argument regarding the politics of politico-epistemic authority draws particularly on Hannah Arendt's concept of authority and proposes to understand the 'expert authority' of NMIs as something that revolves around performances of both 'epistemic representativeness' and 'political representativeness'. In this vein, I understand actors' claims to politico-epistemic authority as an act that involves a two-pronged claim to a specific 'external reality' and the relevance of this external reality to ensure the common good desired by a specific constituency.

Building on this, the empirical part of this thesis studied food agencies as spokespersons both for food-related issues (epistemic claim) and consumer constituencies (political claim). In so doing, I have put a special emphasis on the question of how consumer constituencies, rather than existing 'out there', are constructed by food agencies' authorisation practice. This concurs with the more recent 'constructivist-performative turn' in theorising democratic representation (Voß 2016), notably Michael Saward's notion of 'representative claim-making' (Saward 2010: 36) and Lisa Disch's concept of 'spokesperson' that views actors as mediators who translate and transform those represented in performing representation (Disch 2008). The empirical analysis thus revealed how the authorisation practices used by FSA and the BfR can be understood as instances of representative claim-making and invocations of different coexisting consumer constituencies. Moreover, it showed how these representative claims on behalf of consumers were part of a specific knowledge order.

In line with the FSA's advocatory authorisation strategy that aimed at debating acceptable solutions to shared problems, the agency made epistemic authorisation claims with regard to more broadly framed questions of food policy, i.e. including issues of nutrition and partly even environmentally sustainable food consumption. Likewise, the FSA's advocatory mode of authorisation had consequences for the ways in which the FSA constituted consumers as its main constituency. In its advocatory claims to politico-epistemic authority, consumers no longer appear as passive rights-bearing subjects but are invoked as more active subjects. This was most evident in the FSA's first years, in which it put a strong emphasis on representing 'consumer citizens' who were invoked as active subjects in their own right, i.e. as subjects who are, due to their citizenship, capable of articulating consumer interests and perspectives in knowledge production and policy formation. This claim on behalf of the 'consumer citizen' was supplemented by a representative claim specifically on behalf of 'socially included consumers' who were, in an attempt to counter the socially fragmenting impacts of markets, attributed a right to be equally treated and included in policy formation on the grounds of equal citizenship. The socially-included-consumers-claim was thus specifically aimed at involving the views and needs of 'low-income' and other 'hard-to-reach groups' of consumers. These two representative claims were most visibly reflected in the FSA's stakeholder governing board and its consumer committee (chapter 5.2), the up-stream consumer consultations based on which the agency established a working consensus on traffic light labelling (chapter 5.3), and in the FSA's initial consultative-precautionary mode of coping with the uncertainties surrounding the assessment of BSE in sheep, 'pesticide residues in food and of mixtures of pesticides', and 'food colours' (chapter 5.4).

However, these two representative claims coexisted from the beginning with a more rationalistic representative claim on behalf of the 'knowledgeable consumer' – both in a complementary and a competing way. On the one hand, they were juxtaposed in a complementary manner, which was especially the case in the process of developing the FSA's traffic light signposting. Here, consumers, both as stakeholders and as ordinary people, were incorporated into the long process of developing a working consensus on the signpost labelling. They were thus constituted as having legitimate social interests. At the same time, the final product – the FSA's traffic light signposting – was clearly about empowering the knowledgeable consumer. The traffic light signposting was designed to provide consumers with decision-salient information that would make it easier for them to rationally reflect on their choices and change their behaviour towards healthier eating. On the other hand, the consumer-citizen-claim partly competed with the FSA's simultaneous claim on behalf of the 'knowledgeable consumer'. This tension was most evident in the role of non-specialist consumer representatives in the FSA's scientific advisory committees (SACs) (chapter 5.2.2.4). Initially, the FSA attached a representative claim on behalf of consumer citizens to their role: non-specialist consumer representatives in SACs were imagined as a collective of subjects with legitimate broader social interests that should be incorporated into knowledge production. At the same time, however, they were increasingly expected to represent the purported view of knowledgeable 'ordinary' consumers in the marketplace who, rather than articulating their interests and concerns, engaged themselves in the committees' scientific deliberations in a skilled way.

Thus, the FSA's advocatory mode of building politico-epistemic authority was predominantly based on (1) an epistemic representative claim related to broader notion of food-related problems that included not only food safety but also nutrition (and partly even touched upon issues of environmentally sustainable food consumption), and (2) a political representative claim predominantly related to consumer citizens and specifically socially included consumers – while the consumer-citizens-claim was partly contested by invocations of the knowledgeable consumer in practice.

In contrast to this, the BfR's technocratic authorisation mode was based on a much more narrowly framed claim of epistemic representativeness that was strictly limited to food safety. In terms of claiming political representativeness, the BfR primarily positioned itself as a spokesperson on behalf of the passive subject of the (1) 'health-rights-bearing consumer' and, as its risk communication activities gradually increased, also on behalf of the (2) 'knowledgeable consumer'. As 'health-rights-bearing consumers', consumers were entitled to

safe food, while this legal entitlement was most effectively protected through the rigid application of probabilistic risk assessment and primary risk research. As it understood them as knowledgeable consumers, the BfR expected individuals to put their trust in the BfR's competences and, act in line with its advice that was based on probabilistic science in a rational and responsible way. Thus, in its technocratic authorisation mode, the BfR claimed to represent health-rights bearing and knowledgeable consumers because it possessed specialist probabilistic risk assessment expertise that allowed distinctive insights into food safety risks that would have otherwise been neglected by policy-makers and/or consumers.

Thus, based on these insights I argue that the commonly used and undertheorised notion of the 'expert authority' of NMIs is something that is based on epistemic and political representational practices despite the often-claimed 'non-representative nature' of these institutions (Sosay 2006; Maggetti 2010: 2; Papadopoulos 2010). Their representative claim-making is shaped by the specific knowledge order on which they primarily draw on in their authorisation and legitimation efforts.

Conceiving of NMIs as institutions whose expert authority is based on knowledge-order-bound representational practices is an important contribution to the literature. As I have argued in chapter 2, most of the existing scholarly literature on NMIs argues that these institutions enjoy credibility because they are formally unelected and thus independent from parliaments and ministries and hence protected against partisan interference into decision-making and particularistic capture. In this vein, they are conceived as generally 'unrepresentative expert bodies' (Papadopoulos 2010). Specifically with respect to IRAs, prominent delegation scholars have argued that these do 'not rely on any claim of representativeness'; their legitimation is said to be 'based on a large array of "non-democratic" justifications' (Maggetti 2010: 2). In this literature IRAs appear as belonging to a larger group of the 'unelected' that due to their expertise would handle ostensibly technical policy problems in an objective way and 'speak with greater authority on the facts and their assessment of them' (Vibert 2007: 43). This is a group of 'unelected' also includes 'independent central banks, the European Union, and network governance arrangements that all 'do not conform to the representative model' of democratic institutions (Gilardi 2008: 25).

This thesis, by contrast, contributes to scholarship in political theory that pays increased attention to the expanding scope and diversity of non-electoral forms of representation in 'post-parliamentary' forms of democracy. Notably, John Keane (2011) speaks of the new form of 'monitory democracy', in which 'unelected representatives', such as civil society organisations but also 'independent agencies', perform important power-scrutinising functions regarding both

citizens' inputs to government and policy outputs. According to Keane, in 'monitory democracy' such 'power scrutinising institutions' 'spring up all over the place' '[i]n the name of "people", "the public", "public accountability", "the people" or "citizens" (Keane 2011: 213). Likewise, Pierre Rosanvallon points to the emergence of a 'new age of legitimacy', in which independent agencies and constitutional courts can also be representative and act on behalf of society (Rosanvallon 2011). However, while these accounts are useful in that they help to rethink traditional concepts of representative democracy so that they also include non-electoral forms of representation, they hitherto remained mostly theoretical and lack the conceptual specification that would allow them to undertake an empirical investigation of specific types of NMIs, e.g. IRAs.

7.4 Contextual Embeddedness

A fourth overarching argument that I draw from my 'focused comparative' analysis of the FSA and the BfR relates to contextual embededdness: The way in which NMIs prove themselves among competing knowledge orders in their attempt to build expert authority is shaped by the context of the specific national discourses and politico-administrative traditions in which they are embedded. However, to refer to the contextual embeddedness of their authorisation and legitimation practices as an explanatory perspective is not to neglect the agency of actors who seek authority. On the contrary, NMIs reflect upon, enact and, in so doing, vary and recombine different institutional and discursive contextual elements in novel ways.

By relying on contextual embeddedness in my explanatory perspective, I was able to show how both agencies drew on and reorganised existing discursive and cultural-institutional elements in a situation of a loss of public trust and increasing Europeanisation of food safety governance prompted by the BSE crisis. These findings contribute to the emerging literature on the institutional-cultural and discursive conditions of ascribing expert authority to specific actors, which is still rare both in STS and in interpretive policy analysis (Jasanoff 2005; Boswell 2009; Korinek & Veit 2013; Straßheim 2013; Hoppe & Wesselink 2014; Korinek & Veit 2015).

The focused comparison of the FSA and the BfR has shown in detail the combinatorial nature of building and cultivating politico-epistemic authority. Both food agencies' attempts to build politico-epistemic authority were grounded in the creative merging of old cultural-institutional components and newer dominant discourses. In terms of 'old' institutional-cultural components, the FSA invoked several elements characterising what is commonly understood as the British 'public interest culture' (Pollitt & Bouckaert 2004) or 'communitarian culture' (Jasanoff 2005). In the social dimension, judgement competence was partly attributed to

specific individuals due to their representativeness of social interests. Ultimately, however, it was 'embodied expertise', individually gained professional experience and skills in relevant fields, and a demonstrated record of 'selfless service to society' that made it appear legitimate to attribute judgement competence to individuals with a non-scientific background (chapter 5.2). In the object dimension, the FSA's consultative social objectivation mode relied on 'negotiated expertise', i.e. a mode of establishing objective knowledge that is based on creating a shared perception of problems and accepted solutions devised in the 'public interest' that is characteristic for the British culture of expertise. Moreover, the FSA's social objectivation mode relied on the British predilection for easily tangible empirical proof and common-sense knowledge, i.e. on the traditional cultural component of an empiricist and experiential notion of objectivity (chapter 5.3). Likewise, the FSA's authorisation and legitimation practices in the temporal dimension relied on these old cultural-institutional components of the British context: Both its precautionary approach and its pre-emptive approach to coping with uncertainty were essentially consultative, negotiated, and devised in an attempt to obtain the public's consent (chapter 5.4).

In its early years, the FSA justified its advocatory mode of expert authority that reflected the just mentioned institutional-cultural elements of the British context by strongly referring to the then 'new' 'modernising government' discourse. For instance, the considerable emphasis placed on attributing judgement competence to stakeholders, notably to both organised and 'ordinary' consumer representatives, and on involving them in the FSA's knowledge production was grafted from the discourses on 'science and society' and 'social exclusion'. Both discourses focused on enhancing input legitimacy by opening up policy-making in general, and (regulatory) science in particular, with the aim of boosting the participation of stakeholders and otherwise often-neglected 'ordinary people'. Thus, these input-legitimacy-oriented strands of New Labour's 'modernising government discourse' were at least as important elements in the 'tool kit' of legitimatory resources that underpinned the FSA's advocatory authorisation mode.

By comparing the in-depth study of the FSA with the case of the BfR, I was able to reinforce this insight about the combinatorial nature of actors' attempts to build and cultivate politico-epistemic authority. In its authorisation and legitimation practices, the BfR likewise selectively recombined traditional institutional-cultural elements and newer policy discourses that underpinned its technocratic authorisation claim. Notably, in its strictly technical-guidelines-based approach of knowledge production, the agency explicitly relied on Germany's longstanding legalistic and rule-bound politico-administrative tradition and Rechtsstaat culture,

while simultaneously related this directly to the rising discourse on 'harmonising risk assessment' in Europe and on a global scale. Referring to the transnational discourse on harmonising risk assessment to enable effective food safety regulation in Europe and beyond hence enabled the BfR to justify its technocratic mode of knowledge production with regard to output legitimacy. The transnational harmonisation discourse and the German legalistic administrative tradition here thus were jointly used to underpin the BfR's technocratic authorisation mode.

However, both the FSA and the BfR also went beyond recombining already existing institutional-cultural contextual elements and discourses to underpin their respective authorisation modes; they moreover drew on specific discourses to craft *new* solutions and produce institutional *change*. In the case of the FSA, this is most obvious in its practice of holding open meetings, its far-reaching disclosure provisions, and its transparent risk communication mode. Together, these three transparency-based objectivation practices, which were an essential component in the agency's advocatory authorisation strategy, aimed at (re)establishing objectivity as something instantaneously evident and transparent to the general public's eye. By so doing, the FSA drew on the input-legitimacy-oriented strand of the 'freedom of information discourse' that constituted an explicit critique of the 'high walls of secrecy that surround English regulatory decision making' (Halffman 2005: 460). This reliance upon the freedom of information discourse, in turn, was a good fit with the overall BSE debate, in which the seminal Lord Phillips 'BSE inquiry' report strongly criticised the 'culture of secrecy' dominating Britain's scientific advisory system. Thus, building on these empirical insights, I argue that actors who seek politico-epistemic authority are searching for different elements of the multi-layered institutional-cultural and discursive contexts they are embedded in to recombine them in new ways at opportune moments to produce institutional change. This is also true for the German BfR, as the focused comparison in chapter 6 showed. In the literature on comparative (risk) regulation, Germany is commonly understood as representing a corporatist style of knowledge production and decision-making (Lehmbruch & Schmitter 1982; Brickman et al. 1985; Renn 1995; Halffman 2005). In this corporatist knowledge-making style 'expert committees are often constituted as microcosms of the potentially interested segments of society' (Jasanoff 2005: 267). However, my analysis of the BfR's authorisation practices has shown that the agency deliberately pursued a strategy that was the furthest away from such a corporatist style of knowledge production: It maintained scientist-only-committees and strongly relied on a mechanical-calculative objectivity manifested in its technical risk assessment guidelines designed to iron out any context-specific societal framing assumptions in risk

assessment that were accused of causing disparate opinions among different countries. By so doing, the BfR hence recombined three elements of the cultural-institutional and discursive context that together provided the contextual repertoire the BfR drew upon in its technocratic authorisation and legitimation mode: Germany's legalistic culture and two kinds of 'scientisation discourses': i.e. the domestic discourse on the scientific quality of departmental research agencies prompted by the science council, and the transnational discourse on harmonising risk assessment.

Finally, the empirical insights gained from the comparative in-depth case studies allow us to think about national independent regulatory agencies as actors who, in their search for expert authority and in making sense of their own role in European multi-level governance, draw on a certain repertoire of domestic cultural-institutional elements and discourses. Specifically, the FSA's pre-emptive activities on tackling obesity illustrated how the agency understood itself primarily as a *'network manager'* at EU level. It envisioned itself as an actor that would take a leading role in coordinating the exchange of information and sharing of experiences to identify 'best practice' in relation to collaborative policy approaches that would open up policy-making to actors from different social spheres. With its focus on 'best practice', this vision reflected the British empiricist culture. At the same time, it fitted well with New Labour's self-regulation discourse, which focused on network and private governance with little state involvement. Likewise, the FSA saw its network manager role in defining the incentive structures of its collaborative, private-governance approach in such a way that it effectively tackled obesity. Last but not least, this vision chimed with the traditional Anglo-Saxon noninterventionist understanding of the state, which imagined the EU as a 'free-market project' – a vision that was somewhat reconfigured towards envisioning the EU as an entity of collaborative, network governance under New Labour. In contrast, the BfR envisioned its own role in European multi-level governance and beyond as a *'standard setter'*. This vision was shaped by the dominant German vision of Europe as a political project of shared sovereignty and harmonised rules that is regarded as a prerequisite for Germany's own interests as an entirely export-oriented nation in the postnational constellation. It was this vision, which itself is informed by Germany's Rechtsstaats tradition, that lay the ground for the BfR's efforts on standardising and harmonising transnational risk assessment.

Thus, by shifting the analysis away from presuming a priori which specific context factors of multi-level postnational governance shape the independent regulatory agencies' practices, I was able to show how actors' striving for politico-epistemic authority selectively draw on and creatively recombine both national and transnational institutional-cultural and discursive

contextual elements. These insights contribute to the existing literature on 'embedded expertise', which tends to posit 'frozen knowledge landscapes' as Holger Straßheim put it (Straßheim 2013) and which in viewing national 'styles of public knowledge making' (Jasanoff 2005, similarly: Renn 1995) as stable and monolithic neglects the heterogeneity and dynamics of institutions and discourses in the postnational constellation.

7.5 Contestedness

My starting point for thinking about the politics of politico-epistemic authority was that the rise of IRAs and other NMIs constituted a reconfigured institutional landscape that can be understood as reflecting a fundamental loss of authority in the postnational constellation. NMIs represent important hubs in the postnational polyarchic network architecture, in which the capacities relevant to exercising power are dispersed among a wide range of state, non-state, international and supranational actors. It is against this backdrop that unelected expert bodies are expected to ensure the effectiveness and credibility of ever more complex policy-making processes. In the complex and interwoven governance networks, NMIs are believed to be better at making efficient decisions due to their specialised expertise and credibility. At the same time, however, the postnational constellation also represents a situation of uncertainty, where settled norms are lacking, and political actors within both established and emerging institutional structures work to negotiate new norms and social roles – a situation of 'institutional void' (Hajer 2003). In this context, NMIs are equally confronted with the general decline of authority and their claims to authority become a matter of deliberation and contestation (Zürn 2017).

Based on this observation, the praxeological perspective developed in this thesis is particularly sensitive to the contestedness of authorisation and legitimation practices, an aspect that both rationalist delegation approaches and norm-based-epistemic-community-approaches have a great difficulty in capturing (see chapter 2). The in-depth case study of the FSA has shown that the agency's advocatory mode of authorisation and legitimation was subject to controversy and reframing across all three dimensions. And it was through and in response to such disputes that its authorisation practices continually evolved and changed. In the FSA's first years, its advocatory mode of claiming politico-epistemic authority was based on input-legitimacy. Thereby, it was predominantly participation, public transparency and accountability that served as legitimatory sources to justify the FSA's authorisation claim. Part and parcel of the FSA's advocatory authorisation mode was giving stakeholders, notably consumers, a say in knowledge formation. However, as my analysis in chapter 5 has shown in multiple ways, the FSA's

legitimatory practices were in a constant state of tension and change. Contributing to the literature studying the authority and legitimacy of NMIs, my fifth overarching argument is that these tensions can be understood as originating in interpretive conflicts over democratic norms ('contestation 1') and in acts of reframing based on competing knowledge orders ('contestation 2').

Contestation 1 was most evident in the changing role of the FSA's non-specialist members in SACs and its consumer committee. Initially, the FSA framed non-specialists in SACs as a device to ensure that its SACs took account of issues of consumer concern. This can be understood as an expression of an input-legitimation-oriented way of justifying claims to politico-epistemic authority. In this vein, representatives of the UK's major consumer interest groups were also among those appointed as non-specialist consumer representatives in SACs. What underlies this mode of role and competence attribution is an understanding of participation as an expression of pluralist interest politics. However, in the course of a number of external review and evaluation reports, the FSA changed its understanding of participation. The notion of 'participating to represent the legitimate social interests of consumers' gradually came to be supplanted by 'participating to represent the purported view of the knowledgeable ordinary consumer in the marketplace'. Now, reflecting a more deliberative-rationalist understanding of participation, the prime function of non-specialist consumer representatives in SACs was redefined as contributing to 'ordinary consumer perspectives' in order to make the committee's scientific deliberations more comprehensible from a consumer point of view. However, despite the FSA's considerable efforts to educate non-specialist members accordingly, this limited role of non-specialists as representing the knowledgeable consumer who engaged in the SACs' scientific deliberations instead of representing the social interests of consumers remained contested in the studied time period.

In a similar way, conflicts revolved around the question of whether the FSA's consumer committee constituted a participatory arrangement that provided space for interest politics or rather for rational deliberation. This conflict was reflected in a constant controversy on how to attribute judgement competence to and define the role of consumer representatives: either based on a more interest-based notion of 'organised interest representation', or based on a more deliberative-rationalist notion of engaging the authentic, 'ordinary consumer' to make the FSA's knowledge production and policy formation processes more comprehensible and reasonable. While, over time, the FSA executive tended to emphasise the deliberative-rationalist understanding of the role of the consumer committee over the interest-based one, it

was precisely this hierarchisation that received criticism from the committee's interest group members.

Likewise, there were tensions resulting from differing democratic-theoretical interpretations of the FSA's transparency-based objectivation mode. In its meta-guidance documents and its overall frontstage presentation of its innovative practice of holding open meetings, the FSA invoked a more deliberative understanding of accountability, i.e. as a practice of giving account and reasoned elaboration of its knowledge claims. But in practice, the FSA issued instructions to those interested in participating in the committee meetings. These instructions were designed to limit the space of deliberative accountability to a minimum. Likewise, its far-reaching disclosure policies, which invoked knowledgeable consumers as 'accountability holders' controlling the FSA, were in practice also a source of conflict due to the many 'backstaged' practices of confidentiality that were accused of keeping food (safety) governance as it was pre-BSE rather than making it less opaque .

Based on these insights, I make the following more general argument with regard to IRAs claiming 'advocatory politico-epistemic authority': Advocatory politico-epistemic authority is constantly confronted with the problem of the pluralisation of normative criteria of legitimation. It is this pluralisation of legitimatory criteria that creates a constant tension between the differing interpretations of the democratic-theoretical ideals of participation and public accountability that are essential for claims to advocatory authority. This form of contestedness can be understood as contestedness 1.

Moreover, it can be argued that contestedness 1 is specifically characteristic for advocatory politico-epistemic authority, as became evident in the focused comparison of the FSA with the case of the BfR (chapter 6). In contrast to the FSA, which struggled with the plurality of legitimatory criteria, the BfR's technocratic authorisation and legitimation mode was primarily based on one single normative criterion of legitimacy, namely the 'science-based' protection of the basic right to health. Remarkably, the main external critique to which the BfR was forced to respond remained predominantly limited to questioning the correctness of the agency's actual exercise of technocratic politico-epistemic authority. According to its critics, the agency was not acting according to its self-proclaimed criteria of conducting excellent independent risk assessment research based on which consumers could be effectively protected. However, the BfR was able to counter this critique by casting its critics as being tainted by social concerns and thus not politically neutral; its critics were portrayed as being driven by interests rather than by scientific doubt. Moreover, it argued that the controversy over glyphosate, which was very much in the public spotlight in Germany, was due to disparate risk assessment procedures.

Eventually, in the time period covered by this study, the BfR successfully managed to ward off critique in a way that even reinforced its technocratic claim to politico-epistemic authority that was fundamentally based on the agency's efforts to harmonise risk assessment procedures in Europe and on a global scale.

The comparison of the FSA case with that of the BfR brings out a more general and fundamental difference between 'advocatory' and 'technocratic' politico-epistemic authority: Advocatory modes of building and cultivating politico-epistemic authority exhibit constant tension and uncertainty due to differing democratic-theoretical interpretations of their input-legitimacy-oriented legitimation claims. Technocratic modes, by contrast, are designed to reduce such tension and uncertainty. IRAs that pursue a technocratic strategy of building politico-epistemic authority are thus more capable of immunising themselves – at least temporarily for the studied time period – against contestation resulting from interpretive conflicts over criteria of legitimation.

Contestation 2: A second insight gained from the comparative in-depth case studies refers to the reframing of a specific mode of authorisation and legitimation that is based on discourses pertaining to competing knowledge orders. This has been evident in the FSA's advocatory mode of building and cultivating politico-epistemic authority, which was multiply contested due to the rise of the discourses of 'evidence-based policy making' and 'better regulation'. These prompted the institutionalisation of cross-departmental science reviews, the broader 'behavioural turn' in British policy-making, and the increasing emphasis put on reducing 'regulatory burdens'. In this context, the FSA redefined the premises upon which politico-epistemic authority was attributed. Politico-epistemic authority was now increasingly ascribed based on a more rationalistic-technocratic knowledge order: As a result, the agency's consumer committee and its successor, the advisory committee on consumer engagement, were both abolished and replaced by the social science research committee (SSRC) (chapter 5.2.4.5). In this way, consumer representation was reframed based on a more rationalistic knowledge order with regard to the actual conditions and the effectiveness of consumer representation and towards engaging 'ordinary consumers'. Consumers came to be looked at as objects of both inquiry and of evidence-based interventions. At the same time, in the course of the 'science review explosion' at Whitehall, the FSA changed its initially hybrid model of coupled risk assessment and risk management roles towards a more separated model and pushed the role of the chief scientist as a multicompetent broker into the background in favour of his 'science watchdog role'. In a similar vein, chapter 5.3, which studied the object dimension, showed that with the rising better regulation discourse in Whitehall, the FSA shifted towards a more

mechanical-calculative objectivation mode. This shift was reflected in the FSA guidance documents published after 2005, which increasingly stipulated prioritising quantitative forms of evidence such as formal statistical analysis and risk assessment, cost-benefit analysis and market research. Finally, I have shown with regard to the temporal dimension (chapter 5.4) that, with the managerial and output-legitimacy-oriented better regulation discourse gaining increasing importance, more linear notions of temporality grew in importance. These included formal scientific risk assessment and ex ante regulatory impact assessments and came at the expense of the FSA's initial precautionary approach. Likewise, the FSA's pre-emptive approach to obesity, which pertained to an advocatory knowledge order, was in tension with the better regulation discourse that reproduced a more rationalistic, if not technocratic, knowledge order: On the one hand, some major consumer groups pushed the FSA to broaden its pre-emptive approach to include more diverse values and interests – notably, questions of (environmental) sustainability – in order to represent 'consumer citizens' with their broader value preferences regarding sustainability. On the other hand, the FSA's first careful steps towards doing so were immediately met with resistance from industry. Industry, which was already wary of the FSA's growing focus on pre-empting obesity, urged the FSA to comply with the better regulation agenda, to focus more narrowly on food-safety-related consumer policy and to optimise its efficiency and effectiveness. Thus, across all three dimensions of politico-epistemic authority, the FSA's mode of advocatory authority was reframed and changed based on premises pertaining to a rationalistic knowledge order over the studied time period.

As argued in chapter 6.5, even when it was questioned on grounds beyond sheer technocratic reasoning (which was seldom the case), the BfR managed to successfully ward off this criticism by sticking to its technocratic mode of justification. This was evident in how the agency coped with the criticism of the fact that expert committee members who had a background in consumer representation were extremely underrepresented in relation to members with an industry background. This critique was based on premises pertaining to a more political, advocatory notion of expertise. From the view of its critics, the participation of experts in the BfR 'expert commissions' also involved interest politics to a certain degree and therefore should be balanced between experts with consumer and industry backgrounds. However, in response, the BfR took refuge in the argument that more industry representatives fulfilled the criterion of 'scientific excellence' than consumer ones did, which was portrayed as the only recruiting criterion that counted for the BfR. In this context the BfR invoked its strict interpretation of its legal mandate that was, as the agency constantly emphasised, limited to conducting scientific

risk assessment and communication. Any kind of political considerations would have been outside this remit; and what followed from this was that the sole criterion of competence attribution was personal scientific excellence, regardless of the expert's institutional background. It was thus this very framing of its own role – which, as I have shown in chapter 6.4, specifically drew on Germany's legalistic culture and its 'fit' with the transnational discourse on harmonising risk assessment – that enabled the BfR to immunise itself against critique of the technocratic premises underlying its claims to expert authority. This immunising move was successful in cultivating 'solid' authority in the sense that, in the time period covered by this study, the BfR did not change its practices of attributing competence, producing knowledge and coping with uncertainty.

The focused comparison of the FSA case with the BfR enables me to differentiate between more 'solid' and more 'precarious' ways in which IRAs engage in the politics of politico-epistemic authority. It shows that the FSA's advocatory mode and the BfR's technocratic mode form two poles of a continuum with 'precarious' authority on the one end, and 'solid' authority on the other. This is not to say that a technocratic mode of building politico-epistemic authority is not contested in the broader societal and political discourse based on competing knowledge orders. But what it does claim is that IRAs, which pursue a technocratic authorisation strategy, are better placed to immunise themselves against contestation 2. Vice versa, 'advocatory' of politico-epistemic authority is less suited to doing so. IRAs claiming 'advocatory politico-epistemic authority' are – due to the certain degree of politicisation of expertise that comes along with advocatory authority – likely to be confronted not just with contestedness one that related to differing interpretations of the democratic-theoretical ideals of participation and accountability but also with contestedness 2 that results from acts of reframing based on competing knowledge orders.

However, the capability of IRAs to cultivate 'solid' technocratic authority despite the principle politicisation of regulatory expertise in the postnational constellation is, as my analysis has shown, strongly dependent on contextual institutional-cultural and discursive factors and their ability to creatively recombine these in their authorisation attempts. What proved essential for the BfR's solid technocratic politico-epistemic authority was that managed to invoke the authority of legalistic-bureaucratic authority and recombine it with scientistic discourses of international risk harmonisation – i.e. 'solid' technocratic politico-epistemic authority was based on the successful invocation of what Hajer calls 'classical-modernist' authority, i.e. a system of governing inherited from the twentieth century 'that create[s] positions of de jure authority' (Hajer 2009: 24).

7.6 Avenues for Further Research

The study traced the way in which the British FSA built and cultivated politico-epistemic authority from the time of its establishment in 2000 to 2015 and compared it with the BfR's authorisation and legitimation practices in the same time period. It combined an in-depth interpretive comparative case study with a specific focus on micropractices in order to develop an empirically grounded theoretical account of the way in which IRAs are engaged in the politics of politico-epistemic authority. I have presented five lines of argument emerging from the iterative empirical and theoretical research conducted for this study. The above presented findings, which relate to the terms (1) reflexivity, (2) knowledge orders, (3) representative claims, (4) contextual embeddedness and (5) contestation, have to be viewed as contextualised in the specific cases of the FSA and the BfR. At the same time, in this concluding chapter, I have pointed out that there are several more general theoretical arguments to be made based on these insights and that could be applied to other cases and empirical fields.

First of all, staying in the realm of food (safety) governance, scholars could use the theoretical framework developed in this thesis to comparatively examine other EU member states' independent food agencies. These agencies could be categorised in the matrix I have developed here on the four 'varieties of politico-epistemic authority'. This would contribute to the existing research on European food (safety) governance, a field that has received special attention because it illustrates the complexities of expertise-based regulation in the postnational constellation (Thomann 2018). This literature has hitherto focused on explaining the differing institutional design choices member states made in setting up national food agencies two decades ago; little work has been done on the actual practice of European food safety governance (Klintman & Kronsell 2010; Groenleer 2011; Abels & Kobusch 2015). As this thesis has shown, the different institutional design choices can be understood as an expression of fundamental conceptions of the science-policy-society relationship. In their actual practice, both agencies translated the specific mode of institutional design and the underlying conception of the science-policy-relationship into differing modes of building politico-epistemic authority. By conducting a larger N comparative study with more than just two cases, scholars could compare specific national agencies with regard to whether and how their differing institutional designs reflect 'decisionistic', 'advocatory', 'technocratic', or 'rationalist' modes of politico-epistemic authority. This could lead to the creation of a cartography of expert authority in food (safety) governance, with the aim of revealing different authorisation and legitimation strategies pursued by national food agencies. At the same time, this cartography would allow researchers to ask how the EFSA copes with and coordinates the differing authority claims made by

different national food agencies in its own attempts to build and cultivate politico-epistemic authority. By further adopting the above-presented five lines of argument to this analysis, this could be a promising basis for enriching the emerging literature on the EFSA and other EU agencies as 'networked agencies' (Borrás et al. 2007; Egeberg & Trondal 2009; Levi-Faur 2011; Abels et al. 2014). The existing literature on the EFSA indicates that, while the EFSA has adopted several elements of technocratic authorisation, it has been gradually incorporating more and more elements of input-legitimation since its establishment. Specifically, the establishment of the 'Stakeholder Consultative Platform' that acts as an advisory committee to the EFSA executive has been discussed in this regard (Borrás et al. 2007; Klintman & Kronsell 2010; Abels et al. 2014). Moreover, this literature argues that this gradual increase in input legitimation is a direct response to social contestation of the technocratic approach to European food safety governance. Thus, especially with regard to the question of contestation and change of expert authority, the EFSA seems to be a promising case.

Second, another avenue for further research could be to compare expert institutions seeking politico-epistemic authority across policy fields (Strassheim 2013, 2015). In the comparative study on the FSA and the BfR, I have adopted a methodological approach based on exploratory grounded theory in order to develop an empirically grounded framework that allowed me to conceptualise IRAs' engagement in what I call the politics of 'politico-epistemic authority'. Now that I have developed the conceptual heuristic presented in this thesis, it could be applied to further NMIs or even to private expert bodies operating in other policy fields with the aim of comparing authorisation and legitimation strategies, representative claims, and lines of social contestation. Specifically, policy fields such as environment and climate policy or financial market policy, to name just a few could be promising in this respect. Both likewise face 'wicked problems' that involve a high degree of complexity and social contestation. Given the increasing empirical literature on the different national and transnational scientific assessment bodies that have been established in the last two decades and that exercise a remarkable amount of political and epistemic authority in environmental and climate governance (Beck 2011; Esguerra et al. 2017; Hermann et al. 2017; Berg & Lidskog 2018; Gustafsson & Lidskog 2018), a systematic comparison with NMIs in the field of environmental and climate policy seems particularly promising. Likewise, scholars studying financial market regulation have argued that, as a consequence of the complexity and increasing contestation of this policy field's multi-level transnational governance regime, epistemic authority played an increasing role in contestations over which instances exercise legitimate rule-setting authority in this field (Rosenhek 2013; Quack 2016; Hiß & Nagel 2019). Thus, in both fields, the question arises of

which similarities or differences we can observe between food safety governance and these two fields. How do they differ (if so) in terms of the key aspects of the 'politics of politico-epistemic authority' that have been elaborated in this thesis?

Finally, I have argued and empirically shown in this thesis that the expert authority of IRAs is fundamentally based on specific invocations of constituencies and claims to represent them. Thus, contrary to the textbook model of IRAs, according to which these institutions constitute 'unrepresentative' bodies, we have seen that different representative claims come along with specific modes of building and cultivating politico-epistemic authority. In this way, the empirical findings generated by the comparative case study in this thesis provide insights into a form of political representation that has rarely been problematised, namely that of formally 'unelected' and politically independent expert agencies. This might lead us to move away from thinking about IRAs as 'unrepresentative institutions' and instead prompt us to understand them as institutions that are representative in different ways than the classical electoral institutions of representative democracy. With regard to areas for further research, scholars might subject these insights into the new forms of representation to a democratic-theoretical evaluation. Understanding IRAs as actors who invoke specific constituencies could hence lead us to scrutinise these institutions more closely in terms of their role in representative democracy: In the field of food (safety) governance, different consumer constituencies – the health-rights-bearing consumer, the knowledgeable consumer, the citizen consumer and the socially-included consumer – were invoked in and through the agencies' attempts to build politico-epistemic authority. However, the cases studied here indicate that these claims on behalf of different consumer constituencies – and the different democratic ideas that they reflect – compete with each other. They hence cannot be related to each other without creating conflicts and tensions. In the case of the FSA, these tensions eventually got the FSA to give up on those practices that invoked the consumer citizen, while the BfR invested a lot of effort in denying any representativeness of citizen consumers that would have obstructed its attempt to build technocratic expert authority from the outset. Thus, what we can observe here is a shift from representing citizens to representing different consumer constituencies among which the 'citizen consumer' is just one constituency. This shift mirrors the rise of NMIs in the 'regulatory state' of the postnational constellation. What might be important here in terms of the democratic-theoretical evaluation of IRAs as instances of representation is building on Saward (2010) in combination with other theorists of performative approaches to democratic representation (Voß 2016; Disch 2008) to critically scrutinise this shift.

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